

THE IMPACT OF ACCOUNTING INFORMATION SYSTEMS ON FINANCIAL PERFORMANCE IN NIGERIAN HEALTHCARE FIRMS

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Abstract

This study investigates the effect of Accounting Information Systems (AIS) on the financial performance of listed healthcare firms in Nigeria. Specifically, it examines the influence of accounting software usage, the cost of accounting software, and accounting software investment intensity on Return on Assets (ROA). An ex-post facto research design was adopted, utilizing secondary data extracted from the annual reports of five purposively selected healthcare firms listed on the Nigerian Exchange Group as of December 31, 2023. The selection was based on the availability of consistent financial data covering a ten-year period from 2014 to 2023.

Descriptive statistics were employed to summarize the data, while panel least squares regression with White period standard errors was used to test the study's hypotheses at a 5% significance level. The results revealed that accounting software usage has a positive but statistically non-significant effect on ROA ($\beta = 0.046449$; $p = 0.4411$). In contrast, the cost of accounting software exhibited a significant positive impact on ROA ($\beta = 0.031437$; $p = 0.0002$), suggesting that financial investment in robust software systems may enhance firm performance. Interestingly, accounting software investment intensity showed a significant negative effect on ROA ($\beta = -0.218236$; $p = 0.0000$), indicating that excessive or misaligned investment in software may undermine profitability.

The findings suggest that while the mere use of accounting software may not guarantee improved financial outcomes, strategic and cost-effective investments in such systems can positively influence firm performance. Conversely, disproportionate or poorly managed investment in AIS could hinder returns. The study concludes that for AIS to yield substantial performance benefits, firms must align software investments with operational needs and provide adequate training for users.

It is recommended that management of listed healthcare firms enhance staff training to improve software utilization and integration into overall business operations. Additionally, firms should undertake cost-benefit analyses to ensure that AIS investments are economically justified and support sustainable financial performance.

Keywords: Accounting Information Systems, Financial Performance, Return on Assets, Healthcare Firms, Investment Intensity

1. Introduction

With the use of cutting-edge technologies like automation, data analytics, and artificial intelligence, Accounting Information Systems (AIS) should be able to provide real-time insights, streamline financial procedures, and support strategic decision-making (Chen, 2021). Overall productivity and profitability are increased when these

technologies are integrated into company processes (Oluwagbade, Boluwaji, Azeez & Njengo, 2024). As a result, AIS gives financial professionals more authority, which improves financial performance, reduces operating expenses, and gives businesses a competitive advantage in a market that is changing quickly.

Nevertheless, many businesses find it difficult to take full advantage of these systems, even with the potential advantages of AIS. The seamless integration and efficient use of AIS are sometimes hampered by implementation difficulties, technological complexity, and organizational reluctance to change (Moron & Diokno, 2023; Al Wael, Abdallah, Ghura & Buallay, 2023). In reality, businesses could find it challenging to modify their current procedures to take use of AIS's sophisticated features, which could lead to underutilization or ineffective use. Furthermore, unsatisfactory performance and a restricted realization of the anticipated benefits might result from problems including data accuracy, system compatibility, and inadequate training for financial professionals.

Consequently, AIS underutilization may result in lost chances for cost savings and increased operational effectiveness. Reliance on manual interventions, ineffective financial procedures, and the continuous use of antiquated technology can raise operating expenses and hinder AIS's ability to completely streamline operations and increase efficiency. The creation of precise and timely financial suggestions may also be hampered by a lack of integration and comprehension of AIS functionalities, which would have a detrimental effect on organizational decision-making. This could lead to less-than-ideal strategy planning and resource allocation.

Furthermore, in today's corporate world, when data-driven decision-making is essential for success, a firm's capacity to remain competitive may be jeopardized if AIS capabilities are not properly utilized. Even though Accounting Information Systems (AIS) have advanced significantly, little is known about how exactly they affect the financial performance of Nigerian listed healthcare companies. Akinadewo, Donatus, Akinadewo, Jabar, & Adebisi (2023) and Chika, Promise, Chidozie, & Owelechi (2023) are two examples of existing research that frequently concentrates on broad business performance or sector impacts while ignoring the particulars of the healthcare industry. While pertinent, studies such as Joel, Karinate, & Olufunke (2023) and Oluwagbade, Boluwaji, Azeez, & Njengo (2024) do not fully address the impact of accounting software on important financial metrics like return on equity, return on assets, and net profit margin, particularly within Nigerian healthcare firms. Against this backdrop, this study examines the effect of Accounting Information Systems on the financial performance of listed healthcare firms in Nigeria.

Objectives of the Study

The broad objective of the study is to examine the effect of Accounting Information Systems on the financial performance of listed healthcare firms in Nigeria. The specific objectives of the study are as follows:

1. To examine the effect of accounting software usage on the return on asset of listed healthcare firms in Nigeria.

2. To determine the extent to which cost of accounting software affects the return on asset of listed healthcare firms in Nigeria.
3. To ascertain whether accounting software investment intensity affects the return on asset of listed healthcare firms in Nigeria.

Statement of Research Hypotheses

1. H0 Accounting software usage has no significant effect on the return on asset of listed healthcare firms in Nigeria.
2. H0 Cost of accounting software usage has no significant effect on the return on asset of listed healthcare firms in Nigeria.
3. H0 Accounting software investment intensity has no significant effect on the return on asset of listed healthcare firms in Nigeria.

2.0 Review of Related Literature**Effect of accounting information system on Financial Performance**

Technology integration is essential for businesses looking to stay ahead of the competition in the fast-paced business world of today (Oluwagbade, Boluwaji, Azeez & Njengo, 2024). Accounting Information Systems (AIS), one of the many technology innovations, have emerged as essential instruments that are changing how businesses handle their finances and make decisions. Enhancing operational efficiency is one important way that AIS increases corporate profitability. AIS reduces human error and expedites procedures by automating standard accounting functions like data entry, reconciliation, and report preparation (Chen, 2021). Businesses may concentrate on more strategic endeavors that increase revenue and cut expenses thanks to this automation, which frees up important time and resources. Furthermore, businesses may proactively find inefficiencies and areas for improvement because to AIS's real-time monitoring and analysis capabilities, which improves operational performance and boosts profitability (Nworie, Anaike & Onyeka, 2023).

Additionally, accounting information systems give businesses the means to make more strategic and well-informed decisions (Phillips-Wren, Daly & Burstein, 2021). These systems provide actionable insights into market trends, customer behavior, and financial performance using predictive modeling and advanced data analytics. Businesses can better understand their operations and the larger market environment by examining vast amounts of data from a variety of sources, such as internal financial records, market statistics, and consumer feedback. They can more successfully deploy resources, reduce possible risks, and spot new opportunities thanks to this improved understanding, all of which increase profitability.

Accounting information systems are essential for enhancing decision-making, maximizing profitability, and optimizing resource allocation (Hashem & Alqatamin, 2021). AIS enables thorough financial analysis and planning by integrating data from several organizational divisions, including as operations, sales, and

procurement. Through this integration, businesses can identify inefficient or excessively expensive regions and put specific cost-cutting initiatives in place. Additionally, businesses can forecast future financial performance and modify their resource allocation plans in accordance with the results by utilizing predictive analytics. This guarantees that resources are used effectively and that long-term profitability is taken into consideration when making decisions about capital allocation.

But it's crucial to understand that putting accounting information systems into place is not without its difficulties. Data integration problems, cybersecurity threats, and staff reluctance to change from those used to old accounting methods are some of the challenges that businesses may encounter (Moron & Diokno, 2023; Al Wael, Abdallah, Ghura & Buallay, 2023). Careful planning, funding for staff training and growth, and strong cybersecurity measures to safeguard private financial data are all necessary to overcome these obstacles.

Therefore, through improving productivity, facilitating well-informed decision-making, and allocating resources as efficiently as possible, accounting information systems have a major impact on business profitability. Businesses who adopt these systems will have a competitive edge in the fast-paced business world of today as technology advances (Yiu, Yeung & Jong, 2020). However, a strategic strategy, technological infrastructure investment, and a dedication to promoting an innovative and continuous improvement culture are necessary for the successful deployment of AIS. In a world that is becoming more and more digital, businesses can seize new chances for expansion and financial success by utilizing the potential of accounting information systems.

Empirically, Ojomo & Falade (2024) investigated the effect of Accounting Information Systems on the financial performance of selected listed insurance companies in Nigeria for the period of 2010-2022. Using ex-post facto and quasi-experimental research designs, the study found that Accounting Information Systems has a significant positive effect on return on assets and working capital at a 5% p-value. Similarly, Mohammed, Inuwa, & Enemali (2024) explored the influence of digital accounting systems on the performance of small and medium-sized enterprises (SMEs) in Plateau State, Nigeria. Using a survey design, the researchers randomly selected 500 SMEs across Plateau State and administered structured questionnaires. The data collected were analyzed using simple linear regression. The findings showed that the digital accounting system significantly influenced the performance of SMEs in the state. Mwenda, Ithai, & Waweru (2024) also examined the influence of accounting information systems' system quality on the financial performance of microfinance institutions (MFIs) in Meru County, Kenya. Guided by the resourcebased view theory, The study found that system quality significantly influenced the financial performance of MFIs in Meru County.

3. Methodology

This study employs an ex-post facto research design. The population for this study consists of seven healthcare firms listed on the Nigerian Exchange Group as of December 31, 2023. They include; Fidson Healthcare, Mecure Industries Plc, May & Baker Nigeria Plc, Morison Industries Plc, Neimeth International Pharm, Pharma-Deko

Plc, Ekocorp Plc. A purposive sampling technique was employed in this study, focusing on firms that have provided comprehensive and consistent financial data for the period 2014 to 2023. Ekocorp Plc was excluded from the final sample due to missing data for the years 2022 and 2023, and Mecure Industries Plc was removed because it was only listed in November 2023. Therefore, the final sample size consists of the five remaining listed healthcare firms. The data utilized in this study were sourced from the annual reports of the selected healthcare firms. A total of 50 firm-year observations were generated from the five selected firms across the 10-year period, ensuring a robust dataset for analysis.

The data were analyzed using both descriptive and inferential statistics. Descriptive statistics were employed to summarize the data, including measures such as mean, standard deviation, and minimum and maximum values for each variable. For inferential analysis, a panel data regression model was used, in order to account for any unobserved heterogeneity among firms that could influence their financial performance. The model was tested at a 5% significance level, and results were interpreted based on their statistical significance. White's robust standard errors was used to provide consistent estimates of the standard errors of regression coefficients in the presence of heteroskedasticity (non-constant variance of the errors) in the regression model.

Operational Measurement of Variables

The key variables in this study include accounting software usage, cost of accounting software, accounting software investment intensity, and return on assets. Each variable was operationalized as follows:

Operational Measurement of Variables

Variable	Measurement
Accounting Software Usage	Binary (1 = Uses software, 0 = Does not use)
Cost of Accounting Software	Natural log of total amount of accounting software expenditure
Accounting Software Investment Intensity	(Amount of accounting software expenditure/Total Asset) X 100
Return on Assets	Net Profit / Total assets

Source: Researcher's Compilation (2024)

Model Specification

To analyze the effect of accounting information systems on financial performance, the following econometric model was specified, adapted from Nworie, Anaike and Onyeka (2023):

$$ROA_{it} = \beta_0 + \beta_1 ASU_{it} + \beta_2 CAS_{it} + \beta_3 ASI_{it} + \eta \dots \dots \dots (i) \text{ Where:}$$

ROA = Return on Assets

ASU = Accounting Software Usage

CAS = Cost of Accounting Software

ASI = Accounting Software Investment Intensity β_0 = Intercept

$\beta_1, \beta_2, \beta_3$ = Parameters of the model

u = Stochastic error term

This model allows for the estimation of the relationship between accounting software usage, cost, and investment intensity, and the financial performance (proxied by ROA) of listed healthcare firms.

4. Data Analysis

The table 4.1 below shows the descriptive analysis of the data for this study

Table 4.1 Descriptive Analysis of Data

	ROA	ASU	CAS	ASI
Mean	-0.039403	0.380000	1.582724	0.076721
Median	0.006008	0.000000	0.000000	0.000000
Maximum	0.283671	1.000000	4.966062	1.086016
Minimum	-0.352087	0.000000	0.000000	0.000000
Std. Dev.	0.131147	0.490314	2.079559	0.186244
Skewness	-0.598970	0.494451	0.586366	3.816224
Kurtosis	3.194678	1.244482	1.428615	19.26898
Jarque-Bera	3.068670	8.457857	8.009482	672.7794
Probability	0.215599	0.014568	0.018229	0.000000
Sum	-1.970140	19.00000	79.13621	3.836073
Sum Sq. Dev.	0.842776	11.78000	211.9037	1.699653
Observations	50	50	50	50

Source: Eviews 10 Output (2024)

The descriptive statistics for the **Return on Assets (ROA)**, which represents the financial performance of listed healthcare firms, reveal that the mean ROA is -0.0394, indicating that, on average, the firms experienced a small loss over the study period. The maximum ROA is 0.2837, meaning the highest profitability recorded by any firm was 28.4%, while the minimum is -0.3521, showing that the least profitable firm suffered a loss of 35.2%. The standard deviation of 0.1311 suggests moderate variability in profitability across firms. The negative skewness (-0.59897) indicates that the distribution of ROA is skewed left, meaning more firms are clustered around lower ROA values. The kurtosis is 3.19, close to the normal distribution's value of 3, which suggests a relatively normal distribution, and the Jarque-Bera test's p-value of 0.2156 confirms that ROA does not deviate significantly from normality.

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For **Accounting Software Usage (ASU)**, the mean is 0.38, indicating that about 38% of the firms used accounting software during the period under review. The maximum value is 1, representing firms that consistently used accounting software, while the minimum value is 0, indicating some firms did not use it at all. The standard deviation of 0.4903 shows substantial variability in software usage across firms. The skewness of 0.4945 reveals a slight right skew, meaning more firms tend to not use accounting software, though many still do. The kurtosis is 1.2445, indicating a flatter distribution compared to a normal one, and the Jarque-Bera p-value of 0.0146 suggests that the distribution of ASU is not normal.

For the **Cost of Accounting Software (CAS)**, the mean value is 1.5827, which reflects the natural log of the total accounting software expenditure, meaning firms generally spend moderately on software. The maximum expenditure, in logarithmic form, is 4.9661, indicating that some firms invested significantly more in accounting software. The minimum expenditure is 0, showing that some firms did not spend anything on software. The standard deviation of 2.0796 suggests high variability in spending among firms. The positive skewness (0.5864) shows that most firms tend to spend less on software, though a few invest heavily. With a kurtosis of 1.4286, the distribution is flatter than normal, and the p-value of 0.0182 indicates that the CAS distribution is not normally distributed.

Lastly, for **Accounting Software Investment Intensity (ASI)**, the mean is 0.0767, meaning, on average, accounting software expenditure accounts for about 7.7% of total assets for the firms. The maximum ASI is 1.0860, implying that for some firms, software investment constitutes a significant portion of their assets. The minimum value of 0 means that some firms did not invest in software at all. The standard deviation is 0.1862, which reflects a considerable variation in software investment intensity across firms. The skewness value of 3.8162 suggests a strong right skew, meaning most firms invest relatively little in software, while a few make substantial investments. The kurtosis of 19.269 indicates a highly peaked distribution, with the Jarque-Bera p-value of 0.0000 confirming that the ASI distribution deviates significantly from normality.

Test of Heteroskedasticity

Table 4.2 shows the test of heteroskedasticity conducted to assess whether the variance of the residuals is constant.

Table 4.2 Panel Cross-section Heteroskedasticity LR Test

Null hypothesis: Residuals are homoscedastic

	Value	df	Probability	Equation: UNTITLED
Likelihood ratio	29.04964	5	0.0000	

Specification: ROA ASU CAS ASI C

Source: Eviews 10 Output (2024)

The Panel Cross-section Heteroskedasticity Likelihood Ratio (LR) Test in Table 4.2 evaluates whether the residuals in the regression model are homoskedastic, meaning they have constant variance across different cross-sections (firms). The null hypothesis of this test posits that the residuals are homoskedastic, which implies that there is no significant variation in the error terms across the listed healthcare firms being studied. In simpler terms, the null hypothesis suggests that the variance in the error terms is consistent across the panel data, which is necessary for reliable regression results.

However, the probability value (p-value) of the likelihood ratio test is 0.0000, which is below the commonly accepted significance level of 0.05. This indicates that the null hypothesis of homoskedasticity is rejected. Therefore, the results strongly suggest that the residuals are heteroskedastic, meaning there is variability in the error terms across firms in the panel data. This heteroskedasticity can affect the reliability of the standard errors, making it necessary to correct for heteroskedasticity in further analyses to obtain robust and unbiased results, typically by using techniques like robust standard errors. White's robust standard errors was used to provide consistent estimates of the standard errors of regression coefficients in the presence of heteroskedasticity (non-constant variance of the errors) in the regression model.

Test of Hypotheses

The panel data regression model was used, in order to account for any unobserved heterogeneity among firms that could influence their financial performance. The model was tested at a 5% significance level, and results were interpreted based on their statistical significance.

Table 4.3 Test of Hypotheses

Dependent Variable: ROA

Method: Panel Least Squares

Date: 10/06/24 Time: 23:17

Sample: 2014 2023

Periods included: 10

Cross-sections included: 5

Total panel (balanced) observations: 50

White period standard errors & covariance (d.f. corrected)

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
ASU	0.046449	0.059776	0.777048	0.4411
CAS	0.031437	0.007737	4.063151	0.0002
ASI	-0.218236	0.041815	-5.219054	0.0000
C	-0.090066	0.045059	-1.998833	0.0516
R-squared	0.305285	Mean dependent var	-	0.039403
Adjusted R-squared	0.259977	S.D. dependent var		0.131147
S.E. of regression	0.112819	Akaike info criterion		-1.449453
Sum squared resid	0.585489	Schwarz criterion		-1.296491
Log likelihood	40.23632	Hannan-Quinn criter.		-1.391204
F-statistic	6.738056	Durbin-Watson stat		0.904246
Prob(F-statistic)	0.000730			

Source: Eviews 10 Output (2024)

Table 4.3 presents the results of a multiple regression analysis with Return on Assets (ROA) as the dependent variable and three independent variables: Accounting Software Usage (ASU), Cost of Accounting Software (CAS), and Accounting Software Investment Intensity (ASI). The Adjusted R-squared value of 0.259977 indicates that the model explains approximately 26.0% of the variance in ROA. While this value is lower compared to the previous analysis, it still suggests some explanatory power. The F-statistic of 11.08736 is statistically significant at the 0.05 level ($p = 0.000730$), indicating that the joint effect of the independent variables on ROA is significant at the 5% level.

The intercept term is -0.090066, representing the expected value of ROA when all independent variables are equal to zero. This coefficient is marginally significant at the 0.05 level ($p = 0.0516$), suggesting that while it is not robustly significant, it may indicate a negative baseline performance in the absence of accounting software influences.

Test of Hypothesis I

H0: Accounting software usage has no significant effect on the return on asset of listed healthcare firms in Nigeria. The regression coefficient for ASU is 0.046449 with a p-value of 0.4411. This indicates that a one unit increase in accounting software usage is associated with an increase in ROA by approximately 0.046449 units. However,

this effect is not statistically significant at the 0.05 level, as the p-value exceeds 0.05. Thus, we accept the null hypothesis, concluding that accounting software usage has a non-significant positive effect on the return on assets of listed healthcare firms in Nigeria ($\beta = 0.046449$; $p = 0.4411$).

Test of Hypothesis II

H0: Cost of accounting software usage has no significant effect on the return on asset of listed healthcare firms in Nigeria.

The regression coefficient for CAS is 0.031437 with a p-value of 0.0002. This suggests that for every one-unit increase in the cost of accounting software, ROA increases by approximately 0.031437 units. This coefficient is statistically significant at the 0.05 level ($p = 0.0002$), indicating a significant positive effect of the cost of accounting software on the return on assets of listed healthcare firms in Nigeria. Thus, we accept the alternate hypothesis, concluding that the cost of accounting software has a significant positive effect on return on assets of listed healthcare firms in Nigeria ($\beta = 0.031437$; $p = 0.0002$).

Test of Hypothesis III

H0: Accounting software investment intensity has no significant effect on the return on asset of listed healthcare firms in Nigeria.

The regression coefficient for ASI is -0.218236 with a p-value of 0.0000. This indicates that a oneunit increase in accounting software investment intensity is associated with a decrease in ROA by approximately 0.218236 units. This coefficient is statistically significant at the 0.05 level ($p = 0.0000$), suggesting a significant negative effect of accounting software investment intensity on the return on assets of listed healthcare firms in Nigeria. Therefore, we accepted the alternate hypothesis, concluding that accounting software investment intensity has a significant negative effect on return on assets of listed healthcare firms in Nigeria ($\beta = -0.218236$; $p = 0.0000$).

Discussion of Findings

The analysis reveals that accounting software usage (ASU) has a positive coefficient of 0.046449; however, this effect is not statistically significant ($p = 0.4411$). This finding suggests that while the adoption of accounting software may intuitively appear to enhance financial performance by streamlining operations and improving data accuracy, its actual impact on ROA in the context of Nigerian healthcare firms is negligible. One possible explanation for this lack of significance could be that the firms have not fully integrated the software into their operations or that employees may not be adequately trained to leverage the software's full potential. Consequently, the expected benefits of increased efficiency and accuracy may not be realized in practice, leading to a weak correlation with financial performance. The finding that accounting software usage (ASU) has a non-significant positive effect on the return on assets of listed healthcare firms in Nigeria aligns with Ojomo & Falade (2024) who found that accounting information systems significantly enhance return on assets in insurance companies, suggesting that the effectiveness of software usage can vary across sectors. Similarly, Kolo (2024) highlighted

that the perceived usefulness of computerized accounting systems positively correlates with adoption rates, indicating that without proper training and integration, the benefits of software may not be fully realized, leading to a nonsignificant impact. In contrast, Diana et al. (2023) reported a positive effect of accounting information systems on the performance of SMEs, implying that smaller firms may have different dynamics influencing their outcomes. Furthermore, Joel et al. (2023) observed a significant enhancement in firm performance through accounting information systems, suggesting that specific organizational contexts could play a crucial role in how effectively software usage translates into financial benefits.

In contrast, the cost of accounting software (CAS) shows a positive and statistically significant effect on ROA ($\beta = 0.031437$; $p = 0.0002$). This result indicates that as firms invest in more expensive accounting software, their financial performance improves. A plausible explanation for this finding is that higher costs may be associated with more robust, feature-rich software that offers advanced functionalities, better integration capabilities, and enhanced support services. Such software may enable firms to manage their finances more effectively, leading to improved decision-making and operational efficiency. Therefore, the correlation between higher costs and better financial performance suggests that investing in quality accounting software can yield substantial returns for healthcare firms. The finding that the cost of accounting software has a significant positive effect on return on assets (ROA) is supported by Onaolapo & Olanrewaju (2024) who found that operational expenditures related to accounting information systems explained variations in net profit, underscoring the importance of investment in technology for improved financial performance. Additionally, Akinadewo et al. (2023) noted that accounting information systems contribute to internal controls and information quality, which can lead to enhanced firm performance, suggesting that higher expenditures can yield significant returns. Chika et al. (2023) further reinforced this finding by demonstrating a positive relationship between advanced accounting technologies and ROA in the banking sector, highlighting that investing in robust software solutions is essential for financial success. Finally, Egiyi et al. (2023) showed that accounting systems improve financial health, indicating that investment in quality software can be a worthwhile expense leading to better financial outcomes.

On the other hand, accounting software investment intensity (ASI) has a negative coefficient of 0.218236, with a highly significant p-value ($p = 0.0000$). This finding implies that increasing investment intensity in accounting software negatively affects ROA. A potential explanation for this counterintuitive result might lie in the concept of diminishing returns; as firms invest more heavily in accounting systems, the incremental benefits may not keep pace with the expenditures. Additionally, if a firm invests too much in software without corresponding enhancements in operational processes or staff training, it may incur high costs that outweigh the benefits, ultimately leading to a decline in financial performance. This suggests that firms should balance their investments with practical usage and employee capability to maximize returns. The significant negative effect of accounting software investment intensity (ASI) on return on assets is corroborated by findings from Onifade et al. (2023),

who observed that excessive costs associated with cloud accounting negatively impacted return on equity. This suggests that while investing in accounting systems is necessary, overspending without proportional gains can lead to financial inefficiencies. Additionally, Nworie et al. (2023) indicated that computerized accounting system intensity significantly reduces operating expenses, which may imply that too much focus on investment can detract from overall operational efficiency if not managed properly. Mohammed et al. (2024) emphasized the importance of not only adopting digital systems but also ensuring that employees are well-oriented, implying that without adequate training, investment intensity may not yield positive results. Furthermore, Tahiru (2020) highlighted that while costs influence financial performance, the complexity of accounting systems can also create challenges, which may contribute to the observed negative relationship when investment intensity is too high.

5. Conclusion

This study examines the effect of accounting information systems (AIS) on the financial performance of listed healthcare firms in Nigeria, focusing on three key components: accounting software usage (ASU), cost of accounting software (CAS), and accounting software investment intensity (ASI). The dependent variable, return on assets (ROA), serves as a measure of financial performance. Panel data regression analysis was employed to assess the relationships between the independent variables (ASU, CAS, ASI) and the dependent variable (ROA). In line with the findings, the mere adoption of accounting software is not enough to boost financial performance. This implies that while firms may adopt these systems to enhance data processing and financial reporting, these benefits do not immediately reflect in financial metrics such as profitability. The effectiveness of software usage may depend on other factors such as the skill level of the users, the integration of the software into broader business processes, and the level of support and customization provided by the software. Also, firms that invest more in accounting software tend to achieve better financial outcomes. This finding implies that firms may need to focus on the quality of the software they acquire, as higher expenditures are likely to be associated with more advanced features, better support, and enhanced functionality that can lead to more accurate and efficient financial reporting. These results highlight the importance of resource allocation within the firm, indicating that strategic investments in technology can yield financial benefits. However, it also underscores the need for firms to carefully assess their technology investments to ensure that they are obtaining value for their money.

However, there is a limit to the benefits that can be derived from investing in accounting software, and beyond a certain point, additional spending may lead to inefficiencies or even financial strain. Firms that dedicate too large a proportion of their assets to accounting software may neglect other critical areas, such as operations, marketing, or human capital development, which could hinder their overall profitability. This finding highlights the need for firms to strike a balance between technology investment and other essential aspects of their business. Thus, the findings illustrate the subtle relationship between accounting information systems and financial performance in Nigeria's healthcare sector. In conclusion, even though accounting software usage alone does not lead to

significant improvements in ROA, strategic investments in quality software can yield positive outcomes. However, excessive investment intensity may detract from financial performance, emphasizing the need for firms to adopt a balanced approach in their accounting system strategies. These insights can guide healthcare firms in Nigeria as they navigate their financial management practices in an increasingly technology-driven domain.

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