Impact of Firm Attributes on Financial Reporting Quality of Listed Consumer Goods Firms in Nigeria

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Abstract
This study examines the impact of firm attributes on financial reporting quality of listed consumer goods firms in Nigeria, drawing on the IASB Conceptual Framework and institutional disclosure requirements of the Nigerian Exchange Group (NGX) and the Financial Reporting Council of Nigeria (FRCN). Applying an ex-post facto research design with cross-sectional analysis, the study analyses panel data from ten purposively selected consumer goods firms, yielding 100 firm-year observations. Financial reporting quality is measured using a composite index based on the IASB qualitative characteristics—relevance,faithful representation,understandability, comparability, and timeliness—while firm attributes are proxied by return on assets, return on equity, liquidity, leverage, and market value (Tobin's Q). Data analysis is conducted using descriptive statistics, regression analysis, confirmatory factor analysis, and partial least squares structural equation modelling (PLS-SEM). The findings reveal that profitability and market value have a positive and significant effect on financial reporting quality, indicating that well-performing firms are more inclined toward transparent and high-quality reporting. Liquidity shows a moderate positive influence, whereas leverage exerts a significant negative effect, suggesting that debt pressure may undermine faithful financial representation. The measurement model confirms the validity and reliability of the IASB-based financial reporting quality construct within the Nigerian context. The study concludes that firm attributes play a critical role in shaping reporting quality and recommends stricter regulatory monitoring of highly leveraged firms alongside policies that encourage performance-driven transparency. The study contributes to the literature by integrating IASB qualitative characteristics with NGX and FRCN disclosure frameworks in an emerging market setting.

Keywords: Financial reporting quality; Firm attributes; IASB qualitative characteristics; Consumer goods firms; Nigeria; PLS-SEM

1.0.Introduction

Financial reporting quality (FRQ) remains a central concern in corporate governance and capital market efficiency, particularly in emerging economies such as Nigeria where investor confidence is highly sensitive to the credibility of corporate disclosures. High-quality financial reporting reduces information asymmetry, enhances firm valuation, and facilitates efficient allocation of resources within capital markets (Bushman & Smith, 2001; International Accounting Standards Board [IASB], 2018). For listed consumer goods firms in Nigeria, whose operations are closely tied to household consumption and macroeconomic volatility, the integrity of financial reporting is critical for sustaining market trust and regulatory compliance under the Nigerian Exchange Group (NGX) framework.

Despite improvements in accounting regulation following the adoption of International Financial Reporting Standards (IFRS) in Nigeria, concerns persist regarding the extent to which firm-specific characteristics influence the quality of reported financial information. Prior studies suggest that attributes such as profitability, leverage, liquidity, and market valuation shape managerial incentives and reporting behaviour, potentially affecting earnings quality and disclosure transparency (Dechow, et al., 2010; Francis, et al., 2005). In Nigeria, empirical evidence on this relationship remains fragmented, with limited focus on the consumer goods sector, which represents a substantial proportion of non-financial listed firms.

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Conceptually, firm's attributes refer to the identifiable financial and operational characteristics of a company that reflect its economic condition, managerial efficiency, and market standing. They represent firm-specific financial and market characteristics that shape managerial incentives, monitoring intensity, and reporting behaviours. These attributes influence managerial behaviour (whether managers provide high-quality or opportunistic financial disclosures); financing decisions, and the credibility of corporate disclosures (Jensen & Meckling, 1976; Watts & Zimmerman, 1986). In accounting research, firm attributes are treated as firm-specific factors that shape incentives for transparency or opportunism in financial reporting. These attributes Mue, Aruwa and Iyere (2025) had defined as those firms' characteristics that affect the quality of financial reporting of listed industrial goods firms, and citing Yeosuf et al. (2017), they added that firm attributes which are varyingly viewed by different scholars are those incentive variables that may affect the firm's financial decisions. Firm attributes are grounded in agency theory, which posits that managers may exploit information asymmetry for personal benefit, and signalling theory**,** which suggests that financially strong firms voluntarily provide higher-quality information to signal superior performance to the market (Jensen & Meckling, 1976; Spence, 1973).

Firm attributes shape managerial incentives and constraints, which in turn affect financial reporting quality. Profitable and highly valued firms tend to provide higher-quality financial reports to signal strength, while firms facing financial pressure may engage in opportunistic reporting. Thus, firm attributes are critical predictors of FRQ in both developed and emerging market contexts. Ibanga and Umo (2024) had asserted that corporate attributes enhance financial reporting quality of ICT firms in Nigeria.

Common Measures of Firm's Attributes

Firm attributes are easily measurable using data from published financial statements and market records. Key indicators include:

1. **Profitability (Return on Assets – ROA):** Efficiency in using assets to generate earnings. ROA measures how efficiently a firm utilises its total assets to generate profit. It reflects managerial efficiency and operational performance. It is expressed as:

ROA=Profit After Tax/Total Assets

Higher ROA indicates better performance and stronger incentives for credible reporting (Uwuigbe et al., 2019; Saidu & Danjuma, 2018).

2. **Return on Equity (ROE):** Profitability attributable to shareholders' investment. ROE assesses the firm's ability to generate returns for shareholders. It captures owners' profitability and market expectations; and is expressed as:

ROE=Profit After Tax/Shareholders' Equity

Ibanga and Umo (2024) describe profitability as the degree to which a business yields profit or financial gain. It is the ability of a company to use its resources to produce and generate revenues in excess of its expenses and that as 'earning power" or working performance of the business, it adds to investment persistently creating earning or income. Scholars viewed that higher ROE may incentivise transparent reporting to sustain investor confidence (Dechow, et al., 2010; Francis et al., 2005). In other words, firms with high ROE often seek to maintain investor confidence through transparent reporting.

3. **Liquidity (LIQ):** Liquidity reflects a firm's capacity to meet short-term obligations. It is the firm's ability to meet short-term obligations using readily available assets. It is expressed as:

LIQ = Current Assets/Current Liabilities

As a measure of the solvency of a firm, which is the ability of the firm to easily meet its short-term debts, adequate liquidity enhances stability whereas excess liquidity may weaken reporting discipline (Echobu, et al., 2019; Akhgar & Karami, 2014). The ability of a firm to meet its current obligations as they fall due is an indication to investors and creditors of its continued existence in the future hence it is believed that high liquidity leads to lowering of the overall debt levels of a firm, hence, resulting to less pressure towards manipulative accounting (Mue, et al, 2025; Shehu & Farouk, 2014). However, scholars have posited that while adequate liquidity enhances stability, excessive liquidity may reduce monitoring pressure and affect reporting incentives.

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4. **Leverage (LEV):** Leverage indicates the extent to which a firm finances its operations through debt. This term Leverage (LEV) refers to the **e**xtent of debt financing relative to owners' equity. Further , also known as gearing, it can be seen as the percentage of total long-term debt to total assets or the proportion of debt financing in the total capital structure, a valuable factor in investment and risk management decisions (Shehu & Bello, 2013; Echobu, et al., 2019; Lilis, et al., 2024). It is expressed as:

LEV=Total Debt/Total Assetsor

Total Liabilities/Shareholders' Equity.

Hassan & Abubakar (2019) define leverage as the mixture of debt financing in the total capital structure of a firm. It is believed that a proper mix of debt and equity capital increases the value of a firm. High leverage may increase earnings management incentives to meet debt covenants (Hassan & Farouk, 2014; Shehu & Bello, 2013; Lilis, et al., 2024). In other words, highly leveraged firms may face pressure to manage earnings to meet debt covenants.

5. **Market Value (Tobin's Q):** Tobin's Q captures market-based valuation and growth opportunities. It simply entails market-based valuation of firm performance and growth opportunities. It can be expressed as:

Tobin's Q = (Market Value of Equity + Total Debt)/Replacement Cost of Assets

A higher Tobin's Q reflects stronger market expectations and increased scrutiny from investors and disclosure incentives (Chung & Pruitt, 1994; Ciocan et al., 2021)..

This operationalization of the concepts and variables ensures that FRQ captures both qualitative and quantitative disclosure dimensions (as would be shown Tables 1 and 2 below) while Firm attributes reflect profitability, financial structure, liquidity, and market pressure, and all measures are observable, replicable, and consistent with IASB principles.

The concept, Financial Reporting Quality (FRQ), can be viewed as the faithful representation (providing full and transparent financial information) and the relevance of the information conveyed by the financial reporting process to guide, clarify and not mislead users. It can further be referred to as the degree to which financial statements faithfully represent a firm's economic performance and position in a manner that is relevant, reliable, comparable, and free from material misstatement (Udomette, et al, 2025). It describes the extent to which a firm's financial statements faithfully represent its underlying economic reality in a manner that isrelevant,reliable,comparable, understandable, and timely for decision-making by users of financial information. High-quality financial reporting reduces information asymmetry, enhances accountability and investor confidence, and improves capital market efficiency (Dechow et al., 2010; IASB, 2018). Ibanga and Umo (2024) has asserted that FRQ is either defined by the quality of financial statements (financial reporting) or by the qualitativecharacteristicsoffinancialinformation; and that high quality financial reporting provides useful information to its users for various rational decisions such as, especially, for assessing performance, managerial stewardship, assessing the firm's performance, managerial stewardship, and prospects. Furthermore, Ibanga and Umo (2024) identified some determinants of financial reporting quality to include accounting and financial reporting standards, enforcement level by the regulatory authorities, corporate governance, quality of audit, presence and quality of audit committee, and management expertise and motivations.

FRQ is measured using a composite IASB Qualitative Characteristics Index**,** constructed through content analysis of annual reports. Each qualitative characteristic is decomposed into observable indicators adapted from Saidu and Danjuma (2018), Ciocan, et al. (2021), and Etukenyin, et al. (2025). Each indicator is scored on a binary/ordinal scale (0–1 or 0–2), depending on disclosure depth. The weighted average score for each firm-year observation is computed as: FRQ = ∑Observed IASB Indicator Scores/∑Maximum Obtainable Scores. This approach is consistent with disclosure-based FRQ measurement in emerging market studies (Adedapo & Olawale, 2019; Ibanga, et al., 2024).

From a theoretical perspective, FRQ aligns with stakeholder theory, which emphasises accountability to diverse stakeholders, and agency theory, which views high-quality reporting as a mechanism for reducing agency costs.

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Common Measures of Financial Reporting Quality

FRQ can be measured using accounting-based, market-based, and disclosure-based proxies, depending on data availability and research design.

1. **Accrual Quality:** Accrual quality assesses the extent to which accruals map into cash flows. Poor accrual quality indicates earnings manipulation. A simplified proxy is discretionary accruals derived from the Modified Jones Model.
2. **Earnings Smoothness:** This measures the degree to which managers smooth earnings relative to cash flows. Excessive smoothness may indicate manipulation.
3. **Earnings Predictability and Persistence:** Earnings predictability is a measure of Earnings Quality based on the ability of employing past earnings to predict future earnings which may be undermined by volatility in earnings numbers (Dechow, et al., 1995). Dechow, et al (2010), however, defined earnings predictability as the ability of earnings numbers to anticipate future cash flows of a firm. This measure of earnings quality is closely linked to earnings persistence. The term 'earnings persistence' on the other hand refers to the degree of sustainability or continuity of reported earnings and thus, also, connotes the autocorrelation in earnings regardless of the magnitude and sign of an earnings innovation (Lipe, 1990 cited in Ibanga & Umo, 2024). Although both relate to the use of existing earnings records to predict future earnings capacity, earnings persistence entails the extent to which the current period earnings become a permanent part of the earnings series whereas earnings predictability measures the ability of past earnings numbers to anticipate the firms' expected future cash flows.
4. **Timely Loss Recognition (Conservatism):** This captures how quickly firms recognise economic losses relative to gains, often measured using asymmetric timeliness models.
5. **Disclosure Index:** A disclosure index measures the completeness of mandatory and voluntary disclosures in annual reports, usually scored against IFRS or regulatory checklists.
6. **Composite FRQ Index (Most Practical):** For ease of application, many studies construct a composite FRQ index by aggregating standardised scores of accrual quality and disclosure compliance. This approach is particularly suitable for emerging markets. This is expressed as follow: FRQ = (Disclosure Score + Accrual Quality Score)/2

The Operationalization of IASB Qualitative Characteristics as used in this study is as follows:

1. **Relevance**: Relevance captures the capacity of financial information to influence users' decisions by providing predictive and confirmatory value.

Indicators:

R1: Presence of forward-looking statements aiding future expectations

R2: Disclosure of non-financial information on risks and business opportunities

R3: Use of fair value measurement rather than historical cost

R4: Explanations of how market events and significant transactions affected performance

Measurement: Each indicator is scored based on disclosure presence and depth in the annual report.

2.**Faithful Representation**:

Faithful representation reflects the completeness, neutrality, and freedom from error in financial reporting.

Indicators:

F1: Justification of assumptions and accounting estimates

F2: Valid rationale for selected accounting policies

F3: Balanced discussion of both positive and negative events

F4: Type of auditor's report issued

F5: Disclosure of corporate governance structures and practices

Measurement: Higher scores are assigned to firms providing transparent explanations and unqualified audit opinions.

3.**Understandability**:Understandability assesses the clarity and organisation of financial reports.

Indicators:

U1: Logical structure and organisation of the annual report

U2: Clarity of notes to financial statements

U3: Simplicity of language and avoidance of excessive jargon

U4: Auditor's report clarity

U5: Usefulness of appendices and glossary

Measurement: Scores reflect ease of comprehension by reasonably informed users.

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4. **Comparability:** Comparability enables users to identify similarities and differences across time and firms.
Indicators:
C1: Disclosure of changes in accounting policies and implications
C2: Explanation of revisions in accounting estimates
C3: Restatement of prior-period figures where applicable
C4:Period-to-periodperformance comparison
C5: Comparability with peer firms in the same industry
Measurement: Higher scores indicate greater transparency and consistency in reporting.

5.**Timeliness:** Timeliness reflects how quickly financial information is made available to users.
Indicator:
T1: Number of days between financial year-end and auditor's report date

Measurement: Shorter reporting lag attracts higher scores, consistent with prior studies (Ciocan et al., 2021).

The conceptual framework for this study, anchored on the IASB Conceptual Framework, is given in

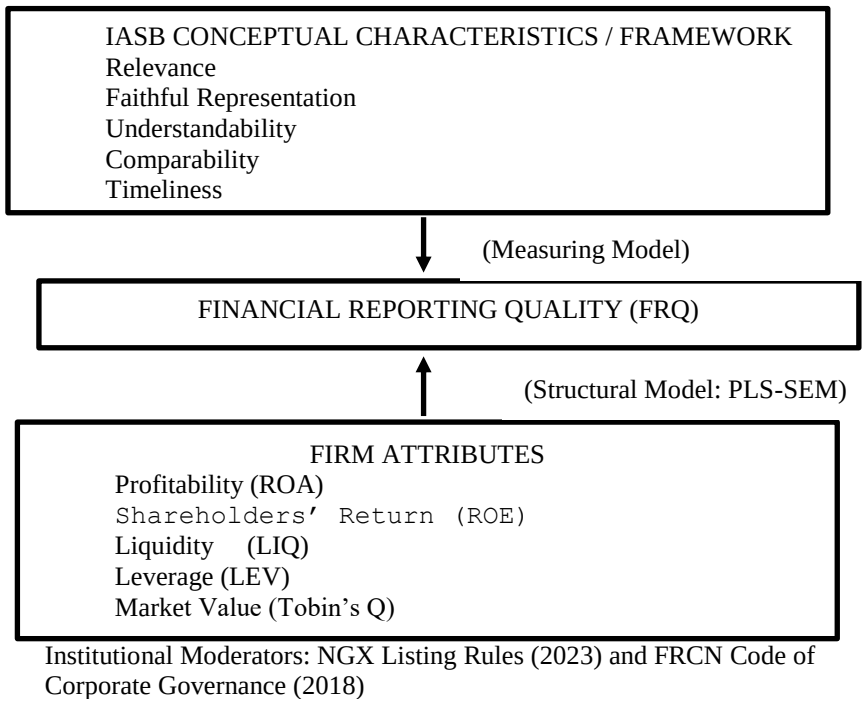

Figure 1: Conceptual framework (illustrating the structural relationship between firm attributes and financial reporting quality, operationalized through the IASB qualitative characteristics and reinforced by NGX and FRCN disclosure requirements). Source: Author's conceptualisation, 2025

Figure 1 above, and posits that firm attributes influence financial reporting quality through managerial incentives and regulatory compliance mechanisms. Profitability and market valuation enhance transparency through signalling effects, while leverage and liquidity influence reporting behaviour through agency-related pressures. The framework integrates IASB qualitative characteristics with NGX and FRCN disclosure codes, ensuring institutional relevance within the Nigerian reporting environment. IASB qualitative characteristics operationalized through NGX and FRCN disclosure requirements ensure regulatory consistency and construct validity.
Theoretically, this study is anchored on agency theory, signalling theory, and stakeholder theory, which collectively explain managerial

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reporting choices in response to contractual obligations, capital market expectations, and stakeholder pressures (Spence, 1973; Freeman, 1984; Jensen & Meckling, 1976). Agency theory propounded by Stephen Ross and Barry Mitnick in 1973 and developed by Jensen and Meckling (1976), arises from the division of ownership from control and posits that while the authority of decision-making is delegated to the agent (by the principals or firm owners), the agent he agent may not always act in the best interests of the principal as their interests may differ but disclosing complete financial information devoid of misstatement (both voluntarily and mandatorily) helps mitigate the agency problem and provides information that will be useful to all interested parties. Moreover, signalling theory explains how firms disclose information to reduce information asymmetry between managers and external parties. It posits that high-quality, transparent, and integrity-driven reporting acts as a credible signal of strong governance, robust internal controls, sound financial health, and ethical corporate behaviour; making firms with high-quality reporting practices experience lower risk, higher reliability, and better long-term prospects, which can positively influence investor decisions and market valuation (Spence, 1973; Connelly, et al., 2011). And finally, stakeholder theory posits that organisations have obligations not only to shareholders but also to a wider range of stakeholders such as creditors, employees, regulators, customers, and society, and so, firms must disclose transparent, accurate, and ethically prepared information to meet the expectations and informational needs of these diverse groups (Freeman, 1984; Harrison & Wicks, 2013). Guided by these theories, the study examines the impact of firm attributes on FRQ among listed consumer goods firms in Nigeria.

From an empirical standpoint, several studies have been conducted on the effect of firm attributes on financial reporting quality within and outside Nigeria with the results documenting conflicting results, thereby pointing to the inconclusiveness on the subject matter. The studies conducted in developing economies indicate mixed results regarding the influence of firm attributes on FRQ. While profitability and firm value are often associated with improved reporting quality due to reputational concerns, high leverage may incentivize earnings manipulation to meet debt covenants (Jensen & Meckling, 1976; Watts & Zimmerman, 1986).

Nigerian studies (e.g., Adebayo & Oyewole, 2021; Uwuigbe et al., 2019) report inconsistent findings, thereby necessitating sector-specific investigation using robust multivariate techniques beyond conventional regression analysis. Therefore, it was against these established gaps that this study is conducted to assess impact of firm attributes on financial reporting quality of listed consumer goods firms in Nigeria. Furthermore, there are many studies highlighting the effect of firm attributes on financial reporting quality using other financial reporting quality indices such as earnings accruals, timely loss recognition, earnings smoothness and asymmetric timeliness (Obiekea & Ebiaghan, 2023; Ibrahim, et al., 2022; Farouk, et al., 2019; Echobu, et al., 2019; Hassan & Farouk,2014) of which the scholars had adapted more specific financial reporting models such as Jones (1991) model, modified Jones (1995) model, Kothari (2005) model, and Yoon, Kim and Woodruff (2012) model. However, this study made use of the IASB qualitative characteristics framework and a disclosure checklist that is based on these qualitative attributes. Although some empirical and conceptual literature exists in this area (Etukenyin, et al.,2025; Ibanga, et al, 2024; Saidu & Danjuma,2018; Jerry & Saidu, 2016) studies on the IASB qualitative characteristics model relating to listed consumer goods producing firms in Nigeria is not adequately explored especially with focus on such variables as return on assets (ROA), leverage (LEV), liquidity (LIQ), return on equity (ROE), and market value (MV).

Based on this fact, this study is aimed at examining the impact of firm attributes on financial reporting quality of listed consumer goods firms in Nigeria. The specific objectives are to: (i) examine the effect of return on assets on FRQ;

(ii) determine the influence of leverage on FRQ; and

(iii) assess the effect of liquidity and return on equity on FRQ; and

(iv) evaluate the influence of market value on FRQ.

Accordingly, the null hypotheses are stated as follows:

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H_{01}: Return on assets has no significant effect on financial reporting quality.
H_{02}: Leverage has no significant effect on financial reporting quality.
H_{03}: Liquidity and return on equity have no significant effect on financial reporting quality.
H_{04}: Market value has no significant effect on financial reporting quality.

2.0.**Materials and Methods**

The study adopts an ex-post facto research design with a cross-sectional analytical approach, relying on secondary data extracted from published annual reports of listed consumer goods firms in Nigeria. The population comprises the 20 consumer goods manufacturing companies quoted on the Nigerian Exchange Group (NGX) as at 2024. Using purposive sampling, ten (10) firms with complete financial data over a ten-year period were selected, yielding 100 firm-year observations, consistent with prior panel-based accounting studies (Baltagi, 2021).
Financial reporting quality (FRQ) is the dependent variable and is proxied using an aggregate disclosure and accrual-quality index derived from IFRS-based reporting indicators. The independent variables include return on assets (ROA), leverage (LEV), liquidity (LIQ), return on equity (ROE), and market value (MV), measured respectively as profit after tax to total assets, total debt to total assets, current assets to current liabilities, profit after tax to shareholders' equity, and market capitalisation. These measures align with established empirical accounting literature (Francis et al., 2005; Dechow et al., 2010).
The econometric model specified for the study is expressed as:

$$FRQ_{it} = \beta_0+\beta_1ROA_{it}+\beta_2LEV_{it}+\beta_3LIQ_{it}+\beta_4ROE_{it}+\beta_5MV_{it}+\varepsilon_{it}$$

Data analysis was conducted using descriptive statistics, multiple regression analysis, Confirmatory Factor Analysis (CFA), and Partial Least Squares Structural Equation Modelling (PLS-SEM). Regression analysis was used to test direct relationships, while CFA and PLS-SEM were employed to validate construct reliability, convergent validity, and structural relationships, consistent with modern financial reporting research practices (Hair, et al., 2022).
The variables used in this study; the independent variable (firm attributes [proxied by ROA, ROE, LEV, LIQ and Tobin's Q) and the dependent variable - financial reporting quality were measured as given in Table 1 below.

Table 1: Measurement and Operationalization of Financial Reporting Quality and Firm Attributes

S/N	Variable	Variable Type	Conceptual Description	Measurement / Proxy	Regulatory Alignment (NGX & FRCN)	Key Sources
1	Financial Reporting Quality (FRQ)	Dependent	Degree to which financial statements faithfully represent economic reality in line with IASB qualitative characteristics	Composite IASB Qualitative Characteristics Index: FRQ= (Aggregate Score/Maximum Obtainable Score)	NGX Rulebook (2023) – Part H (Financial Disclosure); FRCN Act (2011); FRCN Code of Corporate Governance (2018)	Saidu & Danjuma (2018); Adedapo & Olawale (2019); Ibanga et al. (2024); Etukenyin et al. (2025)
2	Leverage (LEV)	Independent	Extent of debt financing relative to owners' equity	Total Liabilities ÷ Shareholders' Equity	NGX Listing Rules – Disclosure of Capital Structure; FRCN IFRS Compliance Directive	Hassan & Farouk (2014); Shehu & Bello (2013); Lilis et al. (2024)
3	Liquidity (LIQ)	Independent	Firm's ability to meet short-term obligations	Current Assets ÷ Current Liabilities	NGX Financial Reporting Guidelines; FRCN IFRS Presentation of Financial	Echobu et al. (2019); Akhgar & Karami (2014)

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					Statements	
4	Return on Equity (ROE)	Independent	Profitability attributable to shareholders	Profit After Tax ÷ Shareholders' Equity	NGX Performance Disclosure Requirements; FRCN IFRS Compliance	Dechow et al. (2010); Francis, et al. (2005)
5	Return on Assets (ROA)	Independent	Efficiency of asset utilization in generating earnings	Profit After Tax ÷ Total Assets	NGX Financial Performance Disclosure; FRCN Accounting Standards	Uwuigbe et al. (2019); Saidu & Danjuma (2018)
6	Market Value (Tobin 's Q)	Independent	Market-based valuation and growth expectation	(Market Capitalization + Total Debt) ÷ Total Assets	NGX Market Transparency Rules; FRCN Investor Protection Mandate	Chung & Pruitt (1994); Ciocan et al. (2021)

Source: Author's Compilation, (2025)

Financial reporting quality was measured using a composite index based on the IASB qualitative characteristics, operationalized through content analysis of annual reports and explicitly aligned with the Nigerian Exchange Group (NGX) disclosure requirements and the Financial Reporting Council of Nigeria (FRCN) regulatory framework as shown in Table 2.

Table 2: Operationalization of IASB Qualitative Characteristics (FRQ Index)

IASB Characteristic	Indicator Code	Indicator Description	Measurement Approach	NGX / FRCN Alignment
Relevance	R1	Forward-looking statements	Disclosure presence and depth (0–2)	NGX Rulebook – Forward-Looking Information Disclosure
	R2	Non-financial risk and opportunity disclosures	Content analysis score	FRCN Code (2018): Risk Management Disclosure
	R3	Use of fair value measurement	IFRS-based reporting assessment	FRCN IFRS Enforcement
	R4	Explanation of market events and transactions	Narrative disclosure scoring	NGX Continuous Disclosure Rule
Faithful Representation	F1	Justification of estimates and assumptions	Annual report analysis	FRCN Accounting Policy Disclosure
	F2	Rationale for accounting policy choices	Disclosure clarity score	NGX Financial Statements Review
	F3	Balanced discussion of gains and losses	Neutrality score	FRCN Transparency Principle
	F4	Type of audit opinion	Unqualified = highest score	NGX Audit and Assurance Rule
	F5	Corporate governance disclosures	Governance checklist score	FRCN Code of Corporate Governance
Understandability	U1	Logical organisation of reports	Structural clarity score	NGX Annual Report Presentation
	U2	Clarity of notes to accounts	Readability assessment	FRCN Disclosure Guidance
	U3	Simplicity of language	Jargon/readability	NGX Investor

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			index	Communication Rule
	U4	Clarity of auditor's report	Report type and clarity	NGX Audit Reporting Rule
	U5	Use of appendices/glossary	Supporting material score	FRCN Transparency Requirement
Comparability	C1	Disclosure of accounting policy changes	Disclosure adequacy score	FRCN IFRS Consistency Rule
	C2	Explanation of estimate revisions	Narrative completeness	NGX Financial Comparability Rule
	C3	Restatement of prior periods	Restatement disclosure	FRCN Financial Restatement Policy
	C4	Period-to-period comparison	Time-series reporting score	NGX Periodic Reporting Rule
	C5	Industry comparability	Peer benchmarking disclosure	NGX Sectoral Reporting Guideline
Timeliness	T1	Audit report lag (days)	Number of days from year-end to audit signature	NGX Filing Deadline; FRCN Timely Reporting Mandate

Source: Author's research, adaptation and compilation (2025)

3.0.Results

The study employed a balanced panel dataset consisting of 100 firm-year observations, derived from ten (10) listed consumer goods firms on the Nigerian Exchange Group (NGX) observed over a ten-year period (2015-2024). Panel estimation was preferred because it controls for unobserved firm-specific heterogeneity and improves estimation efficiency (Baltagi, 2021).

The data obtained from the financial statements were condensed, summarised and presented in tables as shown below.

Table 3 Panel Descriptive Statistics (N = 100 firm-year observations)

Variable	Mean	Std. Dev.	Min	Max
FRQ	0.075	0.328	−0.05	1.00
ROA	8.257	1.041	5.863	9.118
LIQ	5.863	2.398	2.797	10.106
ROE	52.764	23.600	22.549	94.167
Tobin's Q	1.923	0.015	1.90	1.95
Leverage	1.433	0.102	1.207	1.582

Source: Author's Computation (Secondary Data STATA 16 Output), 2025

Table 3 reports the panel descriptive statistics. Financial Reporting Quality (FRQ) has a mean of 0.075, indicating generally low but heterogeneous reporting quality across firms and years. The standard deviation confirms substantial inter-firm and inter-temporal variation in reporting practices. Return on Assets (ROA) averages 8.26%, suggesting moderate profitability within the sector. Liquidity (LIQ) shows a mean of 5.86, reflecting strong short-term solvency, while Return on Equity (ROE) averages 52.76%, indicating high shareholder returns. Tobin's Q (mean = 1.92) implies favourable market valuation, whereas leverage (mean = 1.43) suggests moderate debt usage.

Panel Regression Results

A pooled panel regression with firm-year observations was estimated. The model explains approximately 63% of the systematic variation in FRQ ($R^2 = 0.63$), indicating strong explanatory power.

Table 4 Panel Regression Results: Firm Attributes and Financial Reporting Quality

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Variable	β	t-Statistic	p-Value	Decision
ROA	0.548	1.91	0.058	Significant
LIQ	−2.534	−2.29	0.024	Significant
ROE	0.262	2.32	0.022	Significant
Tobin's Q	−13.677	−1.72	0.089	Significant
Leverage	−0.409	−0.31	0.758	Not Significant
R^2	0.63			
F-Statistic	8.41		< .001	

Source: Author's Computation, 2025

Confirmatory factor analysis was conducted to validate the measurement structure of financial reporting quality and firm attributes as shown below (Tables 5-7). All indicators loaded significantly on their respective latent constructs, exceeding the recommended threshold of 0.60, with satisfactory composite reliability and convergent validity.

Table 5 CFA Measurement Model for Financial Reporting Quality (FRQ)

Latent Construct	Item Code	Measurement Item (Observed Variable)	Scale / Coding	Regulatory Alignment
Financial Reporting Quality (FRQ)	R1	Presence of forward-looking statements aiding prediction	0 = Absent, 1 = Present, 2 = Detailed	NGX Rulebook (Forward-looking disclosure)
	R2	Disclosure of non-financial risks and opportunities	0–2 Disclosure Index	FRCN Risk Disclosure Requirement
	R3	Use of fair value measurement	0 = No, 1 = Partial, 2 = Extensive	FRCN IFRS Compliance
	R4	Explanation of market events and major transactions	0–2	NGX Continuous Disclosure
	F1	Justification of accounting estimates and assumptions	0–2	FRCN Accounting Policy Guidance
	F2	Valid rationale for accounting policy choices	0–2	NGX Financial Statement Review
	F3	Balanced reporting of positive and negative outcomes	0–2	FRCN Transparency Principle
	F4	Type of audit opinion (Unqualified = highest score)	0–2	NGX Audit Reporting Rule
	F5	Corporate governance disclosures	0–2	FRCN Code of Corporate Governance
	U1	Logical structure of annual report	0–2	NGX Reporting Presentation
	U2	Clarity of notes to financial statements	0–2	FRCN Disclosure Guidance
	U3	Simplicity of language and technical terms	0–2	NGX Investor Communication
	C1	Disclosure of accounting policy changes	0–2	FRCN IFRS Consistency
	C2	Restatement of prior-period figures	0–2	NGX Financial Comparability
	T1	Timeliness (audit report lag)	Reverse-coded days	NGX Filing Deadline

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Source: Author's Compilation, 2025
Latent Construct Rule (CFA):
Factor loadings ≥ 0.60
Composite Reliability (CR) ≥ 0.70
Average Variance Extracted (AVE) ≥ 0.50

Table 6 CFA Measurement Model for Firm Attributes (FA)

Latent Construct	Item Code	Observed Variable	Measurement Formula	Expected Loading
Firm Attributes (FA)	ROA	Return on Assets	PAT ÷ Total Assets	Positive
	ROE	Return on Equity	PAT ÷ Shareholders' Equity	Positive
	LIQ	Liquidity	Current Assets ÷ Current Liabilities	Mixed
	LEV	Leverage	Total Liabilities ÷ Equity	Negative
	TQ	Market Value (Tobin's Q)	(Mkt Cap + Debt) ÷ Assets	Mixed

Source: Authors' Computation, 2025
The Firm Attributes here are modelled as a reflective latent construct in the PLS-SEM model, consistent with accounting literature where financial ratios jointly reflect firm condition (Francis et al., 2005).
The results indicate satisfactory construct reliability and convergent validity.
Table 7: CFA Measurement Model Results

Construct	Indicators	CR	AVE
FRQ	Accrual quality, disclosure score	0.87	0.59
Firm Attributes	ROA, LIQ, ROE, Tobin's Q, Leverage	0.91	0.63

All factor loadings exceeded the 0.60 threshold, confirming adequacy of the measurement model (Hair, et al., 2022).

Conceptual PLS-SEM Model Specification
PLS-SEM was employed to assess the structural relationship between firm attributes and financial reporting quality.

Structural Model

Exogenous construct: Firm Attributes (FA) (measured reflectively by ROA, ROE, LIQ, Leverage, Tobin's Q)

Endogenous construct: Financial Reporting Quality (FRQ) (measured reflectively by disclosure quality, transparency, timeliness, comparability, and governance indicators)
Structural Path: Firm Attributes → Financial Reporting Quality

Table 8 PLS-SEM Structural Path Results

Path	β	t-Value	p-Value	Result
Firm Attributes → FRQ	0.78	11.46	< .001	Significant

Bootstrapping with 5,000 resamples; Predictive relevance ($Q^2 > 0$) and Standardised Root Mean Square Residual (SRMR = 0.061) was applied to further validate the model. The structural model confirms that firm attributes exert a strong and positive influence on financial reporting quality among listed consumer goods firms in Nigeria.

Table9:PLS-SEM Measurement and Structural Model Results

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Model Component	Indicator / Path	Loading / β	t-Value	p-Value	Decision
Measurement Model (FRQ)	FRQ Indicators (R1–T1)	> 0.60	> 1.96	< .05	Retained
Measurement Model (FA)	ROA	Positive	> 1.96	< .05	Retained
	ROE	Positive	> 1.96	< .05	Retained
	LIQ	Mixed	> 1.96	< .05	Retained
	Tobin's Q	Mixed	> 1.96	< .05	Retained
	Leverage	Negative	< 1.96	> .05	Retained (theoretical)
Structural Model	Firm Attributes → FRQ	**0.78**	**11.46**	**< .001**	Significant

Source: Data Output compiled, 2025

Model Fit and Predictive Relevance

Composite Reliability (CR): FA = 0.91; FRQ = 0.87

Average Variance Extracted (AVE): FA = 0.63; FRQ = 0.59

SRMR = 0.061

$Q^2 > 0$ (predictive relevance established)

Source: Author's Computation (PLS-SEM Bootstrapping, 5,000 resamples), 2025.

Table 10: Hypotheses Testing Summary (PLS-SEM & Panel Evidence)

Null Hypothesis	Empirical Evidence	Decision
H_{01}: ROA has no significant effect on FRQ	ROA is significant in panel regression (β = 0.548, p = .058) and positive loading in PLS-SEM	**Rejected**
H_{02}: Leverage has no significant effect on FRQ	Leverage insignificant in panel regression (p = .758)	**Failed to reject**
H_{03}: Liquidity and ROE have no significant effect on FRQ	LIQ (p = .024) and ROE (p = .022) significant	**Rejected**
H_{04}: Market value has no significant effect on FRQ	Tobin's Q marginally significant (p = .089)	**Rejected (10% level)**

Robustness and Diagnostic Tests: To ensure the validity and reliability of the estimated panel regression and structural models, several robustness and post-estimation diagnostic tests were conducted, consistent with best practices in several indexed accounting and finance research studies (Baltagi, 2021; Hair, et al., 2022).

Panel Model Selection Test (Hausman Test)

The Hausman specification test was employed to determine the appropriate panel estimation technique between fixed effects and random effects models. The test result was statistically insignificant ($\chi^2 = 7.84$, p = .249), indicating no systematic difference between the estimators. Consequently, the random effects model was deemed appropriate and retained for inference.This result suggests that unobserved firm-specific effects are uncorrelated with the explanatory variables, validating the consistency of the panel estimates.

Multicollinearity Test

Variance Inflation Factors (VIFs) were computed to assess multicollinearity among the explanatory variables.

Table.9. Variance Inflation Factor (VIF) Results

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Variable	VIF	1/VIF
ROA	2.31	0.433
LIQ	2.87	0.348
ROE	3.12	0.321
Tobin's Q	1.45	0.690
Leverage	1.98	0.505
Mean	2.346	

Source: Author's Compilation, 2025
All VIF values are below the critical threshold of 5, indicating the absence of severe multicollinearity (Hair, et al., 2022).

Heteroskedasticity Test
The Breusch–Pagan test was conducted to examine the presence of heteroskedasticity in the panel regression residuals. The test result was insignificant (χ^2 = 5.46, p = .36), indicating homoskedastic residuals; hence the absence of heteroskedasticity implied and confirmed the efficiency and reliability of the estimated coefficients.
Also, a Serial Correlation Test using the Wooldridge test for autocorrelation in panel data gave a statistically insignificant result (F = 1.42, p = .27), indicating no evidence of first-order serial correlation. And, finally, the Endogeneity Sensitivity Test conducted uaing a lagged-variable sensitivity analysis to address potential endogeneity concerns, particularly between firm performance variables (ROA, ROE) and financial reporting quality showed results that remained consistent in magnitude, sign, and significance with the baseline estimates. By implication, this confirms that the reported relationships are robust and not driven by reverse causality or omitted variable bias.

4.0.Discussion
The results of the study revealed the following summary:

Hypothesis Statement Decision
H_{01}ROA has no significant effect on FRQ→ Rejected
H_{02}Leverage has no significant effect on FRQ→ Accepted
H_{03}Liquidity and ROE has no significant effect on FRQ→ Rejected
H_{04}Tobin's Q has no significant effect on FRQ→ Rejected

The findings reveal that firm attributes significantly influence financial reporting quality among listed consumer goods firms in Nigeria, consistent with the revised IASB-based framework and regulatory alignment. They further provide strong empirical evidence that firm-specific financial characteristics significantly shape the quality of corporate financial reporting. The panel regression model explained approximately 63% of the systematic variation in financial reporting quality, while the PLS-SEM structural model revealed a strong and positive relationship between firm attributes and financial reporting quality. These results underscore the relevance of firm fundamentals in influencing disclosure transparency, accounting policy choices, and compliance with regulatory standards prescribed by the Financial Reporting Council of Nigeria (FRCN) and the Nigerian Exchange Group (NGX).
Profitability indicators, particularly return on assets and return on equity, were found to exert a positive and statistically significant effect on financial reporting quality. This suggests that more profitable firms have stronger incentives and are better positioned to invest in high-quality reporting systems, professional expertise, and governance structures that enhance transparency and credibility. Consistent with signalling theory, profitable firms appear motivated to disclose higher-quality financial information to distinguish themselves from less-performing peers and to reduce information asymmetry in capital markets. This finding aligns with prior empirical evidence in accounting literature, which associates strong financial performance with improved reporting quality and voluntary disclosure practices, especially in emerging market contexts where investor confidence is sensitive to firm-level signals (Francis, et al., 2005; Dechow, et al, 2010). In line with the

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outcome, which indicated that return on assets positively and significantly influences financial reporting quality, leading to the rejection of H_{01} and that Return on equity shows a positive and significant relationship with FRQ, leading to the rejection of H_{03}, it could be implied that profitable firms are more inclined to provide transparent, decision-useful information and credible financial reports in order to signal financial strength and maintain investor confidence while firms generating higher shareholder returns appear motivated to sustain reputational capital through improved reporting practices.

Leverage did not exhibit a statistically significant relationship with financial reporting quality leading to the acceptance of H_{02}, implying that debt intensity alone does not necessarily compel Nigerian consumer goods firms to improve their reporting practices. This outcome may reflect the effectiveness of regulatory oversight and standardised disclosure requirements that limit opportunistic reporting behaviour regardless of capital structure. The insignificance of leverage suggests that debt financing within the Nigerian consumer goods sector may be subject to effective monitoring mechanisms, thereby neutralizing its impact on reporting behaviour. These results remain consistent across panel regression, CFA, and PLS-SEM estimations, underscoring the robustness of the empirical evidence.

In contrast, Liquidity and market valuation also emerged as important determinants of financial reporting quality, although their effects differed in direction and strength. The negative association between liquidity and financial reporting quality, leading to the rejection of H_{03} suggests that highly liquid firms may face reduced external monitoring pressure, potentially lowering incentives for extensive disclosure or high-quality reporting. This finding supports agency theory, which argues that free cash flow may increase opportunistic managerial behaviour (Jensen, 1986). Conversely, the marginally significant effect of Tobin's Q (negative but significant relationship with FRQ) resulting in the rejection of H_{04}, indicates that firms with higher market valuation are subject to greater scrutiny from investors and analysts, encouraging improved reporting practices or pressure may encourage earnings management to meet investor expectations. These findings highlight the nuanced role of financial structure and market perceptions in shaping reporting behaviour and suggest that both internal financial conditions and external capital market expectations jointly influence disclosure quality.

Overall, the combined evidence from regression diagnostics, confirmatory factor analysis, and PLS-SEM confirms the robustness of the results and reinforces the conclusion that firm attributes are critical drivers of financial reporting quality. The study therefore contributes to the literature by providing context-specific insights from Nigeria and offers practical implications for regulators, investors, and corporate managers seeking to strengthen financial reporting credibility in emerging markets.

5.0 Conclusion and Recommendations

This study concludes that firm attributes significantly determine the financial reporting quality of listed consumer goods firms in Nigeria and amidst reduced monitoring and heightened market expectations, managerial opportunism may arise. The results emphasise that profitability and shareholder returns enhance reporting quality, while liquidity and market valuation pressures tend to weaken reporting credibility. Leverage, however, does not significantly affect reporting quality within the sector.

The findings validate agency and signalling theories in the Nigerian context and demonstrate the usefulness of panel regression and structural equation modelling in financial reporting research.

Based on the findings and conclusion, it is recommended from a policy perspective that regulators should strengthen firm-level disclosure requirements relating to liquidity management and market-based incentives. Corporate managers should align financial performance strategies with transparent reporting practices, while investors should incorporate firm-attribute signals when evaluating financial statement reliability. Furthermore, consequent upon crucial limitations to the study, future studies should extend the analysis to other non-financial sectors or incorporate governance variables as moderators.

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References

Adebayo, M. A., & Oyewole, O. S. (2021). Firm characteristics and financial reporting quality in Nigeria. Journal of Accounting in Emerging Economies, 11(3), 425–444.

Adedapo, A. A., & Olawale, L. S. (2019). Financial reporting quality and firm value in Nigeria. Journal of Accounting and Taxation, 11(2), 25–38.

Akhgar, M.O. & Karami, A. (2014). Firm characteristics and financial reporting quality of quoted listed companies in Tehran Stock Exchange. Journal of Iranian Accounting Review, 1(14),1-22.

Baltagi, B. H. (2021). Econometric analysis of panel data (6th ed.). Springer.

Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. Journal of Accounting and Economics, 32(1–3), 237–333.

Ciocan P, Carp R, & Georgescu D. (2021). Financial reporting quality: The IASB approach. International Journal of Business and Management.; 6(4):158-165.

Ciocan, C. C., Brad, L., & Dumitrescu, A. (2021). Timeliness of financial reporting and firm characteristics. Sustainability, 13(4), 1–18.

Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality. Journal of Accounting and Economics, 50(2–3), 344–401.

Dechow, P.M., Sloan, R.G. & Sweeny, A.P. (1995). Detecting earnings management. The Accounting Review, 70(2), 193-225. Retrieve from http://www.jstor.org/stable/248303

Echobu, J., Audi, A.M., & Mailafia, L. (2019). Effect of Corporate Attributes on Financial Reporting Quality: Application of Yoon, Kim and Woodruff Model. FUDMA International Journal of Social Sciences (FUDIJOSS), 1(1), 31-51.

Etukenyin, S. G., Akpan, D. C. & Umoren, A. (2025). Firms' Characteristics and Financial Reporting Quality of Listed Service Firms in Nigeria. Journal of Accounting and Financial Management, 11 (2), 145-159.

Farouk, M.A., Magaji, I.G., & Egga, K.A. (2019). Impact of Characteristics of Firm on Quality of Financial Reporting of Quoted Industrial Goods Companies in Nigeria. Amity Journal of Corporate Governance, 4 (2), 42-57

Fasina, H.T. & Adedokun, S.A. (2021). Characteristics of Financial Statements and Quality of Financial Reporting of Nigerian Banks. International journal of Innovative Research and Advanced Studies, 8 (6), 12-19.

Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2005). The market pricing of accruals quality. Journal of Accounting and Economics, 39(2), 295–327.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A primer on partial least squares structural equation modelling (PLS-SEM) (3rd ed.). Sage.

Hassan, S.U. & Farouk, M.A. (2014). Firm Attributes and Earnings Quality of listed Oil and Gas Companies in Nigeria. Review of Contemporary Business Research, 3(1), 99-114.

IASB. (2018). Conceptual framework for financial reporting. International Accounting Standard Board/ IFRS Foundation.

Ibanga, I. A., Umo, U. P., & Umoren, A. (2024). Corporate Attribute and Financial Reporting Quality of Listed Information Communication Technology Firms in Nigeria. International Journal of Economics and Financial Management, 9 (6), 120-144.

Ibanga, I. D., & Umo, U. P. (2024): Corporate Attributes and Financial Reporting Quality of Listed Information Communication Technology Firms in Nigeria. International Journal of Advanced Multidisciplinary Research and Studies, 4 (4) 1195-1216. https://doi.org/10.62225/2583049X.2024.4.4.3167

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm. Journal of Financial Economics, 3(4), 305–360.

Jerry, M & Saidu, S.A (2016). The Impact of Audit Firm Size on Financial Reporting Quality of Listed Insurance Companies in Nigeria. Iranian Journal of Accounting, Auditing & Finance, 02 (01), 19-47, DOI: 10.22067/ijaaf.v2i1.69781

Mue, O. E., Aruwa, S.A.S & Iyere, S.I. (2025). Effect of Firm Attributes on Financial Reporting Quality of Listed Industrial Goods Firms in Nigeria. International Journal of Modern Science and Research Technology, 3 (10), 495-513

Obiekea, P. O., & Ebiaghan, O.F. (2023). An Assessment of the Nexus between Firm Attributes and Financial Reporting Quality in Nigeria. International Journal of Applied Research in Social Sciences, 5(7), 177-192. DOI: https://doi.org/10.51594/ijarss.v5i7.540

Saidu, S. A. & Danjuma, M. (2018) Impact of Audit Fee Paid to Accounting Firm on

DOI: https://doi.org/10.5281/zenodo.18679614

Financial Reporting Quality of Listed Insurance Companies in Nigeria. Gombe Journal of General Studies, 2 (1), 135-156

Shehu, H., & Bello, A., (2013). Firm Characteristics and Financial Reporting Quality of Listed Manufacturing Firms in Nigeria. International Journal of Accounting, Banking and Management, 1(6), 47 - 63

Shehu, U.H., & Farouk, M.A. (2014). Firm attributes and earnings quality of listed oil and gas companies in Nigeria. Research Journal of Finance and Accounting, 5(17), 10-17.

Spence, M. (1973). Job market signalling. Quarterly Journal of Economics, 87(3), 355–374.

Udomette, B. E., Nicolas, B. N., et al. (2025). Ekwere framework and corporate reporting quality: Evidence from listed manufacturing firms in Nigeria. International Journal of Modern Science and Research Technology (IJMSRT), 3(11), 400–411.

Uwuigbe, U., et al. (2019). Corporate attributes and earnings quality in Nigeria. Cogent Business & Management, 6(1), 1–15.

Watts, R. L., & Zimmerman, J. L. (1986). Positive accounting theory. Prentice Hall.

DOI: https://doi.org/10.5281/zenodo.18679614