

Management Strategic Control and Electronic Fraud Detection in Listed Nigerian Deposit Money Banks

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Abstract

Electronic fraud in the banking sector is mainly blamed on insufficient control measures, leading to mismanagement within the sector. The study was conducted to investigate the effect of management strategy control and electronic fraud detection in listed Nigerian deposit money banks. The population of the study consist 13 listed deposit money banks in Nigeria as at 31, December 2022, which also form the sample of the study using census sampling method. Data were obtained from published annual reports of the selected deposit money banks for the period of 2015-2022. Panel least square (PLS) was used in analyzing the collected data. The findings revealed that risk committee composition measured by risk committee size has positive significant influence on electronic fraud, and risk committee meeting has a negative significant effect on electronic fraud. In addition, Audit committee composition measured by audit committee size has a negative significant effect on electronic fraud, and audit committee meeting has positive significant influence on electronic fraud, while internal control system measured by risk assessment has positive significant influence on electronic fraud. The study therefore concluded that management strategy control has significant influence on detecting electronic fraud in listed deposit money banks in Nigeria. It recommended that investors should pay more attention to efficient and effective strategy control being engaged by the companies when members of the board of directors are much, which will help in easy fraud detection in deposit money banks in Nigeria.

Keywords: Audit committee composition, Risk committee composition, Internal control system, Management strategic control, Electronic fraud.

JEL Classification:M42

1. Introduction

The perpetration of banking fraud is mostly attributed to inadequate controls or non-compliance, resulting in global increased complexity (Pradhan & Bai, 2018). However, fraudsters have the means of a major concern to service providers and users of electronic payment platforms in conducting business globally (Nigeria Deposit Insurance Corporation, 2018). With the number of online financial transactions conducted on daily basis globally, bank frauds and cyber-crimes are on the increase as many skilled hackers keep manipulating online banking information systems to hack into private and business accounts (Olaleye, 2019). Such threats can come from both within and outside the system, making it necessary that bank administrators put in place appropriate measures to ensure the confidentiality of their customers' data, to preserve the integrity of the online banking system (Guo et al., 2018). Electronic fraud has resulted in significant financial losses for banks and their customers, this makes the management strategic control methods used for aspect of electronic fraud prevention worthy of evaluation.

The act of committing fraud has a negative impact on businesses which led their resources meant for business transactions depleted and on extreme cases eliminate institutions irrespective of their assets base and source of funding. This is more applicable to Deposit Money Banks (DMBs) whose stock in trade is raw cash which is highly susceptible to fraud, in which it has led many to liquidation (Alaba et al., 2018). Major

fraud has led to the collapse of the entire organization, loss of investment, high legal costs, arrests of key individuals, and erosion of confidence in the financial market (Association of Certified Fraud Examiners., 2020). Bank failure is attributed to the weak internal controls that are insufficient or create opportunities for committing fraud (Pradhan & Bai, 2018). It has damaged many banks' reputation and erode customer trust, customers may lose confidence in the bank's security measures, leading to loss of business and revenue. Bank can face legal consequences if they fail to adequately protect their customers from electronic fraud, and may also face regulatory penalties (Babatunde et al., 2020).

Numerous literatures were reviewed on the effect of electronic banking related fraud on deposit money banks and financial performance in Nigeria. Adaora et al., (2018) ascertained the effect of electronic banking related fraud on deposit money banks. The study dispelled that fraud on point-of-sale terminals has significant negative effect on interest income, while fraud on automated teller machines. Matthew (2021) reviewed fraud risk management and internal audit control. It was found that, the involvement of internal audit in fraud risk management impact the perceived effectiveness of the fraud risk management process. This may be a good opportunity for the internal audit profession to reassess and reconsider where it fits into the broader umbrella of fraud risk management to ensure that internal auditors support their organizations on the road to recovery in the most efficient and effective way.

Samuel et al (2020) investigated risk assessment and fraud prevention in banking sector, to detect how to reduce it by introducing mitigating risk, safeguarding document, support document and estimate of risk. Risk assessment has been found to have significant effect on fraud prevention. Research by Abernethy et al., (2021) and Simons et al (2021). Abernethy et al. (2021) report on a survey show that managers can support strategic change through the use of performance measures which influence the extent to which changes to operational activities are made in response to new strategic control. This study intends to use the existence of electronic fraud detection and to see if the problem of management strategic control will be solved in the deposit money banks. This study will check if risk committee composition, audit committee composition and internal control system which are components of management strategic control will have influence on the information and communication technology investment.

Electronic fraud detection is also a critical aspect of the banking sector, as the industry is highly vulnerable to fraud and cybercrime. With the increase in the use of digital technologies and the internet, the risk of electronic fraud has increased significantly, making it more important than ever for banks to implement effective fraud detection measures (Nwaimo42, 2020). Most studies were done on fraud, but I am specific to look at electronic fraud. The study will check the effect of management strategic control with the use of risk committee composition, audit committee composition and internal control system, also the effect of electronic fraud detection which will be measured with information and communication technology investment. The stu

dy will fill the gaps where other studies did not, the management strategic control and electronic fraud detection will be formulated. Most studies were carried out in foreign countries like Malaysia, United Kingdom, Europe and Ghana, but this study will be carried out in Nigerian deposit money banks.

The research would provide management with better understanding on how to detect fraud electronically with the help of auditors by improving their internal control system and strategies in preventing financial loss. Also, the study would help investors to have essential benefits on knowledge of how their investment is being protected. Further, this study will assist regulators and policy makers in making good policies that will add to the body of knowledge in the society. It will also foster a sense of trust and confidence in the banking sector among the general public with the help of government and law enforcement agencies. Therefore, the study will be carried out in the listed Nigerian deposit money banks spanning from 2015-2022. The base year 2015 was selected because it was the period when cybercrime Act was passed to tackle cybercrime activities in the country (Olanrewaju & Abraham., 2015).

The broad objective of the study is to examine the effect of management strategic control and electronic fraud detection in listed Nigerian deposit money banks. The specific objectives are; to examine the effect of risk committee composition on electronic fraud detection in listed Nigerian deposit money banks; to examine the effect of audit committee composition on electronic fraud detection in listed Nigerian deposit money banks; to examine the effect of internal control system on electronic fraud detection in listed Nigerian deposit money banks.

The remaining part of the section would be presented as follows; section two contains review of literatures which include, conceptual review, theoretical review, empirical review, gap in the existing literature and hypotheses formulated. Section three will be the research methodology where the research design, population, sampling techniques, method of data collection and analysis will be discussed; section four involves a statistical overview and discussion of findings, section five includes the conclusion and recommendations.

2. Literature Review

2.1 Conceptual Review

This section will give definitions to the concepts of this study, showing the link between management strategic control and electronic fraud detection.

2.1.1 Electronic Fraud detection

Raj and Choudhary (2022) defined electronic fraud detection as the process of using technology and analytical tools to identify and prevent fraudulent activities carried out through electronic means. However, with the advent of artificial intelligence now, it is possible to take into account emerging activities, behaviors, and trends in transaction anomalies to ensure the prevention of frauds. Taha et al., (2019) explained E-banking as an extension of the current physical banks as it involves the retrieval and processing of banking data using computers, as well as initiating direct and remote banking transactions via telecommunication networks. E-banking serves as a platform to address most of the customer-related complaints, such as demands for services and other information services. Information and communication technology investments will proxy electronic fraud detection.

Information and communication technology investment is used to measure ICT expenses to sales. Information technology has brought electronic commerce development to a global stage. These developments have facilitated the effective interaction between firms and their customers, and with other corporations within and outside their industries (Han & Kim, 2019). Information and Communication Technology (ICT) is the use of scientific tools and techniques for developing, documenting and communicating information when needed especially as it concerns solving problems and providing needed services in the various areas of human endeavors. The range of customer services provided by banks has increased as a result of improving Information Technology. The quality, range and price of electronic services are important part of any bank's competitiveness (Pedro, 2020) the tangible and intangible benefits of information technology provides to banks cannot be over emphasized.

2.1.2 Management Strategic Control

Linda, (2023) defined management strategy as the ongoing planning, monitoring, analysis and assessment of all necessities an organization needs to meet its goals and objectives. Changes in business environment will require organizations to constantly assess their strategies for success. Sushanta, (2021) management strategy involves the formulation and implementation of the significant goals and action taken by an organization's manager on behalf of stakeholders, based on consideration of resources and an evaluation of the internal and external environment in which the organization performs. Previous research findings show that MSC were designed and used by managers to deal with the challenges presented by the strategic change (Abernethy et al., 2021; Simons & Davila, 2021). This finding expanding on the definition of

strategic change will include operational activities. It shows why the design and use of MSC by managers will not always lead to the successful implementation of a strategic change at the operational level. Instead, we found high levels of resistance to the strategic change which resulted in few changes to innovation activities. This study will proxy management strategic control with risk committee composition, audit committee composition and internal control system which will be measured.

2.1.2.1 Risk Committee Composition

There are no mandatory requirements for the formation of risk committee; however, by CMA (2016), risk committee members should be comprised of people who are independent and should be present in the board of directors. Minimum number of committee members should be three who should be well versed in the field of accounting, auditing and fraud, including having training and experience in the field (CMA, 2016; Zakaria, 2012). Risk committee is required to be majorly engaged in oversight of anti-fraud programs and recommendations for the approval of financial policies (Singleton & Singleton, 2010). In addition, the members of the risk committee shall be bound by the committee Code of Conduct. The risk committee size and risk committee meeting will measure risk committee composition in the study.

The size of a risk committee refers to the number of members that make up the committee responsible for overseeing an organization's risk management activities. It consists of a small group of individuals with relevant experience and expertise, including both internal and external members. The size of the risk committee should be regularly reviewed and adjusted as necessary to ensure it continues to effectively fulfill its role. Khoo et al, (2020) the risk committee ensure monitoring the operation of the internal control department; monitor the honest and ethical conduct of individuals, conflicts of interest. It also responsible for processing, and implementing of disclose risk management. Risk committee impact on the quality of financial statement disclosure or integrated reporting (Agyei, 2019). Risk committee size measured as it is the total directors and non-directors in the risk committee.

Risk committee meeting refers to the frequency by which the risk committee members meet together. The committee shall convene meetings at least twice annually, with authority to convene additional meetings as circumstances require Newton & Thompson, (2017). Risk committee meeting deals with matters such as ensuring strategic plans alignment with organizational objectives, finance, and risk management system, internal and external audit and transparency of an organization's performance (Krishnan & Lee, 2008). The risk committee should possess the knowledge and should have expertise which can identify fraud-related risk and highlight these to the board of directors' attention. The committee does not have the authority to approve, but its assuring role can ensure that an organization's strategies and objectives are free from risk, elements of fraud are highlighted, reported and mitigated for the achievement of the organization (Bentley-Goode; Wilbanks, Hermanson & Vineeta, 2017). Risk committee meetings measured as number of meetings held by the risk committee members in a year.

2.1.2.2 Audit Committee Composition

The composition of the audit committee can be one important determinant of the committee's ability to act independently and question management. The Treadway Commission (1987), the Macdonald Commission (1988), the Cadbury Committee (1992), the Public Oversight Board (1993) and the TSE Committee on Corporate Governance (1994) recommended that the audit committee consist solely of outside, non-employee directors. The implicit assumption underlying such recommendations is that audit committees consisting of solely outside directors would be more likely to undertake activities and procedures which enhance internal controls and corporate governance. However, with the exception of Menon and Williams' (1994) finding that audit committee composition is associated with the frequency of committee meetings, there is little evidence about the impact of audit committee composition on the activities and processes of the audit committee composition. The audit committee size and audit committee meetings will measure audit committee composition.

The size of an audit committee can emphatically affect firm. The larger the size of the audit committee, the higher the board's commitment of resources to the improvement of financial reporting quality (Raghunandan & Rama, 2007) and the higher the firm performance as audit committee size is positively related to profitability (Rahman et al., 2019). Audit committee size monitors the management strategy and control it (Abuet al., 2015). The audit committee (AC) will comprise of not less than three individuals, membership of the committee is subject to the maximum member of six (6) persons. The UK Corporate Governance Code expresses that "the board ought to set up an AC of at least three, or in the case of smaller companies, two, independent non-executive directors. The increased number of members is argued to provide more effective monitoring and thus improve firm performance (Nnubia, 2014). Audit committee size is measured as the total directors and non-directors in the audit committee.

Audit committee meeting refers to the frequency by which the audit committee members meet together. It is expected that more active audit committees that meets often will have a significant outcome in meetings. The AC gatherings recurrence in the UK is suggested by the Guide on Audit Committees gave by FRC as at least three gatherings each year. It is for the AC administrator, in conference with the organization secretary, to choose the recurrence and timing of its gatherings. The degree of action of a review board has been prescribed as critical to upgrade its viability in improving firm performance (Baxter & Cotter, 2009). Al-Mamum (2014) was of the view that standard gatherings of review advisory group could help diminish office issues and data imbalance of a firm by giving reasonable and convenient data to financial backers. DeZoort (2002) proposed that an organization where the review board meets all the more every now and again was probably going to be more cautious in protecting the premium of its financial backers. Audit committee meetings measured as number of meetings held by the audit committee members in a year.

2.1.2.3 Internal control system

Internal control is a management tool that brings solutions to managerial problems, increases efficiency, effectiveness, abuse prevention and institutionalization in organizations and integrates management functions in a holistic way. Internal control systems start as internal processes with the positive aim of helping institutions meet their set objectives (Kabuye et al., 2019). Rae et al. (2017) state that an effective and efficient internal control system requires identifying and understanding the dimensions of the controls and their importance in achieving the objectives of the company. Le et al. (2020) examined the use of internal control system and code of conduct as a more specific element of internal control, in the reduction of fraud. The study revealed that internal control elements such as clear structure and authorities as well as clear mechanisms for risk assessment, monitoring and reporting would reduce fraud incentive. Therefore, risk assessment will be used to measure internal control system.

Risk assessment involves the process of recognizing and evaluating possible mistakes, as well as establishing safeguards, guidelines, and protocols that can detect such errors and work towards their avoidance (Okonkwo & Linda, 2016). All organization are prone to a range of risks that can originate internally or externally to the entity. The management should ensure that each risk is handled and assessed properly in order to achieve the organization's objectives. (Gamage, Lock & Fernando, 2014). Risk Assessment is defined as identification of potential errors, and implements control, policies and procedures in order to reveal those errors and prevent them. A corporation basically establishes an early warning system to determine remote risks or risks with low-probability, and take the necessary actions to remove or minimize such risks. Risk assessment board measured as the total numbers of all directors of a company.

2.1.3 Management Strategic Control on Electronic Fraud Detection

Several studies have established the link between management strategic control on electronic fraud detection. Amira, et al., (2018) investigated risk management practices in electronic banking in Sultanate of Oman and concluded that risk management has a positive effect on electronic banking in sultanate of Oman. Joseph, et al., (2021) examined the effect of Internal Control System and Fraud Prevention of Quoted Financial Services Firms in Nigeria: A Smart PLS-SEM Approach, the study found that internal control

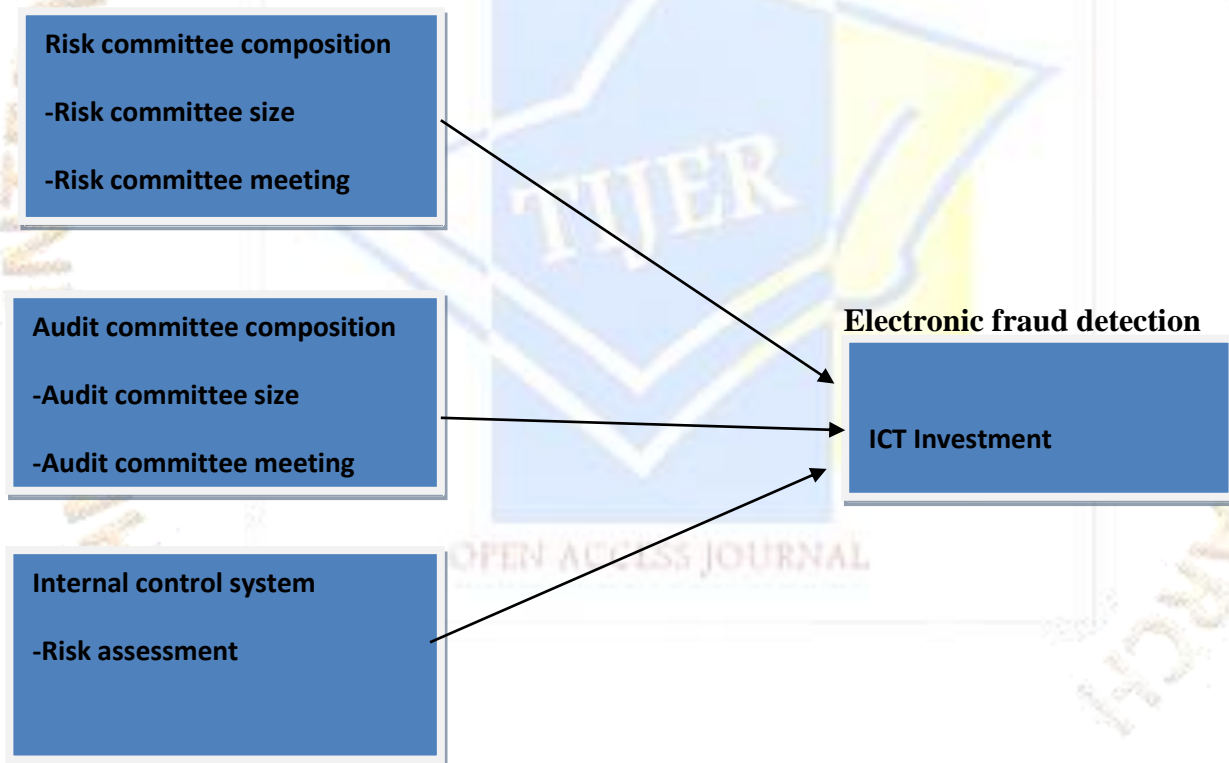
system has a significant influence on fraud prevention. Tariq, et al., (2014) aimed to explore the impact of management control systems to limit the fraudulent practices from the auditor’s perspective at the Jordanian Industrial Sector. It was concluded there is a statistically significant impact of the internal audit on fraudulent practices at the Jordanian Industrial Sector as perceived by auditors.

Santosh, (2021) examined utilization process of fraud management system in prevention of financial scam in the banking sector, and concluded that management system significantly affects financial scam in the banking sector. Nanny, (2022) aimed to assess the factors that cause fraudulent financial report in Indonesia by using Fraud Hexagon Theory of fraud. Database uses in the study is from Indonesia’s banking industry year 2019 and 2020. It was concluded that poor management strategy significantly affects financial report in Indonesia. Okeke,(2021) examined the relationship between audit committee attributes and performance of manufacturing firms in Nigeria. The result revealed that audit committee size and audit committee meetings have positive association with performance of manufacturing firms in Nigeria; while audit committee independence has a negative association with performance of manufacturing firms in Nigeria.

Conceptual Framework

Figure 2

The framework shows the relationship between management strategic control on electronic fraud detection.



The conceptual framework was purposed to establish the link between the dependent variable and independent variable. Electronic fraud detection is the dependent variable proxied with ICT investment, the independent variable is management strategic control proxied with risk committee composition measured by risk committee size and risk committee meeting, audit committee composition measured by audit committee size and audit committee meeting, internal control system measured by risk assessment.

Source: Authors design, 2023.

2.2 Theoretical Review

2.2.1 The Theory of Fraud Triangle

Donald Cressey in the 1950s developed fraud triangle model to explain the factors that lead individuals to commit fraud. The theory is based on the idea that fraud occurs when three conditions are present; opportunity, rationalization, and pressure. Opportunity refers to ability of an individual to commit fraud, which can rise from their access to financial or other resources that can be misused. Rationalization involves the justification of fraudulent behavior, which can be done by convincing oneself that the behavior is not really wrong or is justified by some circumstance. Pressure refers to the motivation or incentive that drives an individual to commit fraud, which can be financial, personal, or situational. Its assume in these context that people use opportunity of the advent of technology in a negative way by committing fraud electronically. Previous studies of Tyona et al., (2021) electronic fraud and Bank Performance: Empirical Evidence from Nigeria. The fraud triangle theory has been widely used in the deposit money banks by auditors, investigators, and law enforcement agencies to identify and prevent fraudulent behavior which is relevance to the management strategies and body of knowledge in the society in order to prevent electronic fraud.

However, it has also been criticized on several grounds. It has focuses too much on individual and ignores the larger organizational and systemic factors that can contribute to fraud. So, also the theory does not fully capture the complexity of the decision making processes that lead individuals to commit fraud. Kassem, (2020) argued that the fraud triangle is not suitable for the assessment of financial fraud reporting. It explains that without understanding the motivation and level of integrity of managers as well as consideration of capability financial statement fraud may not be detected. Lokanan, (2015) on the other hand argues that the fraud triangle is not an adequate tool for fraud detection. He emphasizes that the fraud triangle supports a body of knowledge that lacks the objective criteria required to adequately address all fraud occurrences.

Biegelman and Bartow (2012), explains as a criticism of the fraud triangle that even in the presence of opportunity and pressure/incentive some people may not commit fraud. Hence managing rationalization will contribute to reducing fraud. Despite these criticisms, it still remains a valuable tool for understanding and preventing fraud. By identifying the factors that contribute to fraudulent behavior, organizations can take steps to minimize the risk of fraud and create a culture of transparency and accountability in deposit money banks, this is the underpinning theory.

2.22 The Fraud Scale

Albrecht, Howe and Romney (1984) also developed a fraud theory known as the “Fraud Scale” in the 1980s to explain the various levels of fraudulent behavior that can occur within an organization. The theory suggests that fraudulent behavior exist on a continuum, with different levels of severity depending on the intent and impact of the behavior. Raheel et al (2019) artificial intelligence and human psychology in online transaction fraud. Had applied this theory, it has been widely used in the field of forensic accounting and fraud investigation to classify and assess the severity of fraudulent behavior. The theory remains a valuable tool for understanding and preventing fraud in the deposit money banks. Providing a framework for categorizing and assessing the severity of fraudulent behavior, the theory shows strategies which help management to identify and address potential risk.

However, it has been criticized on several grounds. It is subjective and lacks a clear standard for determining the severity of fraudulent behavior. The theory suggest that fraudulent behavior exist on a continuum from low-level frauds such as office supplies, to high-level frauds such as embezzlement or financial statement. Another criticism is that it is too simplistic and does not fully capture the complex nature of fraudulent behavior. It is important to use the theory with caution and to recognize its limitations in

order to ensure that investigations and interventions are based on a comprehensive understanding of the factors that contribute to fraudulent behavior.

2.3 Empirical Review

Okeke, (2021) examined the relationship between audit committee attributes and performance of manufacturing firms in Nigeria. Ex post facto research design was used while the data source for analysis was secondary and drawn from 2012-2019. Using judgmental sampling method, fifteen (15) firms were selected from the listed manufacturing firms in Nigeria. Data collected were analyzed while the hypotheses formulated were tested using Pearson correlation matrix. The result revealed that audit committee size and audit committee meetings have positive association with performance of manufacturing firms in Nigeria; while audit committee independence has a negative association with performance of manufacturing firms in Nigeria. Based on the findings, the study recommends that the corporate governance discussions should be re-focused from independence to size and meetings of the audit committee. However, the study uses only few manufacturing firms which is limited in Nigeria without the involvement of foreign manufacturing firm for comparison.

Eneji et al., (2019) examined electronic banking frauds, detection of electronic banking frauds, control of electronic banking frauds, and challenges associated with the detection and control of electronic banking frauds. The sample size used was 10 listed deposit money banks in Nigeria. The study adopted survey research design and data obtain using secondary, there is every need to curb this ugly trend with the banking sector. The researchers are of the view that, the integration a biometric security and a system that unveils users' anonymity with electronic banking system will help to mitigate and combat electronic banking frauds. The studies used only 10 listed deposit money banks as sample size which is very scanty among the total number we have in Nigeria, all deposit money banks experienced electronic fraud in one way or the other.

Tyona et al., (2021) examined e-fraud and bank performance, regression analyses was used. The result of the study indicates that both variables, online fraud, (OLF) and ATM fraud (ATF) show negative effect on bank performance proxy in Nigeria in line with a priori expectation. Modified Ordinary Least Squares (Fmols) regression analysis was conducted on the variables. Results indicate a negative relationship between the explanatory variables and return on equity (ROE). The study uses time series data for the period of ten (10) years sourced from Central Bank of Nigeria (CBN) statistical Bulletin. Therefore, the study lacks internal control system in the organization.

Olalode et al.,(2020), investigated why and how e-frauds are perpetrated in the Deposits Money Banks in Nigeria by employees. The survey research design was adopted. Primary data were sourced from 120 fraud investigation officers in the Banks through the administration of structured questionnaires. Data were analyzed using simple percentages. Results revealed that e-frauds were perpetrated by the employees whose employment was threatened as a result of not achieving deposit targets and using either expert or legitimate power to connive with other employees to commit e-fraud against the Banks. Furthermore, findings revealed that job losses were occasioned by disruptive technologies and economic challenges which often lead to employees' disengagement without or little compensation created fear in the mind of employees to commit e-fraud. The study lacks empirical evidence.

Olaleye and Fashina(2019) examined the nature of electronic banking related fraud on deposit money banks in Nigeria, it effects and the controls put in place to prevent financial loss. This study adopted case study research design of data collection, which was based on the use of secondary. These were extracted from CBN: Nigeria Electronic Fraud Forum (NEFF) Annual Report, 2016. The study shows that the effect of electronic fraud would result in loss of money which belongs to either the bank or customers. The study focus on central bank of Nigeria, they lack adequate security measures for various electronic banking channels, review of BVN framework and sensitization of customers on electronic banking operations among others.

Nwaimo, (2020) investigated fraudulent practices in Nigeria banks and the implications on the performances of Deposit Money Banks in Nigeria. Secondary data were obtained from the annual reports of the Nigerian Deposit Insurance Corporation. Data obtained were tested for co-variance using Johansen Co-Integration and thereafter the four hypotheses postulated were tested using Ordinary Least Square Regression (OLS) and Vector Auto Regression Estimates. The study revealed significant negative relationships between fraud variables and bank performances represented by earnings before tax. The study used data from 1994 to 2015 suggested a strong synergy/collaboration between National Deposit Insurance Corporation and Central Bank of Nigeria only, EFCC, ICPC and NCC should have been included as well for effective and proactive monitoring and regulation of fraudulent tendencies and by so doing forestall collapse of the banks

Funso and Temitayo,(2018)investigated the impact of fraud on the performance of banks in Nigeria. The data used for the study were sourced from the secondary source most especially theNigeria Deposit Insurance Corporation and the Central Bank of Nigeria statistical bulletins. This study used bank deposit as the dependent variable while the past value of bank deposit, amount involved in reported fraud cases, amount lost to fraud, number of staffs involved in fraud were used as independent variables. It was revealed that the amounts involved in fraud cases, those lost to fraud and the number of staff volve in fraud have negative relationships with deposit of banks in Nigeria. The study uses data from 1994 to 2015,also utilize whistleblowing policy and other "speak-up" mechanisms, which have remained underused and underrated in the Nigerian financial sector, the life of the blower will always be at risk if it goes wrong.

Muoghalu et al,(2018)examined the effect of electronic banking related fraud on automated teller machines, mobile banking, point of sale terminals and web to return on assets, return on equity, interest income and non-interest income of deposit money banks. The Ordinary Least Square (OLS) was applied in estimating the regression equation. The findings from the study dispelled that fraud on point-of-sale terminals has significant negative effect on interest income, while fraud on automated teller machines, mobile banking and web had no effect on return on assets, return on equity and non-interest income of banks. The study uses data from 2013 to 2017, it focuses only on one time pass word (OTP) to authenticate transactions by sending confirmation code to mobile number linked to the account to affirm that the transaction was initiated by the original cardholder. Therefore, OTP is not the only way out to prevent electronic fraud.

Apreku-Djan,(2022), investigated the effect of fraud risk management strategies (FRMS) on value-based financial performance (Economic Value Added (EVA), Market Value Added (MVA) and Cash Value Added (CVA) of banks listed on the Ghana Stock Exchange. The study used a judgmentalsampling technique to select nine (9) fully licensed and operational commercial banks in Ghana. Multiple regression is used in showing linear relationship. The study shows a strong positive relationship between fraud risk management strategies and EVA, MVA and CVA. There is need to replicate these results to other sectors such as manufacturing industry to establish the relationship between fraud risk management practices and value-based financial performance of firms in other sectors. The study was done in Ghana.

Nwairoegbu-Agbam, et al., (2016) examined the effect of fraud management strategies and organizational success: A study of manufacturing firms in Nigeria.This study is a quasi-experimental design, is descriptive in nature and adopts the cross-sectional survey method in its investigation of the study variables (fraud management strategies and organizational success) with a predominantly quantitative methodology. The target population of this study comprises of four (4) manufacturing firms in Rivers State. The implications of these findings are that a more fraud-preventive and management-oriented organization would be in a better position for adopting effective financial and behavioral control measures. The study uses limited sampling size and lack the use of advent technology to prevent electronic fraud in the organizations which should endeavor to standardize, maintain and constantly upgrade the process of control practices and activities in line with current global events and incidences.

Nanny, (2022) aimed to assess the factors that cause fraudulent financial report in Indonesia by using Fraud Hexagon Theory of fraud. Multiple regression analysis method is applied to analyze the data. Result shows pressure (external) and the element of opportunity (quality of external auditors) correlate positively with fraudulent financial reports. On the hand, proxies such financial stability, financial targets, effective monitoring, number of audit committees, audit turnover, total accruals, GCG score, CEO ego, and WBS – show null correlation. However, all variables in fraud hexagon theory affect fraudulent financial reports simultaneously. The study was done in Indonesia and uses data from 2019 to 2020.

Danazumi, (2022) examined how anti-fraud policies of first bank of Nigerian plc affect the financial performance of Nigerian. The sample size in this study was 40 management staff of first bank plc, multiple linear regression analysis method was used (OLS). The study adopted survey research design and obtain data from primary source. The study established significant positive relationship between all the study variables and financial performance. Bank directors and managers should improve on the monitoring of operational practice of the employees at all levels and quality by ensuring strict compliance with the central bank of Nigeria. The study was done in Jos, Plateau state first bank main branch.

Samuel, et al., (2020), investigated the effect of risk assessment and fraud prevention in banking sector. The study was carried out in all banks headquarters or offices of banks registered and operating in Kenya. Kenya has 42 registered banks but the study will be conducted on 39 banks. Descriptive and correlational research designs were used in this study, regression analysis was adopted using primary data. The descriptive analysis showed that the respondents strongly agreed that the parameters put in place are capable of preventing fraud in banks. The study was done in Kenya, and it lacks risk assessment mechanisms to prevent fraud.

Joseph, et al., (2022) examined the effect of internal control system on fraud prevention of financial services firms in Nigeria. The population is 284 respondents from the listed financial services firms in Nigeria. A cluster sampling technique was adopted for the study. The data was sources through the primary sources and a structure questionnaire were administered to the respondents through the use of five-point Likert scale system. Findings from the study revealed that control environment and monitoring were found to have a positive and significant effect on fraud prevention, while the information and communication has a negative and significant effect on fraud prevention. The study lacks the proper use of control environment, monitoring system on fraud prevention. Also, regulator agency such as CBN, EFCC and ICPC should develop an internal control framework and policy that will guide the financial services firm in Nigeria.

Amira, et al., (2020) investigated the risks of e-banking services in Oman, and their impact on population. Initially a semi-structured interview is conducted as a pilot study with four knowledgeable and experienced staff from one of the leading banks in Oman, to study employee views on risk management issues in e-banking. Questionnaire was developed and used in major banks in Oman to determine whether it operates in line with basic risk management principles. In conclusion, this article included many of the problems faced by banks through electronic thefts and there are internal and external factors. The study was done in Oman, a country in western Asia. It lacks modern technology and good strategic control system.

Huyuh, et al., (2021) explored the relationship of three important components: Corporate Governance, Audit Committee, Strategic Management Accounting. The study adopted both qualitative and quantitative research methods. It used the Bi-probit model on the secondary data obtained from listed companies in Vietnam between 2013 and 2020. Research results have provided evidences on the existence of the relationship between Corporate Governance, Audit Committee, and Strategic Management Accounting. Corporate governance directly affects strategic management accounting while also indirectly affects strategic management accounting through the Audit Committee. The study was done in Vietnam a southeast Asian country. The company will have to apply different levels of strategic management accounting and audit committee

2.4 Gap in Literature

Although, some considerable literatures exist on risk management and fraud prevention, electronic fraud and internal control, challenges facing banks on fraud prevention among others, however there is need to evaluate the management strategic control on electronic fraud detection in listed Nigerian deposit money banks, considering that the use of electronic fraud has become persistent and preventive in recent time. Most studies were carried out in foreign countries such as Malaysia, Europe, and United state. Hence this study has been set out to see how risk committee composition, audit committee composition and internal control system can be used to detect electronic fraud in listed Nigerian deposit money banks because electronic fraud had been a serious challenge in the banking sector globally. The study will anchor fraud triangle theory because the theory stated three factors that may lead to fraud in an organization which are opportunity, rationalization and pressure, by understanding the underlying factors that can contribute to fraud, organization can take steps to prevent or detect fraudulent behavior to minimize the risk and create a culture of transparency and accountability in the deposit money banks. In this regard, the null hypotheses will be stated as follows;

Ho1 There is no significant effect of risk committee composition on electronic fraud detection in listed Nigerian deposit money banks.

Ho2 There is no significant effect of audit committee composition on electronic fraud detection in listed Nigerian deposit money banks.

Ho3 There is no significant effect of internal control system on electronic fraud detection in listed Nigerian deposit money banks.

3. Methodology

Ex-post facto research design was applied. The study's population consist 13 of listed deposit money banks as at December 31, 2022. Census sampling methods were used. The sample size is measured for a period of 8 years (2015-2022). Data were obtained from published annual reports of the selected deposit money banks. The base year 2015 was selected because it was the period when cybercrime Act was passed to tackle cybercrime activities in the country (Olanrewaju & Abraham.,2015). The variables that will be measured are risk committee composition, audit committee composition and Internal control system which will be extracted from the audited annual report. The data obtained will be analyzed using ordinary least squares panel data regression models.

3.1 Model Specification

The model used in Okeke, (2021) examined the relationship between audit committee attributes and performance of manufacturing firms in Nigeria, will be adapted for the research work. The result revealed that audit committee size and audit committee meetings have positive association with performance of manufacturing firms in Nigeria; while audit committee independence has a negative association with performance of manufacturing firms in Nigeria. We modified this model and the ordinary least square was used by the following linear model

$$\text{Performance (ROA)} = f(\text{ACI, ACS, ACM}) \dots \dots \dots \text{I}$$

Based on the above model, we specify the following regression equation

$$\text{ROA}_{it} = a_0 + \beta_1 \text{ACI}_{it} + \beta_2 \text{ACS}_{it} + \beta_3 \text{ACM}_{it} + \mu_{it} \dots \dots \dots \text{II}$$

Where;

ROA = Return on asset

ACI = Audit Committee Independence

ACS = Audit Committee Size

ACM = Audit Committee Meetings

£ = Stochastic error term

a = Constant

$\beta_1 - \beta_3$ are the co-efficient of the regression equation.

The following is the model formulated for this study;

$$EFD = \beta_0 + \beta_1RCS_{it} + \beta_2RCM_{it} + \beta_3ACS_{it} + \beta_4ACM_{it} + \beta_5RA_{it} + e_{it}$$

Where;

RCS=Risk committee size

RCM=Risk committee meeting

ACS=Audit committee size

ACM=Audit committee meeting

RASS =Risk assessment

β_0 = Constant to be estimated

$\beta_1 - \beta_6$ are the co-efficient to be estimated

e = Stochastic error term

Therefore, it is expected that management strategic control will significantly have effect on electronic fraud detection in listed Nigerian deposit money banks. A priori expectation is stated as follows;

$$\beta_{1it} > 0, \beta_{2it} > 0, \beta_{3it} > 0, \beta_{4it} > 0, \beta_{5it} > 0$$

3.2 Measurement of Variables

Table 3.1

S/N	Variables	Description	Measurement	Sources
Management Strategic Control				
1.	Risk committee size (RCS)	It is the number of directors appointed to be members in the risk committee.	Total number of directors and non-directors in the risk committee.	(Agyei, 2019)
2.	Risk committee meeting (RCM)	It ensures strategic plans alignment with organizational objectives, finance, and risk management system, internal and external audit.	Number of meetings held by the risk committee members in a year.	(Krishnan & Lee, 2008)
3.	Audit committee size (ACS)	It is the number of directors appointed to be members in the audit committee.	Total directors and non-directors in the audit committee.	(Rahaman, et al 2019)
4.	Audit committee meeting (ACM)	Audit committee meeting refers to the frequency by which the audit committee members meet together annually.	Number of meetings held by the audit committee members in a year.	(Al-Mamum 2014)
5.	Risk assessment (RASS)	Is the identification of potential errors, and implements control, policies and procedures in order to reveal those errors and prevent them.	Board measured as the total numbers of all directors of a company.	(okonko et al., 2016).

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4. ICT Investment Allocation of financial resources Total money (Saeed et al., towards acquiring, developing and invested into ICT 2022) maintaining technology related for infrastructure in a organizations use. year.

The table shows the variables, their explanations of the variables and the measurements as well as the source of references.

Source: Author's Computation, 2023

4. Data Analysis and Discussion of Findings

4.1 Descriptive Statistics

The descriptive statistics is reported in table 1 and it shows that ICT investment (ICTVT) for the deposit money banks in Nigeria over the years have the average has the value of 10.776 with standard deviation of 6.6806 implying high variation across the years and the coefficient variation of .6199442 which means that the variation is 61 percent over the 8 years of period. The standard error of mean is .6312605 implying variation in the sample mean and population mean with minimum value of 0 and maximum value of 16.833. Data for the variable is negatively skewed having the statistics of -.9223166 and kurtosis value of 2.0115. Furthermore, on the table, it is shown that risk committee size (RCS) have average value of 6.5446 with standard deviation of 1.844 and this imply that risk committee size for the companies over the years varies moderately considering its distance to mean. The total variation of mean is .28188 and the total standard error of mean risk committee size is .1743 with the minimum value of 3 and maximum value 11. The data for the variable is positively skewed having the value of .3655799 and kurtosis value of 2.76257 and this imply that the data is normally distributed.

Furthermore, from table 1, risk committee meetings (RCM) has an average value of 4.6160 with standard deviation of 1.5319 and this imply a moderate variation with 33 percent of coefficient of variation. The standard error of mean of risk committee meetings is 0.144475 with minimum value of 1 and maximum value of 9. The variable is positively skewed having the value of 1.342 and kurtosis value of 5.208 which imply that the data is not normally distributed as the kurtosis value is higher than normal distribution threshold of 3. Also from table 1, audit committee size (ACS) on the average over the 8 years period for deposit money banks is 5.035 with standard deviation of 1.394 and this imply a moderate variation in audit committee size cover the years showing coefficient of variation of 27 percent and the standard error mean is .131 with minimum value of 2 and maximum value of 9. Data for the variable is positively skewed having the value of .1563 and the kurtosis value indicating 2.8932 and this imply that the data is normally distributed. From table 1, it is indicated that audit committee meeting (ACM) on the average has the value of 4.6339 with standard deviation of 1.2663 and this imply a moderate variation with 27 percent of coefficient of variation. The standard error of mean of audit committee meetings is .11965 with minimum value of 2 and maximum value of 11. The data is positively skewed showing the value 1.568 and kurtosis value 7.5911. Risk assessment for the deposit money banks over the years have the value of 13.223 with standard deviation of 2.697 and this indicates a moderate variation across the years having a coefficient of variation of .2039. The standard error of mean value is .2548 and the minimum means of risk assessment is 8 and maximum value of 19. The data is negatively skewed showing -.0253371 and kurtosis value of 2.3433.

Table 2: Descriptive Statistics

Variables	ICTIVT	RCS	RCM	ACS	ACM	RASS
Observations	112	112	112	112	112	112
Mean	10.776	6.544	4.616	5.035	4.633	13.223
SD	6.6806	1.844	1.531	1.394	1.266	2.697
CV	.61994	.2818	.3318	.2769	.2732	.2039629
SE(mean)	.63126	.17432	.1447	.1317	.1196	.2548468
Min	0	3	1	2	2	8
Max	16.833	11	9	9	11	19
Skewness	-.9223	.3655	1.3426	.1563	1.568	-.0253
Kurtosis	2.011	2.7625	5.2080	2.893	7.591	2.343

Researcher’s Computation (2023)

4.2 Test of Variables

4.2.1 Normality Test

The normality of data distribution is an assumption of running a linear model and the assumption merely requires that the residuals be identically and independently distributed. The normality of residuals was conducted using the Shapiro-Wilks test of normality and the result is presented in table 2. The Shapiro-Wilk test is a statistical test that determines whether the data distribution as a whole differs from a comparable normal distribution. This assumption is based on the fact that the sample mean distribution across independent samples is normally distributed. If the test is non-significant ($p > .05$), it means that the sample's distribution is similar to that of a normal distribution. To further validate the result, the SK test was also carried out, and these two tests were chosen due to their advantage over other normality tests like the Kolmogorov–Smirnov tests. From table 2, the results indicate that residuals of the variables explaining strategic management control and fraud control have p-values that are above 0.05 as indicated on the table at 5% level of significance which imply the data is normally distributed.

Table 2: Shapiro-Wilk W Test for Data Normality

Variables	Obs	W	V	z	Prob>z
residuals	112	0.98431	1.425	0.790	0.21467

Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
residuals	112	0.5978	0.0586	3.95	0.1388

Source: Researchers’ Computation (2023)

4.2.2 Correlation Analysis

The linear association or relationship between the dependent and explanatory variables was tested using the pairwise correlation coefficient. The correlation analysis equally helped in detecting the likelihood of multicollinearity among the study variables, the presence of which could have a devastating effect on the standard error of the variables. Table 3 shows that the overall relationship between fraud control measured as investment in ICT and strategic management control is significant. The relationship between risk committee size and ICT investment is direct and positively significant and this evidenced by a coefficient value is 0.5180 and probability value of 0.0000 and this indicate that one time increase in risk commit size will lead to 51.80 percent in fraud control. risk committee meetings (RCM) have inverse relationship with

ICT investment and one time increase in risk committee meetings will cause a decrease fraud control by 20.33 percent having coefficient value of -0.2033 and probability value of 0.0316. The relationship between audit committee size(ACS) and ICT investment is negative and insignificant having coefficient value of -0.0183and the relationship is insignificant having probability value of 0.8484which imply that one time improvement in audit committee size, ICT investment will decrease by 1.83 percent.

The relationship between Audit committee meetings (ACM) and ICT investment is positive, having a coefficient of0.2532, which implies that the higher the commitment of audit committee through meetings, there will be improvement in ICT investment by 25.32 percent. Likewise, from table 3, it is shown that the relationship between risk assessment (RAS) and ICT investment is positive, having a coefficient of0.4796, which implies that the higher the risk assessment level, the higher the improvement in ICT investment by 47.96 percent. Likewise, from table 3, it is observed that the relationship between the explanatory variables does not show the existence of multicollinearity as it is not above the expected threshold of 0.7.

Table 3:Correlation Analysis

	ICTIVT	RCS	RCM	ACS	ACM	RASS
OBS	112	112	112	112	112	112
RCS	0.5180*	1.0000				
RCM	-0.2033*	-0.0688	1.0000			
ACS	-0.0183	0.1149	0.1794	1.0000		
ACM	0.2532*	0.3676*	0.3449*	0.1095	1.0000	
RASS	0.4796*	0.5457*	-0.2342*	0.1512	0.1086	1.0000

Source: Researchers’ Computation (2023)

4.2.3 Panel Unit Root Test of the Variables

Panel variables have the tendency of been non stationary at level which may likely affect the parameter stability and consistency of the model. However, in order to identify the stationary conditions of the variables, the study uses Levin, Lin & Chu t* and Im-Pesaran-Shin unit-root test. The null hypothesis assumption of the unit root test is that all panels contain unit roots while the alternate hypothesis implies that some panels are stationary. The results of unit root tests were displayed in table 4.14. It shows that all the variables are integrated of order zero that is 1(0) which is significant at 5 percent level of significance. Therefore, we reject the null hypothesis and conclude that the series is stationary. Therefore, it is not necessary to conduct the co-integration test in order to determine the long run relationship among the variables. The panel least square is capable of estimating an efficient model and that is less spurious.

Table 4: Panel Unit Root Test

Variable	Levin, Lin & Chu t*		Im-Pesaran-Shin unit-root test	
	Test-statistics	P-value	Z-Statistics	P-value
ICTIVT	-1.7997	0.0360	-8.2322	0.0000
RCS	-5.2948	0.0000	-7.8685	0.0000
RCM	-3.4463	0.0003	-5.2995	0.0000
ACS	-3.5446	0.0002	-5.4591	0.0000
ACM	-4.5463	0.0000	-5.4185	0.0000
RASS	-7.2054	0.0000	-2.7247	0.0032

Source: Author’s Computations (2023)

4.2.4 Multicollinearity Test

Multicollinearity test are part of post estimation test to confirm the validity of the assumption of the regression model. In a situation where two or more explanatory variable are highly correlated, meaning that one can linearly predict the other variable with a certain degree of accuracy, then there is problem of multicollinearity. The Variance Inflation Factor (VIF) value is considered for this purpose to determine the independence of the explanatory variables. Based on the evidence presented in table 5, it can be concluded that there is no multi-collinearity problem. This is because the VIF values for all the variables are less than 10 and the tolerance values for all the variables are greater than 0.10 (rule of thumb). Therefore, the study can rely on regression co-efficient to predict the level of impact of independent variables on dependent variables and the outcome of the findings can be considered valid.

Table 5: Tolerance and VIF Value

Variable	VIF	1/VIF
RCS	1.66	0.601729
RASS	1.55	0.646344
ACM	1.38	0.726635
RCM	1.30	0.767590
ACS	1.08	0.927821
Mean VIF	1.39	

Source: Researchers' Computation (2023)

4.2.5 Heteroscedasticity Test

The heteroscedasticity test was conducted to check the validity of homoscedasticity assumption that variance in the residuals is constant as the absence of homoscedasticity violate the assumption and may lead to wrong inference. Heteroscedasticity test was conducted using Breusch-Pagan/Cook-Weisberg test and data for the study revealed the presence of heteroscedasticity given the probability value of 0.0000 which is lesser than 0.05. The observed problem will be corrected by using the panel-standard corrected error

Table 6: Breusch-Pagan / Cook-Weisberg test for Heteroscedasticity

Null Hypothesis	Statistics	Probability
Constant variance across the variable's residuals (P>0.05)	7.05	0.0079

Source: Researcher's Computation (2023)

4.2.6 Serial Auto-Correlation Test

A variable's autocorrelation depicts how closely its values are correlated across time. It measures how similar two time series, one current and the other lagged, are to one another over time. Data for the study is also tested for auto-correlation using Wooldridge test for autocorrelation in panel data, the result is presented in table 7. The results show the probability of 0.1482 which is insignificant indicating that there is no problem of Auto-correlation hence the null hypothesis that there is no first-order correlation is accepted.

Table 7: Serial Auto-Correlation Test

Null Hypothesis	Statistics	Probability
no first-order autocorrelation (P>0.05)	2.364	0.1482

Researcher's Computation (2023)

4.2.7 Cross-sectional Dependence Test

The study employed the parametric testing procedure proposed by Pesaran (2004). The Pesaran (cross-sectional dependence) test is utilized to ascertain whether the residuals are associated across entities. If the outcome demonstrates $P < 0.05$, we reject the null hypothesis and draw the inference that the panel is correlated (cross-sectional dependence). The cross-sectional dependence test is presented in table 8. The result indicates that null hypothesis that there is no cross-sectional dependence is rejected as the probability value indicated 0.0053 and the average absolute correlation of the residuals as obtained by using the abs parameter shows 0.352 which is considered a very high number. Hence, there is sufficient evidence to conclude that earnings management and firm value under fixed effect condition exhibits cross-sectional dependence. The observed cross-sectional dependence problem will be corrected using panels corrected standard errors (PSCE) with the option that the standard error is independent- corrected.

Table 8: Pesaran's test of Cross Sectional Independence

Null Hypothesis	Statistics	Probability
no cross-sectional dependence ($P > 0.05$)	2.790	0.0053
Average absolute value of the off-diagonal elements	0.352	

Source: Researcher's Computation (2023)

4.2.8 Hausman Test

A Hausman test is used to choose the model that is most suitable for application between the 'inside' estimator and the random effects estimator are compared. If the null hypothesis is rejected, the treatment of the omitted effects by the "inside" estimator is favored (i.e., it favors the fixed effects but only relative to the random effects). The test is being used in this situation to distinguish between models where the omitted heterogeneity is handled as fixed and correlated with the explanatory factors, and models where it is treated as random and independent of the explanatory variables. The result to know the model interpretation showed χ^2 of 16.55 and p-value of 0.0054 that is significant at 5 percent implying that the variation across entities is assumed to be fixed and correlated with the independent variables included in the models. This indicates that the best model for interpretation is fixed effect model.

Table 9: Hausman Test

Null Hypothesis	Statistics	Probability
Difference in coefficients not systematic ($P \leq 0.05$)	16.55	0.0054

Source: Researcher's Computation (2023)

Statistical Findings and Explanations of the Effect of Management Strategic Control on Electronic Fraud Detection in listed Nigerian Deposit Money Banks

The regressed result showing how measures of management strategic control in terms of risk assessment, risk committee composition and audit committee composition after meeting the basis for a Best Linear Un-Bias Estimate (BLUE) is shown in table 10. The panels corrected standard errors regression was run to cater for identified statistical problems of heteroskedasticity and cross-sectional dependence. The results of the regression analyzing the model specified to indicate the linear relationship of management strategic control on electronic fraud detection shows that the linearity of the variables is different from zero indicating Wald χ^2 of 110.33 and probability value of 0.0000 and this implies that the model is significant and fit. The percentage of variation in electronic fraud detection that can be caused by management strategic control is 36.67 percent having R-squared value of 0.3667.

The overall result shows that the measures of risk committee composition have positive and significant influence on the ICT investment of the sampled deposit money bank in Nigeria. The individual results for the variables as shown in table 10 showed that risk committee size (RCS) have a coefficient value of 1.10177, Z-statistics of 4.04 which is statistically significant at 5 percent with p-value of 0.000. Likewise, risk committee meetings (RCM) have a coefficient value of -0.7253556, Z-statistics of -1.46 which is

statistically insignificant at 5 percent with p-value of 0.144. This implies that risk committee meetings have no significant influence of ICT investment. Furthermore, it is observed the measures of audit committee composition have positive and significant influence on the ICT investment of the sampled deposit money bank in Nigeria. The individual results for the variables as shown in table 10 showed that audit committee size (ACS) have a co-efficient value of $-.3998$, Z-statistics of -1.46 which is statistically insignificant at 5 percent with p-value of 0.144. Likewise audit committee meetings (ACM) have a co-efficient value of $.943053$, Z-statistics of 2.53 which is statistically significant at 5 percent with p-value of 0.012. This implies that audit committee meetings have significant influence of ICT investment. Lastly, risk assessment as measured by board size have positive and significant influence on the ICT investment of sampled deposit money banks and this is evidenced by showing a co-efficient value of $.66349$, Z-statistics of 4.30 which is statistically significant at 5 percent with p-value of 0.0000.

The implication of the findings is that management strategic control is a practice that has significant impact on electronic fraud detection of listed deposit money banks that invest in ICT. Management strategic control can be achieved through a sound risk committee size and this reduces the firm chances of detecting risk and the same goes for audit committee meetings which will yield positive results because the manipulation of the company resources will easily be detected which will make detection of electronic fraud more easier before escalate. When the board of directors have enough members for the sake of efficient risk assessment, there will be easy detection of electronic fraud.

Table 10: Panels Corrected Standard Errors Regression

ICTIVT	Coef.	Het-corrected		
		Std. Err.	z	P> z
RCS	1.101777	.2728293	4.04	0.000
RCM	-.7253556	.4969149	-1.46	0.144
ACS	-.3998438	.2738362	-1.46	0.144
ACM	.9430538	.373227	2.53	0.012
RASS	.6634965	.1541278	4.30	0.000
_cons	-4.216362	3.053907	-1.38	0.167
Number of obs	= 112			
R-squared	= 0.3667			
Wald chi2(5)	= 110.33	Prob > chi2	= 0.0000	
Hausman test	chi2(5) = 16.55	Prob > chi2	= 0.0054	

Source: Researcher’s Computation (2023)

4.3 Discussion of Findings

The overall result showed that management strategic control has significant effect on fraud detection. From the individual proxies of strategic management control, it was found that risk committee composition represented by risk committee size has positive significant influence on electronic fraud, and risk committee meeting has a negative significant effect on electronic fraud. The results were therefore compared with existing empirical literature to establish if the findings form consensus to existing results and if there are differences, establish the possible reasons for the difference. These findings aligned with Okeke (2021) which examined the relationship between audit committee attributes and performance of manufacturing firms in Nigeria. The result revealed that audit committee meetings have positive association with performance of manufacturing firms in Nigeria. Also, the results of Joseph, et al., (2021) which examined the effect of Internal Control System and Fraud Prevention of Quoted Financial Services Firms in Nigeria and found that internal control system has a significant influence on fraud prevention. It also supports the study of Paul (2022) that investigated the effect of fraud risk management strategies on value-based financial performance (Economic Value Added (EVA), Market Value Added (MVA) and Cash Value Added (CVA) of banks listed on the Ghana Stock Exchange and the results shows a strong positive relationship between fraud risk management strategies and EVA, MVA and CVA. Furthermore, the findings contradict the result of Nwaimo, (2020) that investigated fraudulent practices in Nigeria banks and the implications on the performances of Deposit Money Banks in Nigeria. The study revealed significant negative relationships between fraud variables and bank performances represented by earnings before tax.

4.4 Policy Implication of Findings

The implication of this findings should motivate investors in paying attention to strategic control engaged in by companies especially the size of the directors on the board and specially effective management committee by prescribing that more directors be appointed to the committee most especially in deposit money banks. This is because the effect of strategic management control has a good influence on detection of fraud as revealed by the study and this is in tandem with the assumption of fraud triangle theory earlier discussed which presents the fact that fraud occurs when three conditions are present; opportunity, rationalization, and pressure. And opportunity of fraud arises in an ineffective strategic control by where prices management did not put in place controls that are excellent. Hence, it is implied that the audit committee meeting will result to increase detection of electronic fraud as measured by investment in ICT. Also, regulators should have risk management policy entrenched in corporate governance code for companies should that improves management strategic control to protect interest of investors that may lose their investment because of cases of increase in electronic fraud. The policies should be made in such a way that the code of corporate governance of the company will not be undermined hereby causing non-detection of electronic fraud.

5. Conclusion and Recommendations

The study examined management strategic control on electronic fraud detection in listed Nigerian deposit money banks. Longitudinal research design was employed, sourcing data through secondary means from the audited annual report. The data obtained was analyzed using ordinary least squares panel data regression models. The findings revealed that Risk committee composition measured by risk committee size has positive significant influence on electronic fraud and risk committee meeting has a negative significant effect on electronic fraud. In addition, Audit committee Composition measured by audit committee size has a negative significant effect on electronic fraud, and audit committee meeting has positive significant influence on electronic fraud, while Internal control system measured by risk assessment has positive significant influence on electronic fraud of sampled deposit money banks. The study therefore concluded that management strategic control is a practice that has significant impact on electronic fraud detection of listed deposit money banks that invest in ICT.

The study therefore recommends that;

- i. Management should have an effective and transparent audit committee which will result to increase detection of electronic fraud as measured by investment in ICT.
- ii. Regulators should have risk management policy entrenched in corporate governance code for companies should that improves management strategy control to protect interest of investors that may lose their investment because of cases of increase in electronic fraud.
- iii. Management should endeavor to standardize policies and constantly upgrade their process control practices in line with current global events and incidences. The policies should be made in such a way that the code of corporate governance of the company will not be undermined hereby causing non-detection of electronic fraud.

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