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NIGERIA PUBLIC MANUFACTURING FIRMS ADOPTION OF COMPUTERISED ACCOUNTING SYSTEM: THE FIRM SIZE AND FIRM CAPITAL TURNOVER EFFECT

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ABSTRACT:

The study investigates the effect of firm size and firm capital turnover on the adoption of computerised accounting system (CAS) among manufacturing firms listed in Nigeria. Specifically, the study determines the effect of firm size and firm capital turnover on the level of accounting software used by listed manufacturing firms in Nigeria. Ex-post facto research design was employed in the study. A sample of 21 public listed manufacturing firms was purposively selected from a population frame of 34 industrial goods and consumer goods firms listed on the Nigerian Exchange Group. Thus, data extracts from these firms' financial statements for a ten-year period (2012 to 2021) was concisely utilized for data analyses purpose. The result of cross-section fixed regression estimation conducted revealed that firm size and firm capital turnover have a positive and significant effect on the adoption of CAS at 5% significance level. The study concludes that organisational readiness and financial capacity which readily points to the amount of financial resources available in a firm, determines the level/quality of computerised accounting system adopted by public manufacturing firms listed in Nigeria. The study therefore recommends that: firms with lower asset base should expand their scale of operation to adopt CAS for improved efficiency and decision-making. This depicts the need for manufacturing firms to improve on their capital turnover towards paving room for adequate financing and consequent adoption of CAS for enhanced growth.

1. INTRODUCTION

Massive breakthrough in contemporary technology in the fourth (4^{th}) generation has tremendously changed the nature of business processes across the globe. This change has equally increased the competitive advantages of firms that have positively keyed into the adoption of emerging technologies (Nworie, Okafor & John-Akamelu, 2022). Information technology available also influences the substance and form of every information, including accounting information (Okpala, 2021) disclosures. Firms integrate information technology infrastructures into their systems in order to reap the benefits offered therein. For instance, computerised accounting system offer the benefits of speed, accuracy, reliability, security, storage, network and improved coordination (Anaeli, 2018; George & Ogonda, 2022). To enhance the effectiveness and efficiency of their decision-making processes, Managers will not hesitate to adopt a high quality computerised accounting system (El-Ebiary & Alawi, 2020). Accordingly, it is pertinent to note that effective managerial decision-making is usually based on the quality of the accounting and non-accounting information at the firms' disposal. Hence, firms make investment in CAS as a way of strengthening the decision-making process of the firm which will in turn lead to business operations that yield attractive returns. However and despite the benefits offered of this system, its adoption is somewhat constrained by the financial resources availability. In other words, Firm-level traits show the extent of organisational readiness which also indicates the amount of financial resources available to the firm for tumely implementation of the computerised accounting system/technology (Al-Khasawneh, Lutfi, Almaiah, Alsyouf & Alrawad, 2022). The hypothesis in this scenario is that firms with favourable traits for organisational readiness will not hesitate to implement CAS whereas firms whose attributes show low organisational readiness falter to adopt CAS.

Theoretically, firms with large size and more favourable capital turnover would adopt computerised accounting system compared to firms with relatively lower size and slender capital turnover (Nworie, Okafor & John-Akamelu, 2022). The caveat of this argument is that even where a firm lacks the requisite resources, the desire to enhance its competitive advantages and be able to compete with large-sized firms and highly profitable firms remains positive and strong. By this scenario, it becomes obvious that small-sized firms still have motivations to invest more on computerised accounting system. Unlike prior related scholarly studies such as Nworie, Okafor and John-Akamelu (2022); Mahama and Dahlan (2022); Mohamed and Ramli (2022); Lutfi (2022); Dirie and Ramli (2022); Sastararuji et al. (2022); Oduro et al. (2022); Eldalabeeh, Al-Shbail, Almuiet, Bany-Baker and E'leimat (2021); Zaini, Hamad and Najim (2020); Uzrail and Bardai (2019); Habiba, Azhar, Annuar and Mastora (2019); Tilahun (2019); Qi and Ismail (2019); Ezenwoke (2017); Wongsim (2016);

Munasinghe and Munasinghe (2015); Oladipupo and Ajape (2013); et cetera, this study applies cross-sectional fixed effect regression which helps to account for unobserved heterogeneity by controlling for time-invariant individual, group, and entity-specific characteristics that may affect the adoption of computerised accounting system. This approach led to more precise and reliable estimates of the effects of firm size and firm capital turnover on the adoption of computerised accounting system among listed manufacturing firms in Nigeria. It is against the above backdrop that this study is envisaged.

1.1 Objectives of the Study

The broad objective of the study is to investigate the effect of firm size and firm capital turnover on the adoption of computerised accounting system of public listed manufacturing firms in Nigeria. The specific objectives are:

i. To determine the effect of firm size on the adoption of computerised accounting system among listed manufacturing firms in Nigeria.
ii. To ascertain the effect of firm capital turnover on the adoption of computerised accounting system among listed manufacturing firms in Nigeria.

1.2 Hypotheses

a) Firm size has no significant effect on the adoption of computerised accounting system among listed manufacturing firms in Nigeria.
b) Firm capital turnover has no significant effect on the adoption of Computerised accounting system among listed manufacturing firms in Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual review

2.1.1 Firm Size

Firm size is a variable that measures the extent of resources controlled by a firm, indicating its operational strength. This can be measured in terms of the amount of workforce (Sastararuji, Hoonsopon, Pitchayadol & Chiwamit, 2022), earnings generated (Trigo, Varajão, Soto-Acosta, Gonzálvez-Gallego & Castillo, 2015), or assets under the control of the firm. The goal is to maximize shareholder value by generating revenue. Larger firms have greater potential to expand their market share in larger markets (Nworie & Mba, 2022). Theoretical assumptions suggest that larger firms have greater financial and non-financial resources available to invest in opportunities (Tilahun, 2019). As a result, larger manufacturing firms are expected to have adequate financial resources to invest in

high-quality accounting IT infrastructure (Nworie, Okafor & John-Akamelu, 2022). On the other hand, smaller manufacturing firms are likely to have fewer resources to adopt or implement a robust computerised accounting system. Moreover, larger firms typically have a higher volume of transactions, making them more likely to adopt high-quality CAS compared to smaller firms with fewer transactions. However, small-sized firms may be motivated to adopt high-quality computerised accounting systems in order to compete with larger firms and gain a competitive edge.

2.1.2 Firm Capital Turnover

Firm capital turnover is a measure of how effectively the funds invested by shareholders generate sales for the firm during business operations (Dyson & Franklin, 2020). The idea that firm capital turnover impacts the adoption of computerised accounting systems arises from the fact that a sufficient volume of net sales is necessary for an enterprise to cover the fixed costs associated with system implementation. An increase in firm capital turnover implies that a lesser amount of shareholders' funds generate more revenue and vice versa. However, this may not always hold true, as some firms with high capital turnover ratios may have a majority of their asset base financed by debts rather than shareholders' equity (Nworie, Okafor & John-Akamelu, 2022). As the number and value of transactions in the manufacturing sector gradually increases, the classes of transactions carried out by firms expand, and the capital turnover ratio rises as the funds provided by shareholders are invested in profitable ventures. Manufacturing firms with high capital turnover ratios are considered to have sufficient financial resources to invest in high-quality computerized accounting systems (Ismail & Ali, 2013). The capital turnover ratio is calculated by dividing the net sales by total equity and provides an indication of how effectively managers are utilizing shareholder contributions to generate income for the company. A low sales-to-equity ratio indicates that managers are not effectively using the capital contribution of shareholders to generate income for the firm. In this study, firm capital turnover is defined as the ratio of sales revenue to shareholder funds at the end of an accounting period.

2.1.3 Computerised Accounting System

According to Mohamed and Ramli (2022), a computerised accounting system is a collection of interconnected subsystems that work together to transform financial data into financial information to support managerial decision-making processes. Computerising the accounting information system of a business involves using computer-based programs and computer peripherals to process and store accounting information. The main component of a computerised accounting system is accounting software, which enables firms to input and process accounting data in order to produce accounting information for management decision-making purposes (Nworie, Okafor & John-Akamelu, 2022).

To put it simply, a computerised accounting system is a combination of software and technology that accountants use to input, process, store, and generate financial information for decision-making purposes (Nworie, Okafor & John-Akamelu, 2022). It automates accounting processes and can be customised to suit the needs of a specific firm. Computerised accounting systems can be designed as backbone, turnkey, or vendor-supported systems. In turnkey systems, the software is already complete and ready to be implemented, while in backbone and vendor-supported systems, the software is customised to meet the needs of the client. Popular examples of computerised accounting systems include Oracle, Sage, QuickBooks, and Peachtree.

2.2 Theoretical Review

2.2.1 Resource Based Theory

In 1991, Jay Barney introduced the Resource-Based Theory, which suggests that a company can achieve a sustainable advantage by using its resources in a superior way (Thuan, Khuong, Anh, Hanh, Thi, Tram & Han, 2022). This means that firms should focus on developing unique capabilities or resources that allow them to maintain their competitive edge (Al-Khasawneh et al., 2022). The Resource-Based Theory acknowledges that the business environment is constantly changing and emphasizes the importance of staying competitive. However, the theory also highlights that not all resources are equally valuable, and firms must identify which resources can provide sustainable competitive advantage (Nworie & Oguejiofor, 2022; Nworie, Okafor & John-Akamelu, 2022). As a result, companies must assess their resources to determine which ones can give them a superior advantage. According to the Resource-Based Theory, all of a firm's resources can be classified as capabilities, skills, and competence, which are used in business processes to achieve the company's goals (Smith, 2020; Mutula, 2018). This theory emphasizes the importance of sustained competitive advantage and suggests that companies seek resources that maximize shareholder value (Ahmad, Smith, Ismail, Djajadikerta & Roni, 2016). Manufacturing firms seeking to enhance their managerial efficiency and effectiveness often adopt computerized accounting system resources to gain a competitive advantage (Ismail, Ali & Rashid, 2017).

Therefore, the relevance of the Resource-Based Theory to our topic is that manufacturing firms can optimize their computerized accounting system resource to maximize the value of their owners through sound management decisions. A high-quality CAS, when optimized and well-maintained, can be a significant source of competitive advantage in the business world. Furthermore, this theory supports the argument made in this study that firms' adoption of CAS is heavily influenced by the resources available to the company.

2.3 Empirical Review

Nworie, Okafor and John-Akamelu (2022) ascertained the effect of firm-level traits on the level of accounting software used by listed manufacturing firms in Nigeria. 21 manufacturing firms were sampled from the 34 listed industrial goods and consumer goods firms on the Nigerian Exchange Group, from which data were collected for ten years, spanning 2012 to 2021. The result of the Prais-Winsten regression revealed that firm profitability has no significant effect on the adoption of CAIS; but firm size, firm capital turnover and firm liquidity have a significant positive effect on the adoption of CAIS among listed manufacturing firms in Nigeria.

In a study by Mohamed and Ramli (2022), the factors influencing the implementation of computerised accounting systems in SMEs in Somalia were investigated. The study used a questionnaire to collect primary data from 110 respondents, and the results of the regression analysis revealed that human capital efficiency, management commitment, cost capabilities, and business user competency significantly affect the implementation of computerised accounting systems in SMEs in Somalia.

Lutfi (2022) conducted research on the factors that determine the adoption of cloud-based accounting information systems by SMEs in Jordan. The study used a structured questionnaire to collect data from 156 SME owners/managers, and the results of the PLS-structural equation modelling showed that organization readiness, top management support, security concerns, perceived usefulness, competitive pressure, and supplier computing support affect the adoption of cloud-based accounting information systems.

Mahama and Dahlan (2022) examined the factors influencing SMEs in Ghana to adopt accounting information systems. The study reviewed 54 journal publications between 2015 to 2021 to obtain secondary data, and the findings of the thematic analysis showed that organizational, human, environmental, and technological factors determine the adoption of accounting information systems.

Dirie and Ramli (2022) conducted a study to investigate the adoption status of computerised accounting systems among small scale enterprises in Mogadishu, Somalia. They collected primary data from 124 respondents through questionnaires and analysed the data using frequency counts and percentage analysis. The study found that small-sized firms in Mogadishu extensively adopt computerised accounting systems.

Sastararuji et al. (2022) examined the factors that determine the adoption of cloud accounting among SMEs in Thailand. They used the interview method to collect qualitative data from 17 respondents and analysed it thematically. The study found that the adoption of cloud accounting is influenced by technological, environmental, vendor, and organisational factors. The authors concluded that firm characteristics, such as size, play a role in determining the level of cloud computing adoption in Thailand.

Oduro et al. (2022) investigated the impact of the adoption of computerised accounting systems on financial performance in the public sector. They collected primary data from 227 local governments in Ghana through questionnaires and analysed the data using structural equation modelling. The study found that readiness to adopt CAS and the cost of adopting CAS significantly affect financial performance, while the effects of CAS complexities and data security threats are not significant.

Eldalabeeh et al. (2021) explored the factors that play a role in the adoption of cloud accounting in Jordan's financial sector. By surveying 187 participants and utilizing structural equation modelling, the study identified six factors that shape adoption: top management support, service quality, organizational competency, system quality, perceived ease of use, and perceived usefulness.

Zaini, Hamad, and Najim (2020) investigated the determinants of accounting information system adoption in Jordan's tourism firms. The researchers distributed questionnaires to 210 respondents and used structural equation modelling to analyze the primary data. The study found that the adoption of accounting information systems is positively influenced by organizational resources and technical infrastructure.

Uzrail and Bardai (2019) studied the factors that determine the adoption of computerized accounting systems among companies in Palestine. The study collected primary data from 500 participants via questionnaire and analyzed the data using simple linear regression. The findings indicate that financial performance has a significant and positive effect on the adoption of computerized accounting systems among companies in Palestine.

Habiba et al. (2019) investigated the factors that affect the adoption of computerized accounting systems among SMEs in Addis Ababa, Ethiopia. The study collected primary data from 300 firms through questionnaires and analyzed the data using logistic regression. The findings reveal that firm

size and financial readiness have a positive and significant influence on the adoption of computerized accounting systems among SMEs in Addis Ababa.

Tilahun (2019) conducted a study using a questionnaire to gather primary data from 52 respondents in order to investigate the factors that determine the adoption of computerised accounting systems in hospitals in Addis Ababa. The study found that firm size has a positive effect on adoption, but this effect was not statistically significant according to the ordinal logistic regression analysis.

Qi and Ismail (2019) investigated the factors that influence the adoption of IT-based Accounting Information Systems in SMEs, using a sample of 100 respondents and regression analysis. The study found that perceived usefulness, perceived ease of use, and Task-technology Fit are significantly associated with the adoption of IT-based Accounting Information Systems among SMEs.

Ezenwoke (2017) studied the factors that affect the implementation of e-accounting systems in Micro and Small Enterprises in Nigeria, using a questionnaire administered to 660 respondents. The study found that financing method has a negative effect on implementation, while firm size has a positive effect on implementation according to the Binary Logistic Regression analysis.

Wongsim (2016) investigated the factors that influence the adoption of accounting information systems in manufacturing firms in Thailand using questionnaires to gather data from 189 respondents. The study found that organisation size is a significant factor that influences the adoption of accounting information systems in manufacturing firms in Thailand.

In their study, Munasinghe and Munasinghe (2015) investigated the factors that influence the usage of computerised accounting systems by SMEs in Sri Lanka. Using regression analysis, the authors analysed primary data collected from 100 respondents and found that firm size had a significant positive effect on the usage of computerised accounting systems.

Oladipupo and Ajape (2013) conducted a study on the factors that affect the adoption of computer-based accounting systems in small and medium enterprises (SMEs) in Nigeria. The study collected primary data from 181 respondents and used logistic regression analysis to identify the factors influencing adoption. The findings revealed that firm size had a significant positive effect on the adoption of computer-based accounting systems in SMEs in Nigeria.

3. MATERIAL AND METHOD

In this study, an ex-post facto research design was used to investigate the impact of firm-level traits on the adoption of computerised accounting systems (CAS) among Nigerian manufacturing firms listed on the stock exchange. The study focused on manufacturing firms dealing with industrial or consumer goods, with the number of firms in each sub-sector presented in Table 1 (refer to Appendix A). The sample size for the study was drawn from the population of 34 listed manufacturing firms presented in Table 1, using a purposive sampling technique to select participants. The selection criteria were that the firms must have been listed on the Nigerian Exchange Group as of 2012, and must have uploaded their annual reports from 2012 to 2021 on either their own website or on the website of the Nigerian Exchange Group. Applying these criteria resulted in a sample size of 21 listed manufacturing firms, as 13 firms from the population did not meet at least one of the criteria. Thus, the study was conducted using a purposive sample of 21 listed manufacturing firms selected from a population of 34 firms dealing with industrial goods and consumer goods on the Nigerian Exchange Group. The list of selected firms is provided in Table 2 (see Appendix 1).

Secondary data for the study were collected from the financial statements and annual reports of the sampled firms over a ten year accounting period, spanning 2012 to 2021. Hypotheses testing was done using the regression estimates from cross-section fixed regression analysis, carried out at 5% level of significance.

The model employed in the study was adapted from the research work of Nworie, Okafor and John-Akamelu (2022). The adapted model is expressed below:

$$ACAIS_{it} = \alpha_0 + \beta_1 PROF_{it} + \beta_2 SZE_{it} + \beta_3 FCT_{it} + \beta_4 LIQ_{it} + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\text{Eq (I)}$$

Where,

$ACAIS_{it}$ = Adoption of computerised accounting system for firm *i* in year *t*

$PROF_{it}$ = Firm profitability for firm *i* in year *t*

SZE_{it} = Firm size for firm *i* in year *t*

FCT_{it} = Firm capital turnover for firm *i* in year *t*

LIQ_{it} = Firm liquidity for firm *i* in year *t*

α = constant

$\beta_{1\text{-}5}$ = Coefficients of the predictor variables

The variables removed from the above model were firm profitability and firm liquidity since the present study was specifically aimed at modelling ACAIS using firm size and firm capital turnover. Thus, the modified model is stated here-under.

$ACAS_{it} = \alpha_0 + \beta_1 SZE_{it} + \beta_2 FCT_{it} + \varepsilon_{it}$……..……Eq (II)

Where,

$ACAS_{it}$ = Adoption of computerised accounting system for firm *i* in year *t*

SZE_{it} = Firm size for firm *i* in year *t*

FCT_{it} = Firm capital turnover for firm *i* in year *t*

α = constant

β_{1-2} = Coefficients of the predictor variables

The variables of the study were calculated as shown in **Table 3** below.

Table 3 Operationalization of Variables

Variables	**Type of Variables**	**Measurement**	**Source**
ACAS	Dependent	The natural logarithm of the value of accounting software	(Nworie, Okafor & John-Akamelu, 2022)
Firm Size	Independent	Natural Logarithm of Total Assets	(Nworie & Mba, 2022)
Firm Capital Turnover	Independent	$\frac{Sales}{Total\ Equity}$	(Dyson & Franklin, 2020)

Source: Researcher's Compilation (2023)

4. RESULT AND DISCUSSIONS

4.1 Data Analysis

4.1.1 Descriptive Analysis of Data

The descriptive analysis of the data is shown below in Table 4.

Table 4 Descriptive Analysis of Data

	SZE	FCT	Value of Accounting Software (ACAS)
Mean	7.581524	2.533077	221481.6
Median	7.661885	2.269128	34092.00
Maximum	9.412006	17.73269	3204505.
Minimum	5.239405	-0.424172	0.000000
Std. Dev.	0.867854	2.215171	428185.7
Skewness	-0.329258	3.300361	3.431417
Kurtosis	2.553616	20.06262	18.57449
Jarque-Bera	5.537882	2928.647	2534.552
Probability	0.062728	0.000000	0.000000
Sum	1592.120	531.9461	46511141
Sum Sq. Dev.	157.4126	1025.560	3.83E+13
Observations	210	210	210

Source: Output from Eviews 10 (2023)

Firm size (SZE) has a mean of 7.58, which suggests that the average value is closer to the maximum value (9.41) than the minimum value (5.24). The standard deviation is relatively small at 0.87, indicating that the data points are closely clustered around the mean. The skewness is negative at -0.33, which suggests that the distribution is slightly left-skewed (i.e., there are more data points on the right side of the mean than on the left side). The kurtosis is 2.55, which indicates that the distribution is platykurtic (i.e., flatter than a normal distribution). The Jarque-Bera test statistic is 5.54, which suggests that the distribution is not

normal, but the p-value of 0.06 indicates that we cannot reject the null hypothesis that the distribution is normal at the 5% level of significance.

Firm Capital Turnover (FCT) has a mean of 2.53, which suggests that the average value is closer to the minimum value (-0.42) than the maximum value (17.73). The standard deviation is relatively large at 2.22, indicating that the data points are more spread out. The skewness is positive at 3.30, which suggests that the distribution is right-skewed (i.e., there are more data points on the left side of the mean than on the right side). The kurtosis is 20.06, which indicates that the distribution is leptokurtic (i.e., more peaked than a normal distribution). The Jarque-Bera test statistic is 2928.65, which suggests that the distribution is not normal, and the p-value of 0 indicates that we can reject the null hypothesis that the distribution is normal at any level of significance.

Value of Accounting Information System (ACAS) has a mean of 221,481.6, which is much larger than the minimum value (0) and closer to the maximum value (3,204,505). The standard deviation is very large at 428,185.7, indicating that the data points are highly dispersed. The skewness is positive at 3.43, which suggests that the distribution is right-skewed (i.e., there are more data points on the left side of the mean than on the right side). The kurtosis is 18.57, which indicates that the distribution is very leptokurtic (i.e., extremely peaked compared to a normal distribution). The Jarque-Bera test statistic is 2534.55, which suggests that the distribution is not normal, and the p-value of 0 indicates that we can reject the null hypothesis that the distribution is normal at any level of significance.

4.1.2 Hausman Specification Test

The Hausman specification test was used to determine whether the fixed effects or random effects model was more appropriate for the dataset. The test compared the difference between the estimated coefficients in the fixed effects and random effects models to determine if the random effects model provided consistent and efficient estimates.

The result of the test is provided in Table 5 below.

Table 5 Correlated Random Effects - Hausman Test

Equation: LogACAS

Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	8.063010	2	0.0177

Source: Output from Eviews 10 (2023)

The Hausman specification test shows a chi-squared statistic of 8.063010 with 2 degrees of freedom and a p-value of 0.0177. This result suggests that the random effects model is not appropriate and that the fixed effects model is more suitable. The null hypothesis is that the random effects model is consistent and efficient, while the alternative hypothesis is that the fixed effects model is consistent and efficient. Since the p-value is less than the significance level of 0.05, we reject the null hypothesis and conclude that the fixed effects model is more appropriate for the data.

4.2 Test of Hypotheses

The output of the Cross-Section Fixed Regression Analysis applied in estimated the regression model stated below is shown in Table 6.

$$ACAS_{it} = \alpha_0 + \beta_1 SZE_{it} + \beta_2 FCT_{it} + \varepsilon_{it}$$

Table 6 Cross-Section Fixed Regression Analysis

Dependent Variable: LOGACAS

Method: Panel Least Squares

Date: 04/04/23 Time: 12:24

Sample: 2012 2021

Periods included: 10

Cross-sections included: 21

Total panel (balanced) observations: 210

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SZE	1.744201	0.512360	3.404248	0.0008
FCT	0.200062	0.060880	3.286140	0.0012
C	-9.687401	3.876617	-2.498932	0.0133
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.441015	Mean dependent var		4.043073
Adjusted R-squared	0.375252	S.D. dependent var		1.885972
S.E. of regression	1.490692	Akaike info criterion		3.739406
Sum squared resid	415.5442	Schwarz criterion		4.105994
Log likelihood	-369.6376	Hannan-Quinn criter.		3.887604
F-statistic	6.706130	Durbin-Watson stat		1.081873
Prob(F-statistic)	0.000000			

Source: Output from Stata 14.2 (2023)

Table 6 above shows the regression result on how the Adoption of Computerised Accounting System (CAS) is influenced by Firm Size (SZE) and Firm Capital Turnover (FCT). The model has a fixed effects specification using dummy variables for cross-sectional variation. The Cross-section fixed (dummy variables) controlled for time-invariant individual, group, and entity-specific characteristics that may affect the adoption of computerised accounting

system. The R-squared value of 0.441015 indicates that the model explains 44.10% of the variation in the adoption of computerized accounting system. The F-statistic of 6.706130 and Prob(F-statistic) of 0.000000 suggest that the overall model is statistically significant, meaning that at least one of the independent variables has a statistically significant relationship with the dependent variable, after accounting for unobserved heterogeneity in the model.

4.2.1 Hypothesis I

H_o: Firm size has no significant effect on the adoption of computerised accounting system among listed manufacturing firms in Nigeria.

The coefficient of Firm Size (SZE) is 1.744201, which means that for every one unit increase in firm size, there is a 1.744201 unit increase in the adoption of computerized accounting system.

4.2.1.1 Decision: The coefficient for Firm Size is 1.744201 with a probability (p-value) of 0.0008. Since the p-value is less than 0.05, we reject the null hypothesis and conclude that Firm size has a significant and positive effect on the adoption of computerized accounting system among listed manufacturing firms in Nigeria. This is in consonance with the findings by Nworie, Okafor and John-Akamelu (2022).

4.2.2 Hypothesis II

H_o: Firm capital turnover has no significant effect on the adoption of computerised accounting system among listed manufacturing firms in Nigeria.

The coefficient of Firm Capital Turnover (FCT) is 0.200062, indicating that for every one unit increase in firm capital turnover, there is a 0.200062 unit increase in the adoption of computerized accounting system.

4.2.2.1 Decision: The coefficient for Firm Capital Turnover is 0.200062 with a probability (p-value) of 0.0012. Since the p-value is less than 0.05, we reject the null hypothesis and conclude that Firm capital turnover has a significant and positive effect on the adoption of computerized accounting system among listed manufacturing firms in Nigeria. Similarly,

Nworie, Okafor and John-Akamelu (2022) found same result that firm capital turnover is positively associated with the adoption of CAS.

CONCLUSION AND RECOMMENDATIONS

The analysis shows that both firm size and firm capital turnover have significant positive effects on the adoption of computerized accounting systems among listed manufacturing firms in Nigeria. This suggests that as firm size and capital turnover increase, the likelihood of adopting a computerized accounting system also increases. Larger firms and those with higher capital turnover have more resources and are better able to afford the costs associated with adopting and maintaining computerized accounting systems. These systems can improve the accuracy, speed, and efficiency of accounting processes, leading to better financial management and decision-making.

Therefore, the study finds that firm size and firm capital turnover are important determinants of the adoption of computerized accounting systems among listed manufacturing firms in Nigeria. As such, firms that are smaller in size or have lower capital turnover may need to consider the potential benefits of investing in such systems to enhance their financial management practices and remain competitive in the market. The study concludes that organisational readiness which entails the amount of financial resources available in a firm determines the level of computerised accounting system adopted by manufacturing firms listed in Nigeria. Based on this conclusion, the study recommends that:

1) Firms with lower asset base should expand their scale of operation to adopt CAS for improved efficiency and decision-making.

2) Manufacturing firms should improve capital turnover to finance the adoption of CAS for enhanced growth.

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APPENDIX I

Table 1 Population of the Study

Firms

1. Bua Foods Plc
2. Cadbury Nigeria Plc.
3. Champion Brew. Plc.
4. Dangote Sugar Refinery Plc
5. Dn Tyre & Rubber Plc
6. Flour Mills Nig. Plc.
7. Golden Guinea Brew. Plc.
8. Guinness Nig Plc
9. Honeywell Flour Mill Plc
10. International Breweries Plc.
11. Mcnichols Plc
12. Multi-Trex Integrated Foods Plc
13. N Nig. Flour Mills Plc.
14. Nascon Allied Industries Plc
15. Nestle Nigeria Plc.
16. Nigerian Brew. Plc.
17. Nigerian Enamelware Plc.
18. P Z Cussons Nigeria Plc.
19. Unilever Nigeria Plc.
20. Union Dicon Salt Plc.
21. Vitafoam Nig Plc.
22. Austin Laz & Company Plc.
23. Berger Paints Plc.
24. Beta Glass Plc.
25. Bua Cement Plc.
26. Cap Plc.
27. Cutix Plc.
28. Dangote Cement Plc.
29. Greif Nigeria Plc.
30. Lafarge Africa Plc.
31. Meyer Plc.

32. Notore Chemical Ind. Plc.

33. Premier Paints Plc.

34. Tripple Gee And Company Plc.

Source: Researcher's Compilation (2023)

APPENDIX II

Table 2 Sample Size of the Study

Firms Selected into the Sample			
1.	Cadbury Nigeria Plc.	12.	PZ Cussons Nigeria Plc.
2.	Champion Brewery Nig. Plc.	13.	Unilever Nigeria Plc.
3.	Dangote Sugar Refinery Plc.	14.	Vitafoam Nigeria Plc.
4.	Flour Mills Nig. Plc.	15.	Berger Paints Plc.
5.	Guinness Nig. Plc	16.	Beta Glass Plc.
6.	Honeywell Flour Mill Plc.	17.	Cap Plc.
7.	International Breweries Plc.	18.	Cutix Plc.
8.	Northern Nig. Flour Mills Plc	19.	Dangote Cement Plc.
9.	Nascon Allied Industries Plc.	20.	Greif Nigeria Plc.
10.	Nestle Nigeria Plc	21.	Lafarge Africa Plc.
11.	Nigerian Breweries Plc		

Source: Researcher's Compilation (2023)