

# INTERNAL AUDIT VALUE AND FRAUD DETECTION: AN EMPIRICAL ANALYSIS

## ABSTRACT

Globally, organizations have various challenges of fraudulent activities and exposure to fraud risk irrespective of size, location or sector. Fraud is not a new phenomenon, it occurred from centuries with numerous high profile cases, and these are perceived to have adversely affected company's profitability, corporate governance, image, growth and going concern, this calls for Internal Audit Value (IAV) and Fraud Detection (FD). Researchers have conducted studies on fraud, but not many studied the influence of IAV on FD. Therefore, this study examined the probable influence of IAV on FD in Nigerian Manufacturing Industries (NMI). Survey research design was adopted with population study of 19,443 workers in ten selected industries in Nigeria manufacturing sector. 392 sample size was determined and questionnaire administered, this give a response rate of 86%. Data collected were analysed with descriptive and inferential statistics at 5% level of significance. The study revealed that IAV positively influenced FD ( $Adj.R^2=0.857, F_{(3, 337)}=667.489, p=0.000$ ). The study concluded that IAV influenced and has significant impact on FD in NMI. The study further recommends that independence of internal audit and quality of audit team should be guaranteed. Opportunity that enhances capability should be flagged and promptly investigated, internal control mechanism should be re-enforced to mitigate fraud while technological monitoring devices should be adopted.

**Keywords:** Corporate governance, Fraud, Fraud detection, Internal audit value, Internal control

**Word Count:** 211

## 1.0 Introduction

Globally, organisations have various challenges of fraudulent activities and exposure to fraud risk irrespective of size, location or sector. This occurred in different forms and gravity with negative impact on image, financial, reputation, social and psychology of individual and organisation. Fraud is not a new phenomenon, it occurred from centuries with numerous high profile cases. This has led to collapsed of many high profile organisation likes Pamalat (Italy), Satyam (India), HIH Insurance (Australia), Barings Bank and Equitable life (United Kingdom), Worldcom, Lehman Brothers, Adeptia Communication Corporation, Enron, Tyco International Limited, Bernie Medoff scandals, all in (United State of America), Cadbury and Nampark, (Nigeria) and others (Olaoye & Adekoya, 2022). However, management, auditors (internal or external), and audit committee have significant roles to play in fraud detection and minimisation of fraudulent activities. Fraud is any illegal act, deceit or violation of trust by individual to gain undue advantage over others. Fraud is stealing by deceit and tricks, to cheat, or gain unjust or illegal advantage over another person (Adekoya, Oyebamiji & Lawal, 2020). In business environment, fraud is an intentional act, deception, misappropriation of company assets or window-dressing of financial statements to the advantage of the perpetrators (Hall, 2007; Zagar, Malis & Novark, 2016).

Corporate accounting scandal, dishonesty, material misstatement and illicit deals are some of the critical challenge to company's profitability, corporate governance, goodwill, and future growth. Likewise, fraud has far reaching consequences on organisation, it reduce confidence, lead to insolvency and liquidation, creates atmosphere of hardship for shareholders and stakeholders, loss of jobs and investments, affect citizens cost of living, and nation's growth in general. Besides, there is need to restores public confidence on corporate governance and efficient management of resources with good ethical leadership. This has necessitated shareholders, management and investors to focus more attention on corporate governance and see internal audit value as critical part of governance process to solve this challenge of fraudulent act. Internal auditor role to detect fraud are in two areas of intentional misstatements: fraudulent financial reporting misstatement, and misappropriation of assets misstatements. Assakaf, Samsudim and Otman (2018) and Chang *et al.* (2019) reported that basic reason for consistent fraudulent act is because at time perpetrators go undetected or discovered several months later without any punishment, therefore to combat fraudulent act, it required timely detection by competent internal audit team. Internal audit add value to business operating efficiency, protect company's assets, and assist in fraud management. Also, it instil culture of honesty, ethics and integrity, and investigate fraudster.

Furthermore, Dezoort and Harrison (2018), viewed that fraud detection is an important role for internal auditors. This is achieve by instituting and implementing various forms of controls to reduce incidence of fraud and restore trust, confidence, profitability and future growth. In addition, auditor responsibility to detect fraud depends on his attitude of professional skepticism throughout the audit process to identify frequency of fraud committed, skillfulness and experience of the perpetrator, degree of collusion involved, and relative size of individual amounts manipulated. The risk of auditor not detecting a material misstatement from fraudulent activities is higher than the risk of not detecting material misstatement from error. Likewise, risk of auditor not detecting material misstatement that result from management fraud is greater than for employee fraud. Internal auditing is an independent objective assurance and consulting activity designed to add value and improve organization's operation (Institute of Internal Auditors, 2016). Internal auditor is a watchdog on organisation's operations and activities. He deter wasteful spending, inefficiency, theft, fraud and non-compliance to established rules, regulations, and policies. Demirovic, Isakovic-Kaplan, and Proho (2021) opined that internal auditor's role on fraud detection rest on fraud risk assessment in internal audit planning process and work engagement. Similarly, internal audit is an independent unit within an organisation saddled with responsibility to provide independent expert opinion, recommendations or advices on efficient internal control, organisation procedure and adequacy of established risk management process in order to achieve organisation set goals and objectives.

Previously, studies had been conducted on fraud detection with other independent variables like forensic accounting/auditing (Lawal *et. al.*, 2020; Mamahi & Urumsah, 2018; Eze & Okoye, 2019; Oyerogba, 2021), in other sectors likes public sector (Assakaf *et. al.*, 2018; Abdul-Aziz & Othman, 2021; Ibrahim & Al-Haidari, 2022; Khoza, Motubatse & Ngwakwe, 2022), university (Fitriyah, 2016; Nisak & Rochayatun, 2023); data analytics (Rosnidah *et al.*, 2022); deposit money bank (Okoye, Adeniyi & Igbojindu, 2020); external auditor (Wahidahwati and Asyik, 2022); internal audit with other dependent variables likes corruption (Alina, Cerasela & Raluca-Andreea, 2018; Chowdhury & Shil, 2019); internal control (Chang *et. al.*, 2019) with less focus on internal audit value and manufacturing industries. However, the objective of the study is to examine the impact of internal audit value on fraud detection using Nigerian manufacturing industry as case study. Manufacturing industry is one sector vulnerable to fraud. Its environment gives suppliers, contractors, workers and management opportunities to perpetrate different forms of fraud. This study would assist to show the role of internal audit value in fraud detection and also, makes appropriate recommendations and strategies that will reduced fraudulent

activities and financial irregularities, enhance company's profitability, confidence and future growth. In order to address the study, the research hypothesis, which suggest a tentative answer to the problem or question under investigation was tested at 0.05 significance level.

### **Hypothesis:**

**H<sub>0</sub>1: Internal audit value does not contribute significantly to fraud detection in manufacturing industries in Nigeria.**

## **2.0 Review of Extant Literature**

### **2.1 Conceptual review**

**2.1.1 Fraud:** Fraud in generic terms embraces varied means of human trick. It is a colloquial and technical word to describe dishonesty and harmful behaviour. Fraud is an intentional act, deceit, suppression of truth, cunning behaviour, tricks or dishonesty by one or more individuals among those saddled with responsibility, to obtain unjust or illegal advantage over others. It is an intent to deceive with false statement in which other parties relied upon and caused damage or financial loss. Olaoye and Adekoya (2022) opined that fraud has led to financial distress and poor performance of many organisations, this cut across countries, races, sectors, religion or human. Fraud exposes organisation to significant financial risks with negative impact on its profitability and growth (Rosnidah *et al.*, 2022). Fraud is violation of trust, it is costly and has negative effect on the reputation and credibility of the auditing plans and process. Fraud are committed basically through, pressure (motive), opportunity (ability to perpetrate fraud) and rationalisation (fraudster's justification for the dishonest behaviour). Association of certified fraud examiners (ACFE) classified fraud into three: corruption, asset misappropriation, and financial statement fraud. Asset misappropriation is act of stealing, dishonesty, misuse or concealment of organisation resources. Corruption is an intentional act by individual to violate his duty for personal benefit. Financial statement fraud is an intentional act of misstatement or omission of material information in the organisation financial reports.

**2.1.2 Fraud Detection:** Fraud detection is a key factor in anti-fraud strategy, it involve prevention, detection, and investigation. Fraud detection is the process of spotting signs or signals of possible fraud and mechanism to stop such at the earliest time. It involves the process to uncover, reveal, or identify existence of fraudulent practices in organisation. According to Wahidahwati and Asyik (2022), fraud detection is a process to disclose illicit action that are intentionally carried out which resulted into material misstatement. Fraud should be recognised in time and quickly investigated for further actions. Recognition could be by indicators symptoms or red flags likes tips, internal controls irregularities, accounting/analytical anomalies, or employee behavioural changes. Fraud detection becomes important where fraud prevention failed. Besides, too much controls to thwart fraud could affect effectiveness and efficiency of business operation. But, there is need to balance the risk of potential fraud and efficient business operation to achieve profitability and growth. Fraud detection reduce exposure to fraudulent activities and fraud associated cost, it also improved profitability, shareholders wealth, stakeholders' confidence, and future growth.

### **Fraud detection techniques**

1. Tip lines – Anonymous tip line is one of the most effective ways to detect fraud in an organization. Tip should be incorporated into employee training and should directly be linked to internal auditor for instant action.
2. By internal auditor – fraud could be detected by internal auditor in the course of their routine audit exercises. Internal audit plays a critical role as watchdog where suspicious activities are flagged and investigated.

3. By accident – this is a passive fraud detection approach where fraud is discovered by confession, accident or tips by others. This occurred where fraudster make mistakes to cover his tricks and expert spots such and report.
4. By dedicated department – organisation create compliance or investigating department. This department operate independently and report to higher officer likes controller, internal auditor or compliance officer on irregularities or fraud.
5. By external auditor – external auditor at time detect fraud in the course of their engagement. It is expected that external auditor conduct their audits using best professional method and assurance that financial statements are free from material misstatements from errors and fraud.
6. By whistle blowing – this is unanimous report of fraud and it is critical to fraud detection.

**2.1.3 Internal Audit Value:** Internal audit is a service delivery unit in organisation that support management to reduce risk of fraud, abuse and compliance with standards and ethical principles in auditing engagement. According to IIA (2016), internal auditing is a catalyst to improve organisation governance, risk management and controls, to provide insight and recommendations based on analyses, assessment of data and services process. The unit provides insight and objective assurance that established internal controls are working perfectly to deter associated organisational risks, to ensure corporate governance and risk management, and also achieved organisational goals and strategic objectives. Internal audit forms a critical part of organisation ethical culture and corporate governance structure to detect or minimize fraud by identifying red flags which show sign to commit fraud and take instant action to investigate. These ethical principles are the basic values, these are independence, integrity, skill, competency, knowledge, and professionalism. According to Coram, Ferguson and Moroney (2008), internal audit add value through improved controls and monitoring within an organisation to detect and report fraudulent activities. An increase in internal audit value will enhance the ability to detect fraud. However, organisation having internal audit are more likely to detect fraud in the course of their primary functions than those without internal audit. Eulerich, Henseler & Kohler (2017), reported that internal audit value is driven by various stakeholders' expectations and internal audit role to meet these expectations. Internal audit value is based on three elements: assurance, insight, and objectivity. Audit unit provides assurance on organisation operations, governance, control process, and risk management to achieve strategic operational financial and compliance targets. It also provides insight or catalyst on how to improve organisation effectiveness and efficiency through qualitative analysis and assessment of business operation. Thirdly, objectivity is based on integrity, independence, and accountability for independent advice and assessment of operations.

## **2.2 Theoretical Framework**

The study adopts Policeman theory and Fraud diamond theory.

**2.2.1 Policemen theory:** Policeman theory stated that internal auditor should act to search, detect and prevent fraud. It is an auditing theory that addresses fraud cases in an organisation, but today, auditors' added roles is to provide reasonable assurance, moitor internal controls, and makes independent reports on true and fair view of financial records. According to Hayes *et al.*, (1999) policeman theory was mostly known theory in the field of auditing until 1940s until other theories. However, Brunelli (2018) opined that policeman theory allow auditor to act like policeman to prevent and detect fraud. Although, auditor could not detect all fraud as it occurred, rather should increase their detection searchlight to minimize and instil stakeholders' confidence. Similarly, Fulop, Tiron-Tudor and Cordos (2019), reported that stakeholders or users of financial statements does not only believe in auditors to detect and prevent fraud, but expect them to work in a professional manner to instil stakeholders' confidence. In addition, Dauda and Olawale (2019), viewed that internal auditor should act as policeman in organisation

to monitor, and control arithmetical and logical cases that might leads to fraud. In manufacturing industries, auditor should focused on productions, distributions, supplies, financials, and technological operation to monitor, minimise or detect fraud. However, with various financial scandal in companies likes Enron, Pamalat, Worldcom and others, this theory becomes a focus for stakeholders, as internal auditor now required to monitor, detect and report fraud on timely basis. The essence is to enhance stakeholder's confidence, profitability and future growth.

**2.2.2 Fraud Diamond Theory:** According to Cressey (1953) fraud determinants factors could be theorized on fraud triangle elements: pressure, opportunity and rationalisation. Fraud is more likely to occur in an environment where person is under pressure to commit fraud, weak internal controls and monitoring, this creates opportunity to commit fraud, and ability to rationalize the crime behaviour. Albrecht *et al.*, (2009) reported that each fraud factor could be explained from double angles: fraudster and company. Fraud diamond theory was propounded by Wolfe and Hermanson (2004), they added that fraud is achieved by person with the required power of capability from opportunity that abounds. The theory was an extension of fraud triangle by Cressey (1953), with additional fourth element "Capability". Capability means ability to turn opportunity into reality. Opportunity for fraud will work where the right person is in right place to exploit and perpetrate fraud. According Wolfe and Hermanson (2004), high profile fraud could not have happened if there are no right person with special capability in organisation to carry out the fraud when opportunity abounds. Opportunity opened door for fraud while pressure and rationalisation draw person towards it, but perpetuator must have required skill, ability or capability to recognize the opportunity and take advantage to commit fraud. Wolfe and Hermanson (2004) identified four traits for committing fraud: individual with power and authority within the organization; ability to undermine and exploit internal controls weakness or failures; high confidence for going undetected or confidence to get out of it in time if detected; and ability to deal with stress that followed the crime of fraud. But, internal auditors' role to detect fraud should be a continuous assessment of capability traits due to changes in controls, processes, and circumstances within the organisation, and also human behavioural changes over time.

### **2.3 Empirical Review**

Nisak and Rochayatun (2023) studied role of internal audit, fraud detection and prevention in Universities. The study revealed that internal audit is required for detecting and preventing fraud, it also improve risk management, good governance, and efficient and effective controls. Similarly, Fitriyah (2016) studies revealed that in public university, internal audit aid fraud management by identification of red flags that show accounting anomalies. Also, Sepala, Herath and Munasinghe (2022) investigated the effect of internal audit on fraud management in financial sector. The study revealed that internal audit competence is an important predictors of fraud management. Besides, Mutambirwa *et al.*, (2022) investigated the impact of internal auditing on fraud detection in cement manufacturing industry. The study revealed that internal audit fails to address major forms of fraud likes misuse of assets, cash theft, cheque tampering and payroll fraud. The study recommends regular financial audit, controls, and audit reports implementation. Likewise, studied by Adewumi and Isaac (2023) on internal auditor roles and functions in preventing and detecting fraud in South African manufacturing SMES revealed that management should ensure effective risk based internal audit which allows risk based policies and programs. The study recommends recruitment of qualified personnel to monitor and detect fraud, and unethical behaviour on a timely basis. In addition, Ibrahim and Al-Haidari (2022) examined the effectiveness of internal audit team in detecting financial and administrative corruption. The study revealed positive relationship between internal audit process and team, and detection of financial and administrative corruption.

Skoczylas-Tworek (2022) studied internal audit as tool to reduce risk of fraud and abuse. The study revealed that internal auditor's effectiveness, in-depth knowledge of organisation's

operations, and characteristics would reduce fraud and abuse. The study recommends introduction of anti-corruption policies using internal audit procedures and team efficacy. Likewise, Demirovic, Isakovic-Kaplan and Proho (2021) examined internal audit risk assessment and fraud detection. The study revealed the quality of internal audit with the use of different tools and techniques to detect fraud which can cause losses, damages and insolvencies. The study recommends legal regulation for internal audit operation. Furthermore, Wahidahwati and Asyik (2022) looked at auditor's determinant ability in fraud detection. The study revealed that auditor ability, experience, ethics, professional skepticism and personality all have positive and significant effect on fraud detection. Also, Arum and Wahyudi (2021) conducted studies on internal audit quality and fraud detection, study revealed that audit quality determined by ethics and professionalism had effect on fraud detection, while audit quality act as mediator of ethics and professionalism on fraud detection. Similarly, Umar *et al.*, (2019) examined audit quality determinants and the relation with fraud detection. The study revealed that auditor independence has no effect on audit quality whereas auditor competencies positively influenced audit quality while audit quality has positive effect on fraud detection.

### 3.0 Methodology

Survey research design and random sampling techniques was adopted for the study to collect the relevant primary data. Study population was 19,443 workers from ten selected manufacturing industries. Sample size was 392, this was determined with Yamane (1967) techniques with 5% error terms. 392 copies of questionnaire were administered to various management, audit, and finance staff of the selected industries. Copies received were 337, with representing 86% response rate. Descriptive statistics: simple percentage, mean, and frequency distribution, and inferential statistics: Ordinary Linear Square (OLS) regression and Analysis of Variance (ANOVA) were adopted to analysed and interpret results.

#### 3.1 Reliability of Research Instrument

The reliability test of research instrument from the pilot study showed that independent variables, independence of internal audit, quality of internal audit, competence of audit team, and dependent variable, fraud detection had Cronbach's alpha of 0.86, 0.78, 0.79, and 0.83 respectively. However, according to Bolarinwa, 2015, a composite reliability and Cronbach Alpha ( $\alpha$ ) calculated greater than 60% should be taken as reasonable, reliabiliable and acceptable. Therefore, since all the constructs figures from the pilot study were greater than 0.6 acceptable threshold, the instrument was reliable and suitable.

**3.2 Model Specification:** *A priori* expectation from the data analysis is that there would be a positive relationship between internal audit value and fraud detection. It is expected that the independent variables: Independence of Internal Audit (IIA), Quality of Internal Audit (QIA) and Competence of Audit Team (CAT) would enhanced dependent variable of Fraud Detection (FD). This is expressed mathematically:  $\beta_1 - \beta_3 > 0$ .

#### Internal audit value and fraud detection

$$FD = \beta_0 + \beta_1 IIA + \beta_2 QIA + \beta_3 CAT + \mu_1$$

Where:

$\beta_0$  = Intercept or the constant, and  $\mu$  = Error terms.

$\beta_1 - \beta_3$  = Partial regression coefficient of the explanatory variables

#### 4.0 Data Analysis and Discussion of Findings

##### 4.1 Descriptive Analysis of test items

**Table 1: Demographic profile of respondents**

Description		Number =337	Percentage
Gender	Male	167	49.6
	Female	170	50.4
Academic Qualification	OND	30	8.9
	HND/BSc	250	74.2
	MSc/MBA	48	14.2
	PhD	9	2.7
Working Experience	<5 Years	84	24.9
	6-10 Years	154	45.7
	11-15 Years	71	21.1
	>15 Years	28	8.3
Age	<35	101	30.0
	36-45	142	42.1
	46-55	68	20.2
	>55	26	7.7
Professional Qualification	AAT	64	19.0
	ACA/ACCA	243	72.1
	FCA/FCCA	30	8.9
Marital Status	Married	195	54.9
	Single	142	42.1

**Source: Field Survey, 2023**

Demographic profile of the respondents in table 1 shows that more female respondents and married staff were involved in the study. Also, respondents in active age and with enough working experience were involved. Similarly, study revealed that respondents were academically and professionally knowledgeable enough to respond to the test items.

**Table 2: Dependent variable (Fraud Detection)**

	Strongly Agreed	Agreed	undecided	Disagreed	Strongly Agreed	Mean
	Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq
Fraud detection requires the use of individuals with diverse expertise, knowledge and skill	41.5	38.9	15.1	3.0	1.5	4.16
Fraud detection helps to detect organizations fraud risk	48.7	37.1	11.3	3.0	-	4.31
Fraud detection does not require the skill of special experts	53.4	38.0	3.0	-	5.6	4.34
Fraud detection helps to evaluate organization's control	40.7	32.0	21.7	2.7	3.0	4.05

**Source: Field Survey, 2023**

## Interpretation

Table 2 shows the respondents' responses to questions on fraud detection. Question on whether fraud detection requires the use of individuals with diverse expertise, knowledge and skill, a mean of 4.16 shows that majority of the respondents agreed that fraud detection requires the use of individuals with diverse expertise, knowledge and skill. On whether fraud detection helps to detect organisations fraud risk, a mean of 4.31 indicates that majority of the respondents agreed that fraud detection helps to detect organisations fraud risk. Likewise, on whether fraud detection does not require the skill of special experts, a mean of 4.34 explains that majority of the respondents agreed that fraud detection does not require the skill of special experts. Finally, on whether fraud detection helps to evaluate organisation's control, a mean of 4.05 indicates that majority of the respondents agreed that fraud detection helps to evaluate organisation's control.

**Table 3: Independent Variables**

Types	Average mean
Independence of Internal Audit(IIA)	4.40
Quality of Internal Audit(QIA)	4.17
Competence of Audit Team(CAT)	4.26

**Source: Field Survey, 2023**

Table 3 is the independent variables and overall average mean. The overall mean for IIA, QIA and CAT are 4.40, 4.17 and 4.26 respectively. This revealed that majority of the respondents agreed that IIA, QIA and CAT aids fraud detection in manufacturing industries in Nigeria.

## 4.2 Test of Hypothesis

### Research Hypothesis:

**H<sub>01</sub>: Internal audit value does not contribute significantly to fraud detection in manufacturing industries in Nigeria.**

**Table 4: Regression Results for Hypothesis**

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.		
					B	Std. Error
$y_1 = a_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \mu$						
1	(Constant)	.463	.115		4.039	.000
	IIA	.101	.038	.086	2.628	.009
	QIA	.773	.029	.716	26.558	.000
	CAT	.238	.035	.220	6.844	.000
<b>a. Dependent Variable: Fraud Detection</b>						
<b>b. R=0.926                      R<sup>2</sup>=0.857                      F<sub>(3, 337)</sub> = 667.486</b>						
<b>PValue = 0.000</b>						

**Source: Researcher's Study, 2023**

$$FD = \alpha_0 + \beta_1 IIA + \beta_2 QIA + \beta_3 CAT + \mu_1$$

$$FD = 0.463 + 0.101 IIA + 0.773 QIA + 0.238 CAT + \mu_1$$

## Interpretation of Result

Table 4 shows the results of regression analysis for the influence of internal audit value on fraud detection in manufacturing industries in Nigeria. The results shows that IIA (0.101), QIA (0.773), and CAT (0.238) have positive relationships with fraud detection in manufacturing industries in Nigeria. An increase in IIA, QIA and CAT by 1% would cause 0.101, 0.773 and 0.238 respectively an increase in fraud detection. The study revealed that internal audit value positively influenced fraud detection in manufacturing industries in Nigeria (*Adj R<sup>2</sup>* =0.857, F(3,

337) =667.49; P= 0.000. There was evidence that IIA, QIA and CAT have significant relationships with fraud detection in Nigeria manufacturing industries (IIA  $\beta$  =0.101,  $t$  =2.628,  $p$ =0.009; QIA  $\beta$  =0.773,  $t$  = 26.558,  $p$ =0.000; and CAT  $\beta$  =0.238,  $t$  =6.844,  $p$ =0.000). This implies that IIA, QIA and CAT were significant factors that influenced changes in fraud detection in manufacturing industries in Nigeria. The overall coefficient of determination of adjusted  $R^2$ , which is the explanatory power of the model was 85.7%. This implies that within the model context, internal audit value is responsible for 85.7% variations in fraud detection while the remaining 14.3% is explained by other factors that can have effect on the dependent variable but not under this study. At a level of significance of 0.05, the F-statistics is 667.486, while the p-value of the F-statistics is 0.000, this is less than 0.05 adopted. Therefore, the null hypothesis that says, internal audit value does not have significant impact on fraud detection in manufacturing industries in Nigeria, will be rejected while alternate hypothesis of internal audit value have significant impact on fraud detection in manufacturing industries in Nigeria, will be accepted.

#### **4.3 Discussion and implication of Findings**

Empirical findings from the test of hypothesis on the internal audit value and fraud detection in manufacturing industries in Nigeria revealed that IIA, QIA and CAT have positive relationships with fraud detection in manufacturing industries in Nigeria. The F-statistic of 667.486 is statistically significant at  $p=0.000$  therefore, the study revealed that the internal audit value has a significant influence on fraud detection in manufacturing industries in Nigeria at 5 percent level of significance. From the findings of this research, the data analyzed makes it evident that internal audit value has a significant impact on fraud detection in manufacturing industries in Nigeria. The implication of findings to policy makers is that they should strengthen internal audit value to enable them monitor, control, and minimise fraudulent activities. Likewise, for investors, return on investment will be maximised with strong internal audit value and controls. Also to the accounting practice, internal audit value needs to be fused into accounting practice as useful and regulatory tool for fraud detection. In addition, the study revealed that internal audit value has a significant impact on fraud management in manufacturing industries in Nigeria. This shows that improvement in internal audit value will increase fraud detection in manufacturing industries in Nigeria and this would enhanced goodwill, probity, confidence and profitability. This corroborated the findings of Adewumi & Isaac (2023); Ibrahim & Al-Haidari (2022); Sepala, Herath & Munasinghe (2022); and Wahidahwati & Asyik (2022). The implication of this finding is that organisations should enhanced independence of internal audit, quality of auditing, training and professionalism, and competency to improve fraud detection in manufacturing industries, globally. Finally, increased enforcement, instant controls, good ethical standard, regulatory oversight, improved auditing standards, identification of fraud capabilities, and adoption of modern technological monitoring devices will assist internal auditor in fraud detection.

#### **5.0 Summary, Conclusion and recommendations of findings**

**5.1 Summary and conclusion:** The study examined internal audit value and fraud detection in manufacturing industries in Nigeria. However, instant cases of fraud is a common problem in organisation without regard to sector, industry, location or size. The study revealed the extent to which each of the independent variables influenced the dependent variable through inferential statistics and provides answer to the extent by which the variations in dependent variable is caused by the independent variables as highlighted in the models as represented by the coefficient of determination ( $R^2$ ). From our empirical findings, the study concluded that internal audit value has significant influence on fraud detection in manufacturing industries in Nigeria. Therefore, internal audit value is vital for detecting fraud in an organisation. But, timely fraud detection would enhanced organisational image, profitability, stability and future growth.

**5.2 Recommendations:** Based on the study findings and conclusions, the following are recommended:

1. The independence of the internal audit should be guaranteed.
2. The quality of internal audit team should be re-enforced with competent and professional staff.
3. Corporate governance policy should cover the quality of the internal audit unit.
4. A good internal control mechanism should be established to limit risk of fraud.
5. Fraud detection strategy should be strengthened with application of modern technological monitoring devices.
6. Internal auditor as watchdog or policeman should be alert to responsibility to detect and report fraud.
7. Opportunity that opened doors for capability should be timely flagged and investigated.

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