**Original Research Article**

**Internal Control System and Fraud Mitigation: a case of Selected SMEs in Nigeria**

# Abstract

The study examine the effect of internal control system on fraud mitigation: a case of selected SMEs in Nigeria. The specific objective was to ascertain the extent to which control activities and monitoring activities affect fraud mitigation among selected SMEs in Nigeria. Descriptive survey design was adopted. A sample size of 196 respondents was calculated using Cochran Formula for sample size determination. Structured questionnaire was used in collecting the primary data for the study. Multiple regression was used to test the hypotheses, which revealed that: control activities have a positive and significant effect on fraud mitigation among selected SMEs in Nigeria (β = 0.418, p = 0.000); monitoring activities have a positive and significant effect on fraud mitigation among selected SMEs in Nigeria (β = 0.574, p = 0.000). In conclusion, when these enterprises embed structured procedures and maintain vigilant oversight within their operations, they create an environment less conducive to fraudulent practices. The study recommends that internal auditors and supervisory staff in SMEs should regularly conduct monitoring exercises, including audits and performance reviews, to ensure that existing controls are functioning effectively and fraud risks are promptly identified.

*Key words:* Internal Control System, Fraud Mitigation, Control Activities, Monitoring Activities

# 1.0 Introduction

In recent years, small and medium enterprises (SMEs) have emerged as a significant component of economic development, particularly in developing nations like Nigeria. SMEs contribute to job creation, income generation, poverty alleviation, and the stimulation of domestic and export earnings (Amoah, Belas, Dziwornu & Khan, 2022). They are widely recognized as engines of growth and development, serving as a bridge between informal economies and the structured corporate environment. However, despite their importance, SMEs in Nigeria face numerous challenges that hinder their growth and sustainability. Among these challenges, financial mismanagement and fraud have proven to be particularly detrimental (Nwosu, Onyemaobi & Odimmega, 2025). Fraudulent activities, including asset misappropriation, financial statement manipulation, and corruption, can cripple business operations, especially in resource-constrained enterprises. Consequently, internal control systems, which are mechanisms put in place to ensure the integrity of financial and accounting information, promote accountability, and prevent fraud (Opaleye & Adelugba, 2024), have become a critical area of focus for business operators, researchers, and policymakers.

Internal control systems encompass the processes, procedures, and policies instituted by an organization’s management and board of directors to provide reasonable assurance regarding the achievement of objectives related to operations, reporting, and compliance (Ololade, 2025). As businesses strive to adapt to technological advancements, globalization, and increasing regulatory scrutiny, the implementation of robust internal controls becomes indispensable. An effective ICS not only safeguards the organization’s assets but also ensures the reliability of financial reporting, compliance with laws and regulations, and the efficiency and effectiveness of operations (Dibo, 2023). In the contemporary business landscape, where digital transactions and remote operations are becoming the norm (Dibie & Nworie, 2025), internal controls must evolve to address new forms of risk, including cyber threats and internal collusion. For SMEs in Nigeria, many of which operate in informal or semi-formal settings, establishing and maintaining strong internal control frameworks can be challenging due to limited financial resources, inadequate managerial expertise, and weak regulatory enforcement (Opaleye & Adelugba, 2024). Nonetheless, the adoption of effective internal controls remains a strategic imperative for long-term business sustainability and growth.

Internal control systems play a fundamental role in mitigating fraud in organizations. Fraud, which involves intentional deception for personal or organizational gain, can occur in various forms and often exploits weaknesses in an organization’s internal control framework (Opiyo, 2023). A well-designed and consistently enforced ICS can significantly reduce the risk of fraudulent activities by creating checks and balances, promoting ethical behavior, and detecting irregularities in financial transactions. Control activities such as segregation of duties, authorization protocols, reconciliations, and regular audits serve as deterrents and monitoring mechanisms that can prevent or uncover fraudulent schemes (Dibo, 2023). For SMEs, where owner-managers may be directly involved in daily operations and financial decisions, the lack of independent oversight or formalized controls increases vulnerability to internal fraud. In Nigeria, the incidence of fraud among SMEs is exacerbated by systemic issues such as corruption, lack of accountability, and inadequate enforcement of financial regulations.

Furthermore, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework has become a global benchmark for evaluating the effectiveness of internal control systems. The framework emphasizes five key components: control environment, risk assessment, control activities, information and communication, and monitoring (Vutumu, Aregbeyen & Akinteye, 2024). These components, when effectively implemented, work together to reduce the risk of fraud and ensure sound financial management. However, many Nigerian SMEs lack awareness or understanding of such frameworks, which limits their capacity to adopt comprehensive control systems. As a result, fraud continues to undermine business success, deterring potential investors and diminishing stakeholder confidence. The impact of fraud on SMEs goes beyond financial loss; it also affects business reputation, employee morale, and customer trust.

However, in reality, many SMEs in Nigeria struggle with the implementation of effective internal control systems. These enterprises often operate with limited resources, inadequate financial oversight, and informal management practices. Internal controls, where they exist, are frequently weak, poorly documented, or inconsistently applied (Okeke, Offor & Chukwunwike, 2021). Many SME operators lack awareness of standard control frameworks or underestimate the importance of internal controls in preventing fraud. Furthermore, the absence of regulatory enforcement and the prevalence of corrupt practices in the business environment further erode the commitment to financial discipline. As a result, fraudulent practices such as asset misappropriation, unauthorized transactions, and manipulation of financial records continue to thrive in the SME sector (Opaleye & Adelugba, 2024). Fraud not only leads to direct financial losses but also undermines business credibility, investor confidence, and long-term viability. SMEs affected by fraud may face cash flow problems, legal penalties, reputational damage, and even business closure (Dibo, 2023). In the broader economic context, the prevalence of fraud in SMEs stifles entrepreneurship, reduces contributions to national income, and weakens the integrity of the financial system. Without effective mechanisms to detect and prevent fraud, SMEs in Nigeria remain vulnerable to internal threats that can derail their growth and development. Therefore, it is imperative to investigate the relationship between internal control systems and fraud mitigation, especially in the context of Nigerian SMEs, to identify gaps and propose practical solutions that can support their sustainability.

# 1.1 Objectives of the Study

The main aim of the study is to examine the effect of internal control system on fraud mitigation: a case of selected SMEs in Nigeria. The specific objectives are as follows:

1. To ascertain the extent to which control activities affect fraud mitigation among selected SMEs in Nigeria.

2. To examine the degree to which monitoring activities affect fraud mitigation among selected SMEs in Nigeria.

# 1.2 Hypotheses

H01. Control activities do not significantly affect fraud mitigation among selected SMEs in Nigeria.

H02. Monitoring activities do not significantly affect fraud mitigation among selected SMEs in Nigeria.

# 2.0 Literature Review

# 2.1 Conceptual Review

# 2.1.1 Internal Control System

An internal control system refers to the framework of policies, procedures, and processes established by an organization’s management and board of directors to ensure the achievement of its objectives in areas such as operational efficiency, reliability of financial reporting, and compliance with applicable laws and regulations (Nwosu, Onyemaobi & Odimmega, 2025). It is a proactive mechanism designed to safeguard assets, prevent and detect fraud, promote accountability, and ensure that organizational operations are conducted effectively and ethically. While the system functions in a coordinated way, it is tailored to an organization’s specific structure, size, goals, and environment (Opaleye & Adelugba, 2024).

The concept of an internal control system is grounded in the idea of establishing checks and balances within an organization (Opiyo, 2023). It ensures that responsibilities are appropriately delegated and that critical tasks are not handled by a single individual, reducing opportunities for error or manipulation. The system operates across all levels of an organization, involving both manual and automated processes to manage and control risks (Dibo, 2023). It is not a one-time effort but a continuous process that evolves in response to changes in the organization’s operations or external environment.

Importantly, an internal control system does not guarantee absolute elimination of risk or fraud but seeks to provide reasonable assurance that objectives will be met. Its effectiveness depends on the commitment of the organization’s leadership to integrity and ethical values, as well as the competence and awareness of employees at all levels (Nwosu, Onyemaobi & Odimmega, 2025). The system also supports informed decision-making by ensuring that accurate and timely financial and operational information is available to management (Ololade, 2025). In essence, an internal control system is a critical governance tool that forms the backbone of transparency, accountability, and sustainable business performance.

# 2.1.2 Control Activities

Control activities are the specific actions and procedures put in place by an organization to implement its internal control policies and achieve its control objectives (Dibo, 2023). They are the operational mechanisms that support the enforcement of management directives and serve as the practical tools used to prevent, detect, and respond to risks that could affect the organization’s ability to reach its goals. Control activities are typically embedded into the daily processes of a business and are a fundamental component of the internal control framework (Vutumu, Aregbeyen & Akinteye, 2024).

These activities are designed to ensure that business processes are performed accurately, efficiently, and in accordance with set standards. They provide a system of checks and verifications that reinforce the accuracy and reliability of transactions, records, and financial reports. In doing so, control activities help minimize the occurrence of errors, irregularities, or deliberate misconduct such as fraud (Okeke, Offor & Chukwunwike, 2021). Although they vary from one organization to another depending on industry, size, and risk exposure, control activities are essential for maintaining discipline and structure in operations.

At the heart of control activities is the principle of accountability. These activities create clear lines of responsibility and ensure that no single individual has unchecked control over critical business functions, thereby reducing the likelihood of fraud or abuse of power (Vutumu, Aregbeyen & Akinteye, 2024). While many control activities are procedural, such as requiring approvals, conducting reconciliations, or verifying documentation, they can also include automated processes in systems or software used for financial management and reporting. Ultimately, control activities bring the internal control system to life, transforming broad policies into actionable steps that directly influence behavior, promote integrity, and enhance the reliability of operations (Dibo, 2023). Their consistent and disciplined application is vital for fostering a secure and transparent organizational culture.

# 2.1.3 Monitoring Activities

Monitoring activities refer to the ongoing processes and evaluations used by an organization to assess the effectiveness and performance of its internal control system over time (Opiyo, 2023). These activities ensure that internal controls are not only properly designed but are also operating as intended and producing the desired results. Monitoring provides management with critical feedback on the performance of controls and highlights areas where improvements are needed or where risks are emerging. It is a vital element in maintaining the integrity, efficiency, and relevance of internal control systems.

Effective monitoring activities are continuous and integrated into normal business operations (Dibo, 2023). Rather than being a one-time or periodic effort, monitoring is a dynamic process that allows organizations to respond to changing circumstances, such as shifts in business strategy, new technologies, or external regulatory requirements. It includes a range of practices from routine management and supervisory reviews to more formal evaluations conducted by internal audit functions or external consultants (Vutumu, Aregbeyen & Akinteye, 2024). The aim is to identify control weaknesses, inefficiencies, and instances of noncompliance before they evolve into significant issues.

Through monitoring, organizations can ensure that control activities remain aligned with organizational goals and that policies are being consistently followed (Opiyo, 2023). It also serves as a mechanism for learning and adaptation, enabling organizations to update or redesign controls in response to detected problems or inefficiencies. Monitoring activities are essential for building a culture of continuous improvement and accountability. They provide the evidence needed for informed decision-making and demonstrate to stakeholders—such as investors, regulators, and customers—that the organization is committed to governance, risk management, and transparency. Without effective monitoring, even the most robust internal control system can become outdated or ineffective over time, leaving the organization exposed to various risks, including fraud and operational failure.

# 2.1.4 Fraud Mitigation

Fraud mitigation refers to the deliberate actions and strategies employed by an organization to prevent, detect, and respond to fraudulent activities (Opiyo, 2023). It involves reducing the risk of fraud occurring and minimizing its potential impact on the organization. Fraud, in this context, is typically understood as the intentional act of deception or misrepresentation carried out by an individual or group to gain an unlawful advantage, often at the expense of the organization’s financial integrity or reputation. Fraud mitigation, therefore, represents a proactive and reactive approach to addressing these threats (Opaleye & Adelugba, 2024).

Fraud mitigation emphasizes the creation of a business environment where fraud is difficult to commit, easy to detect, and met with serious consequences. This is achieved through a combination of organizational policies, internal controls, ethical culture, and employee awareness programs (Alayli, 2022). Preventive measures, such as background checks, ethical codes of conduct, and segregation of duties, work to eliminate opportunities for fraud. Simultaneously, detection mechanisms, such as audits, whistleblower systems, and transaction monitoring tools, serve to uncover fraudulent behavior when it occurs (Dibo, 2023).

Mitigation also includes the organization’s response to identified fraud cases, which may involve disciplinary actions, legal proceedings, or policy revisions to prevent future occurrences (Opiyo, 2023). The goal is not only to recover losses but also to reinforce the message that fraud will not be tolerated. Importantly, fraud mitigation is not a one-size-fits-all process; it must be tailored to the size, structure, and risk profile of the organization. For SMEs, where resources may be limited, fraud mitigation requires a strategic focus on high-risk areas and cost-effective control solutions. Ultimately, fraud mitigation strengthens an organization’s resilience, protects its assets, and builds trust among stakeholders, laying a foundation for sustainable and ethical business growth (Alayli, 2022).

# 2.2 Theoretical Framework

The study is anchored on Fraud Triangle Theory which was developed by Donald R. Cressey in 1953, based on his research into the behavior of white-collar criminals (Van Akkeren, 2023). As a criminologist, Cressey investigated why trusted individuals commit fraud, particularly embezzlement. Through his interviews and case studies with convicted offenders, he identified common patterns that led individuals to violate trust and engage in fraudulent acts (Hermawan & Pramana, 2022). His work, which later became widely recognized in the fields of auditing and forensic accounting, introduced a conceptual framework that remains highly influential in understanding fraud and its prevention within organizations.

The theory posits that three essential elements must be present for an individual to commit fraud: pressure, opportunity, and rationalization (Jiang, 2022). Pressure refers to the motivation or incentive to commit fraud, often arising from financial difficulties, unrealistic performance targets, or personal issues. Opportunity represents the circumstances that enable fraud to occur, typically due to weak or absent internal controls, poor supervision, or lack of accountability. Rationalization involves the mental process by which the fraudster justifies their behavior, convincing themselves that their actions are acceptable, necessary, or harmless. According to Cressey, if any one of these elements is absent, the likelihood of fraud occurring is significantly reduced (Van Akkeren, 2023). Therefore, controlling or eliminating even one of these factors—particularly opportunity—can serve as a strong deterrent to fraudulent activity.

The relevance of the Fraud Triangle Theory to this study lies in its emphasis on opportunity as a critical component of fraud, which is directly influenced by the strength of an organization's internal control system. In the context of Small and Medium Enterprises (SMEs) in Nigeria, the implementation of effective internal controls plays a central role in fraud prevention. Weak controls create loopholes and enable fraudulent behavior, while robust controls minimize the opportunity for such actions to take place. By anchoring this study on the Fraud Triangle Theory, the research aims to examine how enhancing internal control systems in SMEs can effectively reduce or eliminate opportunities for fraud, thereby mitigating the risk of financial loss and enhancing the sustainability of these businesses.

# 2.3 Empirical Review

Nwosu, Onyemaobi, and Odimmega (2025) explored how automated internal control systems are applied in the fight against fraud within small and medium-sized enterprises (SMEs) in Anambra State. The study was guided by two specific research questions and two null hypotheses, which were tested at a 0.05 significance level. The researchers adopted a descriptive survey design, focusing on Anambra State—one of the five states in Nigeria's southeast geopolitical zone. The population consisted of 2,837 SME managers registered with the State Ministry of Commerce, Industry, and Technology. Using the Taro Yamane formula, a sample of 351 SME managers was selected. Data were collected through a structured questionnaire. Experts validated the face validity of the instrument, and the Cronbach Alpha method was used to test the instrument's reliability. The reliability coefficients for the two main parts of the instrument were 0.85 and 0.81, with an overall reliability score of 0.83. The findings revealed that accounting control automation was moderately utilized by SME managers in fraud prevention, while internal audit automation was used to a lesser degree. Furthermore, no statistically significant difference was observed in the average responses of managers regarding the use of accounting and audit automation for effective fraud prevention.

Ololade (2025) examined the internal control strategies adopted by owners of small and medium-sized enterprises, focusing on how these strategies influence the incidence of employee-related fraud. The study also compared proactive and reactive approaches to fraud prevention. A survey methodology was employed, and data were gathered using structured questionnaires from selected SMEs located in Lagos and Oyo States. Analytical methods included descriptive statistics, Spearman correlation, and the Mann–Whitney test. The research found that the majority of SME owners resorted to reactive strategies, implementing control measures only after experiencing financial loss due to fraudulent activities by employees. The study established a positive correlation between reactive strategies and a higher number of fraud cases. Additionally, it found a significant difference in fraud incidence between proactive and reactive internal control strategies, suggesting that early implementation of internal controls can be more effective in fraud prevention.

Opaleye and Adelugba (2024) conducted an empirical investigation into the impact of internal control systems on both fraud prevention and financial performance among retail supermarkets in Ibadan. The researchers utilized a descriptive research design and selected 30 supermarkets through a convenience sampling method. From each supermarket, five employees were purposively chosen, culminating in a total sample of 150 respondents. Data collection was carried out using a self-designed questionnaire. Out of the 150 distributed questionnaires, 148 were returned, and 140 were deemed usable after discarding eight due to inconsistencies. The study employed multiple regression analysis to test two formulated hypotheses. Results revealed that internal control systems had a statistically significant and positive influence on fraud prevention, with a regression result indicating F = 31.467 and a p-value less than 0.05. This finding highlights the crucial role internal control structures play in minimizing fraudulent practices while also enhancing organizational performance.

Opiyo (2023) studied how internal control mechanisms contribute to fraud detection and prevention in SMEs located in Nairobi, Kenya. The objectives included assessing the role of control environment, risk assessment procedures, and monitoring practices in curbing fraudulent behavior. The research was framed within the Reliability and Fraud Diamond theoretical perspectives and employed an explanatory (experimental) design. The population for the study consisted of SME managers and owners in Nairobi’s Central Business District, totaling 993 enterprises with 10 to 99 employees as registered with the Nairobi City County. Using Yamane’s formula, a sample of 400 business owners and managers was selected. Data were primarily collected through semi-structured questionnaires, and a pilot test was conducted to confirm the validity and reliability of the instrument. Analysis included both descriptive and inferential statistics, using SPSS version 28. Inferential tests such as factor analysis and ordered logistic regression were applied. The results demonstrated a strong positive relationship between both risk assessment and monitoring and the effective detection and prevention of fraud. However, a weaker relationship was observed between the control environment and fraud-related outcomes, suggesting that while some elements of internal control are effective, others may require strengthening.

Dibo (2023) examined how internal control systems influence fraud detection capabilities within Kenya’s banking industry. A descriptive research approach was employed, with primary data sourced from questionnaires administered to 39 licensed commercial banks. The study explored five key components of internal controls: control environment, risk assessment, control activities, information and communication, and monitoring. An impressive response rate of 88.46% was recorded. The analysis combined both descriptive and inferential statistics to reveal various degrees of association between internal control measures and fraud detection effectiveness. A strong positive correlation was found between the control environment and fraud detection, underscoring the foundational role of organizational culture and leadership. Risk assessment also showed a moderately strong correlation, indicating its effectiveness in identifying and mitigating potential fraud risks. Similarly, control activities, effective communication, and consistent monitoring all demonstrated strong positive associations with fraud detection. These findings emphasize that a well-rounded internal control framework significantly enhances an organization’s ability to detect and prevent fraud.

Alayli (2022) conducted a study to investigate how internal control practices influence the prevention of fraud within Lebanese small and medium-sized enterprises. From a total of 400 distributed questionnaires, 308 were duly completed and analyzed using the SPSS statistical software. The findings emphasized the necessity for contemporary businesses to adopt robust monitoring mechanisms, as updated evidence indicates that these monitoring systems significantly influence performance evaluations. The mindset of management is largely shaped by the operational environment of the business. A well-established monitoring structure is foundational and supports the development of broader internal control frameworks. The study also identified the importance of organizational culture, employee work habits, and ethical standards in shaping internal controls. It concluded that effective fraud prevention depends on a combination of factors, including oversight from a portion of the executive board and representatives from board committees, who were instrumental in gathering the relevant data upon the board of directors' request.

Ogwiji and Lasisi (2022) examined how internal control systems impact fraud prevention in financial services firms across Nigeria. The study population consisted of 284 respondents drawn from listed financial services companies. The researchers employed a cluster sampling method and collected primary data using structured questionnaires measured on a five-point Likert scale. The analysis was conducted using SMART-PLS-3-SEM software to test the model's fitness and research hypotheses. Reliability and validity were assessed using constructs such as discriminant validity and cross-loadings. The results demonstrated that both the control environment and monitoring significantly and positively impacted fraud prevention. However, information and communication had a negative but statistically significant effect. Additionally, risk assessment had a positive but insignificant relationship, while control activities displayed a negative and insignificant influence on fraud prevention. Overall, the study concluded that internal control systems significantly influence the mitigation of fraud in Nigeria's financial services sector.

Samuel, Pelumi, and Fasilat (2021) analyzed the role of internal control systems in curbing fraud within deposit money banks located in Kwara State, Nigeria. The research aimed to evaluate how internal control components contribute to fraud prevention and assess the role of internal auditors in risk management. The target population included all 17 quoted banks operating in the state. Purposive random sampling was used to select one respondent per bank, preferably someone from senior or middle management or the internal control department. Data collection was done through a well-structured questionnaire distributed to selected personnel. Descriptive statistics and ordered logit regression were employed for data analysis. The study found a significant link between internal control systems and fraud prevention, supported by a p-value of 0.0023, which was significant at 1%, 5%, and 10% levels, suggesting strong evidence of the effectiveness of internal controls in reducing fraudulent activities in deposit money banks.

Okeke, Offor, and Chukwunwike (2021) assessed the effectiveness of internal controls in minimizing fraud and professional misconduct among small and medium-sized enterprises within Enugu metropolis. Using a survey design, the study gathered data that highlighted three key findings: SMEs implement internal controls, they comply with these controls, and the controls are effective in reducing fraudulent practices and professional misconduct. Based on these outcomes, the researchers advised that SME owners and managers should regularly review their existing internal control frameworks, ensure accurate record-keeping, and maintain regular financial reporting. Furthermore, SMEs currently lacking internal controls were encouraged to develop and implement such systems to enhance operational efficiency and reduce opportunities for fraudulent activities.

Ugwu and Ochuba (2021) explored how internal controls serve as mechanisms for fraud control within deposit money banks in Enugu metropolis. The study utilized a survey design, collecting data through structured questionnaires distributed to personnel in fifteen different banks. The hypotheses were tested using the Chi-Square method (Fisher’s Exact Test), revealing that control environment, control activities, and monitoring functions significantly and positively contributed to fraud mitigation in organizations.

# 2.4 Gap in Literature

Even though there are literature on the role of internal control systems in mitigating fraud across various sectors, significant gaps remain, particularly within the context of small and medium-sized enterprises (SMEs) in Nigeria. While studies by Nwosu, Onyemaobi, and Odimmega (2025) and Ololade (2025) have examined internal control strategies and their automation in fraud prevention, these works have predominantly focused on generalized applications of internal controls without dissecting specific components such as control activities and monitoring in sufficient depth. Similarly, although Opaleye and Adelugba (2024), Dibo (2023), and Opiyo (2023) have emphasized the relevance of control systems in retail and banking sectors, their research does not adequately reflect the peculiarities and operational challenges unique to SMEs in Nigeria. Furthermore, while Alayli (2022), Ogwiji and Lasisi (2022), and Samuel, Pelumi, and Fasilat (2021) highlighted the broader impact of monitoring and organizational culture on fraud control, limited attention was given to the interdependence and individual contributions of internal control components like control activities and monitoring within the SME sector. Most of these studies employed broad internal control variables or concentrated on large-scale institutions such as banks or retail chains, thereby neglecting how specific control functions operate in the resource-constrained environments typical of Nigerian SMEs. Consequently, this study seeks to fill the gap by focusing specifically on the effect of control activities and monitoring activities—as distinct components of internal control systems—on fraud mitigation in selected SMEs in Nigeria.

# 3.0 Methodology

Research design refers to the strategic framework for collecting and analyzing data in order to address the research problem. For this study, a descriptive survey design was adopted. Descriptive research is used to systematically describe characteristics of a population or phenomenon being studied. In the context of this research, the descriptive approach is considered appropriate as it allows for the collection of data regarding the perceived effect of internal control systems—particularly control activities and monitoring activities—on fraud mitigation among selected SMEs in Nigeria.

The population of this study comprises owners, managers, accountants, and internal auditors of selected small and medium enterprises (SMEs) in Nigeria. To determine the sample size for an infinite population, Cochran’s formula was employed. The formula is suitable for large or undefined populations where it is not feasible to reach every potential participant.

n = $\frac{z^{2} X p X q}{e^{2}}$​

Where:

n = sample size

Z = Z-value (1.96 for 95% confidence level)

p = estimated proportion of the population with the attribute (assumed at 0.85)

q = 1 – p (0.15)

e = margin of error (0.05)

n = $\frac{\left(1.96\right)^{2} X 0.85 X 0.15}{\left(0.05\right)^{2}}$

n = $\frac{0.489804}{0.0025 }$

n = 195.9216

Approximately, n = 196

Hence, the sample size was approximated to 196 respondents. The study employed a purposive sampling technique to select respondents who are directly involved in financial management and control processes within their SMEs. This non-probability sampling method was used to ensure that data was collected from individuals who have adequate knowledge and experience regarding internal control systems and fraud-related issues in their organizations. Only SMEs with formal accounting processes and at least five employees were considered eligible for inclusion in the sample.

Primary data was collected using a structured questionnaire. The questionnaire focused on items measuring the core research variables: control activities, monitoring activities, and fraud mitigation practices. A 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree" was used in Section B to assess the extent to which respondents agreed with statements related to the influence of internal control components on fraud mitigation.

The reliability of the instrument was tested using Cronbach’s Alpha to determine the internal consistency of the scale items. The reliability coefficient obtained is shown below:

**Table 1 Reliability Coefficient**

|  |  |
| --- | --- |
| **Construct** | **Cronbach’s Alpha** |
| Internal Control and Fraud Mitigation Instrument | 0.893 |

Source: SPSS V. 26 (2025)

This result, obtained using SPSS Version 26, indicates that the instrument is highly reliable, as the alpha value exceeds the commonly accepted threshold of 0.7. The data collected were analyzed using SPSS Version 26. Both descriptive and inferential statistics were applied. Descriptive statistics such as frequency distributions were used to summarize the response patterns. To test the study’s hypotheses and determine the influence of control activities and monitoring activities on fraud mitigation, multiple regression analysis was conducted at a 5% level of significance.

The multiple regression model estimated is expressed below:

FM= β0 ​+ β1​(CA) + β2(MA) +ε \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_eq1

Where:

FM represents Fraud Mitigation, the dependent variable.

β0​ is the intercept or constant term.

β1​ is the regression coefficient for Control Activities (CA), which measures the effect of control activities on fraud mitigation.

β2​ is the regression coefficient for Monitoring Activities (MA), which captures the effect of monitoring on fraud mitigation.

ε is the error term, accounting for the variability in fraud mitigation not explained by the model

The hypotheses were tested at a 5% significance level (α=0.05\alpha = 0.05α=0.05). The decision rule is as follows:

* Reject the null hypothesis if the p-value is less than 0.05.
* Accept the null hypothesis if the p-value is equal to or greater than 0.05.

# 4.0 Result and Discussion

The response rate to the research instrument was 80.6% as 158 responses were retrieved while 38 were not. Thus, further analyses were based on the response rate of 80.6%.

# 4.1 Analysis of Research Questions

**Table 2 Analysis of Research Questions**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **Control Activities** | **SA** | **A** | **N** | **D** | **SD** | **Mean** | **Decision** |
| 1 | Please indicate your level of agreement with the following statements: | 26 | 60 | 20 | 34 | 18 | 3.27 | Accept |
| 2 | The organization uses standard procedures for authorizing transactions and activities. | 40 | 44 | 32 | 24 | 18 | 3.41 | Accept |
| 3 | Physical controls (such as restricted access, locks, passwords) are in place to safeguard assets. | 24 | 56 | 30 | 34 | 14 | 3.27 | Accept |
| 4 | All financial transactions are recorded and approved by designated personnel. | 32 | 58 | 18 | 22 | 28 | 3.28 | Accept |
| 5 | Management regularly supervises and reviews employees’ work to ensure accuracy. | 30 | 58 | 22 | 36 | 12 | 3.37 | Accept |
| 6 | Controls over procurement, sales, and cash handling are strictly enforced. | 72 | 18 | 26 | 12 | 30 | 3.57 | Accept |
|  | Deviations from standard control procedures are properly investigated and corrected. | **SA** | **A** | **N** | **D** | **SD** | **Mean** | **Decision** |
| 1 | **Monitoring Activities** | 30 | 54 | 34 | 26 | 14 | 3.38 | Accept |
| 2 | Please indicate your level of agreement with the following statements: | 26 | 50 | 28 | 40 | 14 | 3.22 | Accept |
| 3 | Regular internal audits are conducted to assess the effectiveness of internal controls. | 34 | 56 | 26 | 20 | 22 | 3.38 | Accept |
| 4 | Management performs periodic reviews of operational and financial activities. | 42 | 40 | 26 | 32 | 18 | 3.35 | Accept |
| 5 | Deficiencies or weaknesses identified in internal control are promptly addressed. | 22 | 70 | 28 | 24 | 14 | 3.39 | Accept |
| 6 | Employees are encouraged to report control breaches or irregularities. | 36 | 46 | 24 | 34 | 18 | 3.30 | Accept |
|  | The monitoring process includes follow-up on audit recommendations. | **SA** | **A** | **N** | **D** | **SD** | **Mean** | **Decision** |
| 1 | Monitoring activities are conducted independently to ensure objectivity. | 32 | 58 | 18 | 22 | 28 | 3.28 | Accept |
| 2 | **Fraud Mitigation** | 30 | 58 | 22 | 36 | 12 | 3.37 | Accept |
| 3 | Please indicate your level of agreement with the following statements: | 72 | 18 | 26 | 12 | 30 | 3.57 | Accept |
| 4 | The internal control system has helped to reduce cases of fraud in the organization. | 30 | 54 | 34 | 26 | 14 | 3.38 | Accept |
| 5 | Fraud risks are identified and assessed as part of routine business processes. | 26 | 50 | 28 | 40 | 14 | 3.22 | Accept |
| 6 | Employees are aware of the consequences of engaging in fraudulent activities. | 34 | 56 | 26 | 20 | 22 | 3.38 | Accept |

Source: Field Survey (2025)

**Table 2** presents the frequency distribution and mean responses of participants on various statements related to Control Activities, Monitoring Activities, and Fraud Mitigation within selected SMEs in Nigeria. The responses were rated on a five-point Likert scale: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly Disagree (SD). The overall decision for each item is based on whether the mean score is above the benchmark of 3.00.

Starting with the section on Control Activities, the first item is a general prompt asking respondents to indicate their level of agreement with the listed statements. Here, 26 respondents strongly agreed, and 60 agreed, which together form the majority. Only 34 disagreed and 18 strongly disagreed, with a neutral stance by 20 respondents. The mean score of 3.27 suggests that the respondents generally accepted the relevance and implementation of control activities.

For the second statement, which assesses whether organizations use standard procedures for authorizing transactions, 40 respondents strongly agreed and 44 agreed. A combined total of 84 positive responses contrasts with only 42 negative responses (24 disagree and 18 strongly disagree). The mean of 3.41 reinforces a positive perception, indicating that standardized authorization procedures are largely in place.

Regarding physical control mechanisms such as restricted access and passwords, 24 respondents strongly agreed and 56 agreed, while 34 disagreed and 14 strongly disagreed. The mean score of 3.27 and the overall acceptance decision show that physical safeguards are moderately acknowledged but not universally practiced.

When asked if all financial transactions are recorded and approved by designated personnel, 32 strongly agreed and 58 agreed, representing a strong affirmation from 90 respondents. However, 50 respondents disagreed or strongly disagreed. Despite this division, the mean of 3.28 still leans toward acceptance, suggesting general compliance with financial recording and approval processes.

On management's role in supervising and reviewing employees’ work, the results are again largely favorable. Thirty respondents strongly agreed, 58 agreed, while 36 disagreed. With a mean of 3.37, it is evident that respondents view management supervision as an active part of internal control.

The sixth item in the control activities section focused on controls over procurement, sales, and cash handling. It received the strongest support, with 72 respondents strongly agreeing and 18 agreeing. Only 12 and 30 respondents disagreed and strongly disagreed, respectively. The high mean score of 3.57 highlights a clear consensus on the enforcement of these controls.

Shifting to the section on Monitoring Activities, the first item evaluates whether deviations from standard control procedures are investigated and corrected. A total of 84 respondents (30 SA and 54 A) support this, while 40 respondents disagree or strongly disagree. The mean of 3.38 and the acceptance decision reflect confidence in corrective monitoring actions.

The next general prompt gathered 76 positive responses (SA and A) against 54 negative ones, leading to a mean of 3.22. Though not overwhelmingly high, this shows that most respondents agree with the importance and presence of monitoring activities.

Regarding the conduct of internal audits to assess internal controls, 90 participants (34 SA and 56 A) affirmed their existence. Only 42 respondents disagreed or strongly disagreed. The mean of 3.38 supports the idea that internal audits are a standard practice in many SMEs surveyed.

When asked whether management performs periodic reviews of financial and operational activities, 82 participants agreed to some extent. The mean of 3.35 reflects an overall belief that management is engaged in consistent performance reviews, even though 50 respondents expressed some level of disagreement.

The statement on promptly addressing deficiencies in internal control was met with strong agreement from 92 respondents (22 SA and 70 A), leading to a solid mean of 3.39. This suggests that most SMEs take timely action in fixing internal control weaknesses.

Respondents were also asked whether employees are encouraged to report control breaches or irregularities. While 36 strongly agreed and 46 agreed, 34 disagreed and 18 strongly disagreed. A mean of 3.30 indicates general agreement, albeit with room for improvement in promoting whistleblowing culture.

The final item in the monitoring section tested the objectivity of monitoring activities. With 32 respondents strongly agreeing and 58 agreeing, the mean score of 3.28 supports the notion that monitoring processes are considered independent and unbiased in many SMEs.

The final section of Table 2addresses Fraud Mitigation. The initial item received significant support: 72 respondents strongly agreed and 18 agreed, giving the highest mean score of 3.57. This suggests strong confidence that internal control activities contribute meaningfully to preventing fraud.

When asked if the internal control system has reduced fraud in their organization, 84 respondents agreed to some extent. The mean of 3.38 reinforces the idea that SMEs experience tangible fraud reduction from applying internal controls.

In terms of identifying and assessing fraud risks as a regular business function, responses were more moderate. Only 76 respondents agreed, while 54 took a negative or neutral stance. The mean of 3.22 shows general agreement but also suggests that formal risk assessment practices may be lacking in some SMEs.

Finally, regarding employee awareness of the consequences of fraudulent behavior, 90 respondents (34 SA and 56 A) affirmed this, resulting in a mean of 3.38. This implies that most SMEs maintain a culture of awareness around ethical behavior and fraud consequences.

# 4.2 Test of Hypotheses

The result of the test of hypothesis is shown below in Table 3.

**Table 3 Test of Hypotheses**

|  |
| --- |
| **Model Summary** |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .915a | .838 | .835 | .33940 |
| a. Predictors: (Constant), Monitoring Activities, Control Activities |

|  |
| --- |
| **ANOVAa** |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 92.043 | 2 | 46.021 | 399.518 | .000b |
| Residual | 17.855 | 155 | .115 |  |  |
| Total | 109.897 | 157 |  |  |  |
| a. Dependent Variable: Fraud Mitigation |
| b. Predictors: (Constant), Monitoring Activities, Control Activities |

|  |
| --- |
| **Coefficientsa** |
| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | .046 | .124 |  | .371 | .711 |
| Control Activities | .418 | .057 | .380 | 7.283 | .000 |
| Monitoring Activities | .574 | .051 | .586 | 11.241 | .000 |
| a. Dependent Variable: Fraud Mitigation |

Source: SPSS V. 26 (2025)

The Model Summary section in Table 3 shows an Adjusted R-Square value of 0.835, indicating that approximately 83.5% of the variation in fraud mitigation among the selected SMEs in Nigeria can be explained jointly by control activities and monitoring activities. This high explanatory power suggests that the internal control system—through these two components—has a substantial effect on the ability of SMEs to reduce or manage fraud occurrences. The remaining 16.5% of variation is attributable to other factors not included in the model.

The ANOVA table supports the model’s overall validity, as shown by the probability (p-value) of the F-statistic being 0.000. This result is highly significant at the 5% level, meaning the joint effect of the predictors (control activities and monitoring activities) on fraud mitigation is statistically valid. In essence, the model as a whole fits the data well and confirms that internal control mechanisms collectively influence fraud mitigation significantly in the SME sector.

The intercept (constant) in the model is 0.046 with a p-value of 0.711, which is not statistically significant. This suggests that when both control activities and monitoring activities are held at zero, the predicted value of fraud mitigation is practically negligible and not meaningful in itself. This further emphasizes the importance of the two explanatory variables as core drivers of fraud control.

# 4.2.1 Test of Hypothesis I

H01. Control activities do not significantly affect fraud mitigation among selected SMEs in Nigeria.

The coefficient for control activities which is 0.418, this indicates that a one-unit increase in the effectiveness of control activities leads to an expected increase of 0.418 units in fraud mitigation, holding monitoring activities constant. This suggests a moderately strong and positive effect, meaning that more robust control activities—such as transaction approvals, physical safeguards, and supervisory checks—contribute meaningfully to reducing fraud. The associated p-value is 0.000, which is statistically significant at the 5% level, allowing us to reject the null hypothesis (H₀₁). Thus, control activities significantly and positively affect fraud mitigation among selected SMEs in Nigeria. In other

# 4.2.2 Test of Hypothesis III

H02. Monitoring activities do not significantly affect fraud mitigation among selected SMEs in Nigeria.

Turning to monitoring activities, the coefficient is 0.574, implying a stronger marginal effect compared to control activities. This means that a one-unit improvement in monitoring activities results in a 0.574 unit increase in fraud mitigation, assuming control activities remain unchanged. Monitoring activities—including internal audits, corrective follow-ups, and whistleblower mechanisms—appear to have an even stronger positive effect on mitigating fraud than control activities. With a p-value of 0.000, this effect is also statistically significant at the 5% level, which leads to the rejection of the second null hypothesis (H₀₂). Therefore, monitoring activities significantly and positively affect fraud mitigation among selected SMEs in Nigeria.

# 4.3 Discussion of Findings

The study found that **control activities** have a positive and significant effect on fraud mitigation among selected SMEs in Nigeria (β = 0.418, p = 0.000). This suggests that structured procedures such as approvals, verifications, reconciliations, segregation of duties, and physical safeguards are instrumental in reducing the occurrence of fraud in small businesses. SMEs, though often resource-constrained, can establish basic but effective control activities that act as deterrents against fraudulent behavior. When employees are aware of the presence of checks and balances in day-to-day operations, the risk and opportunity for fraudulent acts are significantly minimized. These practices not only create accountability but also close loopholes through which internal fraud might occur. The statistical strength of this finding highlights the importance of having operational control structures in place—even at the SME level—where management and employees are often closely connected. The significance of control activities in fraud prevention is echoed in the findings of Opaleye and Adelugba (2024), who reported that internal control systems significantly reduce fraudulent practices among retail supermarkets, reinforcing the need for structured control elements like approvals and reconciliations. Okeke, Offor, and Chukwunwike (2021) also observed that SMEs that implemented and complied with internal controls—including control activities—witnessed reduced fraud and misconduct, confirming that such activities are vital at the operational level. In Ugwu and Ochuba (2021), control activities were explicitly found to significantly contribute to fraud mitigation in the banking sector, aligning with this study’s finding and suggesting cross-sector relevance. On the contrary, Ogwiji and Lasisi (2022) offered a dissenting view, revealing that control activities had a *negative and insignificant* impact on fraud prevention in financial services. This contradiction may stem from sectoral differences or implementation quality, highlighting that control activities alone may not be sufficient without supportive elements like risk assessment or monitoring.

Similarly, the finding that **monitoring activities** positively and significantly influence fraud mitigation (β = 0.574, p = 0.000) emphasizes the critical role of ongoing evaluations and reviews in maintaining effective internal controls. Monitoring encompasses internal audits, supervisory reviews, and feedback mechanisms that help in identifying weaknesses and ensuring controls remain effective over time. For SMEs, this could involve routine checks by owners, performance appraisals, or the use of automated tools to track transactions and activities. The stronger coefficient suggests that constant vigilance and real-time oversight may be even more effective than one-time or procedural controls, particularly in environments where fraud risks are high and evolving. Monitoring introduces a dynamic aspect to control systems by continuously assessing their relevance and ability to adapt to new threats. The positive impact of monitoring on fraud mitigation is strongly corroborated by Opiyo (2023), whose study in Nairobi established a strong relationship between monitoring practices and fraud prevention in SMEs. This affirms the critical oversight role that monitoring plays in fraud control. Similarly, Dibo (2023) found that monitoring, alongside other internal control components, had a robust positive correlation with fraud detection in Kenya’s banking sector, underscoring its significance across industries. Ugwu and Ochuba (2021) further validate this position by noting the effectiveness of monitoring in reducing fraudulent activities within Nigerian deposit money banks. Alayli (2022) adds an international perspective, highlighting how robust monitoring structures in Lebanese SMEs form the backbone of effective internal control frameworks, facilitating better fraud prevention. Collectively, these studies support the idea that without continuous monitoring, even well-designed control systems may become ineffective over time, especially in rapidly evolving business environments.

# 5.0 Conclusion and Recommendation

In an ideal business environment, organizations—regardless of their size—are expected to operate with strong internal control systems that ensure financial integrity, promote transparency, and safeguard assets. Internal controls serve as the first line of defense against fraud and financial mismanagement. When properly implemented, they help ensure compliance with laws and regulations, support accurate financial reporting, and enhance operational efficiency. For small and medium enterprises (SMEs), effective internal control systems can be instrumental in securing stakeholder trust, attracting investment, and enabling sustainable growth. Ideally, SMEs would adopt globally accepted internal control frameworks, such as the COSO model, to reduce the risk of fraud and build robust, accountable financial structures.

The findings of this study suggest that the presence and enforcement of internal control mechanisms, specifically control and monitoring activities, play a critical role in shaping the fraud resilience of SMEs in Nigeria. The significant positive effects indicate that when these enterprises embed structured procedures and maintain vigilant oversight within their operations, they create an environment less conducive to fraudulent practices. This reflects the broader relevance of internal governance structures in enhancing operational integrity, trust, and financial accountability within the SME sector. Moreover, the statistical strength of these relationships highlights that fraud mitigation in SMEs is not merely a function of organizational size or resources, but rather of deliberate control frameworks that function effectively within the unique contexts of small business operations. The study therefore makes the following recommendations:

**1. To SME owners and managers:** Implement clear and consistent control activities such as authorization procedures, segregation of duties, and proper documentation to reduce opportunities for fraud within business operations.

**2. To internal auditors and supervisory staff in SMEs:** Regularly conduct monitoring exercises, including audits and performance reviews, to ensure that existing controls are functioning effectively and fraud risks are promptly identified.

# 5.1 Limitation and Suggestion for Further Studies

This study was limited to a small group of selected SMEs in Nigeria, so the results may not fully represent all SMEs in the country. Also, the study relied only on responses from questionnaires, which means the answers could be affected by the personal opinions or honesty of the respondents. In addition, since the study used a survey method, it could not deeply explore other factors that might influence fraud that were not included in the questionnaire.

Future researchers can expand the study by including more SMEs from different parts of Nigeria to get a wider view. They can also use interviews or focus group discussions alongside questionnaires to get more detailed information. Lastly, future studies could look at other parts of internal control systems, such as risk assessment or information and communication, to better understand their role in reducing fraud.

# References

Alayli, S. (2022). The impact of internal control practices on fraud prevention: The case of Lebanese small-medium enterprises. *European Journal of Business and Management Research*, *7*(5), 141-147.

Amoah, J., Belas, J., Dziwornu, R., & Khan, K. A. (2022). Enhancing SME contribution to economic development: A perspective from an emerging economy. *Journal of International Studies*.

Dibie, I., & Nworie, G. O. (2025). Disruptive technological innovation and profit growth of Small Scale Enterprises in Ebonyi State. *Journal of Global Accounting*, *11*(1), 115-139.

Dibo, S. (2023). *Effect of Internal Control Sytems on Fraud Detection in Banking Industry in Kenya* (Doctoral dissertation, University of Nairobi).

Hermawan, A. W., & Pramana, Y. (2022). The Construction Industry and Financial Statement Fraud: A Literature Review of Fraud Triangle Theory. *Journal of Accounting Issues*, *1*(2), 47-53.

Jiang, R. (2022). Exploring employees’ computer fraud behaviors using the fraud triangle theory. *Pacific Asia Journal of the Association for Information Systems*, *14*(4), 4.

Nwosu, N. L., Onyemaobi, N., & Odimmega, C. G. (2025). Utilization of automated internal control system for effective fraud prevention in small and medium scale enterprises in Anambra state. *Unizik Journal Of Educational Research, Science And Vocational Studies*, *1*(1).

Ogwiji, J., & Lasisi, I. O. (2022). Internal control system and fraud prevention of quoted financial services firms in Nigeria: A Smart PLS-SEM approach. *European Journal of Accounting, Auditing and Finance Research*, *10*(4), 1-13.

Okeke, S. E., Offor, S. I., & Chukwunwike, O. D. (2021). Internal control: Its role in the reduction of fraud and professional misconduct among SMEs. *Asian Journal of Economics, Business and Accounting, 21*(19), 57–66. https://doi.org/10.9734/ajeba/2021/v21i1930486

Ololade, B. M. (2025). Internal control systems of SMEs in Nigeria: a proactive or reactive strategy against employees’ fraud?. *Journal of Financial Crime*, *32*(1), 49-63.

Opaleye, M. A., & Adelugba, I. A. (2024). The effect of the internal control system (ICS) on fraud prevention and the financial performance of selected retail supermarkets in Ibadan. *International Journal of Business and Management (IJBM), 3*(1), 22. <https://iessociety.org/>

Opiyo, L. A. (2023). *Effectiveness of internal control systems on fraud detection and prevention Among Small and Medium-Sized Enterprises in Nairobi Kenya* (Doctoral dissertation, Strathmore University).

Samuel, O., Pelumi, I., & Fasilat, O. (2021). Effect of internal control system on fraud prevention among deposit money banks in Kwara State, Nigeria. *International Journal of Multidisciplinary Research and Growth Evaluation*, *2*(1), 264-271.

Ugwu, J. I., & Ochuba, U. L. (2021). Internal Control: A tool for fraud control in deposit money banks in Nigeria. *European Journal of Business and Management*, *13*(13), 64-75.

Van Akkeren, J. (2023). Fraud triangle: Cressey’s fraud triangle and alternative fraud theories. In *Encyclopedia of Business and Professional Ethics* (pp. 917-920). Cham: Springer International Publishing.

Vutumu, A., Aregbeyen, O., & Akinteye, A. S. (2024). Internal Control and Fraud Prevention in the Nigerian Public Sector: A Partial Least Square Structural Equation Modeling Approach. *Journal of Financial Risk Management*, *13*(4), 703-729.