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Detrminants of Financial Reporting Quality of Listed Pharmaceutical Companies in Nigeria

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Abstract
Despite the adoption of International Financial Reporting Standards (IFRS) in Nigeria, evidence suggests that financial reporting practices in the country remain below expectation. The main objective of this study was to ascertain the determinants of financial reporting quality of listed pharmaceutical companies in Nigeria. The determinants of financial reporting quality used in this study were management quality, audit committee financial expertise, ownership structure and internal control systems. The research design adopted in this study was ex post facto, secondary data were used and the population of the study was 7 listed pharmaceutical companies of which census sampling technique was employed to retain them as the sample size of the study. The technique of data analysis employed was ordinary least square regression analysis and the statistical package used was E views version 13. The findings of the study revealed that management quality (Coef. = -0.251; p = 0.0021) has significant negative effect on income smoothing; audit committee financial expertise (Coef. -0.321; p = 0.0000)) has significant negative effect on income smoothing; ownership structure (Coef. = 0.018; p = 0.0562) has nonsignificant negative effect on income smoothing and internal control system (Coef. = -0.208; p = 0.001) has significant negative effect on income smoothing of listed pharmaceutical companies in Nigeria. Thus, it was concluded that management quality, audit committee financial expertise and internal control systems are major determinants of financial reporting quality of pharmaceutical firms in Nigeria. It was therefore recommended amongst others that the board of directors should make educational qualifications and professional competence key criteria in the selection and promotion of CEO. Also that The financial reporting council of Nigeria (FRCN) and Security and Exchange Commission (SEC) should enforce compliance with corporate governance codes that emphasize financial literacy of audit committee members

Keywords: Determinants, management quality, audit committee financial expertise, ownership structure control systems, income smoothing.

1.0 Introduction

The goal of investors in profit seeking organization is to maximize wealth and to achieve this goal, investors need information that would enable them to predict future cash flows from their investments and the associated risks. Investors often obtain such information from the firms' financial reports and the quality of these reports strongly influence the decision made by the investors. Financial reporting quality (FRQ) reflects the extent to which financial statements provide accurate, complete, reliable, and timely information that enables stakeholders to make informed economic decisions (Etukenyin et al. 2025; Swarmilah & Fakhrorazi, 2021). High-quality financial reporting enhances transparency, strengthens investor confidence, facilitates access to finance, and supports sound corporate governance. Conversely, poor-quality reporting can distort decision-making, erode trust in management, and lead to corporate failure.

In Nigeria, the importance of ensuring high-quality financial reporting among pharmaceutical firms has grown due to the increasing scrutiny of corporate transparency by investors, regulators, and the public. The sector has witnessed several issues relating to weak financial reporting practices, such as earnings manipulation, non-disclosure of critical information, and inconsistencies between reported figures and actual market performance. According to Hossain (2025), problems often stem from weak corporate governance structures, low audit quality, ineffective internal control systems, and managerial opportunism. For instance, Evans Medical Plc, a major Nigerian pharmaceutical company was delisted from the Nigerian Exchange Group (NGX) in 2018 due to prolonged financial distress, failure to submit audited financial statements, and inability to meet post-listing requirements. Similarly, companies such as Neimeth International Pharmaceuticals Plc and Pharma-Deko Plc have, at various times, faced regulatory sanctions for delayed or incomplete financial disclosures (Abiodun et al., 2024). These occurrences raised concerns about the credibility and transparency of financial reporting practices in the Nigerian pharmaceutical industry.

These developments emphasize the need to examine the determinants of financial reporting quality in the sector. Factors such as management quality, audit committee effectiveness, ownership structure (particularly institutional ownership), and the strength of internal control systems may play significant roles in ensuring credible and transparent financial reporting. Management quality refers to the competence, integrity, and ethical orientation of a firm's management team. Audit-committee financial expertise refers to the presence on the audit committee of members who possess technical knowledge and experience in accounting, auditing, finance, or related fields. This expertise enables them to effectively oversee financial reporting, internal controls and audit processes, ensuring the integrity and transparency of financial statements. Ownership structure refers to the distribution of ownership rights and control among various shareholders in a company. According to Chau and Gray (2023) ownership structure is a mechanism that aligns the interest of shareholders with that of managers. Internal control represents the set of procedures, policies, and systems implemented by management to ensure accurate financial reporting, safeguard assets, and prevent fraudulent practices. An effective internal control system mitigates the risks of fraud, errors, and financial misstatements, consequently enhancing financial reporting quality (Jasim & Ibrahim, 2023; Hossain, 2017).

Financial reporting quality could be improved when management is not engaged in opportunistic behavior such as income smoothing. Income smoothing is an accounting technique companies use to reduce fluctuations in their earnings across different periods, aiming to present more consistent financial results over time. When income smoothing is achieved through legitimate accounting discretion (e.g., accrual estimations), it may increase perceived stability and reduce perceived risk (Kartiko et al., 2025). However, when it is used opportunistically to manipulate earnings or mislead investors, it reduces financial reporting quality. Unlike single-period measures of earnings management (such as discretionary accruals), income smoothing looks across multiple periods to assess how firms adjust earnings patterns. Income smoothing is better measure of financial reporting quality because it reflects managerial discretion and reporting integrity (Makokha et al., 2024).

Financial reporting is expected to provide a true and fair view of a firm's financial position and performance to enable investors, regulators, and other stakeholders make informed decisions. However, in Nigeria's pharmaceutical sector, concerns have persisted regarding the credibility, transparency, and reliability of financial reports. Despite the adoption of International Financial Reporting Standards (IFRS) and regulatory oversight by the Financial Reporting Council of Nigeria (FRCN) and the Nigerian Exchange Group (NGX), evidence suggests that financial reporting practices in the industry remain below expectation. A series of corporate failures and reporting irregularities among pharmaceutical firms in Nigeria have raised questions about the determinants of financial reporting quality in the sector. For instance, Evans Medical Plc was delisted from the Nigerian Exchange due to persistent failure to file audited financial statements and meet post-listing obligations. Similarly, other firms such as Neimeth International Pharmaceuticals Plc and Pharma-Deko Plc have at various times faced regulatory sanctions and investors' distrust over delayed or incomplete disclosures. These incidents reveal weaknesses in governance structures, internal control mechanisms, and managerial accountability within the sector.

Furthermore, anecdotal evidence suggests that low management quality, ineffective audit committees, weak internal controls, and concentrated ownership structures may encourage opportunistic reporting

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behaviors such as income smoothing and earnings manipulation (Yudhanto & Rahmawati, 2025). These practices distort the quality of reported financial information, thereby undermining investor confidence, corporate reputation, and long-term sustainability of pharmaceutical firms in Nigeria. The related empirical studies reviewed revealed some gaps. Firstly, other determinants of financial reporting quality were used. For instance, ethical standards and regulatory adherence (Hossain, 2017); the level of IFRS and information technology adoption (Kartiko et al., 2025); capital structure (Etukeyin et al., 2025). It was also noted that measures of financial reporting quality beyond income smoothing were used (IFRS qualitative index - Etukeyin et al., 2025; accrual quality - Amanamah, 2024). It was also noted that most of these studies were conducted outside Nigeria in countries with different legal and institutional backgrounds (Malaysia - Kartiko et al., 2025; Indonesia - Yudhanto & Rahmawati, 2025; Ghana – Amanamah, 2024). Even those studies conducted in Nigeria focused on sectors other than pharmaceutical firms. However, the findings from these studies were mixed, with some having negative relationship and others positive. It was as a result of these identified gaps that this study was instigated to ascertain the major determinants of financial reporting quality of listed pharmaceutical companies in Nigeria.

2.0 Literature Review and Theoretical Development

Determinants of Financial reporting quality.

Determinants of financial reporting quality refer to the factors that influence how accurate, transparent, credible, reliable, and useful a company's financial reports are (Etukenyin et al., 2025). In other words, these are the elements that determine whether the financial statements truly represent the company's financial position and performance, or whether they are distorted by errors, bias or manipulation. According to Anto and Yusran (2023), the determinants of financial reporting quality can be grouped into four broad categories. These are firm specific determinants, governance, institutional and environmental factors. Firm-specific determinants are internal characteristics of the reporting entity that shape incentives, resources, and constraints around the preparation and disclosure of financial statements. Typical firm specific attributes include size, profitability, growth opportunities, leverage, complexity of operations, ownership concentration, and managerial quality (education, tenure, compensation).

Corporate governance determinants focus on the structures and processes designed to align managers' behaviour with shareholders' interests and to provide oversight over reporting. This category includes board composition and independence, audit committee characteristics, ownership structure, external audit quality, executive compensation design, internal control and the presence of internal audit functions. Institutional determinants on the other hand, refer to the regulatory, legal, and market institutions that frame corporate behavior, for example, the strength of investor protection laws, enforcement intensity, capital market development, accounting standards, and the structure of the legal system (common law vs. civil law). Institutions shape both the costs and benefits of high-quality reporting (Hung et al., 2023).

Financial reporting quality (FRQ)

Financial reporting quality refers to the accuracy, completeness, transparency and rFinancial reporting quality of a company's financial statements and disclosures. Financial reporting quality represents the degree to which financial statements provide true, fair, and transparent information about a company's performance and financial position (Hung et al. 2023). It also reflects the extent to which financial statements faithfully represent the underlying economic reality of a firm. According to Kartiko et al. (2025), high-quality reporting enhances transparency, reduces information asymmetry, and improves the reliability of financial information. Financial report that is of high quality provides stakeholders with relevant and trustworthy information to make informed decisions. It may be proxied by measures such as discretionary accruals, earnings persistence, or quality of earnings depending on data availability. Financial reporting quality in this study was measured using income smoothing.

Income smoothing

Income smoothing is an accounting technique companies use to reduce fluctuations in their earnings across different periods, aiming to present more consistent financial results over time. When income smoothing is achieved through legitimate accounting discretion (e.g., accrual estimations), it may increase perceived stability and reduce perceived risk. However, when it is used opportunistically to manipulate earnings or mislead investors, it reduces financial reporting quality. Income smoothing is a form of earnings management and is generally defined as the dampening of fluctuations in reported earnings over time (Ronen & Yaari 2022,). In other words, management is inclined to take actions to increase earnings when earnings are relatively low and to decrease earnings when earnings are relatively high. Income smoothing is one of the accounting-based earnings quality proponents. Beidleman (2023) defined income smoothing as an attempt on the part of the firm's management to reduce abnormal variations in earnings to the extent allowed under sound accounting and management principles. Similarly, Akanbi et al. (2022) defined earnings smoothing as reduction of volatility in reported earnings that would otherwise exist in the absence of some action. Income smoothing is a legal right of the incumbent management to refine financial statements. Managers either use their discretion to alter earnings by different accounting choices or they change operations for the sake of earnings targets. Income smoothing is an earnings management strategy. There are countless reasons why managers are engaged in income smoothing like for instance reaching bonus targets, protecting their jobs, providing private information for outsiders or reducing tax obligations.

Management quality and income smoothing

Management quality refers to the competence, integrity, and ethical orientation of a firm's management team. According to Kartiko et al. (2025) management quality plays a crucial role in determining the credibility and transparency of financial reports. The academic qualification of a Chief Executive Officer (CEO) serves as a reliable proxy for management quality because it reflects the CEO's competence, technical knowledge, and ethical orientation. According to positive accounting theory, managers may engage in accounting choices that serve their interests. However, CEOs with higher academic qualifications and ethical awareness are less likely to manipulate reports for personal gain. Their knowledge and professionalism promote transparency, leading to improved financial reporting quality.

A CEO with a strong educational background, especially in accounting, finance, or management, is more likely to understand the implications of accurate and transparent reporting on corporate reputation and investor confidence. Well-qualified CEOs tend to implement sound governance practices, discourage earnings manipulation, and ensure adherence to accounting and regulatory standards. Their educational exposure also equips them to appreciate the long-term benefits of credible reporting over short-term opportunistic gains. High-quality management promotes accurate and timely reporting, limits earnings manipulation, and upholds accountability. Empirical evidence supports this view, for instance Abebaw (2020) found that management quality has significant positive effect on financial reporting quality. Echobu et al. (2021) found positive significant relationship between CEO academic qualification and financial reporting quality, positive significant relationship between leverage, liquidity, CEO academic qualification and financial reporting quality, measured using residuals from the modified Jones model by Dechow et al. (1995). Stephen (2021) found that management quality significantly improves financial reporting quality through negative relationship with earnings management. Adebayo (2022) found that management quality is a poor determinant of financial reporting quality. Thus, this study hypothesized that;
Ho_1: Management quality has no significant effect on income smoothing of listed pharmaceutical companies in Nigeria.

Audit committee financial expertise and income smoothing

Audit committee financial expertise refers to the knowledge, skills and experience of audit committee members in financial reporting, accounting, auditing and internal controls. This expertise enables them to effectively oversee financial reporting, internal controls and audit processes, ensuring the integrity and transparency of financial statements. An audit committee with financial expertise reduces information asymmetry between managers and the board/shareholders and strengthens monitoring, thereby constraining opportunistic earnings management such as income smoothing. Financial experts are better equipped to question accounting estimates, detect earnings management techniques (accrual manipulation, classification shifts, real activities manipulation), and demand robust disclosures. This raises the expected cost of manipulation and improves FRQ (Henok (2021). Audit-committee experts are a valuable governance resource: their knowledge (human capital) enables better interpretation of accounting standards, judgement over complex transactions, and oversight of internal controls and the external auditor. Expert members are more likely to identify unusual accruals, related-party transactions, and inconsistent accounting policies.

The empirical studies revealed mixed findings on the effect of audit committee financial expertise and financial reporting quality. Henok (2021) found that quality of accounting information of Ethiopian private banks can be influenced by audit committee effectiveness. Stephen (2021) found that audit quality measured using audit committee financial expertise have significant negative effect on earnings management being a negative measure of audit quality. Amanamah (2024) found that diverse skills and expertise on corporate boards and audit committees' independence significantly impact financial reporting quality.

Ho_2: Audit committee financial expertise has no significant effect on income smoothing of listed pharmaceutical companies in Nigeria.

Ownership structure and income smoothing

Ownership structure refers to the distribution of ownership rights and control among various shareholders in a company. Ownership structure as proposed by the agency theory is one of the most important corporate governance mechanisms to solve agency problems as it suggests that concentrated ownership will result in more effective monitoring (Jensen & Meckling, 1976). One important dimension of ownership structure is institutional ownership, which represents the proportion of a company's shares held by institutional investors such as banks, pension funds, insurance companies, investment firms, and mutual funds. Institutional investors are typically regarded as sophisticated and informed investors who possess the resources, expertise, and incentives to monitor management activities and influence corporate governance decisions. Empirical studies have produced mixed results regarding the effect of institutional ownership on financial reporting quality measured through income smoothing or earnings management. Many studies show that higher institutional ownership discourages earnings management and improves reporting quality because institutional investors act as effective monitors. Masud (2021) found that long-term institutional investors discourage opportunistic earnings management. Stephen (2021) reported that firms with higher institutional ownership are less likely to engage in income-increasing earnings management. Awodiran and Ogundele (2022) showed that institutional ownership improves the informativeness of earnings by reducing income smoothing behavior. Ekwueme and Aniefor (2024) found a positive significant relationship between ownership structure and financial reporting quality, measured using residuals from the modified Jones model. Etukeyin et al. (2025) found that ownership structure (coeff. = -0.006[0.887]), has no significant effect on financial reporting quality of listed service firms in Nigeria.

Ho_3: Ownership structure has no significant effect on income smoothing of listed pharmaceutical companies in Nigeria.

Internal control systems and income smoothing

Internal control represents the systems, policies, and procedures established by management to ensure the reliability of financial reporting, safeguard assets, and prevent fraud or material misstatement. Effective internal control mechanisms play a vital role in ensuring that transactions are properly recorded and reported in compliance with accounting standards. Internal controls are critical for ensuring the accuracy, completeness, and reliability of financial statements. An effective internal control system mitigates the risks of fraud, errors, and financial misstatements, consequently enhancing financial reporting quality (Jasim & Ibrahim, 2023; Hossain, 2017). Effective internal controls constrain opportunistic behavior by ensuring that management actions comply with accounting standards and company policies, thereby limiting income smoothing and other forms of earnings management. A well-functioning internal control system reinforces stewardship behavior by promoting accountability, ethical conduct, and compliance with reporting standards, thereby enhancing the credibility of financial information.

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Strong internal controls act as a monitoring mechanism that reduces agency costs by restricting managers' ability to manipulate financial reports. A robust internal control system ensures that information disclosed in financial reports is accurate and timely, reducing asymmetry.

Weak internal controls, in contrast, heighten the risk of earnings manipulation and financial fraud. Echobu et al. (2021), found that companies with weak internal control environments exhibited increased levels of earnings misstatements and fraudulent financial reporting practices. This means that with weak internal control is weak, management can exploit this gap to smooth income or manipulate earnings to appear more stable and profitable. Most empirical studies report positive relationship between internal control and financial reporting quality implying negative relation with income smoothing. Swarmilah and Fakhrorazi (2021) found that internal control system (ICS) has a positive relationship with financial reporting quality. They noted that firms with material weaknesses in internal control report lower-quality accruals, indicating poor financial reporting quality. Anto and Yusran (2023) documented that internal control deficiencies are associated with more persistent earnings management and less reliable reporting. Amanamah (2024) showed that companies with strong internal controls provide more credible financial statements with less income smoothing.
Ho_4: Internal control has no significant effect on income smoothing of listed pharmaceutical companies in Nigeria.

2.2Theoretical framework

The empirical studies on financial reporting quality and earnings management have shown that many theories provide empirical foundations for this topic. However, this work is supported by positive accounting theory.

Positive Accounting Theory (PAT) by Watt and Zimmerman

Positive Accounting Theory was propounded by Ross L. Watts and Jerold L. Zimmerman in 1978 through their seminal work titled "Towards a Positive Theory of the Determination of Accounting Standards". They later expanded it in 1986 in their book "Positive Accounting Theory." Positive Accounting Theory explains and predict how managers, auditors, and firms choose specific accounting methods, rather than prescribing which methods they should use. In contrast to normative accounting theory, which tells accountants what they ought to do, positive accounting theory focuses on understanding why they do what they do in real-life situations (Abebaw, 2020). Although company perceptions are important, managers are often predominantly concerned with ways of maximizing their perks and Compensation. Watts and Zimmerman argue that managers are self-interested individuals who make accounting choices to maximize their personal or organizational benefits. These choices may be influenced by factors such as bonus plans, debt covenants, tax policies, political costs, and ownership structure. This theory provides a behavioral explanation for why management and governance mechanisms affect reporting outcomes.

According to Bintara (2022), the theory offers three different views, namely efficiency perspective, opportunistic perspective and contractual perspective. Under the efficiency perspective, mechanisms are put in place with the objective of minimizing future agency costs. Accounting methods are adopted to reflect the true underlying performance of the entity. In relation to such perspective, managers conduct earnings management to convey private information to stakeholders about future prospects of the firm (Cudia & Dela Cruz, 2018). On the other hand, under the opportunistic perspective, it assumes that managers will opportunistically select accounting methods to achieve the goal of increasing their own personal wealth. Managers would use earnings management strategies to conceal the true economic performance of the firm and eventually to mislead investors and to pursue their own private gains (Bintara 2022). The third perspective, which is the contractual view, assumes that managers would utilize their choice of accounting policies in order to minimize costs incurred in a contractual agreement (Swarmilah & Fakhrorazi, 2021). All three perspectives under the PAT provide an explanation as to why managers would choose a specific earnings management strategy. Under this theory, there are motivations both internal (firm-specific characteristics) and external (contractual agreements) that would affect how a firm utilizes discretionary accruals (Fagbemi et al., 2022). Further, Watts and Zimmerman (1986) explained that capital market will react when abnormal return appears in firm's

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financial report, whether caused by nature or accountant intervention.

Positive accounting theory is relevant to this study as it provides the theoretical foundation for understanding how management behavior and organizational governance mechanisms shape the quality of financial reporting. It predicts that when governance mechanisms like strong internal control, effective audit committees, and institutional monitoring are in place, managerial opportunism is curtailed, resulting in high-quality, transparent, and reliable financial reports — exactly what this study aims to assess. PAT helps explain how internal and external governance determinants (management quality, internal control, ownership structure, and audit committee independence) influence management's accounting decisions that determine financial reporting quality. This was the anchor theory for this study.

3.0 METHODOLOGY

This study adopted an ex-post facto research design. The design was suitable for this study because secondary data were used. Also, ex-post facto was used since the event had taken place and there is little or no room to manipulate the variables of this study.The population of this study comprised seven (7) pharmaceutical companies listed on the Nigerian Stock Exchange Group . In this study, secondary data were used, Secondary data were preferred due to its reliability, acceptability, and availability. The data used for the study were extracted from Nigerian Stock Exchange (NSE) fact book and annual financial statements of the sampled companies for the period of ten years (2016 to 2025). The data for internal control were derived through internal control checklist. Items disclosed by the company according to the checklist were assigned '1', while those not disclosed were assigned '0'. An internal control index was derived as the ratio of actual disclosure to aggregate total disclosures. The technique of data analysis that was employed in this study was ordinary least square regression analysis and the statistical package employed was E views version 13.

Model specification

In line with the previous researches, the researcher adapted and modified the Model of Etukeyin et al. (2025) in examining the determinants of financial reporting quality of of listed pharmaceutical companies in Nigeria. This is given below:

Financial reporting quality =f (Determinants)

Income smoothing = f(Management quality, audit committee financial expertise, ownership structure, internal control)

$$\mathbf{INS_{it} = \beta_0 + \beta_1 MANQ_{it} + \beta_2 AUCF_{it} + \beta_3 OWNS_{it} + \beta_4 INTC_{it} + £_{it}}$$

Where:

INCS = Income Smoothing
MANQ = Management quality
AUCF = Audit committee financial expertise
OWNS = Ownership structure
INTC = Internal control system
β_0 = Model intercept
β_1-β_4 = Coefficient to be estimated in the study
$_{it}$ = Cross section of listed pharmaceutical firms with time variant
$£_{it}$ = Stochastic error term

4.0 Analysis and discussion

The data in this study were analyzed ordinary least square regression analysis.

Table 4.1 Descriptive statistics of the determinants of financial reporting quality of pharmaceutical companies in Nigeria

	INCS	MAQT	AUFE	OWSH	INTC
Mean	0.420	1.800	0.623	0.152	0.837
Median	1.359	2.000	0.250	0.092	0.028
Maximum	2.754	4.000	0.830	0.250	0.472
Minimum	0.121	0.100	0.300	0.056	0.267
Std. Dev.	3.762	0.620	0.350	0.506	0.225
Skewness	7.603	12.58	2.534	2.316	0.029
Kurtosis	85.480	164.0	9.660	8.674	0.278
Jarque-Bera	52757.51	199393.9	525.3768	412.5719	234.837

Probability	0.000000	0.000000	0.000000	0.000000	0.00000
Sum	12.642	9511.140	35719	1.908	3.4781
Sum Sq. Dev.	56.632	1723266	2.4623	6.554	8.0938
Observations	70	70	70	70	70

Source: Author's computation (2026)

Table 4.1 shows a summary of the descriptive statistics of the study. From the Table, it was observed that financial reporting quality measured using income smoothing had a mean value of 0.420. This shows that pharmaceutical firms in the study report income that reflects actual fluctuations in performance. This therefore means that financial reporting quality is relatively high since reported earnings better reflect the true economic condition of firms. Management quality (MAQT) measured using CEO education had an average score of 1.800 which rounds up to about 2. This implies that, on average, most CEOs in the pharmaceutical firms possessed master degree. Audit committee financial expertise shows a mean value of 0.623 which means 62% of audit committee members in the pharmaceutical sector are accounting and finance experts, and then standard deviation came in at 0.35 indicating a low level of variability in the data points of this variable. For ownership structure measured using institutional ownership, it was observed that the minimum was 0.053, indicating that the lowest institutional ownership stake in the studied firms was about 5%. Also the highest stake owned by institutional investors was 0.250, that's about 25%. Finally, the internal control index has a minimum value of 0.2 and this means that the least compliant firm disclosed only 20% the items in the internal control checklist.

Table 4.2 Correlation analysis of the determinants of financial reporting quality of pharmaceutical companies in Nigeria

	INCS	**MAQT**	**AUFE**	**OWSH**	**INCT**
INCS	1.000000				
MAQT	0.014527	1.000000			
AUFE	0.387622	0.426292	1.000000		
OWSH	0.201817	-0.027629	0.452722	1.000000	
INCT	0.38303	0.278108	0.536829	0.273839	1.0000

Source: Author's computation (2026)

From Table 4.2 there is no discernable association between income smoothing (INCS) and management quality (0.014527). Conversely, there is a positive and moderate correlation between audit committee financial expertise (AUFE) and income smoothing (0.387622). Also, there is a weak and positive association between ownership structure(BOEX) and income smoothing (0.201817)). And finally, there is a moderation association between internal control and income smoothing (0.38303). Since the correlation coefficients are moderate, there is no room to suspect the presence of multicollinearity.

Table 4.3 Regression analysis of the determinants financial reporting quality of listed pharmaceutical companies

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	0.425278	0.072629	1.727838	0.0534
MAQT	-0.025102	0.367202	-2.962522	0.0021
AUFE	-0.321092	0.089202	-3.892762	0.0000

OWSH	-0.012522	24.32478	-1.928202	0.0562
INCT	-0.208105	0.678960	-3.528291	0.0001

R-squared	0.320872	Mean dependent var	0.529822
Adjusted R-squared	0.292773	S.D. dependent var	0.224582
S.E. of regression	0.623429	Akaike info criterion	1.152892
Sum squared resid	47.72892	Schwarz criterion	1.628922
Log likelihood	122.7390	Hannan-Quinn criter.	1.253899
F-statistic	23.96530	Durbin-Watson stat	2.536892
Prob(F-statistic)	0.023425		

Source: Author's computation (2026)

Table 4.3 shows an F-statistic of 23. 96530 with p-value of 0.023425 indicating that overall, management quality, audit committee financial expertise, ownership structure and internal control system have significant effect on financial reporting quality of pharmaceutical companies in Nigeria. The model gave an R-squared value of 0.320872 which means that 32% of the changes in the dependent variable could be explained by the independent variables of this study. However, the unexplained part is captured in the error term.

4.4 Discussion of findings

Management quality and income smoothing

The result from the regression output in Table 4.3 shows that management quality measured using CEO academic qualification (Coef. = -0.251; p = 0.0021) has significant negative effect on income smoothing of listed pharmaceutical companies in Nigeria. Therefore, the negative coefficient indicates that higher CEO academic qualification enhances financial reporting quality by discouraging opportunistic accounting practices. The p -value of 0.0000, which is far below the conventional level of 0.05, indicates that the likelihood that this result occurred by chance is low. This indicates that higher academic qualifications of CEOs are associated with a lower tendency to engage in income smoothing. It is important to note that low Eckel income smoothing index or coefficients suggest high level of financial reporting quality. This finding implies that well-educated CEOs possess greater ethical awareness, technical competence, and understanding of the long-term implications of earnings manipulation on firm credibility and investor confidence. In other words, more educated are less likely to engage in income smoothing behavior. Empirical evidence supports this view, for instance Abebaw (2020) found that management quality has significant positive effect on financial reporting quality. Echobu et al. (2021) found positive significant relationship between CEO academic qualification and financial reporting quality, positive significant relationship between leverage, liquidity, CEO academic qualification and financial reporting quality). Stephen (2021) found that management quality significantly improves financial reporting quality through negative relationship with earnings management.

Audit committee financial expertise and income smoothing

The result from the regression output in Table 4.3 shows that audit committee financial expertise (Coef. -0.321; p = 0.0000)) has significant negative effect on income smoothing of listed pharmaceutical companies in Nigeria. The negative coefficient of -0.321 implies that as the level of financial expertise among audit committee members increases, the extent of income smoothing significantly reduces. In other words, firms with more financially knowledgeable and experienced audit committee members are less likely to manipulate earnings or engage in income smoothing. This implies that the presence of financially knowledgeable members on the audit committee reduces the likelihood of earnings manipulation. Financially expert audit committees are better equipped to detect accounting irregularities, enforce compliance with accounting standards, and ensure that financial statements present a true and fair view of the firm's performance. This finding is backed up by previous empirical studies. For instance, Stephen (2021) found that audit

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quality measured using audit committee financial expertise have significant negative effect on earnings management being a negative measure of audit quality. Amanamah (2024) found that diverse skills and expertise on corporate boards and audit committees' independence significantly impact financial reporting quality,

Ownership structure and income smoothing

The result from the regression output in Table 4.3 shows that ownership structure measured using institutional ownership (Coef. = 0.018; p = 0.0562) has nonsignificant negative effect on income smoothing of listed pharmaceutical companies in Nigeria. This implies that the distribution of ownership among institutional and individual shareholders does not significantly influence managers' tendency to smooth earnings. The insignificance could be attributed to weak monitoring mechanisms among shareholders or the presence of concentrated ownership where dominant shareholders align with management decisions. This finding contrasts with theoretical expectations that concentrated ownership should improve oversight, but it reflects the contextual reality in many emerging markets where ownership concentration may not translate to active monitoring. Empirical studies have produced mixed results regarding the effect of institutional ownership on financial reporting quality measured through income smoothing or earnings management. Masud (2021) found that long-term institutional investors discourage opportunistic earnings management. Stephen (2021) reported that firms with higher institutional ownership are less likely to engage in income-increasing earnings management. Awodiran and Ogundele (2022) showed that institutional ownership improves the informativeness of earnings by reducing income smoothing behavior. Ekwueme and Aniefor (2024) found a positive significant relationship between ownership structure and financial reporting quality, measured using residuals from the modified Jones model. Etukeyin et al. (2025) found that ownership structure (coeff. = -0.006[0.887]), has no significant effect on financial reporting quality of listed service firms in Nigeria.

Internal control system and income smoothing

The result from the regression output in Table 4.3 shows that internal control system (Coef. = -0.208; p = 0.001) has significant negative effect on income smoothing of listed pharmaceutical companies in Nigeria. The negative coefficient of -0.206 implies that as the internal control systems become stronger, the extent of income smoothing significantly reduces. In other words, firms with more stronger internal control systems are less likely to manipulate earnings or engage in income smoothing. This implies that strong internal controls reduce the incidence of earnings manipulation, thereby improving financial reporting quality. Effective internal control mechanisms ensure accuracy, reliability, and compliance in financial reporting by providing checks and balances that discourage fraudulent financial practices. This finding aligns with the internal control theory and supports the assertion that well-designed internal control frameworks enhance transparency and accountability in financial reporting.The finding of this study is supported by previous empirical studies. Swarmilah and Fakhrorazi (2021) found that internal control system (ICS) has a positive relationship with financial reporting quality. Anto and Yusran (2023) documented that internal control deficiencies are associated with more persistent earnings management and less reliable reporting. Amanamah (2024) showed that companies with strong internal controls provide more credible financial statements with less income smoothing.

5.0 Conclusion and recommendations

This study concluded that management quality, audit committee financial expertise, and internal control systems play a critical role in improving financial reporting quality by reducing the tendency of managers to engage in income smoothing. Conversely, ownership structure appears to have no significant influence on income smoothing behavior. The results suggest that organizational governance mechanisms related to managerial competence, financial oversight, and control processes are more effective in enhancing reporting transparency than ownership concentration. Strengthening these governance attributes can therefore enhance the credibility of financial reports and investor confidence in listed firms. Based on the findings of this study, it was recommended that the board of directors should make educational qualifications and professional competence key criteria in the selection and promotion of CEO. Also, the financial reporting council of Nigeria (FRCN) and Security and Exchange Commission (SEC) should enforce compliance with corporate governance codes that emphasize financial literacy of audit committee members This will enhance the committee's ability to detect and prevent earnings manipulation practices like income smoothing, thereby promoting transparency, accountability and reliability in financial reporting

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