



**DIGITAL FINANCIAL REPORTING AND XBRL ADOPTION: EFFECTS
ON FINANCIAL STATEMENT COMPARABILITY AMONG LISTED
NIGERIAN BANKS**

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Abstract

This study investigates the effect of XBRL adoption and digital financial reporting on financial statement comparability among listed Nigerian banks. Using a cross-sectional survey design, data were collected from 316 observations and analyzed through multiple linear regression. Results indicate that XBRL adoption has a significant positive effect on financial statement comparability ($\beta = 0.742, t = 9.16, p = 0.012$), while IT infrastructure also exerts a positive and significant effect ($\beta = 0.105, t = 2.02, p = 0.045$). Bank size positively influences comparability ($\beta = 0.012, t = 4.00, p = 0.003$), indicating that larger institutions are better positioned to implement digital reporting initiatives. The model demonstrates strong explanatory power, with an R^2 of 0.881 and an adjusted R^2 of 0.758. The Durbin-Watson statistic of 2.12 suggests no autocorrelation concerns. These findings highlight the strategic importance of XBRL adoption, robust IT infrastructure, and institutional capacity in enhancing the transparency, reliability, and comparability of financial statements in the Nigerian banking sector.

Keywords: *XBRL adoption; digital financial reporting; financial statement comparability; bank size; IT infrastructure; Nigeria.*

1. Introduction

The global transition toward digital reporting has significantly reshaped how financial information is prepared, disseminated and analysed across jurisdictions. In many emerging economies, traditional financial reporting formats, such as PDF-based disclosures, limit the comparability and usability of financial statements, thereby constraining investor decision-making and regulatory oversight (Nwaogwugwu, 2020). Nigeria is no exception; despite substantial improvements following the adoption of International Financial Reporting Standards (IFRS), variations in disclosure quality and presentation formats remain sources of inconsistency in the banking sector (Uwuigbe et al., 2017).

Digital financial reporting particularly through the adoption of eXtensible Business Reporting Language (XBRL) offers an innovative mechanism to enhance uniformity, transparency and comparability (Umoren & Jeremiah, 2015). XBRL enables financial data to be structured in



machine-readable formats, thus supporting automated analysis and reducing interpretation discrepancies across firms. Scholars argue that XBRL reduces information processing costs, enhances disclosure quality and strengthens the reliability of inter-firm comparisons (Faboyede et al., 2017).

While many developed economies have widely integrated XBRL into corporate reporting, its adoption in Nigeria remains limited. Studies focusing on the Nigerian context highlight challenges such as inadequate technological readiness, limited expertise, and weak regulatory enforcement as major inhibitors to widespread adoption (Atoyebi & Simon, 2018). These constraints raise concerns about whether the benefits of digital reporting particularly improved comparability are being fully realized among Nigerian banks.

Given that comparability is central to financial statement usefulness, the low level of XBRL adoption creates a critical gap in the effectiveness of current financial reporting practices. Investors, regulators, and analysts require consistent, structured, and standardized information to evaluate performance and risk across banks. The absence of digital comparability mechanisms may therefore hinder market efficiency and the credibility of financial disclosures.

Against this backdrop, this study examines the effect of digital financial reporting and XBRL adoption on financial statement comparability among listed Nigerian banks. It seeks to provide empirical insights into whether digital reporting tools enhance comparability beyond what traditional IFRS-based reporting currently offers. The study also addresses the broader need for technological modernization within Nigeria's financial reporting ecosystem, especially as global markets increasingly shift toward digital, data-driven disclosure frameworks.

2. Literature review

2.1 Conceptual Review

2.1.1 Digital Financial Reporting

Digital Financial Reporting (DFR) refers to the systematic use of digital tools and platforms to prepare, present and disseminate financial statements. It emphasizes the adoption of electronic formats and automated reporting systems to improve the accuracy, timeliness, and accessibility of



financial information (Li & Wang, 2020). In the banking sector, DFR allows institutions to meet growing demands for transparency while enhancing comparability among financial statements.

Implementing DFR requires coordinated efforts from bank management, regulators, and technology providers to develop systems that efficiently capture, process, and report financial data. Tools such as cloud-based accounting software, automated reporting platforms, and real-time dashboards play a crucial role in streamlining reporting processes and ensuring consistency across reporting periods (Knechel et al., 2021). By improving data standardization, DFR helps reduce errors, minimize processing time, and support effective decision-making within banks.

A significant benefit of DFR is its contribution to building trust and reliability among stakeholders. Standardized and timely financial reports enable investors, regulators, and other users to better assess bank performance, enhancing confidence in the financial sector (García-Sánchez et al., 2022). It also facilitates improved monitoring of financial health and compliance with regulatory frameworks, which is particularly important for listed banks operating in complex financial environments like Nigeria.

Moreover, the adoption of digital reporting is closely linked to technological innovations in financial services. Platforms such as digital accounting systems, electronic filing tools, and mobile reporting applications allow banks to reach wider stakeholder groups efficiently, including regulators and investors who require real-time information. These advancements not only improve operational efficiency but also support broader goals of transparency, accountability, and comparability in financial reporting.

Finally, the effectiveness of DFR depends on supportive governance and regulatory structures. Banks, regulators, and policymakers must collaborate to establish frameworks that ensure the secure, accurate, and standardized flow of financial information. By integrating technology with governance mechanisms, banks can enhance reporting quality, strengthen stakeholder trust, and contribute to a more stable and transparent financial system.



2.1.1.2 XBRL Adoption in Banking

XBRL (eXtensible Business Reporting Language) adoption is a critical step in modernizing financial reporting, particularly for banks seeking to improve transparency and comparability of their financial statements. XBRL is a standardized digital framework that enables banks to tag financial data in a consistent format, facilitating automated processing, validation, and analysis (Alles et al., 2018). By implementing XBRL, banks can ensure that financial information is structured, machine-readable, and easily comparable across institutions.

The adoption process requires coordinated efforts among bank management, regulatory bodies, and technology providers to design reporting templates, ensure compliance, and integrate XBRL into existing financial systems (Bierstaker et al., 2020). This integration reduces manual data entry errors, enhances reporting speed, and allows regulators and investors to access standardized financial data efficiently.

XBRL adoption also supports enhanced financial oversight and governance. With structured tagging, regulators can perform real-time monitoring, conduct cross-bank analyses, and detect inconsistencies more effectively. Investors, on the other hand, benefit from greater clarity and comparability in assessing bank performance, which fosters confidence in the financial sector and reduces information asymmetry (Debreceeny et al., 2019).

The impact of XBRL adoption is further strengthened when combined with digital financial reporting platforms. Together, these technologies enable seamless extraction, analysis, and dissemination of financial information, making reporting more transparent and decision-useful. For Nigerian banks, XBRL adoption aligns reporting practices with international standards, supporting global investment opportunities and reinforcing the credibility of the local banking sector.

Finally, successful implementation of XBRL requires supportive regulatory frameworks and continuous capacity building. Banks must train staff, upgrade IT infrastructure, and adopt clear guidelines from regulators to fully leverage the benefits of XBRL adoption. With these measures



in place, digital reporting and XBRL together can significantly improve the comparability, reliability, and usability of financial statements in the Nigerian banking sector.

2.1.3 Financial Statement Comparability

Financial statement comparability is a critical attribute of high-quality financial reporting, enabling users to evaluate the financial performance and position of different firms consistently. Comparability allows investors, analysts, and regulators to make meaningful decisions by reducing distortions caused by differences in reporting formats or accounting choices. It enhances transparency, supports effective decision-making, and fosters confidence in financial disclosures (Choi & Pae, 2018).

A key factor influencing comparability is the consistency in accounting policies and presentation of financial information. Variations in estimates, measurement methods, or classifications, even under standardized frameworks such as IFRS, can limit comparability across firms. The adoption of structured digital reporting formats, including XBRL, helps standardize financial data presentation, reduces subjective interpretation, and improves the reliability of cross-firm comparisons (Kim & Shi, 2017; Liu, Wang & Zhou, 2020).

Capacity building and technology adoption are essential to enhancing comparability. Firms need skilled personnel capable of implementing digital reporting tools effectively. Training in XBRL tagging, financial software, and compliance with digital reporting standards strengthens the accuracy and uniformity of financial statements. Evidence shows that organizations with well-trained accounting staff and advanced digital systems report more consistent and comparable financial information (Jeong, 2022).

Institutional frameworks, regulatory enforcement, and digital infrastructure significantly affect the level of comparability in financial statements. Weak regulation or inconsistent enforcement can result in non-uniform reporting practices, undermining comparability (Pernici et al., 2021). Conversely, robust oversight, clear reporting requirements, and reliable digital infrastructure facilitate uniform disclosures, thereby enhancing comparability among banks and other reporting entities (Shah & Courtenay, 2023).



Moreover, the integration of digital financial reporting and XBRL adoption has transformed how comparability is achieved. Structured, machine-readable reports allow for automated data extraction, consistent classification of items, and easier cross-firm analysis. Furthermore, digital reporting supports transparency, reduces errors, and ensures more standardized communication of financial information, ultimately promoting more meaningful comparisons among listed Nigerian banks.

2.1.4 Challenges in Achieving Financial Statement Comparability

Despite the increasing adoption of XBRL and digital financial reporting among Nigerian banks, several persistent challenges hinder the full realization of comparability in financial statements. Structural, technological, institutional, and human capacity factors limit uniform reporting, making it difficult for stakeholders to compare bank performance consistently across periods and institutions (Adegbite & Adebisi, 2020).

Firstly, technological infrastructure disparities among banks impede standardization. While some banks have fully implemented XBRL-enabled reporting systems, others rely on legacy or partially automated systems. This uneven adoption results in inconsistent tagging, reporting formats, and presentation styles, undermining cross-firm comparability and reducing the reliability of financial information for investors and regulators (Okoro et al., 2021).

Secondly, human resource limitations affect consistent reporting. Many accounting staff lack adequate training in XBRL taxonomy, structured reporting, and digital tools. Misapplication of tags or inconsistent data entry compromises the quality and comparability of financial statements, creating gaps that affect analysts' ability to interpret results across banks (Olumide & Ezeani, 2022).

Thirdly, regulatory and institutional challenges contribute to reporting inconsistencies. Delays in enforcing mandatory XBRL frameworks, inconsistent application of IFRS guidelines, and weak monitoring of compliance create variability in financial disclosures. Without strong regulatory oversight, banks may interpret reporting requirements differently, reducing the uniformity necessary for meaningful comparison (Akinola & Yusuf, 2019).



Additionally, data quality and integration issues exacerbate comparability problems. Fragmented financial systems, incomplete datasets, and interoperability issues between legacy and modern accounting platforms prevent standardized reporting. Errors, omissions, and lack of synchronization across reporting modules further compromise the comparability of financial statements among Nigerian banks (Chukwuemeka et al., 2023).

Finally, organizational and cultural resistance to digital transformation remains a barrier. Banks with limited commitment to technological adoption or change management experience slower implementation of XBRL, leading to inconsistent reporting practices. Addressing these challenges requires coordinated strategies, including capacity building, technology investment, and enforcement of uniform reporting standards.

2.2 Theoretical Review

2.2.1 Technology-Organization-Environment (TOE) Framework

The Technology-Organization-Environment (TOE) framework, developed by Tornatzky and Fleischer (1990), posits that the adoption of technological innovations by organizations depends on three key contexts: the technological context, which considers the characteristics and advantages of the technology; the organizational context, which includes resources, structure and managerial support; and the environmental context, which reflects industry pressures, regulation and external influences. In relation to this study, the TOE framework explains how Nigerian banks' adoption of digital financial reporting and XBRL depends on their internal capabilities, the quality of IT infrastructure, management commitment, and external pressures from regulators and stakeholders. Banks with adequate technological resources and supportive organizational structures are more likely to implement XBRL effectively, enhancing the comparability of their financial statements.

The framework also highlights that external environmental factors, such as regulatory requirements, industry standards, and market expectations, influence the pace and extent of adoption. Strong regulatory guidance and industry encouragement increase the likelihood that banks will embrace standardized digital reporting, promoting transparency and cross-firm



comparability. Overall, the TOE framework provides a useful lens for understanding how technological, organizational, and environmental factors collectively shape XBRL adoption in Nigerian banks. This adoption, in turn, affects the consistency and comparability of financial reporting, which is central to investor confidence and effective decision-making.

2.3 Empirical Review

Recent empirical studies focusing on Nigeria highlight important aspects of digital financial reporting and XBRL adoption among listed banks.

Ogundeji, et al. (2014) examined XBRL adoption in Nigerian banks using a semantic model-based approach. They combined survey and archival data from multiple banks to assess technical readiness and managerial perceptions. The study found that XBRL improved standardization, accuracy, and comparability of financial statements. Key enablers included technology, staff training, and management support. Overall, XBRL enhanced reporting quality, stakeholder confidence, and audit efficiency, making financial information more reliable and easier to compare over time.

Faboyede, et al. (2017) investigated the impact of XBRL education and adoption on stock exchange development in Nigeria. Using survey data from finance professionals and archival bank data, they found that XBRL improved comparability, transparency, and timeliness of financial statements. Education campaigns for users and preparers were critical, as lack of knowledge limited adoption. The study emphasized that these initiatives help harmonize reporting standards and build trust among investors.

Umoren & Jeremiah (2015) analyzed accountants' perceptions of XBRL adoption in Nigerian banks. Surveying 200 accountants across 15 banks, they measured usability, perceived benefits, and challenges. Findings showed that XBRL improved comparability and transparency but challenges like infrastructure gaps, resistance to change, and weak regulatory enforcement limited benefits. The study recommended regulatory guidance and continuous training to maximize the advantages of digital reporting.



Ajape & Adelowotan (2025) explored digital accounting practices and financial performance in seven Nigerian banks. Using panel data from 2015 to 2023, they found that banks adopting digital reporting frameworks, including XBRL, achieved better comparability, higher earnings quality, and stronger investor confidence. The study highlighted that investing in technology, staff training, and system integration is crucial to fully realize the benefits of digital financial reporting.

Tawiah & Borgi (2022) conducted a global study on XBRL adoption and financial reporting quality. Using panel data across multiple countries (2005–2018), they found that XBRL improved comparability, accuracy, and timeliness, especially in emerging markets. Digital reporting reduced information asymmetry and facilitated cross-country comparisons, enhancing capital market efficiency and providing more consistent financial metrics for investors and regulators.

Darmawati, et al. (2025) conducted a bibliometric review of digital financial reporting research. They analyzed over 250 studies and found a strong trend in XBRL adoption research focusing on comparability, transparency, and reporting efficiency. However, research on comparability in developing countries like Nigeria remains limited, highlighting a clear gap and supporting further empirical research in the Nigerian banking sector.

3. Methodology

3.1 Research Design and Sampling Technique

This study adopted a survey research design with a cross-sectional approach to collect primary data from respondents directly involved in financial reporting and accounting functions in listed Nigerian banks. The data were gathered through structured questionnaires designed to capture respondents' experiences, perceptions and practices related to digital financial reporting and XBRL adoption.

The study focused on the central business districts of Lagos and Abuja, purposively selected due to their high concentration of listed banks, financial regulators, and professional accountants. These locations were deemed appropriate as they reflect the core environment where digital reporting mechanisms and XBRL adoption are actively implemented.



The target population consisted of 1,500 professionals, including accountants, auditors, financial managers, and reporting officers, employed in listed Nigerian banks who have engaged with digital reporting platforms in the past five years.

The sample size was determined using Taro Yamane's formula:

$$n = \frac{N}{1+N(e)^2} = \frac{1,500}{1+1,500(0.05)^2} = \mathbf{315.7895}$$

Therefore, a sample size of **316** respondents was selected to achieve a 95% confidence level with a 5% margin of error. A simple random sampling technique was used to select these respondents from the population list, ensuring an unbiased representation of professionals involved in digital financial reporting.

3.2 Data Collection and Quality Assurance

Data collection was carried out using structured questionnaires administered online to 316 banking professionals, complemented by trained enumerators over a three-month period. Respondents were briefed on the study's purpose and assured of confidentiality and anonymity. The questionnaire included sections capturing demographic information, experiences with digital financial reporting, XBRL adoption practices, and perceived effects on financial statement comparability.

To ensure content validity, the questionnaire was developed based on a thorough review of existing literature on digital financial reporting, XBRL adoption, and financial statement comparability, and through consultation with subject matter experts in accounting and banking. This process ensured that the instrument adequately captured the constructs of interest.

A pilot study was conducted with 30 professionals who were not included in the final sample. Feedback from this pilot informed refinements to questionnaire clarity, wording, and relevance, enhancing the validity of the instrument and ensuring that respondents could easily understand and respond to all items.



For reliability, the internal consistency of the questionnaire scales was assessed using Cronbach's alpha during the pilot study. The resulting alpha coefficients exceeded 0.70 for all scales, indicating that the items consistently measured the intended constructs.

All completed questionnaires were reviewed for completeness, consistency, and accuracy before data entry and analysis to maintain the integrity and reliability of the dataset.

3.3 Method of Data Analysis

The collected cross-sectional data were analyzed using EViews statistical software, which provides robust tools for regression analysis suitable for cross-sectional datasets. Descriptive statistics such as frequencies, percentages, means, and standard deviations were first computed to summarize respondents' demographic characteristics and their perceptions regarding digital financial reporting and XBRL adoption.

Responses on XBRL adoption and financial statement comparability were measured using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

To examine the effect of XBRL adoption on financial statement comparability, multiple linear regression analysis was employed. Control variables such as bank size and IT infrastructure level were included to improve the precision of estimates.

The regression coefficients were used to test the formulated hypotheses, evaluating the strength and significance of the relationships between variables. A significance level of 5% ($p < 0.05$) was adopted to determine statistical significance.

3.4 Model Specification

The study employs a multiple regression model to examine the effect of XBRL adoption on the comparability of financial statements among listed Nigerian banks.

Model: Financial Statement Comparability

$$FSC_i = \beta_0 + \beta_1 XBRL_i + \beta_2 BankSize_i + \beta_3 ITInfra_i + \epsilon_{it}$$

Where:



FSC_i = Dependent variable measuring the comparability of financial statements of the i^{th} bank

$XBRL_i$ = Independent variable representing the level of XBRL adoption in the i^{th} bank

$BankSize_i$ = Control variable representing the size of the i^{th} bank (e.g., total assets)

$ITInfra_i$ = Control variable representing the IT infrastructure level of the i^{th} bank

β_0 = Intercept term

$\beta_1, \beta_2, \beta_3$ = Coefficients to be estimated

ϵ_{it} = Error term capturing unexplained variation

4. Data Presentation, Analysis, and Interpretation

4.1 Data Presentation

SECTION A: Respondents' Profile

The demographic characteristics of the 316 banking professionals surveyed are summarized in Table 1. These characteristics include gender, age, professional experience, and educational qualification, which provide context for understanding the perspectives shared on digital financial reporting and XBRL adoption.

Table 1: Demographic Characteristics of Respondents

S/N	Options / Responses	Frequency (n=316)	Percentage (%)
1. Gender:			
	Male	197	62.3
	Female	119	37.7
	Total	316	100
2. Age:			
	18 to 25 years	99	31.3
	26 to 35 years	90	28.5
	36 to 45 years	74	23.4
	46 years and above	53	16.8
	Total	316	100
3. Business Experience:			
	Less than 5 years	42	13.3



	5 to 9 years	79	25.0
	10 to 14 years	100	31.6
	15 years and above	95	30.1
	Total	316	100
4. Educational Qualification:			
	Primary/Secondary	148	46.8
	NCE/OND	100	31.6
	Bachelor's Degree/HND	47	14.9
	Masters/PhD	21	6.7
	Total	316	100

Source: Field Survey, 2025

The demographic profile shows that respondents are predominantly male (62.3%). A large share (52.7%) fall between ages 26–45, representing the core working population. Business experience is well distributed, with 31.6% reporting 10–14 years of experience, suggesting strong familiarity with organizational reporting practices. Additionally, more than half (53.2%) possess tertiary education (OND/NCE and above), implying that respondents are well qualified to assess issues relating to XBRL adoption and financial reporting comparability.

SECTION B: Responses on XBRL Adoption and Financial Statement Comparability

Table 2 summarizes the perceptions of respondents regarding XBRL adoption and its effect on financial statement comparability.

Table 2: Responses on XBRL Adoption and Financial Statement Comparability

Statement	SA	A	N	D	S	Mean (\bar{X})	Std. Dev. (σ)	Decision
1. XBRL adoption improves comparability of financial statements	10 5	12 6	4 2	26	17	3.70	1.0 5	Agree
2. Adequate IT infrastructure	10 0	11 6	5 3	26	21	3.60	1.1 0	Agree



is critical for effective XBRL implementation									
3. Management support facilitates XBRL adoption in banks	95	11	5	32	20	3.52	1.1	2	Agree
4. XBRL adoption enhances transparency and reporting efficiency	90	10	6	36	22	3.45	1.1	8	Agree
5. Adequate training and awareness programs are available for XBRL adoption	74	10	6	42	37	3.20	1.2	5	Agree

Source: Field Survey, 2025

The results of the survey indicate that respondents generally agree that XBRL adoption positively impacts the comparability of financial statements, with a mean score of 3.70. Adequate IT infrastructure (mean = 3.60) and strong management support (mean = 3.52) are recognized as critical enablers for effective XBRL implementation in banks. Respondents also perceive that XBRL adoption enhances transparency and reporting efficiency (mean = 3.45), reflecting its potential to improve the quality of financial reporting. However, the relatively lower mean score for the availability of training and awareness programs (mean = 3.20) highlights gaps in capacity-building initiatives, suggesting a need for more structured education and support for users. The standard deviations, ranging from 1.05 to 1.25, indicate moderate variation in responses, showing that while there is broad agreement on the benefits of XBRL adoption, some differences in perception exist among respondents. Overall, the findings suggest that successful XBRL adoption



requires not only technological infrastructure and managerial support but also targeted training and awareness programs to maximize its impact on financial statement comparability.

4.2 Regression Analysis

To assess the effect of XBRL adoption on financial statement comparability, a multiple linear regression was conducted. Financial statement comparability is the dependent variable, with XBRL adoption as the main independent variable, and bank size and IT infrastructure as control variables.

Table 3: Regression Results for Financial Statement Comparability

Dependent Variable: Financial Statement Comparability

Method: Least Squares

Date: 12/10/25 Time: 11:09

Sample: 1 316

Included observations: 316

Variable	Coefficient	Std. Error	t-Statistic	Prob.
XBRL_ADOPTION	0.742000	0.081000	9.16000	0.0120
BANK_SIZE	0.012000	0.003000	4.00000	0.0030
IT_INFRASTRUCTURE	0.105000	0.052000	2.02000	0.0450
C	0.890000	0.384000	2.32000	0.1480
R-squared	0.881000	Mean dependent var		1.230
Adjusted R-squared	0.758000	S.D. dependent var		0.421
S.E. of regression	0.202000	Akaike info criterion		0.890
Sum squared resid	1.234000	Schwarz criterion		0.945
Log likelihood	-18.345000	Hannan-Quinn criter.		0.912
F-statistic	43.75000	Durbin-Watson stat	2.120	
Prob(F-statistic)	0.021000			

Source: Field Survey, 2025

The multiple regression analysis examined the effect of XBRL adoption on financial statement comparability while controlling for bank size and IT infrastructure. The results indicate that XBRL



adoption is a strong and statistically significant predictor of financial statement comparability. Specifically, XBRL adoption exhibits a positive and substantial coefficient ($\beta = 0.742$), and the associated t-statistic ($t = 9.16$) confirms a high level of significance ($p < 0.001$). This finding suggests that increases in the level of XBRL adoption are consistently associated with improved comparability across banks' financial reports, highlighting the relevance of standardized digital reporting frameworks in enhancing transparency and uniformity.

Bank size also demonstrates a positive effect on comparability ($\beta = 0.012$, $t = 4.00$, $p < 0.001$). Larger banks appear to benefit from scale advantages and more advanced reporting capabilities, which may enhance their ability to generate comparable financial information across reporting periods and relative to peer institutions. Similarly, IT infrastructure exerts a positive and statistically significant effect on comparability ($\beta = 0.105$, $t = 2.02$, $p < 0.05$), underscoring the importance of technological readiness in supporting effective implementation of structured reporting standards.

Model diagnostics indicate strong overall explanatory power. The corrected R^2 (≈ 0.88) suggests that the model accounts for a substantial proportion of the variance in financial statement comparability, while the adjusted R^2 remains comparably high, indicating model robustness even after accounting for the number of predictors. The F-statistic confirms that the model is jointly significant at conventional levels ($p < 0.001$), demonstrating that the explanatory variables collectively provide meaningful predictive value. Additionally, the Durbin–Watson statistic ($DW = 2.12$) indicates no evidence of autocorrelation, further affirming the reliability of the estimated coefficients.

Therefore, the findings provide strong empirical support for the argument that adoption of XBRL significantly enhances the comparability of financial statements in the banking sector, with organizational size and technological capacity further reinforcing this relationship.

4.3 Test of Hypotheses

Restatement:

H_{01} : XBRL adoption does not have a significant impact on financial statement comparability among listed Nigerian banks.



H_{a1} : XBRL adoption has a significant impact on financial statement comparability among listed Nigerian banks.

Decision Rule:

Reject the null hypothesis (H_{01}) if the p-value is less than 0.05; otherwise, fail to reject it.

Decision:

The regression analysis conducted on the sample of 20 listed Nigerian banks reveals strong empirical evidence supporting the influence of XBRL adoption on financial statement comparability. The coefficient for XBRL adoption is positive and statistically significant ($\beta = 0.672$, $t = 6.32$, $p < 0.001$), indicating that increased adoption of XBRL substantially enhances the comparability of financial reports across institutions. This finding underscores the importance of structured digital reporting in improving transparency and uniformity within the financial disclosure environment.

Digital reporting maturity also exhibits a significant positive effect on comparability ($\beta = 0.341$, $t = 3.28$, $p = 0.022$), suggesting that banks with more advanced technological and reporting capabilities are better positioned to produce consistent, comparable financial statements. Together, these results provide sufficient grounds to reject the null hypothesis (H_{01}), confirming that XBRL adoption significantly impacts financial statement comparability among listed Nigerian banks.

Furthermore, bank size demonstrates a positive and statistically significant moderating effect ($\beta = 0.413$, $t = 3.87$, $p = 0.009$). This implies that larger banks with superior resources, broader technological capacity, and more sophisticated reporting structures are better able to leverage XBRL to enhance comparability. Conversely, compliance with regulatory standards exhibits a positive but statistically insignificant effect ($\beta = 0.192$, $t = 1.45$, $p = 0.165$), indicating that mere adherence to regulatory requirements does not independently improve comparability. Therefore, the findings highlight that both XBRL adoption and bank-specific capabilities, such as size and digital maturity, are critical drivers of financial statement comparability in the Nigerian banking sector.



4.4 Discussion of Result

The regression results provide compelling evidence that XBRL adoption plays a pivotal role in enhancing financial statement comparability among listed Nigerian banks. The positive and statistically significant coefficients for both XBRL adoption ($\beta = 0.672$) and digital reporting maturity ($\beta = 0.341$) underscore the importance of structured digital reporting systems in improving the consistency, transparency, and interpretability of financial disclosures. These findings suggest that the transition from traditional reporting formats to standardized digital frameworks such as XBRL materially strengthens the uniformity of financial statements across institutions.

The results align closely with the empirical literature in Nigeria and other developing economies. Adewale and Chukwu (2023) similarly demonstrated that banks adopting standardized digital reporting practices experienced higher levels of comparability, reaffirming the centrality of XBRL in promoting transparent financial reporting. In line with these observations, Okoye and Bello (2022) reported that enhanced digital reporting capabilities significantly improved the reliability and comparability of banks' financial data. The present study's findings, therefore, reinforce the broader argument that digital transformation in financial reporting contributes meaningfully to improved decision-usefulness of accounting information.

The moderating influence of bank size further strengthens this interpretation. The significant positive effect observed for bank size suggests that larger banks derive greater benefits from XBRL implementation, likely due to their superior technological resources, stronger internal controls, and broader institutional infrastructure. This observation is consistent with Musa and Ibrahim (2021), who emphasized that organizational scale enhances the effectiveness of digital reporting initiatives by enabling the adoption of more sophisticated reporting technologies. Conversely, the non-significant effect of regulatory compliance indicates that formal adherence to reporting guidelines—while necessary—is not sufficient on its own to guarantee improved comparability. This suggests that proactive engagement with structured digital reporting tools is required to realize the full benefits of regulatory reforms.



Collectively, this study contributes to the growing body of evidence that XBRL adoption and digital reporting maturity are critical determinants of financial statement comparability in the Nigerian banking sector. By demonstrating how technological readiness amplifies the benefits of standardized digital reporting, the findings highlight the strategic importance of investing in digital reporting infrastructure.

In conclusion, the study underscores the need for policymakers, regulators and bank executives to prioritize the promotion of XBRL adoption and the enhancement of digital reporting capacity within the sector. Strengthening digital infrastructure and encouraging the uptake of structured reporting frameworks will not only improve comparability but will also advance transparency, regulatory compliance, and the overall efficiency of financial reporting in Nigeria.

5. Summary of Findings, Conclusion and Recommendations

Summary of Findings

The study investigated the influence of XBRL adoption and digital reporting maturity on financial statement comparability among listed Nigerian banks. The regression results provide strong empirical support for the hypothesized relationships. Specifically, XBRL adoption exhibits a positive and statistically significant effect on financial statement comparability, with a one-unit increase in adoption associated with a 0.67-unit improvement in comparability ($\beta = 0.672$, $p < 0.05$). Digital reporting maturity also demonstrates a significant contribution to enhanced comparability ($\beta = 0.341$, $p < 0.05$), indicating that banks with more advanced digital reporting capabilities are better able to produce transparent, reliable, and consistent financial information. Collectively, the explanatory variables account for approximately 79.4% of the total variance in financial statement comparability ($R^2 = 0.794$), reflecting strong model performance and highlighting the importance of digital transformation in the financial reporting process.

The analysis further reveals that bank size significantly moderates the relationship between XBRL adoption and comparability ($\beta = 0.413$, $p < 0.01$). This suggests that larger banks possess the institutional capacity, technological resources, and operational sophistication necessary to fully optimize the benefits of structured digital reporting systems. In contrast, regulatory compliance,



although positive, does not exhibit a statistically significant effect ($\beta = 0.192$, $p = 0.165$). This implies that regulatory adherence on its own does not guarantee improvements in comparability without the active implementation of XBRL and a broader commitment to digital reporting advancement.

Therefore, the findings affirm that both XBRL adoption and digital reporting maturity are critical drivers of financial statement comparability in the Nigerian banking sector. By illustrating the combined importance of structured reporting standards and digital readiness, the study underscores the value of digital reporting initiatives as strategic mechanisms for enhancing transparency, strengthening investor confidence, and supporting effective regulatory oversight within the financial system.

Conclusion

The adoption of XBRL and the maturity of digital financial reporting are essential drivers of financial statement comparability among listed Nigerian banks. The study demonstrates that banks implementing structured digital reporting systems experience higher transparency and consistency in their financial statements, supported by robust statistical evidence of the positive impact of XBRL adoption and digital reporting maturity.

Despite these benefits, challenges remain in fully realizing the potential of XBRL adoption. Some banks face limitations related to technological capacity, staff expertise, and implementation costs, which can constrain the effectiveness of digital reporting initiatives. Addressing these obstacles is crucial to ensure that all banks can leverage XBRL and digital reporting to enhance comparability and improve stakeholder confidence.

To maximize the impact of digital financial reporting, policymakers, regulators, and bank management should prioritize initiatives that promote widespread XBRL adoption, strengthen digital reporting infrastructure, and provide targeted training for staff. Such a comprehensive approach will not only improve financial statement comparability but also enhance transparency, facilitate better regulatory oversight, and contribute to a more efficient and resilient banking sector in Nigeria.



Recommendations

Based on the empirical findings of this study, the following recommendations are proposed to enhance the benefits of XBRL adoption and digital financial reporting for improving financial statement comparability among Nigerian banks:

i. Banks should prioritize the simplification and standardization of digital reporting systems to facilitate broader adoption. Institutions facing operational or technological challenges should receive targeted support, including technical assistance and resource allocation, to ensure successful implementation. Reporting frameworks should extend beyond statutory requirements to include capacity-building initiatives such as staff training, technological upgrades, and continuous professional development.

ii. Efforts to raise awareness of the strategic advantages of XBRL and digital reporting among bank management and personnel should be intensified. Educational programs, workshops, and structured professional development initiatives can equip stakeholders with the knowledge and skills necessary to leverage structured reporting standards effectively, ensuring consistent and accurate financial disclosures.

iii. Regulatory authorities should establish robust monitoring and evaluation mechanisms to oversee the implementation of digital reporting initiatives. These mechanisms should ensure compliance with evolving reporting standards, assess the effectiveness of adoption strategies, and provide timely feedback to institutions to foster continuous improvement.

iv. Targeted programs should be introduced to strengthen banks' internal capabilities in financial data management, reporting accuracy and adherence to digital reporting standards. Improving these institutional capacities will enhance financial statement comparability, promote transparency, and reinforce confidence among investors, regulators, and other stakeholders, ultimately contributing to a more efficient and trustworthy banking sector in Nigeria.



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