

## Forensic Accounting Techniques and Attainment of Results in Federal Government Parastatals in Nigeria



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**ABSTRACT:** Economic and financial fraud instances have risen over the past few years. However, fraud is a dynamic phenomenon, and new ways to defraud people, businesses, even government and the environment as a whole, appear every day. Adopting significant accounting techniques and fraud detection measures that are capable of identifying and preventing any type of fraud, regardless of how complex, is therefore imperative. The forensic accounting technique is one of these methods. This is one of the types of techniques that is primarily responsible for the investigation of fraud and is created primarily in the field of public and private finances. This study therefore examines the effect of forensic accounting techniques on attainment of results in Federal Government parastatals in Nigeria. The study adopted survey research design. The population of the study was 5 federal government agencies. Purposive sampling technique was used to select 2 agencies. The target population of the study was 131 accountants in the two agencies chosen- Nigeria Port Authority and Nigeria Civil Aviation Authority. Total enumeration was adopted. A validated and structured questionnaire was used to administer 131 copies of the questionnaire to the respondents. 126 copies were retrieved which represented 96% response rate. The Cronbach alpha reliability coefficients ranged from 0.740 – 0.892. The data were analyzed using descriptive and inferential (multiple regression) statistics at 5% level of significant. The result found that forensic accounting techniques had significant effect on output maximization in public sector of Nigeria (Adj.  $R^2 = 0.183$ ;  $F(6, 125) = 7.995, p < 0.05$ ). The study concluded that forensic accounting techniques had a significant positive effect on attainment of result (effectiveness). The study recommended that government should adopt forensic accounting investigation techniques in corruption investigation significantly achieve attainment of results in government parastatals.

**KEYWORDS:** Forensic Accounting Techniques, Procurement Practices, Public Sector, Attainment of Result.

### INTRODUCTION

Economic and financial fraud instances have risen over the past few years. However, fraud is a dynamic phenomenon, and new ways to defraud people, businesses, even societal customs and the environment as a whole, appear every day. Adopting significant security and fraud detection measures that are capable of identifying and preventing any type of fraud, regardless of how complex, is therefore imperative. The forensic accounting technique is one of these methods. This is one of the types of techniques that is primarily responsible for the investigation of fraud and is created primarily in the field of public and private finances. The forensic audit is a method of prevention of fraud and corruption, it puts in the hands of judges and the relevant legal authorities information and sufficient evidence to analyze and put as evidence in the judicial process, thus determining, based on legal texts, whether or not it is a fraud case or not (Adegbe et al. 2019). Forensic auditing is also known as forensic accounting. A forensic auditor is a Certified Public Accountant (CPA) who uses special techniques to detect or prevent certain types of crime for businesses and government agencies.

Globally, Claire and Jude (2016), noted that business fraud is now more likely to occur and that financial crime has expanded in scope. High levels of financial abuse have made it difficult to gather taxes and other sources of revenue, which has decreased foreign investment and made it difficult to police the law. The prevalence of fraud in the public sector has made conventional auditing and inquiry methods ineffective and ineffective at detecting fraud. This has been attributed to be part of the reason for poor attainment of result in many government organizations today (Ekechukwu et al., 2018). In USA for instance, the cost of fraud in the USA varies depending on the source and nature of the fraud. However, according to a report by the Association of Certified Fraud Examiners (ACFE) in 2020, the average losses caused by fraud in the United States was \$125,000. This figure represents the average loss across all types of organizations, from small businesses to large corporations, and across all types of fraud schemes. Also, the ACFE (2020) report also found that the typical organization loses 5% of its revenue to fraud each year, which can have a

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significant impact on its bottom line. For larger organizations, the cost of fraud can be even more significant. For example, in 2019, Wells Fargo agreed to pay \$3 billion to settle criminal and civil investigations into fraudulent sales practices, which included the creation of millions of unauthorized customer accounts. Bauerlein (2020) opined that it is important to note that the true cost of fraud in the USA may be much higher than these estimates suggest. Fraud is often underreported or undetected, and its impact can be difficult to quantify. However, forensic accounting can help organizations detect and prevent fraud, as well as estimate the financial impact of fraudulent activities.

The cost of fraud in the UK is difficult to estimate due to the complexity and diversity of fraud types, as well as the challenges in measuring the scale of undetected or unreported fraud. However, various studies have attempted to provide some estimates (Gibson, 2017). According to a report by the Centre for Counter Fraud Studies at the University of Portsmouth, fraud costs the UK economy around £190 billion per year, which is equivalent to approximately 7% of the country's GDP. The report further suggests that this figure could be an underestimate, as it does not include the costs of tax evasion, cybercrime, or fraud committed by individuals (Button et al., 2016). According to a report by PwC in 2020, 60% of organizations surveyed in Africa reported experiencing economic crime in the past two years, and the average financial loss per organization was \$4.4 million. The report also found that fraud was the most commonly reported type of economic crime in Africa (PwC, 2020). According to Enofe (2017), many developing economies need rigorous accounting, but records indicate that this is only necessary in established countries, with only a basic recognition in rising economies. Nigeria is progressively coming to understand the value of forensic accounting as a tool for identifying and preventing financial and economic offenses. Enofe (2017) referenced Bologna and Lindquist (1995) who described forensic accounting as the use of financial expertise and an investigative mindset to address unresolved problems while adhering to the standards of proof. It is used in situations where CPAs use their expertise to look into theft, fraud, and embezzlement of funds as well as uncover concealed assets in divorce cases.

Adegbe, Dada, Owoeye and Siyanbola (2020) opined that there is an alarming increase in the number of fraud and fraudulent activities in Nigeria, requiring the invitation of forensic accounting services. According to the Centre for Forensic Studies (2010) report, the increasing need for forensic and investigative accounting in the banking sector results from the complexities of modern day banking with large volume of complex data. This makes it difficult to monitor transactions by applying manual audit processes. This in turn makes the control utility of auditing ineffective. Adegbe et al. (2020) opined that virtually all the weaknesses and challenges identified in the banking industry in Nigeria's post-consolidation, and criminal investigations and prosecutions arising from them, are issues for forensic accounting.

In Nigeria, in spite of the government determination to reduce the occurrence of fraud and corrupt practices through several interventions such as establishing Fiscal Responsibility Act (2007) and Public Procurement Act (2007), creating Due Process Policy in the Presidency, the Nigeria Treasury Circular of 5 July (2002), and strengthening the Independent Corrupt Practices Commission (2000), the Economic and Financial Crimes Commission Act No. 5 of 2002 and the Code of Conduct Bureau Cap C15, LFN 2004, fraud and corruption in the public sector continues to increase which result into outcry by the general public and opposition groups (Eke & Okoh, 2019).

Evidence from Nigeria as reported in the study of Azih and Okoli (2019) showed that forensic accounting practice is an important tool used for fraud detection in public sectors in Nigeria. The administrative competence of the performance of some public sectors in Nigeria has been faulted by poor credibility of some of these ministries/departments/agencies. There are over estimations of government projects, cases of abandoned projects, and payment of salaries to ghost workers amongst others. Some of these projects mobilization fees have been paid for and yet to be executed. This keeps encouraging poor attainment of result in the government (Naziru & Bala, 2018). According to Eke and Okoh (2019), the need for greater accountability for the enormous investment in resources under the control of the government, which has administrative and political power over the decisions and affairs of political groups of people, is being seriously considered.

According to Clement and Comfort (2018), government spending is a very big business, and the public wants to know if the enormous sums of money are being spent wisely for the interests of the public. If not, there is a need for the use of forensic accounting to aid in fraud investigations that involve various tasks like looking up public records, having the ability to conduct interviews, recovering documents, filing legal charges, and performing a surprise cash count. According to Adegbe et al. (2019), the field of forensic accounting includes knowledge of fraud, financial competence, a solid grasp of business reality, and a comprehension of how the legal system functions. One of the most effective and efficient ways to lower and check accounting theft and maintain fidelity to value for money practices in the public sector may be through forensic accounting.

### Statement of Problem

According to Asusu (2019), the prevalence of fraudulent activities is rising in Nigeria, particularly in the public sector, and they claim that the buying process is the main method used to carry out these activities. This suggests that the value for money

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principal, according to PwC's (2021) economic analysis, which guarantees the lowest purchase price for products and services of high quality, is in danger. Because people commit fraud and other corrupt acts in accordance with the authority of their positions, Abdul and Acho (2018) also stated that the perpetuation of financial irregularities through buying is turning into a speciality of both the private and public sectors in Nigeria. However, it is anticipated that the use of forensic accounting techniques (surprise cash counts and research skills) as emphasized in this study will contribute to ensuring the economy of public funds with an emphasis on the public sector's buying process.

Another issue in Nigeria's public sphere is efficiency, which has to do with achieving intended results. It makes sense why Adah and Akogu (2019) claimed that Nigeria's current level of corruption presents a significant challenge to both leaders and people, endangering the efficacy of government financial management. Since the nation gained independence in 1960, federal and state administrations are said to have lost about US\$380 billion as a result of graft (Adah & Akogu, 2019). The lack of accountability and transparency in the public sector has made it difficult to get the desired results. However, Abebe (2016) argued that accountability and transparency are crucial, as they guarantee that the public has access to timely and accurate information about decisions and performance in the public sector.

The use of forensic accounting methods, according to Ocansey (2017), is a financial strategy for avoiding and resolving financial and economic crimes in the Nigerian economy. The ability to hold people accountable makes it more difficult for those who manage resources in a fiduciary capacity to secretly abuse that trust, according to Safiyanu, Saifullahi, and Armaya (2019). As a result, forensic accountants play a significant role in reducing crime and corrupt practices in any public sector with regard to economy, effectiveness, and efficiency. Given the issues mentioned above, the study seeks to investigate the effect of forensic accounting techniques on attainment of results in federal government parastatals in Nigeria.

### **LITERATURE REVIEW**

#### **Attainment of Results (Effectiveness)**

Enofe (2017) opined that attainment of Results (Effectiveness) simply entails making sensible financial decisions in order to accomplish the desired outcomes. According to Kalubanga and Kakwezi (2013), it is concerned with the degree to which goals have been met and the degree to which any action yields the desired outcomes. He continued by saying that those qualitative and quantitative indicators of an improvement or decline in results demonstrate how well a program is working to achieve its intended goals. According to Firas (2021), at the core of financial management, is the translation of society's ambitions into achievable policies with well-recognized financial ramifications. Issues that are not addressed during policy development tend to get bigger throughout implementation, and they can lead to substantial policy reversals or major slippages that lead to unexpected outcomes. Udeh (2019), noted that the input or output for the end objectives to be reached, i.e. the outcome, is referred to as effectiveness. The outcome is frequently tied to welfare or growth goals, and as a result, it can be impacted by a variety of factors (including outputs as well as external 'environmental' factors).

Effectiveness (spending wisely) is concerned with the extent to which objectives have been achieved, that is the extent to which any activity achieves the intended results. It involves qualitative and quantitative measures of increase or decrease in outcomes that show that a programme is effective in achieving its intended objectives. The Institute of Chartered Accountant of Nigeria, (2021) stated that effectiveness is defined as the ability to achieve desired outcomes or objectives.

Efficacy is concerned with obtaining outputs that fulfill the needed purposes and objectives, whereas efficiency is focused with generating more outputs from available resources. For example, if the number of patients who are effectively treated improves from 80% to 90%, the efficacy of therapy for a specific medical disease will improve (The Institute of Chartered Accountant of Nigeria, 2021; Udeh 2019). Effectiveness refers to ensuring that any given activity's product (or the influence that services have on a community) achieves the desired outcomes. To assess effectiveness, one must first ensure that authorized or intended objectives are being met. A goal is a concrete manifestation of policy aims. (Udeh, 2019).

#### **Forensic Accounting Techniques**

Forensic accounting is the use of laws of nature to the laws of man. This is normally carried out by forensic scientists as interpreters and examiners of facts and evidence in legal case that also gives expert opinion concerning their findings in a court of law. Fyeface and Oseiweh (2017) affirm that forensic accounting is essential investigative device for the detection of fraud Umar et al. (2017) opined that forensic accounting helps in introducing effective internal control and fraud prevention in an organization. He also described forensic accounting as the mixture of auditing and investigation skills. It is therefore, the process of summarizing, interpreting and presenting complicated financial issues, clearly, and factually in a court of law as an expert view and witness. Fyeface and Oseiweh (2017) define forensic accounting as the use of criminal method and incorporation of investigative accounting activities and law processes to investigate and detect financial crimes and other economic malpractices. Forensic

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accounting as the combination of auditing, accounting, and investigative skills. Forensic accounting is appropriate for legal matter, offering the highest rate of assurance (Oluwole, 2016).

Abdullahi and Mansor (2015), also described forensic accounting as the application of accounting and investigative skills to a level acceptable by the competent court to handle issues in contention in the context of both criminal and civil litigation. Fraud can be a theme to forensic accounting because fraud can include the illegal property acquisition, concealment or misrepresentation. Forensic accounting knowledge can assist the accountant in preparing valid evidence from the previous records and financial statement against the prosecutors in the court of law (Gibson, 2017). Forensic accounting has to a great extent become a field of interest to accountants and auditors. A study carried out by Eke and Okoh (2019) revealed that 42 % of organizations have opined the call for forensic accountants due to the rapid increase in fraudulent activities and related economic crimes. According to Akani and Ogbeide, (2017), forensic accountants are trained to dig beyond the figures and deal with the realities of circumstances. He also noted that forensic accounting include: investigating, examining financial evidence, developing computerized applications to support in the analysis and presentation of financial evidence and communicating their finding in form of reports, displays and collect documents, and help in legal proceedings, including attesting in court, as expert witness and setting up visual aids to in supporting trial evidence.

Forensic accounting is a combination of accounting and investigative techniques used to discover financial crimes. Forensic accountants explain the nature of a financial crime to the courts. Forensic accountants trace funds, identify assets and conduct asset recovery, and perform due diligence reviews (Henry & Ganiyu, 2017). Forensic accounting refers to the application of accounting, auditing and investigative techniques to uncover and gather evidence of financial fraud, misrepresentation, or any other financial crime. It is used in legal proceedings and investigations to determine the extent of financial loss or damage, to establish the cause of a financial crime and to identify the responsible parties (Hazieli et al. 2021). The purpose of forensic accounting is to provide objective, credible and reliable evidence in court, regulatory or other legal proceedings. The scope of forensic accounting also includes the analysis of financial information to support civil, criminal and administrative investigations and litigations, the examination of financial records for insurance claims, and the assessment of financial and operational damage caused by cyber-attacks, data breaches or other digital crimes.

In carrying out their duties, forensic accountants, in the opinion of Akinadewo et al. (2019) employ economic theories, business information, financial reporting systems, accounting and auditing standards and procedures, data management and electronic discovery, data analysis techniques for fraud detection, evidence gathering and investigative techniques, and litigation processes and procedures (Erasmus, 2021). According to Fyeface and Oseiweh (2017) a well-trained forensic accountant uses a variety of abilities to carry out their job, including communication, information technology, legal, accounting, criminology, investigative, and auditing knowledge.

### Theoretical Framework

#### Fraud Scale Theory

The proponents of the Fraud Scale theory are Albrecht, Howe and Romney (1984). This theory was developed the fraud scale theory as an alternative to the fraud triangle model. They are both similar in the sense that it still involves the elements in the fraud triangle except for personal integrity instead of rationalization. Personal integrity is associated with individual's personal code of ethical behavior. They also argued that unlike rationalization in the fraud triangle, personal integrity can be observed in both an individual's decisions and the decision-making process which can help in assessing integrity and determining the likelihood that an individual will commit fraud. Other writers like Dorminey et al. (2010), Rae and Subramaniam (2008) also supported the fraud scale theory that fraud and other unethical behaviors often occur due to an individual's lack of personal integrity or other moral reasoning because moral and ethical norms play essential roles in an individual's decisions and judgment. Puspasari (2015) another supporter noted that it has been discovered that the three variables that because fraud are interconnected. The potential of fraud will be high if the situational pressure is great and the chance to conduct fraud is similarly high, but personal integrity is low. There will be no fraud if the situational pressure and opportunity are low, but the personal integrity is high. Sorunke (2016) supported the fraud scale theory stating that Integrating the new variable personal ethics into the previous model will no doubt helps fraud examiners and investigator to understand why some certain people engaged in fraudulent act.

Some other authors such as Kranacher et al 2011; Pulliam 2003; White, 2008; Yerah, 2010; criticized the theory stating that motivation for committing fraud can be expanded into variables that include Money, ideology and coercion and Ego. Furthermore, Huber 2017 argued that forensic accountant and practitioners must consider that there are 'n-dimensions' of financial crime that must be accounted for in any model that attempts to explain, predict, prevent, detect, and prosecute financial crimes, of which fraud is merely a subset.

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Gbegi and Adebisi (2013) noted that in Nigeria, the current national value system is inadequate; little or no emphasis is placed on qualities such as honesty, integrity, and good character. The source of "wealth" is not questioned by society. Anyone who finds themselves in a position of riches is immediately acknowledged and honored. Fraud has its roots firmly rooted in the social setting where riches were honored without scrutiny, which is the popular situation in Nigeria. To this end fraud scale theory brings to bear the importance of personal integrity to understanding the reasons by fraud is been committed.

### METHODOLOGY

The study adopted the cross sectional survey research design where quantitative method of data collection and analysis was used to investigate the effect of forensic accounting techniques (represented by Investigation of Fraud, Expert Witness, Litigation Services and Surprised Cash Count) on value for money practices (represented by attainment of result in public sector of Nigeria. Similar studies (Ugwu, 2021; Okoye, Adeniyi & James, 2019; Eze & Okoye, 2019) have utilized this design in literature. All Nigerian federally controlled Ministries, Departments, and Agencies (MDAs) having offices in Lagos state made up the population of this study, which included all Accountants with a level of education higher than 8. These were chosen because to the size of the target population and the study's time constraints, which prevented it from looking into every federally owned MDA in every state. Purposive sampling techniques were applied to the process of choosing the respondents. In order to collect data that provided the greatest information in order to meet the specific study objectives, the purposive sampling method was utilized to select just those agencies that provided audience and access to the researcher. Due to the likelihood of accessibility, only the Nigeria Port Authority (NPA) and the Nigeria Civil Aviation Authority (NCAA) were utilized as the sample frame for the study. There are 94 and 37 accountants, respectively, working for these two Lagos-based agencies. Since entire enumeration was employed, 131 accountants were chosen as the sample size. In order to investigate the applicability of forensic accounting methods on value for money in federal public sector organizations in Lagos state, this study used a primary source of data (questionnaire).

To ascertain the reliability of the instrument, a test- re-test was done using 10 copies of the questionnaire among government ministry that is not part of the study. The duration of time required for all of them to complete the questionnaire was about 15 minutes on average. Data from the pilot study was statistically analysed using Cronbach Alpha standard score to test the internal consistency of the instrument. The Cronbach Alpha value was above 0.7.

**Table 1. Reliability of Variables' Measurements**

Variables of Study	Cronbach's Alpha	Number of Questions
Investigation of fraud	0.868	6
Expert Witnessing	0.892	5
Litigation Services	0.790	5
Surprise Cash Count Audit	0.845	5
Procurement practices	0.813	5

Source: Computed from Pilot study, (2022)

The study employed quantitative method of analysis with the aid of SPSS software. Both descriptive and inferential statistics were carried out to establish the effect of forensic accounting techniques on Output Maximization in federal government parastatals in Nigeria.

### A priori expectation

It was expected that the measures of forensic accounting techniques would have positive effects on value for money practices in the public sector organization of Nigeria. Thus,  $\beta_{1-4} > 0$

**Table 2. A-priori expectation**

Variables	Coefficients Sign
Investigation of fraud	$\beta_1 > 0$
Expert Witnessing	$\beta_2 > 0$
Litigation Services	$\beta_3 > 0$
Surprise Cash Count Audit	$\beta_4 > 0$

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## DATA ANALYSIS AND RESULTS

**Research Hypothesis:** Forensic accounting techniques have no significant effect on the attainment of results in federal government parastatals in Nigeria.

**Table 3. Regression Analysis for the Model**

	Multiple Regression Analysis						
	Coefficients		Std. Error	T	prob	Collinearity Statistics	
						Tolerance	VIF
Predictors	(Constant)	2.542	.318	8.007	.000		
	IF	.204	.076	2.687	.008	.807	1.239
	LS	.133	.061	2.175	.032	.766	1.306
	EW	.141	.085	1.662	.099	.689	1.451
	SSC	-.210	.051	-4.080	.000	.735	1.361
R	0.457						
R <sup>2</sup>	0.209						
Adjusted R <sup>2</sup>	0.183						
F-statistics	7.995						
Probability	0.000						

**Dependent variable: Attainment of Result**

**\*significant at 5%**

**Source:** Researcher’s Study, 2022

$$AR_i = \alpha_0 + \beta_1 IF_i + \beta_2 EW_i + \beta_3 LS_i + \beta_4 SCC_i + \epsilon_i \dots \dots \dots$$

### Interpretation

Table 3 represents the regression model hypothesis testing the effect of forensic accounting techniques on attainment of result in federal government parastatals in Nigeria. The multicollinearity test showed that data set does not have disturbance that can affect the statistical inference of the study. The regression estimate of the model above shows that all proxies of forensic accounting techniques has positive except for surprised cash count which has negative effect on attainment of result. This is indicated by the signs of the coefficients, which are  $\beta_1 - 3 > 0$  and  $\beta_4 < 0$  which is not consistent with a-priori expectations. From Table 3, the sign of the coefficient of the independent variables shows that Investigation of Fraud (IF), have a positive effect on attainment of result, with a coefficient of 0.204. This positive effect is statistically significant as the t-statistic significance level shows 0.00 which is less than 0.05 significant levels chosen for this study. Litigation service also has a positive effect on attainment of result, with a coefficient of 0.133. This positive effect is however significant as the t-statistic significance level shows 0.03 which is less than 0.05. Also, expert witness has a positive effect on attainment of result, with a coefficient of 0.141. This positive effect is however not significant as the t-statistic significance level shows 0.09 which is higher than 0.05. However, surprised cash count audit has a negative effect on attainment of result, with a coefficient of 0.210, this negative effect is statistically significant as the t-statistic significance level shows 0.00 which is less than 0.05.

The Adjusted R-square of the model showed 18.3%, this suggest that variations in attainment of result of the sampled population can be attributed to all our independent variables put together, while the remaining 81.7% variations in attainment of result are caused by other factors not included in this model. However, the F-statistics is 7.995, where the p-value is 0.00 which is less than 0.05 level of significance adopted for this study. This implies that null hypothesis that says forensic accounting techniques have no significant effect on attainment of result in federal government parastatals in Nigeria was rejected. Therefore, from the regression estimates, Investigation of Fraud (IF), Litigation services (LS), Surprise Cash Count Audit (SCC) and Expert witnessing (EW) significantly affects attainment of result in federal government parastatals in Nigeria.

### DISCUSSION OF FINDINGS

The objective was set out to investigate the effect of forensic accounting techniques measured by Investigation of Fraud (IF), Litigation services (LS), Surprise Cash Count Audit (SCC) and Expert witnessing (EW) on attainment of result in federal government parastatals in Nigeria. From the result of the regression analysis carried out in model three, it was discovered that overall, forensic accounting techniques have significant effect on attainment of result in federal government parastatals in Nigeria. Furthermore, while forensic accounting techniques measured by Investigation of Fraud (IF), and Litigation services (LS), have positive significant

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effect on attainment of result in federal government parastatals in Nigeria, at 5% level of significance, expert witnessing has a positive significant effect on attainment of result at 5% level of significance. While this finding aligns with the studies of Eze and Okoye (2019); Erasmus 2021. However, Surprise Cash Count Audit (SCC) has a negative significant effect on attainment of result. This finding aligns with the findings of Fyneface and Oseiweh, 2017; Nwosu and Gbegi and Adebisi 2013.

Likalama (2017) noted that non-involvement of forensic experts as expert witness in fraudulent court cases is one of the challenges of corruption in both the private and public sector and so they recommended that forensic accounting unit should be established to ensure proper and effective investigation of persons accused of fraudulent practices. Naziru and Bala (2018) having analyzed the incidence of fraud in the Nigerian public sector and the means of achieving a successful management of such fraud stated that there is a significant relationship between ineffective management policies and Nigeria public sector fraud, the study discovered that there is no strong internal control system in the Nigeria public sector and management integrity has influence on fraud prevention in the Nigeria public sector. Firas (2021), stated that the core of financial management, is the translation of society's ambitions into achievable policies with well-recognized financial ramifications. Issues that are not addressed during policy development tend to get bigger throughout implementation, and they can lead to substantial policy reversals or major slippages that lead to unexpected outcomes. Okoye et al. (2019) carried out a study on the relevance of forensic accounting to financial crimes in private and public sectors of third world economies. The study evaluated the extent of financial crimes in developing countries and compares the private and public sector with a view to determine the sector that needs forensic accounting the most. It was found that investigative or forensic accountant has a role to play, generally, but more in the public sector and the study recommended that forensic accounting institution should be strengthened and utilization should be publicized in the public sector.

Although the adjusted r square indicates the measures of forensic accounting technique has a weak explanatory power for the variations in the attainment of result. However, the probability of the F statistics has shown that forensic accounting technique exerts a significant effect on the attainment of result in the public sector of Nigeria. Kalubanga and Kakwezi (2013), opined that it is concerned with the extent to which objectives have been achieved and the extent to which any activity achieves the intended results. He explained further that those qualitative and quantitative measures of increase or decrease in outcomes show that a programme is effective in achieving its intended objectives.

### CONCLUSION AND RECOMMENDATIONS

The study had examined the effect of forensic accounting techniques on Output Maximization in federal government parastatals in Nigeria. All the independent variables together, which were Investigation of Fraud (IF), Litigation services (LS), Surprise Cash Count Audit (SCC) and Expert Witness have statistical significance on the dependent variable which was procurement practices (economy). Findings of this study therefore provided insight into the effect of forensic accounting techniques on attainment of result. It further provided an insight as to the extent to which all independent variables together affect the dependent variable and also provided affirmation of the extent of variations on the dependent variable caused by independent variables all together covered, as depicted by the Adjusted R square. The study concluded that forensic accounting techniques had a significant positive effect on attainment of result (effectiveness).

The study recommended that government should adopt forensic accounting investigation techniques in corruption investigation significantly achieve attainment of results in government parastatals. Also, Forensic accounting techniques can help identify early warning signs of potential corruption or fraudulent activities within government parastatals. By analyzing financial records, transactions, and patterns, forensic accountants can uncover discrepancies, anomalies, or suspicious activities that may indicate fraudulent behavior.

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