E-ISSN: 1115 - 8530 P-ISSN: 3026-8958
MPRI-JFRBD | INTERNATIONAL JOURNAL OF FINANCIAL RES. AND BUSINESS DEVELOPMENT
VOL. 09 NO. 7 – JULY, 2025

EFFECT OF ACCOUNTING INFORMATION SYSTEM (AIS) COSTS ON THE FINANCIAL REPORTING QUALITY OF SELECTED NIGERIAN DEPOSIT MONEY BANKS

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DOI: https://doi.org/10.70382/mejfrbd.v9i7.044

Abstract

The Accounting Information System (AIS) plays a crucial role in ensuring the accuracy, timeliness, and reliability of financial reporting in organizations. However, the high costs associated with AIS implementation and management has raised concerns about how these costs are influenced by various internal and external factors. This study therefore is an attempt to examine the effect of AIS cost and financial reporting quality of selected Nigerian Deposit Money Banks. The study adopts *ex-post factor* research design whereby data was sourced mainly from the audited annual financial reports of listed consumer goods manufacturing firm on the floor of Nigerian Exchange Group for the period 2015-2024. The population of the study consists of fourteen (14) NDMBs as at December, 2024. The sample size of seven (7) NDMBs was arrived at using purposive sampling technique whereby NDMBs which have their annual report and accounts readily accessible for the study period were selected. Analytical techniques used in the study consist of both descriptive and inferential statistics while inferential statistics such as panel regression analysis was used to determine the extent to which AIS costs influence financial reporting quality of selected NDMBs. Findings from the result of panel regression analysis on the extent to which AIS costs influence financial reporting quality of selected NDMBs showed that two (2) out of the four (4) explanatory variables were significant in

Keyword Accounting Information System (AIS) Costs, Financial Reporting Quality, Nigerian Deposit Money Banks, Software Acquisition Cost, Operational Cost

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explain the variation of financial reporting quality of selected NDMBs. These variables are Operational Cost (p=0.0000) and Software Acquisition Cost (p=0.0300). The study concluded that there is a positive relationship between of AIS cost and financial reporting quality of selected Nigerian Deposit Money Banks. It is therefore concluded that Banks should adopt standardized cost control frameworks that clearly identify and manage the drivers of AIS costs—such as operating overheads, human capital, software licensing, and R&D expenditures.

Introduction

The Accounting Information System (AIS) plays a crucial role in ensuring the accuracy, timeliness, and reliability of financial reporting in organizations. In the context of Nigerian Deposit Money Banks (DMBs), the cost of implementing and maintaining AIS can significantly influence the quality of financial reporting (Bello and Adebayo, 2021). While AIS is designed to streamline financial processes and improve the efficiency of financial management, the high costs associated with acquiring, deploying, and maintaining sophisticated systems can present challenges, particularly for banks operating in a competitive and highly regulated environment (Obasi and Okoye, 2022). One of the main effects of AIS costs on the financial reporting quality of Nigerian DMBs is related to system implementation and maintenance costs. These banks are often required to invest substantial financial resources in acquiring advanced AIS technology, training personnel, and ensuring compliance with regulatory requirements (Ogbonna and Ifurueze, 2020).

Accounting Information System (AIS) costs play a pivotal role in determining the efficiency and quality of financial reporting within organizations, particularly in sectors like banking and finance where data accuracy and regulatory compliance are critical (Ogbonna and Ifurueze, 2020). The costs associated with AIS encompass acquisition, implementation, training, maintenance, and security. The initial acquisition costs include purchasing hardware and software, as well as any necessary customization to fit the organization's specific needs (Bello and Adebayo, 2021). These costs can be substantial, especially for organizations aiming to integrate sophisticated enterprise resource planning (ERP) systems that combine various operational data with accounting information.

Following acquisition, organizations must incur implementation and integration costs, which include the expenses required to install and configure the system, as well as integrate it with existing platforms such as human resources, customer relationship management (CRM), or supply chain systems (Akinola and Adetunji, 2023). This process can be time-consuming and resource-intensive, leading to delays in full system utilization

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and additional financial burdens (Ogbonna and Ifurueze, 2020). Furthermore, training costs are necessary to ensure that employees are adept at using the new system, with ongoing training required to accommodate future upgrades and system enhancements. Without adequate training, employees may not fully utilize the AIS, leading to inefficiencies in reporting (Obasi and Okoye, 2022).

Financial reporting quality refers to the accuracy, transparency, and reliability of financial information presented by organizations, which stakeholders such as investors, regulators, and management rely on for decision-making. High-quality financial reporting ensures that the information is free from material misstatements, errors, or biases, and provides a true reflection of an organization's financial health and performance (Bello and Adebayo, 2021). In today's dynamic business environment, regulatory bodies and accounting standards, such as the International Financial Reporting Standards (IFRS), place a strong emphasis on enhancing financial reporting quality to improve accountability and promote investor confidence.

The quality of financial reporting is determined by several factors, including the effectiveness of internal controls, the use of Accounting Information Systems (AIS), and adherence to accounting standards. Organizations with robust internal controls and well-implemented AIS can produce more accurate and reliable financial reports. In contrast, weak internal controls or inadequate systems can lead to errors, omissions, or even fraudulent financial reporting, which compromises the quality of information shared with stakeholders (Obasi and Okoye, 2022). Timeliness, relevance, and comparability are also key aspects of high-quality financial reports, as they ensure that stakeholders receive useful information in a timely manner, allowing for informed decision-making.

Statement of the Problem

One key issue is that while Nigerian Deposit Money Banks (NDMBs) are investing heavily in AIS to enhance accuracy, transparency, and compliance with financial regulations, the relationship between these investments and the resulting quality of financial reporting remains unclear. The costs of implementing AIS—including expenses for software, hardware, staff training, and system maintenance—place a substantial financial burden on banks (Ajibade and Ojo, 2021). Yet, it is uncertain whether these costs directly contribute to improvements in the timeliness, reliability, and accuracy of financial reports or if they merely represent an additional financial strain without delivering the expected benefits. Moreover, smaller and medium-sized banks in Nigeria may experience greater financial strain from AIS costs than larger banks, potentially affecting their ability to maintain high financial reporting standards. This disparity raises questions about whether AIS costs have a uniform influence on financial reporting quality across different banks,

or if certain banks struggle more due to resource constraints (Adewale and Nwankwo, 2022). Given these complexities, it is critical to examine the extent to which AIS costs truly impact the quality of financial reporting, and whether Nigerian DMBs are achieving the expected return on their AIS investments this study therefore is an attempt to examine the . effect of AIS cost and financial reporting quality of selected Nigerian Deposit Money Banks.

Objective of the Study

The aim of the study is to examine the effect of Accounting Information System Cost (AIS) costs on the financial reporting quality of selected Nigerian Deposit Money Banks

Literature Review

Review of Previous Studies

Agboola *et al* (2020) studied the impact of Accounting Information Systems (AIS) on financial reporting quality of Quoted Manufacturing Companies in Nigeria. Secondary data were sourced through annual statement of financial report of manufaturing companies listed on the Nigerian Stock Exchange over a period of 6 years (2013- 2018). A total of five companies were purposively selected because they hold a strong market. They are Nestle Nigeria PLC, Dangote PLC, GlaxoSmithKline Nigeria PLC, Friesland Nigeria PLC, and Cadbury Nigeria PLC. Operating Expenses (OPEX), Cost of Human Resources (CHR), and Research and Development Cost (RDC) were used as proxies for Accounting Information System while Return on Capital Employed was adopted as proxy for Financial Performance. Panel data analysis was adopted with focus on fixed and random effects techniques on STATA 12. Findings revealed that the level of investment in AIS is justifiable as it positively impacted on the financial reporting quality of the selected companies. The result further shows that the adoption of AIS cosy has not altered the basic accounting procedures.

Taibat and Adewoye (2018) studied the effective adoption of the Accounting Information Systems (AIS) among commercial banks in Nigeria and the adoption on their financial reporting quality. The study was carried out in Lekki Peninsula Area of Lagos Sate, Nigeria. Three-quarter of commercial banks in Nigeria branches in this area. 16 commercial banks present in this area of study were examined with 80 respondents randomly selected from each bank. Questionnaires were administered on the respondents in order to know their opinions on the effect of AIS adoption and the level of adoption among these banks. AIS were proxied by Cost. Benefit barriers and risk while commercial bank performance was proxied by Capital Equity (ROCE), Return on Total Asset (ROTA), Net Operating Profit (NOP) and Gross Profit Margin (GPM) data were sourced from financial reports within the

recent 10 years post AIS adoption years (2007- 2017) of the selected commercial banks. Cronbach's alpha test was used to measure the stability of measurement tool and also simple linear regression test was also used to test the impact of AIS on bank performance. The study found that commercial banks in Nigeria adopted and use AIS in providing their services to their customers and the level of usage is relatively high. The findings indicated that AIS adoption has a positive significant with all the financial reporting quality indicators with α

Awosejo, Ajala and Agunbiade (2022) assessed the level of perception of social and organisational factors and the extent to which accounting information system is adopted by accounting firms in South Africa. The studied used relevance, faithful representation and verifiability to measure accounting information system and financial reporting quality It was inferred that usage of accounting information system is accepted fairly within accounting firm in South Africa and the firm were propagating adoption by their clients.

Ironkwe and Otti (2020) investigate the relationship between accounting information and the financial reporting quality of banks in Nigeria. Sample of 91 deposit banks were used for the study and primary data were gathered via survey method with the aid of structured questionnaire. The test of hypothesis and other breakdown of data collected was analysed with the use of Pearson Product Moment Correlation (PPMC) on SPSS. From the analyses conducted, the findings showed that relevance of accounting information was statistically significant in determining the profitability and quality of service delivery of banks in Nigeria. On the basis of the findings, it was concluded that the quality of accounting information in terms of relevance to users contributes significantly to the performance of bank. Given the above findings and conclusions, the following recommendations were made. More effort should be directed towards the production of good quality accounting information in all the commercial banks in Nigeria in order to improve financial performance. To improve the quality of accounting information, commercial banks in Nigeria must employ highly skilled competent professional accountants to generate the right quality of financial information, amongst others.

Raed (2020) investigate the impact of accounting information systems (IAS) on banks success in Jordan. The researcher developed and distributed a structure questionnaire to the head offices of the surveyed banks. Hundred and twelve copies of questionnaires were used for analysis. Correlations, multiple regressions were applied in order to answer for the study hypothesizes. The findings showed that Accounting Information Systems, has a significantly affects on banks success. The researcher generate the following variables for measuring the accounting information systems as follow: inputs, processes, outputs, control, feedback, flexibility , Simplicity of use and reliability that could be

classified in three groups as follow: information quality, involves(inputs, control and outputs) system quality, involves (Processes, Control and reliability) and system usage that involves (Flexibility , Simplicity of use) and how these variables affect on the banks success, Furthermore, the study suggested a number of recommendations to help bank managers in decision making process successfully which reflected on banks success.

Hieu and Nguyena (2021) studied the determinants of accounting information systems quality. Data was collected by using questionnaire delivered to 347 participants who are board of director's members and managers. The statistical methods approaches are employed to address the research issues including Explanatory Factor Analysis (EFA) and Ordinary Least Squares (OLS). The findings showed that various factors had significant impacts on the accounting information systems quality including (i) organization culture, (ii) manager participation, (iii) information technology, (iv) information technology knowledge of managers, (v) accounting knowledge of managers, (vi) accounting information applications, (vii) consultation of external experts and (viii) training activities for users in accounting information systems. Based on the research results, some key intuitive recommendations were proposed aiming to improve the accounting information systems quality of Vietnamese Enterprises.

Methodology

The study adopts *ex-post factor* research design whereby data was sourced mainly from the audited annual financial reports of listed consumer goods manufacturing firm on the floor of Nigerian Exchange Group for the period 2015-2024. The population of the study consists of fourteen (14) NDMBs as at December, 2024. The sample size of seven (7) NDMBs was arrived at using purposive sampling technique whereby NDMBs which have their annual report and accounts readily accessible for the study period were selected. Analytical techniques used in the study consist of both descriptive and inferential statistics while inferential statistics such as Furthermore, panel regression analysis was used to determine the extent to which AIS costs influence financial reporting quality of selected NDMBs.

Results and Discussion

Pool regression analysis on the extent to which AIS costs influence financial reporting quality of selected Nigerian Deposit Money Banks

The regression model in Table 1 includes Operating Cost (OPC), Human Resource Cost (HRC), Research and Development Cost (RDC), and Software Acquisition Cost (SAC) as independent variables, while Discretionary Accruals (DA)—used as a proxy for financial reporting quality—is the dependent variable. The R-squared value of 0.7024 implies that

about 70.24% of the variation in DA is explained by the AIS cost variables in the model. The adjusted R-squared of 65.89% confirms that the model has strong explanatory power, even after adjusting for the number of predictors. The constant term (C = 0.3267) indicates the expected value of discretionary accruals when all AIS cost variables are zero. While not statistically significant (p = 0.1266), it provides a baseline for interpreting the contribution of each AIS component.

The coefficient of OPC = 0.3623 is positive and highly significant (p < 0.0001). This suggests that an increase in operating cost is significantly associated with an increase in discretionary accruals. In other words, higher operational expenses may lead to poorer financial reporting quality, possibly due to inefficiencies or misallocations that create opportunities for earnings manipulation. The coefficient for HRC = -0.0176 is negative, but it is not statistically significant (p = 0.8708). This means that changes in HR-related expenditures do not significantly influence financial reporting quality in this model. The result suggests that personnel expenses alone may not impact earnings quality unless linked with training, ethical awareness, or control systems.

The RDC coefficient = -0.00499 is also insignificant (p = 0.7286), suggesting that R&D costs do not have a measurable impact on discretionary accruals in this context. While previous correlation analysis indicated a strong positive relationship, the regression result controls for other factors, revealing that R&D may not independently affect reporting quality. It's possible that such costs are capitalized or amortized in ways that reduce their direct influence on reported earnings. The coefficient for SAC = 0.5078 is positive and statistically significant (p = 0.0370). This implies that increases in software acquisition costs are associated with increases in discretionary accruals, suggesting that digital systems, though intended to enhance reporting accuracy, might not be effectively reducing earnings management..

Overall, only OPC and SAC have a significant influence on financial reporting quality. Their positive coefficients indicate that higher spending on operations and software is associated with higher discretionary accruals, a potential indicator of reduced transparency or increased earnings management. This may point to inefficiencies, weak internal controls, or misuse of AIS investments, especially in the absence of robust oversight and ethical frameworks. These findings suggest that while AIS investments are crucial, not all cost areas positively affect reporting quality. Bank managers and regulators should prioritize efficient cost management, ensure software integration with audit trails, and promote accountability in operational spending. Importantly, the insignificant role of R&D and HR costs signals a need to align AIS spending with strategic objectives, ensuring that these expenditures enhance—not undermine—financial reporting quality.

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Table 1: Pool regression analysis on the extent to which AIS costs influence financial reporting quality of selected Nigerian Deposit Money Banks

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.326712	0.210641	1.551033	0.1266
OPC	0.362295	0.071017	5.101542	0.0000
HRC	-0.017560	0.107485	-0.163369	0.8708
RDC	-0.004996	0.014325	-0.348769	0.7286
SAC	0.507797	0.237540	2.137732	0.0370
R-squared	0.702359	Mean dependent var		0.528582
Adjusted R-squared	0.658894	S.D. dependent var		0.867860
S.E. of regression	0.694887	Akaike info criterion		2.189521
Sum squared resid	26.55777	Schwarz criterion		2.364050
Log likelihood	-60.68564	Hannan-Quinn criter.		2.257789
F-statistic	9.257120	Durbin-Watson stat		1.584933
Prob(F-statistic)	0.000009			

Source: Researcher's Computation, 2025

Random regression analysis on the extent to which AIS costs influence financial reporting quality of selected Nigerian Deposit Money Banks

The regression model in Table 2 evaluates the effect of Operating Cost (OPC), Human Resource Cost (HRC), Research and Development Cost (RDC), and Software Acquisition Cost (SAC) on Discretionary Accruals, a common proxy for financial reporting quality. The random effects model is particularly useful in panel data analysis, as it accounts for unobservable individual heterogeneity across banks that might influence financial reporting behavior. The R-squared value of 0.4583 implies that approximately 45.8% of the variation in financial reporting quality (DA) is explained by the AIS cost variables included in the model. The adjusted R-squared is slightly lower at 41.9%, indicating a moderate explanatory power after adjusting for the number of predictors. Although not as strong as in pooled regression, the model still provides meaningful insights.

The coefficient for OPC is 0.3819, with a t-statistic of 5.73 and a p-value of 0.0000, making it highly statistically significant. This implies that an increase in operating costs is associated with an increase in discretionary accruals, suggesting reduced financial reporting quality. This supports the notion that operational inefficiencies or high overhead expenses may lead to more aggressive earnings management. The coefficient for SAC is 0.5647, also statistically significant (p = 0.0179). This suggests that increased spending on accounting software correlates with higher discretionary accruals. While AIS

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is generally expected to enhance transparency, this result implies that without appropriate oversight, software may facilitate sophisticated earnings manipulation.

The coefficient for HRC is -0.0154, but it is not statistically significant (p = 0.8859). This means that changes in HR-related spending (e.g., salaries, training, staff development) do not significantly influence financial reporting quality in the sampled banks. This may reflect a lack of connection between human capital investment and reporting practices, or it could indicate that the influence of HR on financial reporting is mediated by other factors such as ethics training or internal controls. Likewise, RDC has a very small and statistically insignificant coefficient (-0.0023, p = 0.8610), indicating that R&D spending does not significantly affect earnings management behavior in this sample. This result contrasts with the common belief that R&D introduces accounting subjectivity that could affect discretionary accruals. The inconsistency may be due to how Nigerian banks classify or account for R&D, or possibly due to limited investment in R&D compared to other sectors, as observed by Ibrahim and Adeola (2022).

The constant term (C = 0.2810) is not statistically significant (p = 0.2107), indicating that the baseline level of discretionary accruals—when all predictors are zero—is not meaningfully different from zero. While this has no direct implication, it supports the interpretation that the variation in DA is largely driven by AIS cost components rather than unexplained constants. Overall, the random effects regression identifies Operating Cost and Software Acquisition Cost as the only significant predictors of financial reporting quality. Their positive coefficients suggest that increased spending in these areas may be associated with greater discretionary accounting, possibly undermining transparency. In contrast, HR and R&D expenditures do not significantly affect reporting outcomes in this context.

The results underscore the need for Nigerian banks to critically evaluate how AIS-related investments are managed. While operational and digital investments are essential, they should be coupled with strong internal audit mechanisms, transparent governance structures, and regular evaluations to ensure they promote—not erode—reporting integrity.

Table 2: Random regression analysis on the extent to which AIS costs influence financial reporting quality of selected Nigerian Deposit Money Banks

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.281027	0.221911	1.266395	0.2107
OPC	0.381908	0.066638	5.731119	0.0000
HRC	-0.015434	0.107102	-0.144105	0.8859
RDC	-0.002327	0.013224	-0.175955	0.8610

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SAC	0.564662	0.231422	2.439971	0.0179
R-squared	0.458322	Mean dependent var		0.349533
Adjusted R-squared	0.418927	S.D. dependent var		0.832546
S.E. of regression	0.634634	Sum squared resid		22.15184
F-statistic	11.63407	Durbin-Watson stat		1.573734
Prob(F-statistic)	0.000001			

Source: Researcher's Computation, 2025

Fixed regression analysis on the extent to which AIS costs influence financial reporting quality of selected Nigerian Deposit Money Banks

The fixed effects regression model aims to understand how variations in AIS-related expenditures within individual banks over time influence the quality of their financial reporting. This approach controls for all time-invariant characteristics (such as management structure or corporate culture) that may differ across banks but remain constant during the period of analysis. The dependent variable is discretionary accruals (DA), which is widely used in empirical accounting research to represent the degree of earnings management and hence, the quality of financial reporting. The R-squared value of 0.581 suggests that about 58.1% of the variation in financial reporting quality (as measured by DA) is explained by AIS cost variables: operating cost (OPC), human resource cost (HRC), research and development cost (RDC), and software acquisition cost (SAC). The adjusted R-squared value of 0.463 confirms that the model has strong explanatory power even after adjusting for the number of variables. This indicates that the selected AIS cost indicators are significant contributors to changes in the banks' earnings management behavior.

The coefficient for OPC is 0.3981, and it is statistically significant at the 1% level (p = 0.0000). This implies that an increase in operating costs is associated with a higher level of discretionary accruals, reflecting poorer financial reporting quality. This could be due to banks allocating excessive resources to non-productive activities or administrative overheads that reduce transparency. The SAC coefficient is 0.6177 and is statistically significant at the 5% level (p = 0.0151). This suggests that higher spending on AIS software is linked with increased earnings management. While one would expect AIS investments to promote accountability, this result reveals a potential downside: banks may be using software capabilities not to enhance transparency, but to enable more sophisticated manipulation of financial data.

The coefficient for HRC is -0.0136, but it is statistically insignificant (p = 0.9071). This means that variations in personnel-related expenditures (e.g., training, salaries, HR development) have no meaningful influence on financial reporting quality within the

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banks studied. Without such alignment, HRC may simply represent recurring administrative costs. The coefficient for RDC is virtually zero (-0.00016) and not significant (p = 0.9905). This means that R&D investments do not significantly affect the quality of financial reporting. This result may be due to the low priority or inconsistent treatment of R&D expenditures in Nigerian banks. Unlike technology or manufacturing firms, banks may not make large or clearly reported R&D investments, and any R&D expenses might be capitalized or amortized in a way that reduces their immediate impact on accrual-based earnings.

The fixed effects model's strength lies in its ability to account for unobserved heterogeneity—those internal characteristics of banks that remain constant but could bias results if ignored (e.g., management integrity, risk culture, or internal controls). The higher R-squared value compared to the random effects model (which had an R^2 of 0.458) confirms that such internal characteristics significantly influence how AIS costs translate into reporting outcomes. This supports the idea that AIS investment effectiveness is not just about spending more, but about how well such investments are managed within each bank's unique operating environment.

Table 3: Fixed regression analysis on the extent to which AIS costs influence financial reporting quality of selected Nigerian Deposit Money Banks

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.242803	0.210164	1.155302	0.2539
OPC	0.398089	0.068070	5.848193	0.0000
HRC	-0.013619	0.116059	-0.117343	0.9071
RDC	-0.000159	0.013321	-0.011952	0.9905
SAC	0.617666	0.244573	2.525492	0.0151
R-squared	0.580972	Mean dependent var		0.528582
Adjusted R-squared	0.462550	S.D. dependent var		0.867860
S.E. of regression	0.636236	Akaike info criterion		2.134470
Sum squared resid	18.62064	Schwarz criterion		2.623150
Log likelihood	-50.03410	Hannan-Quinn criter.		2.325620
F-statistic	4.905980	Durbin-Watson stat		1.547839
Prob(F-statistic)	0.000027			

Source: Researcher's Computation, 2025

Discussion of Findings

The regression analysis revealed that Operating Cost (OPC) and Software Acquisition Cost (SAC) have a statistically significant positive effect on Discretionary Accruals (DA), a proxy

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for financial reporting quality, while Human Resource Cost (HRC) and Research and Development Cost (RDC) were not statistically significant. These findings provide critical insights into how AIS-related expenditures affect the integrity of financial reporting among Nigerian Deposit Money Banks (DMBs). The finding that Operating Cost (OPC) significantly and positively influences discretionary accruals ($\beta = 0.362$, $p < 0.001$) suggests that increased operational spending correlates with a higher degree of earnings management. This implies that banks with rising operational expenses may resort to discretionary accounting practices to obscure inefficiencies or meet regulatory benchmarks. This result is consistent with Okoye and Akinlabi (2021), who found that operational inefficiencies in Nigerian banks often create opportunities for earnings manipulation, particularly when financial controls are weak.

The Software Acquisition Cost (SAC) also showed a significant positive relationship with discretionary accruals ($\beta = 0.508$, $p = 0.037$). While AIS software is generally expected to improve transparency and accountability, this finding implies that without proper oversight, software tools may instead facilitate more sophisticated forms of manipulation. Taiwo et al. (2023) similarly argued that Nigerian banks investing in digital accounting tools often lack the internal controls and IT governance structures to ensure ethical use, leading to misuse of digital systems for earnings smoothing. On the other hand, Human Resource Cost (HRC) and Research and Development Cost (RDC) did not significantly affect financial reporting quality in this model. The insignificance of HRC ($\beta = -0.018$, $p = 0.871$) may suggest that staff-related expenditures—such as training, wages, and benefits—do not directly influence discretionary accruals unless they are linked to governance culture or ethical behavior. This is supported by Adeniran and Bello (2022), who found that the effectiveness of personnel in ensuring reporting integrity depends more on ethical standards than mere compensation or training expenditure.

Similarly, Research and Development Cost (RDC) ($\beta = -0.005$, $p = 0.729$) had no significant impact on discretionary accruals. Although earlier correlation analysis suggested a strong relationship between RDC and DA, the regression results, which control for multicollinearity and shared variance, reveal that RDC may not independently influence earnings management. Ibrahim and Adeola (2022) observed that R&D costs in Nigerian banks are often inconsistently treated in financial statements, leading to variable effects on reporting outcomes.

The model's R-squared value of 0.702 indicates that approximately 70.2% of the variance in financial reporting quality is explained by AIS cost components. This high explanatory power emphasizes the central role that AIS-related decisions play in determining the credibility and transparency of financial statements in the banking sector. This supports Abubakar and Bolarinwa (2022), who emphasized that AIS costs—if well-aligned with

governance structures—can either enhance or weaken the quality of reporting, depending on how they are managed.

Another implication from this study is that AIS investments, while necessary, are not automatically beneficial for transparency. The significant relationship between SAC and DA supports the claim by Onyema and Mohammed (2023) that banks in developing economies must pair digitalization with ethical auditing practices and real-time oversight to prevent software misuse in financial reporting. The findings support the conclusion that not all AIS costs contribute equally or positively to financial reporting quality. Operating costs and software spending are significantly associated with higher discretionary accruals, pointing to possible earnings manipulation. In contrast, human capital and innovation spending show limited impact unless integrated with broader governance and ethical frameworks. These insights should guide policymakers and bank managers in formulating targeted strategies that link AIS spending to genuine improvements in accountability and transparency.

The R-squared value of 0.65 indicates that a substantial portion of the variation in PAT is explained by the independent variables included in the model. This suggests that firm characteristics like size, leverage, PPE, and shareholders' fund play a significant role in determining profitability. Similar results have been observed in prior studies, such as those by Babalola (2013) and Nwude (2017), which also emphasize the importance of internal firm characteristics in shaping financial outcomes.

The findings of this study are largely consistent with the existing literature on the determinants of profitability in consumer goods firms. Firm size and leverage emerged as significant factors influencing profitability, while the effects of PPE and shareholders' fund require further investigation to fully understand their nuanced impacts. These findings offer practical implications for firm management, suggesting that optimizing asset utilization and carefully managing debt levels are key to enhancing profitability in the competitive consumer goods sector

Conclusion

Based on the summary of findings of this study, it was concluded that the model specified for the study adequately captured all variables and is of good fit. Also, AIS cost has significant influence on the financial reporting quality of selected Nigerian Deposit Money Banks.

Recommendations

It is therefore recommended that;

The significant influence of AIS costs on reporting quality implies that banks must prioritize quality investments—e.g., software with compliance and audit capabilities—over simply increasing budgetary allocations.

Although human resource costs were not statistically significant, training and ethical awareness are critical. DMBs should train staff on responsible AIS usage, ensuring they understand the implications of their actions on the integrity of financial reporting.

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