

# Internal Control System and Financial Statement Fraud of Quoted Banks in Nigeria

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## ABSTRACT

The menace of financial statement fraud which has sent notable and reputable corporate entities to their unimaginable early grave soon after the publication of juicy profits has continuing posing catastrophic threats and bleeding the global economy into a state of comma. This dreaded phenomenon around the globe may be demystified through effective internal control system to provide managers with the means to increase accountability for their programs and to obtain reasonable assurance that the programs they direct meet established goals and objectives. Intuitively, an effective system is not only restricted to a digital one but to one that is able to deter, prevent and detect fraudulent activities frontally. The main aim of this study is to develop an internal control system that will help in reducing financial statement fraud of quoted banks in Nigeria through not only its deterrent, predictive and detective properties; but also, the recommended internal control procedures and policies which the accounting profession should adopt. Deterrent control mechanism, and preventive control mechanism were the proxies of internal control system while improper revenue recognition, overstatement of assets were the sub-constructs of the financial statements fraud. The researchers adopted correlational survey design for the study and used primary data via structured questionnaire. The null hypotheses test and other data were analyzed by Pearson Product Moment Correlation and simple linear regression tools with the aid of Statistical Packages for the Social Sciences version 25. The study found that all the internal control system proxies; deterrent control mechanism, and preventive control mechanism positively and significantly related to improper revenue recognition and overstatement of assets of quoted banks in Nigeria in the period of this study. The study concludes that internal control system effectively and significantly related with the financial statement fraud. Based on the empirical findings, the study recommends the need for banks as a matter of necessity to continue to reinvigorate and maintain the tone at the top culture with effective risk management, energizes segregation of duties and job rotation with mandatory annual leave policies for the purposes of rooting out financial statement fraud in Nigeria banks.

**Keywords:** Internal Control System, Financial Statement Fraud, Deterrent Control Mechanism, Tone at the top, Assets Overstatement

## INTRODUCTION

The banking sector of any economy exists with its core objective to provide essential specialized intermediary services between surplus and deficit spending units in the economic development of nations. Through this vital service, banks lubricate the production engine turbines, facilitate capital formation, increase the quantum of savings and investments, enhance national output and hence help to make the overall economy more efficient. Akindele (2011) opines that banking industry is the principal depository of the public monetary savings and also the nerve center of the system of payments, owed with the money creation ability, allocation of financial resources and conduct through monetary and credit policies. A healthy, robust and stable banking sector plays a critical strategic role in supporting economic activity;

promoting economic growth and ensuring financial stability that ultimately boost the confidence of the stakeholders. Banks like other corporate entities of the world usually communicate the stewardship of the activities to the stakeholders through financial statements that is expected to provide them with timely and reliable information with which to make well and informed decision. As the tools used by management of corporate organization for reporting and communicating entity's performance, the stakeholders do expect a zero level of manipulation in the preparation, presentation and reporting of financial statements. However, Alaryan (2015) observed the reverse as most corporate organizations recorded heavy fraud and all sort of manipulations occur in financial statements of companies that mislead users. In recent times, the wave of the rampaging fraud, plundering every corporate entities has blown the desired healthy banking sector has continued unabated, creating unprecedented and colossal financial loss that is bleeding the global economy into a state of comma.

Fraud is like termites which gradually eat giant iroko tree to an undesirable end and it has factually imposes tremendous costs upon businesses and government agencies throughout the world. Ibanichuka, (2022) describes fraud as a generic term to represent all the multifarious activities of persons, and/or corporate entities, whether private or public, that denotes deceit to gain unfair advantage over another by the perpetrators. Those involved in such activities are known as fraudsters. Similarly, the Association of Certified Fraud Examiners (ACFE, 2022) defines fraud as one in which an employee uses his or her occupation to enrich himself or herself through the deliberate misuse or misappropriation of employer's resources or assets. Fraud, particularly that which relates to financial statements is in the news virtually every week, if not daily (Bressler, 2012). Association of Certified Fraud Examiners (ACFE, 2012) categories fraud into three main mutually exclusive dimensions: asset misappropriation, financial statements fraud and corruption. Financial statement fraud is a form of occupational fraud" (ACFE, 2016), which involves the deliberate misrepresentation of the financial condition of an enterprise accomplished through the intentional misstatement or omission of amounts or disclosures in the financial statements to deceive financial statement users" (ACFE, 2018). This menace is a severe threat to the integrity of financial reporting and corporate governance systems (Hogan, et al., 2008; Smith & Crumbley, 2009; Bhasin, 2013) and often result in a loss of confidence in the financial reporting process by investors and other stakeholders (Hogan, et al., 2008; Smith, 2015). On a global scale, the Association of Certified Fraud Examiners (ACFE, 2016) has estimated that in general business organizations would in most cases lose 5% of their yearly revenue to fraud. The Association of Certified Fraud Examiners (2018) reports estimated the cost of corporate fraud globally to be \$3.7 trillion. Gee and Button (2019) also pointed out that the global fraud losses are equivalent to 6.05% of GDP, that is, \$5.127 trillion, while related losses have increased by 56% in the last decade. ACFE's recently released "2022 Report to the Nations", underlines that the median cost of every incident of occupational fraud globally amounts to \$117,000 with a median period of 12 months.

In Nigeria, Achebe (1983) describes fraud as important to Nigerians just as grass is to goat. He opined that just the way goat cannot survive without grass likewise, Nigerians cannot survive without fraud. Fraud has wreaked havoc on entities such as Oceanic Bank, Intercontinental Bank, Cadbury Plc., Afri bank just to mention a few has showed the dynamism of corporate fraud (Amara et al, 2013). Nigeria Deposit Insurance Corporation (NDIC, 2018) disclosed that the fraudulent acts and forgery incidents in the banking industry rose by 56.30 percent in 2018 compared to 16,751 cases in 2016 and 26,182 cases in 2017. Collaboratively, Ibanichuka, (2022) asserts that Nigeria appears to have the preponderance evidence of monumental and persistent fraud activities. Take the financial institutions for example, to represent the private sector, NDIC Annual Report, (2020) stated that the number of fraud cases in banks in the year 2020 increased from 52,754 in 2019 to 146,153 in 2020 indicating 177.10% increase. The amount involved in 2019 was 204.65 billion Naira while in 2020, the banks reported 120.79 billion Naira. The total actual loss in 2019 was 5.46 billion Naira while the loss in 2020 was 5.33 billion Naira. Petitions relating to fraud sent to the Economic and Financial Crimes Commission (EFCC) increased from 6,782 cases in 2010 to 73,948 cases in 2019 indicating an increase of 990.36% (EFCC Operational statistics, 2010-2019). In the past two decades, the

contemporary global business community has unimaginably been submerged in the upsurge of fraudulently misrepresented financial statements that have severely eroded the stakeholders' confidence and public trust. Financial statements are prepared by the management to showcase the financial health of an enterprise and released to the various stakeholders who rely on them to take informed economic decisions.

The financial statement of banks like other corporate entities represents the enterprise's financial position, financial performance, cash flows and related notes of the company to the outside users. Legitimately, the management is expected to provide relevant, reliable and timely information for stakeholders and other users of financial statements to make well and informed decisions. In recent times however, the world business space is tormented and agitated as to why notable corporate entities suddenly died soon after publication of juicy profits. The sudden demise of the enterprises soon after the published healthy annual report, obviously resulted from financial statements fraud. Financial statements fraud usually involves improper revenue recognition, overstatement of assets, understatement of liabilities, misappropriation of assets and improper disclosure and many others. Odunayo (2014) averred that accounting for (fictitious revenue) income not earned, that is, non-existing income and bringing revenue from a different period to another are common in most financial statements. The import is that revenue is deliberately raised in a particular year, it would make the next year income to be smaller. Financial statement fraud distorts financial statement analysis (Olayinka, 2022) and therefore able to mislead investors, creditors and other potential stakeholders. In fact, these fraudulent practices are masqueraded and successfully perpetrated and inspired directly or indirectly by top management in collaboration with the auditors. Everette (2012) alleged that chief executives mostly continue this practice year after year. It is plausible that thorough and effective interrelated internal control domain regarding; control environment, risk assessment, control activities, information/communication, and monitoring activities that would have ultimately paved way for formidable and proper internal control mechanism was apparently ignored or poorly carried out. It is the priority of this study to explore the viability of internal control mechanism in combating financial statements fraud menace by ensuring that all expenditures are properly authorized; incomes and revenues to which the bank is entitled are properly documented and recorded. From the foregoing, the main objective of this study is to investigate the relationship between internal control system and financial statements fraud in Nigerian quoted banks. The study specifically examined the followings:

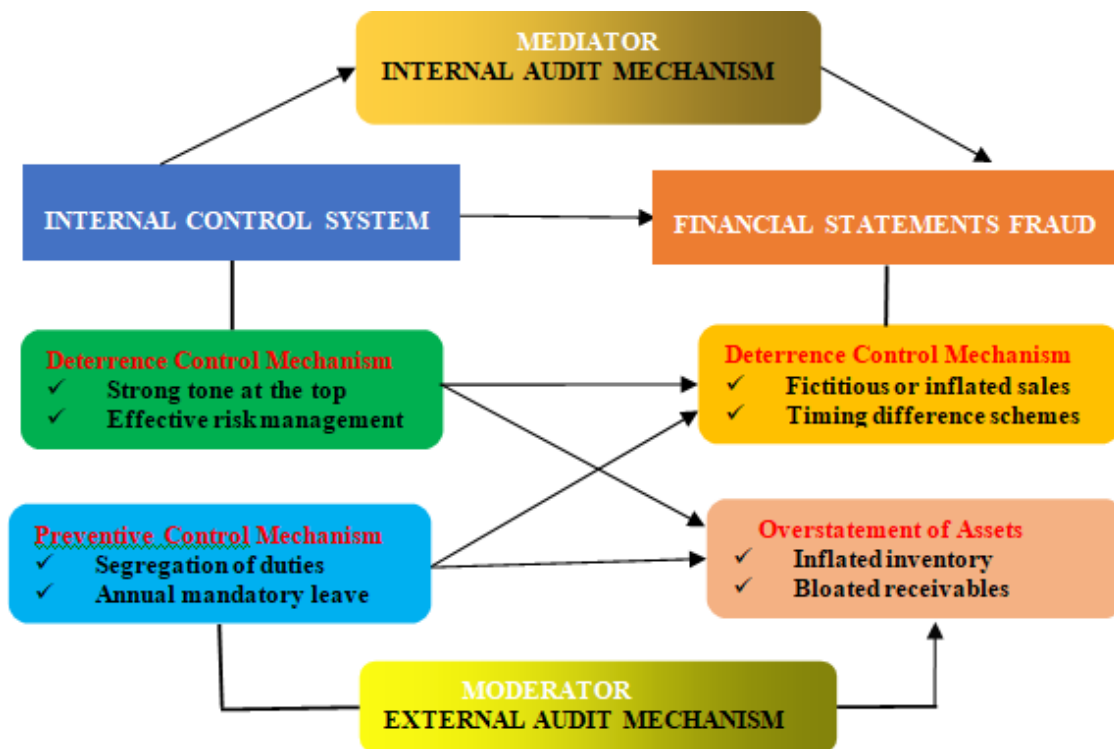
1. To examine the relationship between fraud deterrence control mechanism and improper revenue recognition in Nigerian quoted banks.
2. To investigate the relationship between fraud preventive control mechanism and overstatement of assets in Nigerian quoted banks.

The remainder of this study is organized as follows. Section 2 presents the relevant literature reviews of fraud investigation and its consequences. The conceptual model of the research relationships and hypotheses development are provided. Section 3 includes the presentation of data collection and statistical methodologies. Section 4 presents and discusses the empirical results of the study. Finally, Section 5 summarizes the overall study and the potential implications.

## LITERATURE REVIEW

This section presents the conceptual review, theoretical literature and empirical review. It reviews the opinion expressed by authors and writers in the area of internal control system and financial statements fraud in the banks with their respective subconstructs and to provide an insight into the phenomenon.

### Operational Conceptual Framework



Source: Solomon and Abubakar (2023)

**Fig. 1: Operational Framework of Internal Control System and Financial Statement Fraud of Quoted Nigerian Banks.**

#### Internal Control System

The term internal controls has a variety of definitions but generally speaking, internal controls is a process designed to provide reasonable assurance concerning the achievement of specific aims in effectiveness and efficiency of operations, reliability of financial reporting and compliance with laws and regulations. Accounting tools (AT, 2022) defines internal control as a set of activities that are layered onto the normal operating procedures of an organization, with the intent of safeguarding assets, minimizing errors, mitigate the amount and types of risk to which a firm is subjected, and ensuring that operations are conducted in an approved manner. Similarly, Hevesi (2005) defined internal control as the integration of the activities, plans, attitudes, policies, and efforts of the people of an organization working together to provide reasonable assurance that the organization will achieve its objectives and mission. Millichamp (2002) also views internal control system as the whole system of controls, financial and otherwise, established by the management in order to carry on the business of safeguard the assets and secure as far as possible the completeness and accuracy of the records. Controls are also useful for consistently producing reliable financial statements. The Committee of Sponsoring Organizations of the Tread way Commission (COSO, 2013) defines internal controls as a process performed by the board of directors, managers and other personnel of a business to provide reasonable assurance in achieving firm’s objectives in terms of controls, effectiveness and efficiency of business operations, reliability of financial reporting and compliance with laws and regulations.

Financial problems experienced in recent time have demonstrated that in some organizations mostly in financial institutions, risk-management and internal control practices were ineffective or imperfect (Ali, 2013). International Federation of Accountants (IFAC) indicated that previously many organizations

focused on financial reporting controls until many more financial crises arose (International Federation of Accountants, 2012). Tunji (2013), noted that collapse of ICS in any organization will lead to the failure or suffering of the organization. Karagiorgos et al. (2013) in their research indicated that the bank failures have mostly been due to fraud. Basle committee analyzed the situations leading to bank failures and it observed that the failures and losses in banks could have been avoided had the banks maintained strong ICS. Karagiorgos et al. (2013), in their research observed that strong ICS are pertinent to the banks due to their susceptibility to fraud. Similarly banking sector in Nigeria has suffered a lot due to mismanagement resulting from either lack of adherence to laid down principles and policies that have been established by the management or lack of ICS (Ifeanyi et al., 2011).

Commission of Sponsoring Organization (COSO) stated that ICS is said to work properly if the five components – control environment, risk assessment, control activities, communication of information and monitoring are present and functioning well (Commission of Sponsoring Organization, 2013). Various studies have been undertaken on components of ICS. Control environment are factors which determine the effectiveness of policies, procedures and methods specific to a process (Ikeotuonye Victor and Nnenna Linda, 2016). The control environment comprises the ethical values of the organization and integrity, these parameters enable the top management to carry out its governance oversight responsibilities; the organizational structure and assignment of authority and responsibility; the process for attracting, developing, and retaining competent individuals; and the accuracy of performance measures, incentives, and rewards to drive accountability for performance. The resulting control environment has a pervasive impact on the overall system of internal control (Akwaa-Sekyi and Gené, 2016). Price water House Coopers (2012) indicated that, the control environment includes the governance and management functions and the attitudes, awareness, and actions of those charged with governance and management concerning the entity's internal control and its importance in the entity. Communication of information is concerned with identification, capture and exchanging of operational, financial and compliance related information on timely bases. Information that is relevant, accurate, appropriate, understandable, accessible and timely will enable personnel in the organization to manage, conduct and control operations (AbiolaI and Oyewole, 2013). According to Badara and Saidin (2013) relevant information must be identified, recorded and communicated in a form and time frame that will allow people to carry out their responsibilities. Communication of information can reduce the risk of fraud. Lack of proper safe means of receiving and disseminating information to the relevant authority for action increases cases of non-reporting of suspicious activities that leads to fraud (Hayali *et al.*, 2013). Information sharing is an important tool for alerting the concerned parties about any suspicious activity and fraud prevention. The shared information by reserve or central bank about methods of operations incase of fraud cases reported help in identifying loopholes, initiation of corrective measures and encourage review of guidelines (Chakrabarty, 2014).

Monitoring is the evaluation of the events and transactions of the organization to determine whether performance of the organization is qualitative and to check effectiveness of the controls. Monitoring involves all management oversight of the ICS (Etengu and Amony, 2016). Commission of Sponsoring Organization (2013) stated that continuous evaluations or separate evaluations or combination of the two evaluations are used to assess the presence and functionality of ICS components.

Assessment of ICS can also be done through internal and external audits to determine the effectiveness (Kumuthinidevi, 2016). The staff on the other hand have responsibilities of evaluating various systems of internal controls and enhance them where needed. Any discovered deficiencies should be addressed immediately and added to the overall systems of internal control (AbiolaI and Oyewole, 2013). The staff on the other hand have responsibilities of evaluating various systems of internal control and enhance them where needed. Any discovered deficiencies should be addressed immediately and added to the overall systems of internal control (AbiolaI and Oyewole, 2013). By monitoring, internal control activities are continuously kept under strict watch and their performance are assessed. This what the whole organization should engage in, indicating that fraudulent actions are revealed and dealt with within soonest possible.

Where an organization lacks proper evaluation mechanisms of its own policies and frequent revision of its practices, the organization risks being defrauded by employees who are used to the practices and who might find a way to conceal their fraudulent activities (Hayali et al., 2013).

Despite the adoption and implementation of the COSO, (1992, & 2013) robust internal control factors analysis framework by organizations, perpetrations of fraud particularly, financial statement frauds in banks have continued unabated. Furthermore, existing studies from both international and national Joseph & Isiaka (2022), Chnar (2022), Okoro & Onyebueke (2021), Le et al. (2020) often focused on internal control system using COSO 1992 framework components as proxies for internal control. The said framework components are only good factors that facilitate the analysis and understanding of internal business domain but not control mechanism. The controls analysis frameworks are sometimes compromised by the employees in order to defraud the institutions (Adetiloye et al., 2016). Therefore, internal control system in this study centered on deterrence control mechanism and preventive control mechanism.

### **Deterrence control mechanism**

Deterrent control is an administrative mechanism (such as policies, procedures, standards, guidelines, laws, and regulations) that is used to guide the execution of security within an organization. Deterrent controls are utilized to promote compliance with external controls, such as regulatory compliance. It is characterized by actions and activities intended to stop or forestall fraud before it is attempted; that is, to turn aside or discourage even the attempt at fraud. Successful deterrence is the stopping of fraud before it happens. Deterrence or “to deter,” is defined as, “to inhibit or discourage through fear; hence to forestall from action by fear of consequences. Therefore, increasing the difficulty of committing the fraud effectively functions as an incremental increase in deterrence. Thus, successful deterrence is contingent upon the tone on top and effective risk management.

### **Strong tone at the Top**

Tone at the top refers to the ethical atmosphere that is created in the workplace by the organization’s leadership. It defines the level of commitment by management and the board of directors to having an open, honest, and ethically-correct corporate culture. The Association of Certified Fraud Examiners (ACFE, 2020) posits that whatever tone management sets will have a trickle-down effect on employees of the company. This implies that if the tone set by the board of directors and the top-level group within a business upholds ethics and integrity, mid-level managers and the employees below them will be more inclined to uphold those same values.

Thus, it is a key element of an organization’s system of controls, for proper support from the top provides a robust foundation for controls. However, if the upper management appears unconcerned with ethics and focuses solely on the bottom line, employees will be more prone to commit fraud because they feel that ethical conduct is not a focus or priority within the organization. Employees pay close attention to the behavior and actions of their bosses, follow their lead and do what they witness their bosses doing.

Corporate greed at the executive level has destroyed hundreds of companies, drained stockholders of their investments, and left innocent employees without work. Ken Lay, Jeffrey Skilling, and Andrew Fastow from Enron; Bernie Ebbers from MCI/WorldCom; and Dennis Kozlowski at Tyco have become household names, and to many are synonymous with what is wrong with our corporate system (ACFE, 2020). Furthermore, these individuals represent only a small percentage of the executives who have abused their posts of power to commit corporate fraud. Over 100 public company CEOs have been sued over the last five years for committing white collar crimes. These CEO criminals were sending a clear (though perhaps unintentional) message to their employees that committing fraud is acceptable as long as it makes the company seem profitable. They were obviously not setting an ethical tone at the top for their employees. It

is crucial to a company's success for executives and management to set an ethical example (or tone) of how their employees should behave in the workplace. When those in top positions set the wrong, unethical example by committing fraud, their employees will take heed and follow in their bosses' fraudulent footsteps, creating an entire culture of workplace fraud. When executives put pressure on their employees to meet unrealistic goals to yield profits for the company, they are essentially forcing employees to do whatever it takes to achieve those goals, whether they achieve those goals improperly or not. In their minds, the end justifies the means. Treadway Commission (2022) stresses that the tone at the top plays a crucial and influential role in creating an environment in which fraudulent financial reporting is ripe to take place. To set the right tone, those in top positions of management have to follow four very important steps: communicate to employees what is expected of them; lead by example; provide a safe mechanism for reporting violations; and reward integrity.

### **Preventive control mechanism**

Preventive control mechanism is considered to be more pragmatic, as they are put in place to foreclose any problems from occurring, and as such, aid in helping to prevent losses or other negative outcomes. In the fraud arena the use of the term prevention emphasizes both common forms of the definition, to keep from doing and to hinder the fraudster from performing fraudulent activity. Adeniji (2004) is of the view that preventive controls are measures put in place by management to deter and prevent noncompliance with directives, policies and procedures. These preventive controls are intended to prevent risk of error, frauds and irregularities from occurring in transactions and prevention of loss. From a practical viewpoint, preventive controls are very critical branch of internal controls, since they are proactive tools that deter noncompliance. There are several ways to implement preventive controls. In most case management may implement tough punishment, relax exiting rules or motivate employees with rewards packages, whichever way is feasible (COSO, 2013). When preventive control fails it may be an indication of major weaknesses in the entire control structure leading to deficiencies in the subcomponents which will render the organization vulnerable to all manner of risks (Armstrong, et al., 2015; Bangmek et al., 2018). Unauthorized access to vital information is a good example of preventive control failure. The outcome may cause severe and irreparable damage to the organization. Similarly, a study revealed that the breakdown of internal control may compromise the corporate strategy with severe-associated repercussions. Though preventive controls are superior, its effectiveness can only be ascertained by regular monitoring such as validating accounting processes to intercept manipulations prior to the occurrence, which means it functions alongside detective controls (Arundel, Casali, & Hollanders, 2015; Brzeziński & B?k, 2015). The emergence of computerized systems of accounting processes has also lessens the work of internal auditors. This system prompts management of any possible breach within the control system, be it errors, fraud or payments exceeding thresholds. Since preventive control is employed prior to the occurrence of errors and irregularities it is prudent for management to enforce segregation of duties among individuals, thus those performing related functions (ter Bogt & Tillema, 2016). According to Bajra and ?adež (2018), the corporate leadership may as well be subjected to rigorous evaluation, concerning their commitment to the control environment. Matei and Drumasu (2015), believe it is inappropriate for an individual performing accounting duties to process and authorize payments, as it constitutes a breach of accounting standards.

Other dimensions of these controls involve the heads of departments verifying before approving purchasing requests to ensure the user departments are actually in need and that approval is given by only authorized persons (Horne, 2017; Tricker & Tricker, 2015). A recent study suggests that preventive controls also manifest into proper documentation of newly purchased assets, updating existing assets register with clear details on book values, and also confirm their existence and designated locations. The idea simply suggests that an organization must be proactive in managing to avoid threats especially those originated with deliberate intentions (García-Meca & García-Sánchez, 2018). Dzingai and Michael (2017), believe preventive controls could be expensive in nature but the positives outweigh the negatives impact. These

preventive controls are in the form of segregation of duties, mandatory annual vacation, proper authorization and approval, establishment of organizational chart to allocate jobs to responsible officers, adequate documentation, physical control over assets and constant training of staff.

### **Segregation of Duties**

Segregating duties is an effective measure to deter commission of occupational fraud, especially if combined job rotation. About 7 out of 10 occupational frauds are committed by one person acting alone. Including other people in functions makes collusion necessary, or makes the fraud far more difficult to commit. Having to involve or avoid another person in committing a fraud discourages most would-be fraudsters. This policy increases the belief that one will be caught, and reduces the chances of committing fraud. This is an easier method of fraud control to implement (COSO, 2020). The purpose of segregating duties is to thwart occupational fraud in the form of asset misappropriation and intentional financial misstatement. Segregation of duties can be simplified by staying focused on this purpose and enhancing practical risk assessment. Segregation of duties ensures that no employee or group of employees should be in a position to perpetrate and conceal errors or fraud in the normal course of their duties. (Stone, 2009). The lesser people involved in the transaction, the greater the opportunity for fraud. The basic internal control concept requires that different employees should be assigned different financial and accounting tasks. Segregation of duties limits the probability of loss (Capodanno, 2012). There is need for sufficient division of duties among those who are mandated to perform accounting procedures or control activities and those who are entrusted to handle assets. The steps followed in transaction processing and related activities should be designed in a way that the work of one individual is either independent or serves to check the work of another. Such arrangements reduce the risk of undetected error and reduce opportunities to misappropriate assets or conceal intentional erroneous entries in the financial statements. Segregation of duties serves as a discouragement to commit fraud and concealment of error because of the fraudster will require involving another individual concealing the act which is difficult (Stone, 2009).

### **Annual mandatory leave**

Internal controls mechanism such as mandatory vacations are used to prevent a single employee from committing fraud. One of the many basic tenets of internal control is that a banking organization ensure that employees in sensitive positions be absent from their duties for a minimum of two consecutive weeks. Such a requirement enhances the viability of a sound internal control environment because most frauds or embezzlements require the continual presence of the wrongdoer. Some regulatory bodies recommend that employees take two consecutive weeks of vacation and that workers' tasks be handed over to peers (Neil, 2017). The FDIC and the SEC are two regulatory bodies that have made statements about vacation guidelines. FDIC guidance says that mandatory vacation rules "are highly effective in preventing embezzlements, which usually require a perpetrator's ongoing presence to manipulate records, respond to inquiries, and otherwise prevent detection." From the foregoing therefore, employees in positions of fiscal trust are often required to take an annual vacation leave of at least five consecutive workdays, to reduce the risk of fraud which often requires an employee's constant presence to perpetuate.

The use of mandatory vacations is considered a best practice among financial institutions. The Federal Deposit Insurance Corporation (FDIC) is an independent agency created by Congress to maintain stability and public confidence in the nation's financial system. The FDIC Regulations Manual states: "Banks should have a policy that requires all officers and employees to be absent from their duties for an uninterrupted period of not less than two consecutive weeks. Management should consider suspending or restricting an individual's IT access rights during periods of prolonged absence. Organizations that implement mandatory vacation or job rotation policies are less likely to be victims of fraud, according to the Association of Certified Fraud Examiners (ACFE, 2016). The ACFE Report to the Nations on Occupational Fraud and



Abuse recommends mandatory vacations as a strong anti-fraud control, and includes it on the fraud prevention checklist designed to help organizations test the effectiveness of their fraud prevention measures. According to the 2016 Report, for all frauds reported by the global study, mandatory vacation controls were in place only 19.4% of the time. In 12.5% of the cases examined, the report notes that of the three main categories of fraud committed by employees (asset misappropriation, corruption, and financial statement fraud), these behavior red flags were present: • Refusal to take vacations • Control issues, unwillingness to share duties. Mandatory vacation and job rotation policies are two security best practices that help to prevent employee fraud and abuse. The implementation of a pro-active policy to address mandatory vacation or rotation of employees in financial positions would achieve best practices for fraud prevention

### **The Concept of Fraud**

Fraud can be described as an unlawful act of acquiring wealth by an individual or group of people in a planned manner. Some forensic accounting experts traced fraud history to the ancient Egypt in respect of those who took inventory of Pharaoh's valuables like grains and gold. Embezzlements and bribes then were very minimal and punishment for culprits very harsh. Archaeological findings in Mesopotamia and Egypt in 3300 B.C and 3500 B.C respectively showed evidence suggestive that accountants/scribes recorded economic transactions using clay tables of papyrus scrolls. Any suspicion of tampering with the record would result in the original one being enfolded and wrong doings fined and serious cases of mutilation might attract death (Oyedokun, 2012 and Zysman, 2004). Fraud is a global problem that affects organizations all over the world (ACFE, 2020).

Fraud has been defined differently by different studies because fraud is seen differently by different individuals or organizations as fraud for one may be completely not for another (Baldock, 2016). Similarly, Lokanan (2015) explains fraud as a multifaceted phenomenon, whose contextual factors are not fixed to a particular framework. While Kurpierz and Smith (2020) point out that fraud is a colloquial and technical term that is used as an umbrella system to describe a large number of dishonest and harmful behaviours. Consequently, the harm caused by fraud goes beyond direct financial loss, to the collateral damage that may include harm to external business relationships, employee morale, firm reputation, and branding (Bierstaker et al., 2006). Kranacher and Riley (2019) also present the components of fraud from a common law perspective which encompasses: “(1) A material misstatement; (2) Knowledge that the statement was false when it was spoken; (3) Reliance on the false statement by the victim; (4) Damages resulting from victim's reliance on the false statement. Albrecht et al., (2015) add that fraud can be classified into those committed against the organizations and those that are committed on behalf of the organizations. Albrecht et al. (2015) asserts that fraud begins when trust and confidence placed in an individual is violated; hence fraud involves all the deceptive ways in which an individual obtains an advantage over another by false representation. ACFE (2020) defines fraud as “fraud committed by individuals against the organizations that employ them which is among the costliest forms of financial crime in existence. Suh et al. (2019) add that Occupational fraud is fraud committed against an organization by its employees and sometimes characterized as internal, insider or employee fraud or just fraud. Occupational fraud goes undetected and is often never reported so determining the full extent of its losses is usually very difficult (ACFE, 2020). ACFE (2020) underscores that asset misappropriation has the highest level of occurrence of 86% cases but with the smallest median loss effect of \$100,000 per case. This is followed by corruption as the second-highest level of occurrence of 43% cases amounting to a median loss of \$200,000. Financial statement fraud is the least occurrence with only 10% of scheme cases but this scheme has the most devastating effect with a median loss of \$954,000. Generally, fraud is a deliberate intention motivated to receive or attract undue advantage. This understanding, therefore, differentiates fraud from error, which in business parlance is referred to as unintentional omissions or disclosures or misstatements. This implies that error is not to misappropriate the assets of an organization (Madray, 2006). In a simple term, fraud involves working outside the regulatory framework (Jones, 2011). It entails breaking the law and violating the regulatory framework.

## **Fraud Classification**

ACFE, (2012) broadly classified fraud into three as Corruption, Asset Misappropriation, and financial statements fraud. Each of these categories has several sub-categories. This study focused financial statement fraud.

### **Financial statement fraud**

Financial statement fraud is the least common type of occupational fraud occurring in less than 10% of the cases according to the ACFE report to the nation on occupational fraud and abuse (2018). Financial statement fraud, however, has a median loss of \$975,000 which is the highest out of the three categories of fraud on the fraud tree (ACFE, 2018). Financial statement fraud is now one of the biggest challenges in today's modern business world (Lawyers Connect, 2016). Financial statement fraud is the deliberate misrepresentation of the financial condition of an enterprise accomplished through the intentional misstatement or omission of amounts or disclosures in the financial statements in order to deceive financial statement users (ACFE, 2016). The negative impact of financial statement fraud on stakeholders is by far higher than corruption and asset misappropriation. Usually committed by senior management, this crime is typically a means to an end. The motives for perpetrating financial statement fraud include personal gain, keeping the business afloat, and retaining status as a leader in the organization. Fraudsters attempt to inflate the perceived worth of the company to make the stock appear more attractive to investors, to obtain bank approvals for loans and/or to justify large salaries and bonuses when compensation is tied to company performance.

This was the case in Enron, WorldCom, and Toshiba. Financial statement fraud can also lead to loss of jobs and pension and could have a long-lasting effect on the economic growth of a country (Mueller, et al., 2015). Financial statement fraud often results in some investors committing suicide (Trefgarne, 2002). It also jeopardises the going concern of a corporation (Black, 2010). This is the primary reason why this study set out to explore the views of major stakeholders in the industry on how to reduce financial statement fraud through a system shift to formidable internal control system. Financial statement fraud does not occur regularly as compared to other types of occupational fraud, but when it happens, the implications are usually significant. The fear of systemic market failure occasioned by inflating profits is achieved through manipulation of revenue, valuation of asset wrongly and improper expense recognition. In this study, financial statements fraud was examined in the perspectives of improper revenue recognition and overstatement of assets.

### **Improper revenue recognition**

In a simple term, revenue is recognized and recorded for financial statement purposes when the sale occurs, which usually occurs on delivery of the product or provision of the service. Thus, it is different from cash flows that are recorded when the cash is received. In reality, determining when to recognize revenue in all of the scenarios that happen in the real world is very complex. There are accounting rules to guide the revenue recognition process, which can be broken when committing fraud. In fact, improper revenue recognition is the most common type of financial statement fraud (Beasley et al. 2010; Dechow et al. 2011; Gao & Srivastava 2011). Revenue schemes focus on manipulating revenue. This normally means falsely increasing reported revenue, but in some cases the reverse can be true. Revenue schemes are classified into the following categories; fictitious or inflated sales, timing schemes, misclassification schemes, gross-up schemes. The usual reason revenue is improperly recognized is to fraudulently increase revenue and consequently raise income, in order to improve the financial performance as shown in the income statement. It can also be used to decrease these figures, but that is comparatively rare.

## **Overstatement of assets**

Asset accounts are manipulated to enhance a company's statement of financial position, especially to positively impact important ratios involving assets. The overstatement of current assets may involve inflating the value of inventories or trade receivables. The valuation of inventory involves two separate elements: quantity and price. Determining the quantity of inventory on hand is often difficult. Goods are constantly being bought and sold, transferred among locations and added during a manufacturing process. Figuring the unit cost of inventory can be problematic, too; Fifo, Lifo, average cost and other valuation methods can routinely make a material difference in what the final inventory is worth. As a result, the complex inventory account is an attractive target for fraud. Dishonest organizations usually use a combination of several methods to commit inventory fraud: fictitious inventory, manipulation of inventory counts, non recording of purchases and fraudulent inventory capitalization. All these elaborate schemes have the same goal of illegally boosting inventory values. The obvious way to increase inventory asset value is to create various records for items that do not exist: unsupported journal entries, inflated inventory count sheets, bogus shipping and receiving reports and fake purchase orders. Since it can be difficult for the auditor to spot such phony documents, he or she normally uses other means to substantiate the existence and value of inventory.

## **Mediating and Moderating Variables**

A mediating variable (or mediator) explains the process through which two variables are related, while a moderating variable (or moderator) affects the strength and direction of that relationship. Including mediators and moderators in your research helps you go beyond studying a simple relationship between two variables for a fuller picture of the real world. These variables are important to consider when studying complex correlational or causal relationships between variables. Including these variables can also help you avoid or mitigate several research biases, like observer bias, survivorship bias, undercoverage bias, or omitted variable bias. Thus, this study used internal audit and external audit as mediating and moderating variables respectively.

## **Internal Audit**

Internal audit is one major guaranteed way of ensuring fraud prevention when standards are complied with by organisations (Tanja, Julija & Tatjana, 2016). It contributes to the attainment of organizational objectives (El Azhary & Taouab, 2018). Internal Audit as an autonomous evaluation of the overall internal activities of an entity, which entails the review of its entire operations (Kontogeorgis, 2018). Internal audit is a subset of organisational internal control system, established by the management to oversee all the operations of the entity. Along this line Benjamin, Adegbite, Nwaobia and Adekunle(2020) submitted that internal audit is an essential feature of the internal control system established by an organisation's management towards ensuring compliance with policies and procedures designed to achieve organisational objectives. To halt fraud, the internal auditor needs to be independent, objective and report irregularities without fear of pressures from executives. In today's changing business environment, it is also important that internal auditors should be knowledgeable of business, systems, and developments and skilful in the use of information technology (ICT), because as it is essential in ensuring the integrity of financial reports through harmonious working of the entire internal control component in banks. The head of internal audit should be qualified with auditing certification such as the Certified Internal Auditor (CIA) and chartered accountancy certifications (FCA, ACA, FCCA, and ACCA). The qualities of internal auditors combined with internal control activities is needed to prevent fraud in organizations. According to Mc Cafferty (2016) one of the major activities of internal audit is to execute a fraud risk assessment that singles out an organization's vulnerabilities to internal and external fraud. Another way internal audit prevents fraud is through unscheduled audits or surprise audits (Lowers & Associates, 2018). An impromptu audit strictly probes the company's internal controls that are expected to forestall and spot fraud. These preventative measures

enable auditors to spot any flaws that could make assets susceptible and to determine whether anyone has already abused those weaknesses to report fraudulently and/or misappropriate assets. Another fraud prevention mechanism is whistle blowing (Fawole & Fasua, 2017). Fraud prevention comes under internal control systems of organizations like banks and consists of five interrelated components that provide the foundation for fraud detection (COSO, 2013). These five components are control environment, risk assessment, control activities, monitoring activities, and information and communication. Providing a proper control environment for an organization is very essential in ensuring fraud detection. Risk assessment deals with the recognition and scrutiny of the achievement of the management objectives related risks (Terje, 2016). With control activities, auditors possess sufficient information required in examining the overall control system designed in monitoring the strategic financial management practices of a firm. Furthermore, information technology plays an important role in ensuring the integrity of financial reports. The harmonious working of this entire internal control component ensures that fraud is detected in banks.

### **External Audit**

External audit is an impartial, independent examination by an external auditor of a company's business and financial condition (Porter et al., 2003). The external auditor's overall responsibility is to deliver reasonable assurance to the shareholders of the company and, in general, that the financial statements are free from material misstatement. In addition, they must assess whether the financial statements are true, fair, and compliant with international accounting standards. It must be acknowledged that external auditors are chosen by shareholders to help protect their capital. The role of audit as control mechanisms are considered to be crucial to ensure the reliability and accuracy of the financial institutions financial reporting. Every organisation is required to set up audit committee who has responsibility towards internal audit, including reviewing the internal audit programme and ensuring the adequacy of the scope of the internal audit activities (Yasin & Nelson, 2012). Financial institutions are also mandated by BOFIA (Bank and other financial institution) Act 2020 section 28 to have an independent auditor known as external auditor who will examine the financial statements of the banks and state in his report whether the financial statements show a true and fair view. External auditing function is carried out by an external auditor who is approved by the shareholders of the organization. External auditors' reports are key to measuring performance of public investments in banks as the quality assurance reports attracts deposit while a negative report could trigger off a panic withdrawal of deposits. Choosing the right auditor helps ensure a thorough and transparent audit of the business (Rashid, 2017). The harmonisation of internal and external audits has received a lot of attention, especially during the past decade (Rashid, 2017). Board audit committees, internal auditing, and external auditing as tripartite tools that aid confirm the financial reporting reliability (Saber, 2022). The financial data usage by directors (on behalf of owners) and the contribution of internal and external auditors increases the usefulness of information submitted by management (Rashid, 2018).

### **Theoretical Framework**

This study is anchored on two main theories of agency theory (Jensen & Meckling, 1976) and the fraud triangle theory (Cressey, 1950). While agency theory utilised in establishing the role of internal control system and the weaknesses of the current accounting system in fraud menace, the fraud triangle model gives an account of the three elements that could enable management to commit financial statement fraud. The two theories will now be considered in more details and linked together. The choice of Agency Theory is based on its ability to inform the critical role it plays in the asymmetry conflict between the principal and the agent, making the Fraud Triangle Model highly compatible with Agency Theory in developing the internal control system and its fraud prevention, deterrent and detection capacity. The Fraud Triangle Model explains the three elements that are responsible for criminal violation of trust. Wolfe and Hermanson (2004) improved on the Fraud Triangle Theory and added the fourth element which they called capacity to form the Fraud Diamond Model.

## Agency Theory

Agency theory which is elsewhere called contracting theory is one of the theoretical perspectives that has been widely used in understanding organisations and has been seen to dominate current accounting research (ICAEW, 2005). Agency theory was first introduced to management literature by Jensen and Meckling (1976) (Albrecht, et al., 2004; Colbert & Jahera, 2011). Agency theory describes the principal-agent relationship that exists between shareholders and management, with top management acting as an agent whose personal interest do not naturally align with the company's and the shareholders interest (Jensen & Meckling, 1976). From the perspective of agency theory, directors and managers have a responsibility to ensure that true and fair view financial statements are issued to the existing shareholders, to provide information on the quality of their stewardship of the company. The directors' role in overseeing financial accounting processes and the risk of unethical behavior in this function creates an agency cost for the shareholders. In the context of the agency relationship between shareholders and directors, financial statement fraud may be used to conceal the failure of company directors in their duties towards the company's shareholders. In this case, the financial figures are altered and the company's true activities are not reported to shareholders. However, the agency theory is premised on the economic perspective which assumes that a conflict of interest characterizes the relationship between the principal and the agent (Albrecht, et al., 2004; ICAEW, 2005; Choo & Kim, 2007; Chariri, 2008). Such conflict usually occurs between agent and principal. This conflict of interest usually occurs as a result of information asymmetry (Arnold & de Lange, 2004). Information within an organisation is very critical to decision making, and management working at the coal face of the operations are privy to essential information that can be manipulated to maximize their interest at the expense of the principal (ICAEW, 2005). As a result of this, management (agent) has a competitive advantage of information within the company over that of the owners (principal). The information advantage that the agent has resulted in the inability of the principal to control the desired action of the agent (Arnold & de Lange, 2004). This conflict of interest is called agency problem (Albrecht, et al., 2004). Because of information asymmetries and self-interest, principal lacks reasons to trust their agent and will seek to resolve these concerns by putting in place mechanism to align the interest of agents with those of the principal and to reduce the scope for information asymmetries and opportunistic behaviour for financial statement fraud (Albrecht, et al., 2004; ICAEW, 2005). The nature of the misstatement in financial accounts will depend on the pressure or motive behind it. If the motive is misappropriation of assets, the misstatement required will involve the understatement of income and assets and the overstatement of expenses and liabilities, in order to conceal the extent of equity which ought to be available to owners or the amount of unused grants repayable to funding bodies. If the motive is to conceal poor or negligent performance, the misstatement required will involve the overstatement of income and assets and the understatement of expenses and liabilities, in order to create a false and optimistic view of performance. An essential control to prevent financial statement fraud lies in the oversight of accounting systems by independent non-executive directors who are not directly responsible for the operations of the firm but are charged with the control of its systems and governance.

## Fraud Triangle Theory

Cressey (1971) postulated the theory of fraud triangle. He observed that fraud is likely to occur given a combination of three factors; namely- Pressure (Motivation), Opportunity and Rationalization. Pressure here refers to needs or desires that have to be satisfied. It could be divided into financial pressure, vices, work-related pressure and other pressures (Adeniji, 2012). Opportunity to commit fraud, conceal the fraud or avoid being punished forms the second element of the fraud triangle. The third element is rationalization which entails giving unnecessary explanation(s) to justify one's involvement in fraud. There exists pressure, motivation or compulsion on the fraudster who identifies opportunity which he utilizes and tries to justify his actions by unnecessary rationalization.

## Fraud Diamond Theory

Wolfe and Hermerson (2004) postulated the fraud diamond theory. Fraud diamond added a fourth dimension to fraud triangle where it states that an individual's capability, personality trait and abilities can play a major role in determination of fraud occurrence. Despite the existence of opportunity, with pressure and rationalization as attracting forces to it, individual's trait and ability to recognize the opportunity and perpetrate the fraud were other essential factors for fraud to occur.

## Empirical Review

This sub section presents the empirical evidence (i.e those research that are done on the topic area) to support the undertaking of the research and helps the researcher to pin point the knowledge gap in the literatures.

**Joseph & Isiaka (2022)** examined the effect of internal control system on risk management of firms in Nigeria. The population is thirty-seven (37) listed financial services firms and sample size are twenty-nine (29) deposit money banks and listed insurance firms in Nigeria and twenty (20) were administered to each of the sample size firms. The cluster sampling techniques was adopted for the study. Primary data was sources through the administered questionnaire to the respondents through the use of five point Liker scale system, and the SMART-PLS-3-SEM was used to analyze the data fitness and test of research hypothesis. Constructive reliability and validity and the discriminate validity measure were used to test the fitness of the model. Path coefficient, predictive relevance of exogenous. Findings from the study revealed that control environment and monitoring are positive and significant effect on risk management, while the information and communication has a negative and significant effect on risk management. Risk assessment show an insignificant positive effect on risk management while the control activities is negative and insignificant effect on risk management of the listed financial services firms in Nigeria. In conclusion, the study found that internal control system has a significant influence on risk management. It is recommended among others that the management of financial services firms should maintain the used in control environment, monitoring system because they play a greater in effect on risk management while critically look the measure on to restructure their ICT system and improve on disclosure and reporting system.

**Chnar (2022)** analyzed the impact of internal control systems on fraud detection and prevention of commercial companies in Iraq. It is necessary to set an appropriate tone at the top, and top management should encourage ethical behaviour in a transparent manner. A risk assessment process needs to be set up, and the risk of fraud can be assessed by brainstorming to deceive the organization. It is necessary to create report and the investigation process. Thus, this work attempted to review and analyze 20 articles among different countries to reveal the importance of internal control system in preventing and detecting fraud in commercial companies. It is discovered that it has a significant role in fraud prevention.

**Okoro & Onyebueke (2021)** examined fraud detection, prevention, control, and investigation in Nigeria financial sector. The specific objectives were to; assess the motivation behind fraud, and fraudulent activities in Nigeria, investigate how fraud is concealed, examine processes of fraud discovery, and appraise the justification for committing fraud. Sample survey research was adopted for the study while the population comprised of banks, insurance firms, pension fund custodians, and microfinance banks.

**Joseph (2020)** assessed the effect of internal controls on fraud prevention Ghana. The questionnaire was used to obtain data for the study. A combination of purposive sampling and random sampling techniques were used to select the sample elements. A sample of ten (35) management staff including the internal auditor was selected for the study. The study revealed that, the internal control measures put in place by management have helped the bank in preventing fraud. It was again revealed that majority of the respondents

agreed that management ensure that all necessary measures needed to prevent and detect fraud are provided. Also, majority of the respondents (91.4%) revealed that there is an effective supervision and implementation of internal control system capable of revealing fraudster's mode of operations in the bank.

**Peter & Tonye (2020)** studied on providing empirically findings on internal control strategies influence on listed commercial banks financial performance in Nigeria within 2000-2018 respectively. Secondary data sourced were analyzed through the error correction mechanism (ECM) for identified long-run co-integrating relationship that exists among variables, and t-statistics output were employed to test formulated hypotheses in the study. The empirical results of study shows that profitability with security of funds control strategies have a non-linear significant influence on financial performance of listed commercial banks in Nigeria, while effectiveness and efficiency control strategy has a linear significant influence on listed commercial banks financial performance in Nigeria for the period under study. The study further drew conclusion premised on empirical findings that internal control strategies are of necessity to corporate financial performance (listed commercial banks in Nigeria) in upholding the going concern concept and recommend to its management to periodically review internal control strategies standard and employ modern sophisticated measures specifically on effectiveness and efficiency control strategy due to its linear significant influence on financial performance of listed commercial banks in Nigeria for the period under study.

**Wagdi et al. (2019)** focused on the influence of internal controls including risk assessment, internal audit function on the financial performance of Egypt's food processing firms. The study was carried out among 114 sampled companies through stratified and random sampling. The study used semi-structured questionnaires as the main research tools for data collected through emails. The study revealed that internal audits involve assets audits and liabilities audits. Assets audited included stock, cash fixed assets available. On the other hand creditors and accruals are also audited. The study revealed that audit functions on inventory especially in fast-moving consumable goods are carried out on a routine basis to avoid shoplifting, fraud detection within an organization, and effective stock movement to avoid dead stock. The functions of auditing stock were found to have a positive effect on the profitability of fast-moving consumable goods.

**Alawattagama (2018)** explored on the impact of internal control on firm performance. A sample of forty five banking and finance companies listed on the Colombo Stock Exchange (CSE) was selected for this study and uses both primary and secondary data for the empirical analysis. The extent of adoption of internal control practices was assessed by using the Enterprise Risk Management integrated framework of committee of sponsoring organization (COSO) of the Treadway Commission of USA. Return on equity (ROE) is used as a proxy to measure the firm performance and uses multivariate regression analysis to assess the impact of key ERM functions on firm performance. This study found event identification, risk assessment, risk response and information and communication indicate an insignificant positive impact on firm performance.

**Le & Tran (2018)** examined the effect of internal control system on asset misappropriation in Vietnamese firms. Based on questionnaires collected from internal auditors, accountants and department managers in Vietnamese firms, the study assess the impact of COSO five internal control components on the popularity of asset misappropriation in the firms. The results show that of the five components, control environment presents the strongest impact, followed by control activities, information and communication in respective order. Determinants with the mildest impact are risk assessment and monitoring of control. Based on the findings, it is important that the management of the firms improve the internal controls to effectively reduce the chance of fraud in their firms.

**Chimeocha (2018)** carried out a study on the examination of internal audits as an effective tool for fraud control in a manufacturing organization. The main objective of the study is to examine the internal audit

system in the operation of companies in Nigeria and evaluate the effectiveness of the system as a strategy for fraud control. The data were collected through the primary source, and using Taro Yamane's 1964 formula out of the population of eight (8) staff in Michelle laboratory Enugu. The data were analyzed using t-test analysis. The study revealed that internal audit has statistical significance association on fraud prevention in manufacturing, organization, also that internal audit has statistical significance association on fraud detection in manufacturing, organization, and finally, internal audit has no statistically significant association on fraud remediation in manufacturing, organization.

**Olatuji & Adekola (2017)** studied the impact of internal control on fraud detection, and prevention in Nigeria deposit money banks: evidence from Southwest. This study examined the impact of auditors captured by risk assessment, system audit, and verification of financial reports on banking fraud control. The study relied on primary data. Multiple regression techniques and ANOVA were used for the analysis. The results indicated that the level of fraud control in Nigerian banks during the period covered was low; the result revealed that risk assessment management, system audit, and verification of financial reports adopted by the banking industry in Southwest Nigeria limit the fraudulent activities among the Nigerian banks.

### Identification of Knowledge Research Gap

Empirical studies in the area of internal control system reviewed across the globe had given none consideration to its relationship with financial statement fraud. Thus, the review in Nigeria, other Africa countries and the rest countries of the world above pin pointed out various research gaps which the current study seeks to fill. From the foregoing extant empirical review, the following gaps were clearly identified:

**RG1** Some of the previous studies were internationally based whose business and environmental peculiarities are quite different from Nigeria and as such, the research findings from these countries would be foolhardy to be applied in Nigeria.

**RG2** Many of the previous studies did not give recuse to the time-frame of their research making it very different difficult to appropriately know the periods of their investigation. The import is that time reference could be made with absolute certainty.

**RG3** Most of the existing studies from both international and national often focused on internal control system using COSO 1992 framework components as proxies for internal control. The said framework components are only good factors that facilitate the analysis and understanding of internal business domain but not control mechanism with varying degree of findings.

These are phenomenal research gaps in literature. It is against these milieu that this current research extended the body of knowledge and investigated the relationship internal control system and financial statement fraud of quoted banks in Nigeria by focusing attention on internal control mechanism and financial statement fraud in the perspectives of deterrent control mechanism and preventive control which showcased the epitome of quality of good antidote with the capacity to forestall the mighty masqueraded financial statement fraud in the dimensions of improper revenue recognition and overstatement of assets for banks to breath fresh air of survival as a going concern.

Based on these assertions, the study, therefore, formulates the following hypothesis:

Ho1 There is no significant relationship between deterrent control mechanism and improper revenue recognition of Nigerian quoted banks.

Ho2 Deterrent control mechanism does not significantly relate to overstatement of assets of Nigerian quoted banks.



Ho3 There is no significant relationship between preventive control mechanism and improper revenue recognition of quoted Nigerian banks.

Ho4 Preventive control mechanism does not significantly relate to overstatement of assets of Nigerian quoted banks.

Ho5 There is no significant mediating influence of internal audit in the relationship between internal control system and financial statement fraud of quoted Nigerian banks.

Ho6 External audit has no significant moderating influence in the relationship between internal control system and financial statement fraud of quoted Nigerian banks.

## METHODOLOGY

Correlation survey design was adopted in carrying out this study. The focus on survey design is deemed appropriate as supports the use of primary data via structured questionnaire with a large number of respondents (Ezejelue et al., 2008) to elicit the opinion of the participants on the issue of interest in the study. The population of the study comprises 10 most capitalized listed deposit money banks on the main and premium boards of the banking sub-sector of the Nigerian Stock Exchange (NSE) as contained in the NSE daily official list (Equities) for January 8, 2023. These banks constitute the working population of the study are depicted in the table 1 below.

**Table 1. Working Population of the Study**

Ranking	Name	Founded	Branches	ATM	Market Capitalization N Billion
1	Zenith Bank Plc	1990	500	2,044	787.58
2	GT Bank	1990	250	1,366	603.33
3	First Bank pls	1894	760	2,600	391.26
4	Stanbic Bank Plc	1989	166	732	367.98
5	Access Bank	1989	600	2,963	319.9
6	UBA	1948	428	2,675	263.34
7	Eco Bank	1989	250	2460	182
8	Union Bank	1917	320	800	168.9
9	Fidelity Bank	1988	240	774	84.32
10	Sterling Bank	1960	141	654	43.47

Source: NSE (2023)

### Statistical Data

Data for the study was obtained through structured questionnaire from the directors, managers, auditors, accountants, and top executives opinions from the ten quoted commercial banks with national spread in Nigeria.

### Measurement of Variables

The sub-construct of independent variables (deterrent control mechanism and preventive control mechanism) were measured in the perspectives of; strong tone at top and efficient risk management; and segregation of duty and mandatory annual vacation respectively in this study, while the proxies of dependent variables (improper revenue recognition and overstatement of assets) were measured in terms of fictitious revenue and timing difference; inflated inventory and bloated receivables respectively in this study.

### Statistical Test

The study employed quantitative techniques to analyse the primary data and adopted and used the Pearson correlation and regression model of inferential statistics to analyze and test the null hypotheses at 0.05 level of significance with the aid of Statistical Package for Social Science (SPSS) version 25. Also, descriptive statistics through table and percentage were reported.

### Model Specification

In line with the conceptual framework and the null hypotheses stated earlier, multiple regression model (MRM) was employed to estimate the relationship of the independent variables. Specifically, the regression model is:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 \dots + \beta_nX_n + \varepsilon \dots \dots \dots (3.1)$$

Where:

- Y = the dependent or outcome variable
- X1, X2 ... Xn = set of independent variables or predictors
- $\alpha$  = constant term
- $\beta_1, \beta_2, \dots \beta_n$  = coefficients of the predictor variables and
- $\varepsilon$  = the error term.

For the purpose of this study, we posit that the application of internal control system by the licensed quoted commercial banks in Nigeria will lead to financial statement fraud reduction through deterrent control mechanism, preventive control mechanism. To this end, we proposed that:

$$\text{Financial statement fraud} = f(\text{Internal control system}) \dots \dots \dots (3.2)$$

Where financial statement fraud is measured by improper revenue recognition (IRR), overstatement of assets (OOA), and internal control system is measured by deterrent control mechanism (DCM), preventive control mechanism (PCM).

$$\text{It follows that: DCM and PCM} = f(\text{IRR, OOA}) \dots \dots \dots (3.3)$$

This study adopted the econometric model as put forward by Roy chowdhury (2006); Cheng and Warfield (2005); and Yusuf and Abubakar, (2017). Thus, the following regression equations and the functional form of our model as given below.

**Functional form of the model:**

$$IRR = f(DCM, PCM) \dots\dots\dots (3.4)$$

$$OOA = f(DCM, PCM) \dots\dots\dots (3.5)$$

$$IAM = f(DCM, PCM) \dots\dots\dots (3.6)$$

$$EAM = f(DCM, PCM) \dots\dots\dots (3.7)$$

The above functional equations are trans-modified into mathematical form by adding constant term ( $\alpha_0$  &  $\beta_0$ ), and slope ( $\alpha_1 - \alpha_2$  &  $\beta_1 - \beta_2$ ) in the model below:

**Mathematical form of the model:**

$$IRR = \alpha_0 + \alpha_1 DCM + \alpha_2 PCM \dots\dots\dots (3.8)$$

$$OOA = \beta_0 + \beta_1 DCM + \beta_2 PCM \dots\dots\dots (3.9)$$

$$IAM = \epsilon_0 + \epsilon_1 DCM + \epsilon_2 PCM \dots\dots\dots (3.12)$$

$$EAM = \lambda_0 + \lambda_1 DCM + \lambda_2 PCM \dots\dots\dots (3.13)$$

The above mathematical equations are trans-modified into econometrics form by adding constant term ( $\alpha_0$ ,  $\beta_0$ ,  $\epsilon_0$  &  $\lambda_0$ ), slope ( $\alpha_1 - \alpha_2$ ,  $\beta_1 - \beta_2$ ) and error term ( $\epsilon$  &  $\mu$ ) in the model below:

**Econometric Expression of the Model:**

$$IRR = \alpha_0 + \alpha_1 DCM + \alpha_2 PCM + \epsilon \dots\dots\dots (3.10)$$

$$OSA = \beta_0 + \beta_1 DCM + \beta_2 PCM + \mu \dots\dots\dots (3.11)$$

$$IAM = \epsilon_0 + \epsilon_1 DCM + \epsilon_2 PCM + q \dots\dots\dots (3.12)$$

$$EAM = \lambda_0 + \lambda_1 DCM + \lambda_2 PCM + z \dots\dots\dots (3.13)$$

Where:

- DCM = Deterrent Control Mechanism
- PCM = Preventive Control Mechanism
- IRR = Improper Revenue Recognition
- OSA = Overstatement of Assets
- IAM = Internal Audit Mechanism
- EAM = External Audit Mechanism

$\alpha, \beta, \text{¥}, \text{€} \text{ \& } \text{£}$  = Constants

$\alpha_1 - \alpha_2, \beta_1 - \beta_2, \text{¥}_1 - \text{¥}_2, \text{€}_1 - \text{€}_2 \text{ \& } \text{£}_1 - \text{£}_2$  = Coefficient of predictor variables

$\alpha_0, \beta_0, \text{€}_0 \text{ \& } \text{£}_0$  = Error term

## RESULTS AND DISCUSSIONS

### Data Presentation

The data sources to this end are the survey conducted with Directors, Accountants, Auditors, Heads of Departments and anti-fraud control experts and top executives responses from twenty two quoted commercial banks with national spread in Nigeria of this study.

#### 4.1.1 Questionnaire Distribution and Collection

Questionnaire	Freq.	Percentage	Cum. Percentage
Number of questionnaire distributed	400	–	
Number of questionnaire returned	241	60.25	
Number of questionnaire not returned	159	39.75	
Number of invalid questionnaire	11	4.56	
Number of valid questionnaire	<b>230</b>	95.44	
Sex			
Male	186	71.54	71.54
Female	74	28.46	100

**Source: Solomon and Abubakar Survey, (2023)**

The researchers distributed 400 copies of questionnaires to the banks, 241 were returned which represents 60.25% and 39.75% was not returned. 95.44% of the returned questionnaire was valid for this study as shown in the table above. Regarding sex distribution, male employees had 71.54% while the female had 28.46% of the questionnaire administered.

#### Table 4.1.2 Job Responsibility

Job Responsibility	Freq.	Percentage	Cum. Percentage
Directors, Accountants, Auditors & Internal Control	189	47.25	47.25
Anti-Fraud detection	120	30.00	77.25
Ethics Compliance unit	91	22.75	100
Total	<b>400</b>	<b>100</b>	

**Source: Solomon and Abubakar Survey, (2023)**

The questionnaire was distributed to 400 employees of the banks who worked as directors, accountants, auditors, internal control, anti-fraud detection, and ethics compliance unit (47.25%, 30.00% & 22.75%) respectively as shown in the table above. The result implies that the respondents give a valuable feedback since they are aware of the main aim of the research (i.e. internal control system and financial statement fraud).

**Table 4.1.3 Educational Background**

<b>Educational Level</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Cum. Percentage</b>
Professional	63	15.75	15.75
MSc	77	19.25	35
BSc	131	32.75	67.75
HND	59	14.75	82.5
ND & others	70	17.5	100
<b>Total</b>	<b>400</b>	<b>100</b>	

**Source: Solomon and Abubakar Survey, (2023)**

With respect to educational background, 32.75% of the participants have Bachelor of Science degrees in the field of the accounting, 19.25% has M.sc, 15.75% of the respondents are professional, 14.75% has HND and 17.5% are ND holders in accounts and others. This implies that the sampled banks hired those persons that are capable of performing those tasks in their field of study so that fraud control which needs commitment, competence and ethical value is fulfilled.

**Table 4.1.4 Participants field of Specialization**

<b>Specialization</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Cum. Percentage</b>
Internal control	146	36.5	36.5
Accountants & Auditors	98	24.5	61
Fraud Experts	87	21.75	82.75
Management	69	17.25	100
<b>Total</b>	<b>400</b>	<b>100</b>	

**Source: Solomon and Abubakar Survey, (2023)**

Regarding the field of study and the respondents work experience table 4.1.4 revealed that 36.5, 24.5%, 21.75%, and 17.25% of the survey respondents working as an internal control, auditor, and fraud expert and management.

**Table 4.1.5 Years of Experience**

<b>Experience</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Cum. Percentage</b>
0-5 years	140	35	35
6-10 years	70	17.5	52.5
11-15 years	87	21.75	74.25
16-20 years	56	14	88.25
>20 years	47	11.75	100
<b>Total</b>	<b>400</b>	<b>100</b>	

**Source: Solomon and Abubakar Survey, (2023)**

Table 4.1.5 shows that on average (35%) of the sampled banks' employees have work experiences of 0-5 years, and 17.5% are 6-10 years, 21.75% are 11-15 years, 14% are 16-20 years and 11.75% have more than

20 years respectively.

### Evaluation of Internal Control System Based on Some Criteria

COSO (1992) framework for evaluating internal control deficiencies provides useful guidance and focuses on five key assessment areas: the control environment, risk assessment, control activities, information and communication systems, and monitoring activities.

**Table 4.1.6.1: Major influence in participants’ response**

Opinions	Frequency	Percentage
Control environment	82	20.5
Risk assessment	47	11.75
Control activities	110	27.5
Information and communication systems	75	18.75
Monitoring activities	86	21.5
<b>Total</b>	<b>400</b>	<b>100</b>

**Source: Solomon and Abubakar Survey, (2023)**

Table above clearly shows that the control activities has the strongest influence on the internal control as 27.5% of the sample banks. Monitoring activities was also found to be 21.5% of the sample. The control environment has 20.5% of the sample. Information and communication systems and risk assessment 18.75% and 11.75% respectively. The import from the above analytical evaluating factor of internal control variables provides provide reasonable assurance about the achievement of a business’s objectives in three key areas: the reliability of financial reporting, effectiveness and efficiency of operations, and compliance with applicable laws and regulations.

### Evaluation of Financial Statement Fraud Based on Some Criteria

**Table 4.1.6.1: Major influence in participants’ response**

Opinions	Frequency	Percentage
The professional accountancy ethical codes	120	30.00
The Association of Certified Fraud Examiners ethical codes	89	22.25
The Nigeria legal system	64	16.00
Imbibed societal value system	35	8.75
My belief in not harming the society	15	3.75
Banks’ policies and rules	77	19.25
<b>Total</b>	<b>400</b>	<b>100</b>

**Source: Solomon and Abubakar Survey, (2023)**

Table above clearly shows that the accountancy professional ethical codes have the strongest influence on the conduct of accountants in their professional practice as 30% of the sample attributed their professional conduct to this factor in the preparation and presentation of financial statements. Other important influences are the Association of Certified Fraud Examiners ethical codes with 22.25% of the sample. The banks

policies and rules in which accountants work have influence on their conduct with (19.25%) of the sample. The Nigeria legal system was also found to have influence in the accountants financial reporting as indicated 16% of the sample. Imbided societal value system and belief is not harming the society depicted 8.75% and 3.75% respectively. Internal control has been considered as the most important mechanism for ensuring proper adherence to the company’s policies, procedures, standards and regulations. In addition, to achieve efficient and effective operations, adherence to internal controls is assumed to protect the companies from any misconduct, wrongdoings or, in particular, financial statement fraud.

**Table 4.1.6.2: Summary of Research Panel One on Deterrent Control Mechanism**

S/No	Statement Please tick the suitable box next to each statement (ranging from strongly disagree (1) to strongly agree (5)).	RESPONSES				
		SA	A	UND	D	SD
1	Proper and strong tone at the top and periodic assessment of the tone throughout the organization by the board encourages ethical behaviour deters fraudulent practices.	50	25	0	4	2
2	The existence of sufficient skepticism in the oversight provided by members of the financial reporting supply chain, including management, the board of directors, audit committee, and internal and external auditors forecloses fraud.	20	15	0	2	1
3	The banks have formal and regularly scheduled procedures to perform fraud risk assessment and in turns deter financial statement fraud.	35	15	1	1	1
4	The bank have robust and effective communication among participants in the financial reporting process and as such discourages fraud.	27	17	0	2	2
5	Adequate attention and direction provided by the board of directors and its committees, especially the audit or risk management committees helps to dissuade fraud.	18	13	0	1	2

Scales	Frequency	Percent
Strongly Agree	155	59.62
Agree	85	32.69
Undecided	2	0.80
Disagree	10	3.81
Strongly Disagree	8	3.08
Total	260	100

**Source: Solomon and Abubakar Survey, (2023)**

The study wished to establish the extent to which the participants agree with the statement that the deterrent control mechanism is an antidote for financial statement fraud of the banks as it forecloses the occurrence of the fraud. The study revealed that 59.62% of the participants strongly agreed that the tone at the top and effective risk management are good deterrent control mechanism of financial statement fraud, while 32.69% did agree which brings the total of 92.31% agreeing with the statement. On contrary 0.80% disagree, 3.81% undecided and 3.08% strongly disagreed, which gives a total of 7.73% disagreeing with the statement that preventive control mechanism is antidote to the financial statements fraud. This implies that the tone at the top and effective risk management coupled with the organisation ethical culture and the board’s doggedness

to stamp out fraud is the albatross of the fraudsters in the sampled studied banks.

**Table 4.1.6.3: Summary of Research Panel Two on Preventive Control Mechanism**

S/No	Statement	RESPONSES				
		SA	A	UND	D	SD
	Please tick the suitable box next to each statement (ranging from strongly disagree (1) to strongly agree (5)).					
6	Appropriate segregation of duties or mitigating control within transaction processing, authorization, custody, and recording, procurement, account payables and disbursements functions prevent and reduce a person’s opportunity to commit fraud, conceal fraud or errors.	72	50	4	2	1
7	An appropriate level of management authority approves and authorizes all transactions over a specified limit, and authorization requires more than one signature.	25	17	2	0	0
8	Independent checks on whether jobs are getting done and recorded amounts are accurate helps to prevent fraud.	11	9	1	1	1
9	A policy that requires all officers and employees to have mandatory annual leave not less than two consecutive weeks is practically implemented.	20	7	2	3	1
10	Effective monitoring and follow-up processes help to prevent fraud activities.	15	11	1	3	1

Scales	Frequency	Percent
Strongly Agree	143	55.00
Agree	94	36.15
Undecided	10	3.85
Disagree	9	3.46
Strongly Disagree	4	1.54
<b>Total</b>	<b>260</b>	<b>100</b>

**Source: Solomon and Abubakar Survey, (2023)**

The study also aimed at establishing the extent to which the participants agree with the statement that the appropriate segregation of duty, mandatory annual leave and job rotation with appropriate authorization and proper approval of certain task level strategy are remedies for financial statement fraud in the banking industry.

The study revealed that 55% of the participants strongly agreed that segregation of duty, mandatory annual leave and job rotation with appropriate authorization and proper approval of certain task level are effective preventive control mechanism of financial statement fraud, while 36.15% did agree which brings the total of 91.15% agreeing with the statement. On contrary 3.85% disagree, 3.46% undecided and 1.54% strongly disagreed, which gives a total of 8.85% disagreeing with the statement that preventive control mechanism is antidote to the financial statements fraud. This means that segregation of duty, mandatory annual leave and job rotation with appropriate authorization and proper approval of certain task level would bring down fraudsters and their collaborators in the banks.



**Table 4.1.6.5: Summary of Research Panel Three on Improper Revenue Recognition**

S/No	Statement	RESPONSES				
	Please tick the suitable box next to each statement (ranging from strongly disagree (1) to strongly agree (5)).	SA	A	UND	D	SD
11	Significant pressure to achieve financial results give management an impetus to falsely inflate its earnings by recognizing revenue related to fake contacts or other fictitious sales.	79	57	7	1	3
12	Poor overall financial performance in the current period could lead management to inappropriately shift revenue from one period to another, giving an illusion of recovery, or to reduce current period taxes owed.	20	15	2	0	0
13	Complex transactions or those requiring a high degree of judgment could be subject to management bias, resulting in misstated revenue.	15	7	3	1	1
14	Failure to identify or comply with contractual performance obligations may result in improper deferral or acceleration of revenue recognition.	20	5	2	2	1
15	Inappropriately inventory sale to distributors in amounts that far exceed the public’s demand for the products and prematurely recognize revenue on future sales is fraud oriented.	10	9	1	1	1

Scales	Frequency	Percent
Strongly Agree	141	54.23
Agree	93	35.77
Undecided	15	5.77
Disagree	5	1.92
Strongly Disagree	6	2.31
<b>Total</b>	<b>260</b>	<b>100</b>

**Source: Solomon and Abubakar Survey, (2023)**

The study wishes to establish the extent to which the participants agree with the statement that improper revenue recognition is one of the fraudulent schemes in the financial statements fraud. The study revealed that 54.23% of the participants strongly agreed with the statement that improper revenue recognition is one of the fraudulent schemes in the financial statements fraud and 35.77% agreed which represents the total number of 90% of the participants agreeing with the statement. On contrary 5.77% disagree, undecided 1.92% and 2.31% strongly disagreed, which gives a total of 10% disagreeing with the statement that improper revenue recognition is one of the fraudulent schemes in the financial statements fraud. This implies that fictitious or inflated sales and time difference schemes have significant negative effect of the financial statement report and invariably affect economic decision of its users.

**Table 4.1.6.6: Summary of Research Panel Four on Overstatement of Assets**

S/No	Statement	RESPONSES				
	Please tick the suitable box next to each statement (ranging from strongly disagree (1) to strongly agree (5)).	SA	A	UND	D	SD
16	Overstated sales and accounts receivable caused fraudulent increase in net income, retained earnings, current assets, working capital, and total assets	80	30	4	2	1
17	Overstatement of cost of goods sold to avoid paying taxes through the purchase of fictitious raw materials to increase the cost of inventories.	27	18	2	0	0

18	Recording non-existent assets, such as cash or receivables, and overstating of intangible assets	18	7	1	1	1
19	Reconciliation of inventory control system with the physical stock taken could curtail or reduce fraudulent inflated inventory	20	9	2	3	1
20	Overstatement of equipment due to misappropriation	15	13	1	3	1

Scales	Frequency	Percent
Strongly Agree	160	61.54
Agree	77	29.61
Undecided	10	3.85
Disagree	9	3.46
Strongly Disagree	4	1.54
<b>Total</b>	<b>260</b>	<b>100</b>

**Source: Solomon and Abubakar Survey, (2023)**

The study sought to establish the extent to which the participants agree with the statement that overstating assets falsely reflects a financially stronger company by inclusion of inflated asset costs in the financial statements. The study depicted that 61.54% of the participants strongly agreed with the statement that overstatement of assets is one of the fraudulent scheme in the financial statements fraud and 29.61% agreed which represents the total number of 91.15% of the participants agreeing with the statement. On contrary 3.85% disagree, undecided 3.46% and 1.54% strongly disagreed, which gives a total of 10% disagreeing with the statement that improper revenue recognition is one of the fraudulent scheme in the financial statements fraud. This means that inflated inventory results in understated cost of goods sold, overstated net income, overstated assets, and overstated equity. Also, bloated accounts receivable affect not only the statement of financial position but also reported income and equity. Both schemes significantly result in increased equity and net worth for the company which does not faithfully represent the financial health of the bank .

## Data Analysis and Interpretations

### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.982	0.982	6

**Source: SPSS 25 Output of Data 2023**

Constructs of multi-item scale were tested by Cronbach Alpha with the aid of the Statistical Package for the Social Sciences (SPSS) version 25 to measure the reliability of the data. The higher the Cronbach's alpha coefficient is, the greater the internal consistency of the items in the scale (Cronbach, 1951; Gliem and Gliem, 2003). Consequently, a Cronbach Alpha of 0.982 based on Standardized items, an indication that the research instrument's scale and the items, to a large extent, exhibit high internal consistency as shown in table above. That means, the internal consistency of the measures used in this study can be considered good for constructs.

### Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
DETERRENT CONTROL MECHANISM	2	155	52	66.89
PREVENTIVE CONTROL MECHANISM	4	143	52	63.17
IMPROPER REVENUE RECOGNITION	5	141	52	61.84
OVERSTATEMENT OF ASSETS	4	160	52	67.46

#### Source: SPSS 25 Output of Data 2022

The above table indicated that the all the variables have an average of 52 with a minimum of 2,4,5 and 4 respectively. They also have standard deviation of 66.89, 63.17, 61.84 and 67.46 respectively.

### Correlation Analysis

Pearson Product Moment correlation analysis was employed at 95% confidence level with the aid of Statistics Package for Social Sciences (SPSS) 25. The table below presents the correlation analysis results in a correlation matrix with all the variables in the study.

**Table 4.6: Extract of Correlations Matrix Results**

#### Correlations

Variables		DCM	PCM	DCM2	IRR	OSA	USL
DCM	Pearson Correlation						
	Sig. (2-tailed)						
PCM	Pearson Correlation	.993**					
	Sig. (2-tailed)	0.001					
IRR	Pearson Correlation	.989**	.999**	.998**			
	Sig. (2-tailed)	0.001	0	0			
OSA	Pearson Correlation	.995**	.985**	.991**	.984**		
	Sig. (2-tailed)	0	0.002	0.001	0.002		

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### Source: SPSS 25 Output of Data 2023

**Interpretation:** The correlation matrix results of table 4.4 above indicated that DCM (deterrent control mechanism) had a strong positive relationship with (IRR & OSA) as flagged by the coefficients of 0.989, 0.995 & 0.999 respectively. This suggests that internal control system (PCM) could weeder the storm of fraudulent manipulation of the financial statement regarding improper revenue recognition (IRR) and overstatement of asserts (OSA) for the benefit of the users of financial statement to make an informed economic decisions. Similarly, PCM (preventive control mechanism) also has a strong positive relationship with (IRR &, OSA) as shown by the coefficients of 0.999 & 0.985 respectively. This implies that preventive control mechanism (PCM) may greatly enhance the quality of financial statement by curtailing the menace of the fraudsters in the form of improper revenue recognition and overstatement of assets

## Regression Analysis

The researchers further used simple regression technique for the analysis to determine the actual nature of the relationship between the predictor and criterion variables of the study. The statistics tested for include regression equation for the variables, coefficient of determination ( $R^2$ ), t-test, f-test and Durbin Watson (DW) statistics. The Statistics Package for Social Sciences (SPSS) version 25 was used to run the analysis.

Where:

Coefficient of Determination ( $R^2$ ) = Test measures the explanatory power of the independent variables on the dependent variable.

F-test: Test for the overall statistical significance of the models. It is used to generalize the hypothesis. The findings of the hypothesis testing are presented in the next segment of this study.

## Hypotheses Testing

The formulated null hypotheses were statistically tested at 0.05 confidence level.

### Deterrent control mechanism and improper revenue recognition

**Ho<sub>1</sub>: There is no significant relationship between deterrent control mechanism and improper revenue recognition of quoted Nigerian banks.**

**Table 4.7: SPSS Simple Linear Regression Outputs.**

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.989 <sup>a</sup>	0.979	0.971	10.44364

a. Predictors: (Constant), DCM

#### ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	14968.79	1	14968.79	137.241	.001 b
	Residual	327.209	3	109.07		
	<b>Total</b>	<b>15296</b>	<b>4</b>			

a. Dependent Variable: IRR

b. Predictors: (Constant), DCM

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	4.445	6.188		0.718	0.524
	DCM	0.915	0.078	0.989	11.715	0.001

a. Dependent Variable: IRR

**Source: SPSS 25 Output of Data 2023**

**Interpretation:** The empirical test results of the simple regression analysis presented in table 4.7 assists to explain the statistical relationship between the dependent variable (improper revenue recognition) and the independent variables. The explanatory power  $R^2$  of the regression model shows that DCM revealed a strong ability to predict financial statement fraud – improper revenue recognition as it accounted for about 97.9% of the dependent variable of **IRR**. This implies that the remaining **2.1%** variation in **IRR** cannot be explained because it may be related to other variables which are not depicted in this model. The implication is that there may be number of variables which can have impacts on financial statement fraud in Nigerian quoted banks that needs to be studied. The Adjusted R Square (adj.  $R^2$ ) is another important factor in regression analysis. Adjusted  $R^2$  tells how well the data points fit a regression line showing the percentage of variation explained only by the independent variables that actually affect the dependent variable. A value of 0.971 in this study indicates true 97.1% of variation in the outcome variable is explained by the predictors in the model.

The F-ratio in the ANOVA tests whether the overall regression model is a good fit for the data. The table shows that the independent variables proxies statistically and significantly predict the dependent variable,  $F = 137.241$ ,  $p(0.001b) < .05$  implying that the regression model is a good fit of the data.

Moreso, the standardized coefficient of the table 4.7 demonstrates that DCM with ( $\beta = 0.989$  &  $P = 0.001$ ) positively and strongly related with IRR. This suggests that a unit change unit change in enforcing the policy of the tone on top and effective risk assessment would cut-out the fraudulent practice of fictitious sales and timing difference scheme in the bank financial statement, improve IRR by about 0.989 and invariably better the quality of economic decision of the financial statement users. In the same vein, its relationship is also significant as the p-value of 0.001 is less than 0.05% standard alpha value. Thus, the null hypothesis was rejected and on the basis of this, the study concluded that DCM significantly relates to IRR of Nigerian quoted banks in the period of this study.

**Deterrent control mechanism and overstatement of assets**

**Ho<sub>2</sub>: Deterrent control mechanism does not significantly relate to overstatement of assets in Nigerian quoted banks.**

**Table 4.8: SPSS Simple Linear Regression Outputs.**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.995 <sup>a</sup>	0.991	0.988	7.52183

a. Predictors: (Constant), DCM

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	18036.27	1	18036.27	318.786 <sup>b</sup>	.000
Residual	169.734	3	56.578		
<b>Total</b>	<b>18206</b>	<b>4</b>			

a. Dependent Variable: OSA

b. Predictors: (Constant), DCM

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.200	4.457		-0.045	0.967
DCM	1.004	0.056	0.995	17.855	.000

a. Dependent Variable: OSA

**Source: SPSS 25 Output of Data 2023**

**Interpretation:** The empirical test results of the simple regression analysis presented in table 4.8 helps to explain the statistical relationship between the dependent variable (overstatement of assets) and the independent variables. The explanatory power **R<sup>2</sup>** of the regression model shows that DCM showcase a strong ability to predict financial statement fraud – overstatement of assets as it accounted for about 99.1% of the dependent variable of **OSA**. This implies that the remaining **0.9%** variation in **OSA** cannot be explained because it may be related to other variables which are not depicted in this model. The implication is that there may be number of variables which can have impacts on financial statement fraud in Nigerian quoted banks that needs to be studied.

The Adjusted R Square (adj. R<sup>2</sup>) is another important factor in regression analysis. Adjusted R<sup>2</sup> tells how well the data points fit a regression line showing the percentage of variation explained only by the independent variables that actually affect the dependent variable. A value of 0.988 in this study indicates true 98.8% of variation in the outcome variable is explained by the predictors in the model.

The F-ratio in the ANOVA tests whether the overall regression model is a good fit for the data. The table shows that the independent variables proxies statistically and significantly predict the dependent variable, F = 318.786, p (0.000b) < .05 implying that the regression model is a good fit of the data.

Furthermore, the standardized coefficient of the table 4.8 depicts that DCM with (β = 0.995 & P = 0.000) has a very strong positive relationship with OSA. This implies that a unit change in implementing the policy of the tone on top and effective risk assessment would curb the fraudulent manipulation of inflated inventory and bloated receivables in the bank financial statement improve OSA by about 0.995 and thereby restore the lost public confidence on the financial statement. Better still, its relationship is equally significant as the p-value of 0.000 is less than 0.05% standard alpha value. Thus, the null hypothesis was rejected and on the basis of this, the study concluded that DCM significantly relates to OSA of Nigerian quoted banks in the period of this study.

**Preventive control mechanism and improper revenue recognition**

**Ho<sub>3</sub>: Preventive control mechanism not significantly relate to improper revenue recognition in Nigerian quoted banks.**

**Table 4.9: SPSS Simple Linear Regression Outputs.**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999 <sup>a</sup>	0.997	0.996	3.74035

a. Predictors: (Constant), PCM

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	15254.03	1	15254.03	1090.335	.000 b
	Residual	41.971	3	13.99		
	<b>Total</b>	<b>15296</b>	<b>4</b>			

a. Dependent Variable: IRR

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	1.166	2.273		0.513	0.643
	PCM	0.978	0.03	0.999	33.02	.000

a. Dependent Variable: IRR

**Source: SPSS 25 Output of Data 2023**

**Interpretation:** The empirical test results of the simple regression analysis presented in table 4.9 explains the statistical relationship between the dependent variable (improper revenue recognition) and the independent variables. The explanatory power **R<sup>2</sup>** of the regression model shows that PCM revealed a very strong ability to predict financial statement fraud – improper revenue recognition as it accounted for about 99.7% of the dependent variable of **IRR**. This implies that the remaining 0.3% variation in **IRR** cannot be explained because it may be related to other variables which are not depicted in this model. The implication is that there may be number of variables which can have impacts on financial statement fraud in Nigerian quoted banks that needs to be studied. The Adjusted R Square (adj. R<sup>2</sup>) is another important factor in regression analysis. Adjusted R<sup>2</sup> tells how well the data points fit a regression line showing the percentage of variation explained only by the independent variables that actually affect the dependent variable. A value of 0.996 in this study indicates true 99.6% of variation in the outcome variable is explained by the predictors in the model.

The F-ratio in the ANOVA tests whether the overall regression model is a good fit for the data. The table shows that the independent variables proxies statistically and significantly predict the dependent variable, F = 1090.335, p (0.000b) < .05 implying that the regression model is a good fit of the data.

Moreover, the standardized coefficients of the table 4.10 disclosed that PCM with (? = 0.999 & P = 0.000) positively and strongly related with IRR. This suggests that a unit change in applying the policy of segregation of duty and mandatory annual with job rotation would get rid of the fraudulent practice of fictitious sales and timing difference scheme in the bank financial statement, improve IRR by about 0.999 and by so doing, the financial statement users would able to make informed decision. The relationship is also statistically significant as the p-value of 0.000 is less than 0.05% standard alpha value. Thus, the null hypothesis was rejected and on the basis of this, the study concluded that PCM significantly relates to IRR of Nigerian quoted banks in the period of this study.

**Preventive control mechanism and overstatement of assets**

**Ho<sub>4</sub>:** There is no significant relationship between preventive control mechanism and overstatement of assets in Nigerian quoted banks.

**Table 4.10: SPSS Simple Linear Regression Outputs.**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985 <sup>a</sup>	0.971	0.961	13.34827

a. Predictors: (Constant), PCM

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17671.47	1	17671.47	99.18	.002 b
	Residual	534.529	3	178.176		
	Total	18206	4			

a. Dependent Variable: OSA

b. Predictors: (Constant), PCM

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.714	8.113		-0.334	0.76
	PCM	1.052	0.106	0.985	9.959	0.002

a. Dependent Variable: OSA

**Source: SPSS 25 Output of Data 2023**

**Interpretation:** The empirical test results of the simple regression analysis presented in table 4.10 explicates the statistical relationship between the dependent variable (overstatement of assets) and the independent variables. The explanatory power  $R^2$  of the regression model shows that PCM indicate a strong ability to predict financial statement fraud – overstatement of assets as it accounted for about 97.1% of the dependent variable of **OSA**. This implies that the remaining 2.9% variation in **OSA** cannot be explained because it may be related to other variables which are not depicted in this model. The implication is that there may be number of variables which can have impacts on financial statement fraud in Nigerian quoted banks that needs to be studied.

The Adjusted R Square (adj.  $R^2$ ) is another important factor in regression analysis. Adjusted  $R^2$  tells how well the data points fit a regression line showing the percentage of variation explained only by the independent variables that actually affect the dependent variable. A value of 0.961 in this study indicates true 96.1% of variation in the outcome variable is explained by the predictors in the model.

The F-ratio in the ANOVA tests whether the overall regression model is a good fit for the data. The table shows that the independent variables proxies statistically and significantly predict the dependent variable,  $F = 99.180$ ,  $p(0.002b) < .05$  implying that the regression model is a good fit of the data.

Furthermore, the standardized coefficients of the table 4.11 pictures that DCM with ( $\beta = 0.985$  &  $P = 0.002$ ) has a strong positive relationship with OSA. The import is that a unit change in utilizing the policy of segregation of duty and mandatory annual with job rotation would minimize or eradicate the fraudulent



manipulation of inflated inventory and bloated receivables in the bank financial statement improve OSA by about 0.985 and thereby restore the lost public confidence on the financial statement. Better still, its relationship is equally significant as the p-value of 0.002 is less than 0.05% standard alpha value. Thus, the null hypothesis was rejected and on the basis of this, the study concluded that PCM significantly relates to OSA of Nigerian quoted banks in the period of this study.

**Testing the Mediating effect of Internal Audit on Relationship between Internal Control System and Financial Statement Fraud**

Ho5: Internal audit mechanism effects do not significantly mediate the relationship between internal control system and financial statement fraud of quoted Nigerian banks.

**Table 4.11 Extract Summary of the SPSS Multiples Regression Results**

Model	Unstandardized Coefficients		Standardized Coefficients	T-statistic	Sig. Value
	B	Std. Error	$\beta$		
(Constant)	3.425	8.213		0.524	0.637
IRR	0.784	0.128	0.917	54.2005. (000)	0.017
OAS	1.342	0.061	0.826	37.400 (.001)	0.012

Dependent variable:

R 0.998

R<sup>2</sup> 0.996

ADJ. R<sup>2</sup> 0.992

F-Statistics 252.883

Sig. 0.000

Durbin Watson 2.399

**Source: SPSS 25 Output of Data 2023**

**Interpretation:** The empirical test results of the multiple regression analysis in table 4.11 elucidate the statistical mediating effect of internal audit on the relationship between the independent variables and the dependent variables. The explanatory power R<sup>2</sup> of the regression model shows that IAM revealed strong ability to mediate the effect of internal control system on financial statement fraud as it accounted for about 92.70%, & 87.50% of the dependent variables of IRR and OAS. This implies that the remaining 7.3%, & 12.5% variation in DCM and PCM cannot be explained because it may be related to other variables which are not depicted in this model. The implication is that there may be number of variable which can have impacts on financial statement fraud of quoted Nigerian bank. that needs to be studied.

Interestingly, table 4.11 of panel 10 indicated that IAM with ( $\beta = 0.917$  &  $0.826$ ) had strong and positive mediating effect on internal control system with financial statement fraud. This implies that a unit change in the internal audit mechanism is most likely to minimize financial statement fraud by about 0.917 & 0.826 regarding fraudulent financial loss, and improve shareholders' confidence level. Better still, the P-values (=

0.017 & 0.012) are less than 0.05% standard alpha value for IRR and OSA. Therefore, the null hypothesis was rejected and on the basis of this, the study concluded that IAM has significant mediating effect on IRR and OAS of quoted Nigerian banks in the period of this study.

### Testing the Moderating effect of External Audit Mechanism on Relationship between Internal Control System and Financial Statement Fraud

Ho6: There is no significant moderating effect of external audit mechanism on the relationship between internal control system and financial statement fraud of quoted Nigerian banks.

Extract Summary of the SPSS Results

Model	Unstandardized Coefficients		Standardized Coefficients	T-statistic	Sig. Value
	B	Std. Error	$\beta$		
(Constant)	0.862	1.747		0.493	0.631
IRR	0.783	0.3	0.797	2.609	0.023
OAS	0.884	0.283	0.896	3.615	0.01

Dependent variable:

R	0.986
R <sup>2</sup>	0.965
ADJ. R <sup>2</sup>	0.959
F. Statistics	163.562
Sig.	0.000
Durbin Watson	2.399

Source: SPSS 25 Output of Data 2023

**Interpretation:** The empirical test results of the multiple regression analysis in table 4.12 revealed the statistical moderating effect of external audit mechanism on the relationship between the independent variables and the dependent variables of this study. The explanatory power R<sup>2</sup> of the regression model shows that EAM revealed strong ability to moderate the effect of internal control system on financial statement fraud as it accounted for about 96.5% of the dependent variables of IRR and OAS. This implies that the remaining 3.5% variation in DCM and PCM cannot be explained because it may be related to other variables which are not depicted in this model. The implication is that there may be number of variable which can have impacts on financial statement fraud in Nigeria that needs to be studied..

Excitingly, table 4.12 of panel 11 indicated that EAM with ( $\beta = 0.797$  &  $0.896$ ) had strong and positive moderating effect on internal control system with financial statement fraud. This implies that a unit change in the external audit mechanism may likely to curb financial statement fraud by about  $0.797$  &  $0.896$  in respect of fraudulent financial loss, and improve shareholders' confidence level. Better still, the P-values (=  $0.023$  &  $0.010$ ) are less than 0.05% standard alpha value for IRR and OSA. Therefore, the null hypothesis was rejected and on the basis of this, the study concluded that EAM has significant moderating effect on IRR and OAS of quoted Nigerian banks in the period of this study.

## DISCUSSION OF RESEARCH FINDINGS

The study examined the relationship between internal control system and financial statement fraud in Nigerian quoted banks. Kitted with the results from the hypotheses tested, it was established that internal control system had empirical statistical relationship with financial statement fraud in Nigerian quoted banks in the period of this study.

Deterrent control mechanism flagged by ( $\beta = 0.989$ ,  $p = 0.001$ ) was found significantly and positively correlated with improper revenue recognition in the financial statement fraud of quoted Nigerian banks. Therefore,  $HO_1$  was not supported and this suggests that deterrent control mechanism will aid financial statement fraud reduction in the Nigerian quoted banks. The finding was not in tandem with the study of **Okoro & Onyebueke (2021)** who examined fraud detection, prevention, control, and investigation in Nigeria financial sector and found that personal ethics do not influence fraud.

Similarly, the findings also revealed that deterrent control mechanism had a very strong positive and significant relationship with overstatement of assets with statistical values of ( $\beta = 0.995$ ,  $p = 0.000$ ). This finding implies that top management should develop a strong ethical code which all the staff working in the manufacturing companies must adopt. Therefore,  $HO_2$  was rejected implying that the corporate ethical culture to fraud will result in a lower occurrence of financial statement fraud reduction in the Nigerian banking sector. This finding is in line with the findings of **Joseph (2020)** who assessed the effect of internal controls on fraud prevention Ghana.

Also, the findings indicates that preventive control mechanism had a strong significant relationship with improper revenue recognition with statistical values of ( $\beta = 0.999$ ,  $p = 0.000$ ). This finding demonstrated that preventive control mechanism has the potential to mitigate fraudulent practices by the fraudsters. Therefore,  $HO_3$  was rejected meaning that the preventive control mechanism will curb financial statement fraud reduction of quoted Nigerian banks. This result supports the findings of **Chimeocha (2018)** who investigated internal audits as an effective tool for fraud control in a manufacturing organization.

Furthermore, preventive control mechanism equally had a strong significant relationship with overstatement of assets with statistical values of ( $\beta = 0.985$ ,  $p = 0.002$ ). This finding shown that preventive control mechanism has the potential to mitigate fraudulent practices by the fraudsters of overstatement of assets. Therefore,  $HO_4$  was rejected meaning that the preventive control mechanism will curb financial statement fraud reduction of quoted Nigerian banks. This result is in tandem with the findings of **Omolurun, & Ehailo (2017)** who carried out a study on the measures of fraud prevention in the banking industry.

Moreso, internal audit mechanism flagged by  $\beta$  ( $= 0.917$  &  $0.826$ ),  $P$  ( $= 0.017$  &  $0.012$ ) was found significantly and positively correlated with internal control system and financial statement fraud of quoted Nigerian banks. Therefore,  $HO_5$  was rejected and this implies that internal audit mechanism mediating effect will curtail financial statement fraud in the Nigerian quoted banks. The finding was in tandem with the study of **Okoro & Onyebueke (2021)** who examined fraud detection, prevention, control, and investigation in Nigeria financial sector and found that personal ethics do not influence fraud.

Finally, external audit mechanism flagged by  $\beta$  ( $= 0.797$  &  $0.896$ ),  $P$  ( $= 0.023$  &  $0.010$ ) demonstrates significant and positive correlation with internal control system and financial statement fraud of quoted Nigerian banks. Therefore,  $HO_6$  was rejected and this means that external audit mechanism moderating effect will reduce financial statement fraud in the Nigerian quoted banks. The finding was in tandem with the study of **Peter & Tonye (2020)** who examined fraud detection, prevention, control, and investigation in Nigeria financial sector and found that personal ethics do not influence fraud

## CONCLUSIONS AND RECOMMENDATIONS

### Summary of the Findings

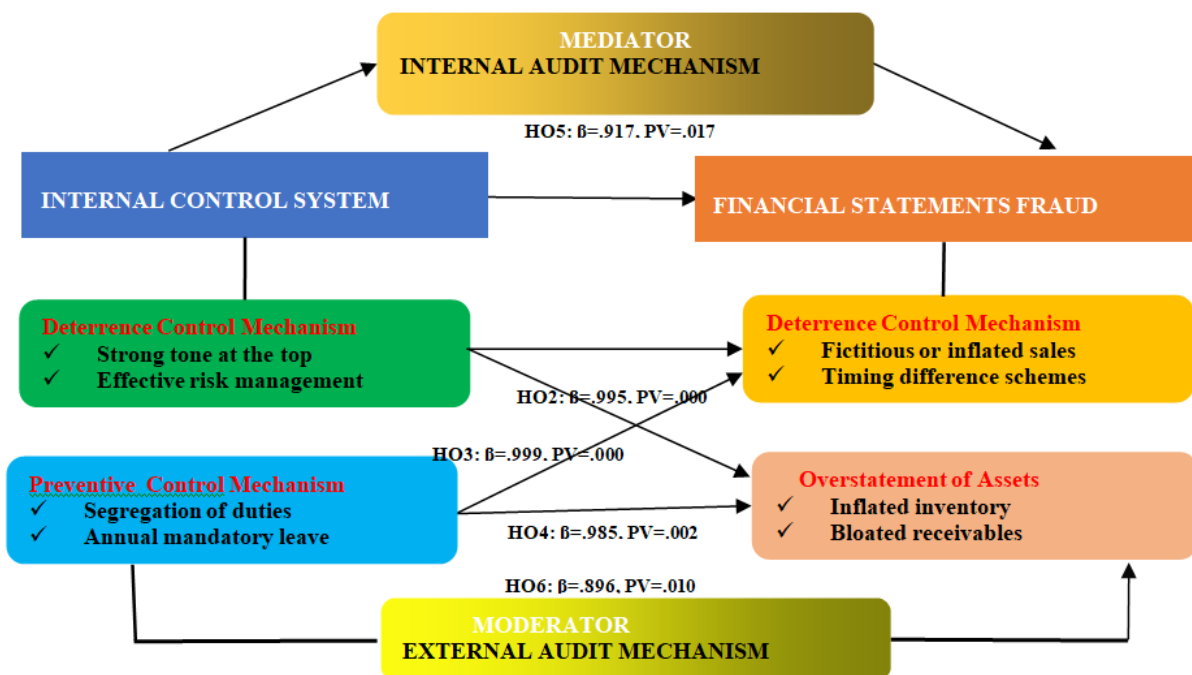
The study investigated the relationship between internal control system and financial statement fraud in Nigerian quoted banks in Nigeria. The study analyzed internal control system in the perspectives of deterrent control mechanism, preventive control mechanism and detective control mechanism while financial statement fraud was examined in the dimensions of improper revenue recognition, overstatement of assets and understatement of liabilities in Nigerian quoted banks in Nigeria

The study adopted correlation survey design. The reason for choosing the said research design is that the study seeks to establish the relationship between internal control system and financial statements fraud and it also considered appropriate for primary data purposes. The target populations for this study consist of the quoted banks Nigeria. Pearson Product Moment Correlation Coefficient and simple regression technique were the statistical tools used and the primary data were analyzed with the aid of SPSS version 25. Table 5.1 below and The fig. 3 showcased the summary research findings and Heuristic Model of the study.

Tables 5.1 Research Findings at a Glance

HO :	Variables	Standardized Coefficients	P-Value	Relationship	Decision
		?			
Ho <sub>1</sub>	DCM & IRR	0.989	0.001	Positive and significant	Reject
Ho <sub>2</sub>	DCM & OSA	0.995	0	Positive and significant	Reject
Ho <sub>3</sub>	PCM & IRR	0.999	0	Positive and significant	Reject
Ho <sub>4</sub>	PCM & OSA	0.985	0.002	Positive and significant	Reject
Ho <sub>5</sub>	IAM/ (IRR& OSA)	0.917	0.017	Positive and significant	Reject
Ho <sub>6</sub>	EAM/ (IRR& OSA)	0.896	0.01	Positive and significant	Reject

Source: Solomon and Abubakar, (2023)



Source: Solomon and Abukakar (2023)

Fig. 3: Heuristic Model of Internal Control System and Financial Statement Fraud of Quoted Banks in Nigeria

## Conclusion

Given our findings from this study on the relationship between internal control and financial statement fraud of quoted banks in Nigeria, we conclude thus that:

1. Deterrent control mechanism has significant relationship with improper revenue recognition of quoted banks in Nigeria during the period of this study.
2. Deterrent control mechanism also has significant relationship with overstatement of assets of quoted banks in Nigeria during the period of this study.
3. Preventive control mechanism also has significant relationship with improper revenue recognition of quoted banks in Nigeria during the period of this study.
4. Preventive control mechanism equally has significant relationship with overstatement of assets of quoted banks in Nigeria during the period of this study.

Generally, the reports of the coefficients of correlation and level of significance indicate affirmatively that the internal control system constructs under review are important factors to consider if the banks are serious about curtailing the unwavering financial statements fraud in the banking industry in Nigeria.

## Recommendations

In line with the findings and conclusion, the researchers made the following recommendations:

1. Set an ethical tone at the top – Upper management banks have to lead by example and actions. These actions should include rewarding ethical behavior while punishing unethical actions. There should be sanctions for engaging in, tolerating, or condoning improper conduct.
2. Assign proper authority and responsibility – In addition to hiring qualified, ethical employees, it is important to place these individuals in situations where they are able to thrive without resorting to unethical conduct. Banks should provide employees with well-defined job descriptions and performance goals.
3. Mandate fraud and ethics training for staff – This should be mandatory for all employees (including upper-level personnel) to receive fraud prevention and detection training. This training should cover the company's stance on corporate compliance: its code of ethical conduct, the company's procedures and standards, as well as employees' roles and responsibilities to report misconduct in the organization.
4. Implement effective disciplinary measures – No internal control system will be effective unless there is consistent discipline for ethical violations. Consistent discipline requires a well-defined set of sanctions for violations and strict adherence to the prescribed disciplinary measures. If one employee is punished for an act and another employee is not punished for a similar act, the moral force of the company's ethics policy will be diminished. The levels of discipline must be sufficient to deter violations.

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