Original Article

Adoption of Forensic Accounting Investigation in the Detection and Prevention of Tax Frauds in Kaduna State Internal Revenue Service, Nigeria

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Abstract: The high rate of tax fraud in Nigeria has worsened national economic development, with Kaduna State inclusive. Therefore, the study appraised the statistical significant difference between forensic accounting investigation adoption and tax fraud detection and prevention in the Kaduna State Internal Revenue Service (KADIRS). The study adopted Chi-Square approach and descriptive statistics. It was discovered that 74.3% of the sampled respondents were adequately knowledgeable on issue related to forensic accounting, because most of the respondents have had more than five years and above years of service; the gender category was adequately represented in the study with male having 54.3%; while, 45.7% were female; also, 91.4% of the sampled respondents were certified professional accountants who are capable to work in Kaduna State Internal Revenue Service (KADIRS), Nigeria. Furthermore, the results of the Chi-Square estimates showed that the X^2 calculated (45.14 & 32.14) for the two tested objectives were much higher than the critical value of 9.49 respectively. Implying a direct relationship between forensic accounting investigation adoption and tax fraud detection and prevention in KADIRS. The study concluded that accounting professional practitioners whom are well-trained in forensic accounting investigation agreed that forensic accounting will assist in the detection of tax fraud, as well as, preventing its occurrence in the filing of tax returns and also play the role of expert witness in any tax litigation confronting the Kaduna State Internal Revenue Service (KADIRS) and any other tax collection agency in Nigeria. Therefore, the study recommends that the state government should ensure that forensic accounting investigations is fully implemented, as well as, sustain its adoption through the appraisal of tax returns filed by taxpayers annually and other required documents submitted by taxpayers.

Keywords: Forensic Accounting, Tax Evasion, Tax Frauds, Kaduna State Internal Revenue Service (KADIRS).

I. INTRODUCTION

Governments in many developing nations, including Nigeria, have failed to deliver appropriate public services for numerous reasons. The absence of sufficient tax income is the most significant of these reasons. Government's lifeblood is tax revenue, but in developed nations, the average revenue to gross domestic product (GDP) ratio in 2005 was close to 35%. This ratio was approximately 15% in developing nations, compared to 12% of GDP in under developed nations for tax income (Muhammad & Muhammad, 2012). This situation demonstrates that these nations have not adequately generate enough tax revenue to provide public services like hospitals, good roads, schools, electricity, pipe bone water amongst others to their citizens. Tax evasion and avoidance are both factors contributing to government's inability to generate enough tax revenue, leading to tax fraud and a country's shadow economy. Schneider and Enste (2000) defined the shadow economy as the economy in which individuals do not disclose their actual income or taxable earnings that they earned through legal transactions.

The most significant problems affecting the collection of taxes in Nigeria are tax fraud, tax evasion, and non-compliance. These issues have grown problematic in most emerging nations, and governments have consistently continued to look for ways



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of reducing or eliminating this menace. Tax fraud is a menace perpetrated by individuals as well as companies and involves tax evasion, tax avoidance, and non-compliance with extant tax laws. Fraud is the intentional conduct, false representation, or omission of material information with the intent to deceive another person into acting in a way that would cause them harm (Adekoya et al., 2020).

Fraud is a universal problem as no nation is immune. However, developing countries including their states tend to bear the pain much (Okoye & Gbegi, 2013). The incidence of fraud continues to increase across private and public sector organisations most nations (Okoye & Gbegi, 2013). In the past few decades, the world has witnessed high-profile cases of financial frauds which cut across continents of the world. Enron, World Com, Daewoo Motors Korea, Xerox, Parmalat, Satyam, Sub-prime mortgages, Olympus are some of the world high level frauds which caused business losses to nations.

The cases presented above and the wide spread of fraud in public sector suggest that traditional auditing and investigation appear to be inefficient enough in detecting and preventing frauds, particularly in government revenue agencies. Thus, a new way of ensuring that financial frauds are detected and prevented has become imperative especially in Kaduna State Tax agency which generates huge revenue for the state government. Previous studies have called for a paradigm shift in the way and manner of detecting and preventing tax frauds in government tax offices. Studies such as Okoye & Gbegi (2013), Modugu & Anyaduba (2013), Rezaee et al. (2016) concurred that forensic accounting and tax investigation technique will be the answer the world need to detect and prevent financial malfeasance in public tax avoidance and invasion. Therefore, forensic accounting investigation would be an effective tool for detecting and preventing tax frauds and recovery of unremitted tax. Thus, this attempt to investigate the adoption of forensic accounting investigation in the detection and prevention of tax fraud in Kaduna, Nigeria.

Nigeria, being the fastest and biggest growing economy in Africa with Kaduna State as one of the most viable economy state in the north central states of Nigeria is no exception and not immune from tax fraud. Adegbie & Fakile (2012) observed that financial crime such as tax fraud is believed to be the greatest obstacle to national economic development as the nation has little or nothing to show for its huge economy activities and sales of crude oil.

Furthermore, the issue of how to detect and prevent tax frauds in Nigeria has being a major issue of concern to stakeholder in the country with consistent innovation by the Federal Inland Revenue Service (IFRS) and State Internal Revenue Service (SIRS), particularly when one considers the use of tax in the development and welfare of the citizens. Practitioners and academics have acknowledged the inability of the government at all levels to effectively detect and prevent tax frauds among taxpayers in Nigeria. In another perspective, very little attention has been paid to tax fraud detection and prevention using forensic technique as a measure in Nigeria including Kaduna State.

It is argued that the adoption of forensic accounting investigation would assist the government to not only detect but prevent the huge tax fraud going on among taxpayers. However, only few previous studies have attempted to link forensic accounting investigation in detection and prevention of tax frauds (Adekoya et al., 2020; Akenbor & Oghoghomeh, 2013; Muhammad & Muhammad, 2012). Therefore, the major objective of this study is to determine how the adoption of forensic accounting investigation would facilitate the detection and prevention of tax frauds, particularly in the Kaduna State Internal Revenue Service (KADIRS), Nigeria.

A. Study Objective:

- To appraise the nexus between forensic accounting investigation adoption and tax fraud detection in the Kaduna Sate Internal Revenue Service (KADIRS).
- To examine the correlation between forensic accounting investigation adoption and tax fraud prevention.

II. LITERATURE REVIEW

A. Conceptualization of Fraud:

Generally, fraud can be defined as an illegal act of obtaining something valuable through wilful misrepresentation or a deception deliberately practiced in order to secure unfair or unlawful gain. Soni (2014) described fraud as any misrepresentation of facts with intention to mislead someone to believe these facts as true; or parting with some valuables or money belonging to

someone after getting induced by misrepresented facts causing or likely to cause loss of money and/or valuable things to the affected person. Fraud is the intentional conduct, false representation, or omission of material information with the intent to deceive another person into acting in a way that would cause them harm (Adekoya et al., 2020). According to Adefila et al. (2005), stated that fraud and related fraudulent actions are prevalent globally.

The economic growth of the Nigerian state has suffered greatly as a result of the rising prevalence of corruption, which includes tax fraud by taxpayers. The Nigerian economy has suffered severe harm as a result of tax fraud and other tax-related offences committed by tax payers, which also have an adverse effect on investment levels and tax revenue production (Nosiri et al., 2020). The tactics used by the various tax authorities, which include the Kaduna State Internal Revenue Board (KSIRB), to combat tax fraud are frequently ineffective enough as taxpayers are quick to devise a means to bypass tax authorities developed measures to combat tax fraud. Tax fraud may have devastating effects on the economy and its finances, including financial loss as well as a decline in the economy's performance, credibility, and public trust (Nosiri et al., 2020).

B. Forensic Accounting Investigation:

Forensic accounting first appeared in the United States in the late 1870s and early 1880s due to stock fraud cases and scandals involving the securities market and the credit industry (Rezaee et al., 2016). Several attempts have been made by many scholars to describe forensic accounting. Forensic means suitable for use in a court of law, and it is to this standard forensic accountant generally work. Forensic accounting involves an investigative style of accounting used in determining whether or not an individual or an organization has engaged in any illegal financial activities.

In order to provide legal evidence, forensic accounting uses its own models and methodology for conducting investigations that look for assurance, attestation, and advisory opinions. As a practical field, it is concerned with accounting fraud, forensic auditing, compliance, due diligence, and risk assessment, as well as the identification of financial deception and financial statement fraud (Skousen and Wright, 2008). It also addresses the evidential aspect of accounting data. According to Al-Sharairi (2018), forensic accounting has been developed in the accounting field as a technique to look into situations of financial fraud, including fraud involving taxes, among others. In order to resolve fraudulent financial behaviours in a legal situation, the accounting branch known as forensic accounting applies fundamental accounting, auditing, and investigation knowledge and abilities. Further, Aduwo (2016) stated that forensic accounting is an expertise applied to a legal issue. The goal of forensic accounting is to decrease tax fraud, tax dishonesty, and tax corruption in order to increase tax revenue generation without negatively impacting social, economic, or infrastructure development at any level of government (Oyedokun & Asaolu, 2022).

The combination of accounting, auditing, and investigation abilities is known as forensic accounting (Zysman, 2004). According to Degboro and Olofinsola (2007), the purpose of a forensic inquiry is to identify and establish facts to support a case in court. In other words, using forensic procedures to discover and look into a crime exposes all of its accompanying characteristics and identifies the perpetrators. According to Howard and Sheetz (2006), the process of understanding, summarising, and factually presenting complicated financial matters in a court of law as an expert is known as forensic accounting.

C. Forensic Accounting and Tax Fraud:

Baird and Zelin (2009) opined that a key investigative technique for detecting fraud is forensic accounting. They further stated that it gives the court an accounting analysis for use in resolving criminal disputes, and it also explains any fraud that has been perpetrated. Based on its usage and effectiveness, forensic accounting may be extremely important for discovering and minimising tax-related fraud in both the public and private sectors of the economy. In this idea, forensic accounting professionals perform an account analysis to identify the information needed to settle a disagreement before it is taken to court or the litigation process is completed (Ozkul & Pamuke, 2012).

Tax fraud is a premeditated form of tax evasion that is often illegal and punishable under the jurisdiction of tax law. Tax fraud and other fraudulent financial acts are commonplace in Nigeria, particularly in the public sector, where they permeate the lives of the tax administrators (Okoye and Akamobi, 2009; Gbegi and Adebisi, 2014). This indicates that tax fraud is not only committed by the taxpayers; even the tax administrators can be compromised. The intervention of forensic accountants can be

used to uncover any unethical practice by both the taxpayers and the tax collector where there is a case of compromise and intentional evasion by the taxpayers.

In tax disputes, according to Oyedokun and Asaolu (2022), forensic accountants perform three crucial roles: fact witness, consulting expert, and testifying expert. As a professional expert witness in a financial court case, forensic accountants are required to appear before a jury or judge to offer their professional advice and opinion on various financial issues, either via testimony, decision-making, or evidence. Financial report manipulations and tax law violations that result in tax fraud have both been addressed using forensic accounting (Eliezer & Emmanuel, 2015). The adoption of sophisticated tax fraud and manipulation detection techniques is necessary for use by the relevant tax authorities due to the inability of statutory tax audits to identify fraudulent actions perpetrated by individual and corporate taxpayers. These techniques will be utilised by professional forensic accountants in court to find unreported or underreported earnings of businesses, as well as manipulated costs and invoices.

D. Empirical Review:

There are empirical documentations about forensic accounting investigation particularly in the academic literature as it relates to tax fraud. Khersiat (2018) conducted a survey study on the Role of the forensic accountant in the detection of tax fraud in financial statements in Jordanian accounting and auditing offices and firms. Primary data were used via questionnaires that were distributed by the researcher to 125 forensic accountants employed by Jordanian accounting and auditing firms. The following conclusions were reached after using SPSS to analyse and evaluate the hypotheses: That forensic accountants have the training, knowledge, and skills to spot financial statement manipulation and tax fraud, in addition to other types of financial misconduct. Through an investigation of Jordanian Auditors, Al-Sharairi (2018) investigated the role of forensic accounting in limiting tax evasion in public industrial shareholding companies in Jordan. A random sample of external auditors who are members of the Jordanian Association of Certified Public Accountants (JACPA) and who have audited financial accounts of Jordanian industrial companies with public shareholdings served as the major source of information for the researcher. The study's findings indicate that forensic accounting plays a statistically significant role in reducing tax fraud and evasion. The report makes the suggestion that Jordanian government should acknowledge the contribution that forensic accountants provide to reducing tax fraud and evasion.

Balios et al. (2020) conducted a study on the conjunction of tax auditing mechanisms with behavioural and institutional parameters of tax evasion: the role of accounting rules and forensic accounting. The study demonstrated the need for forensic accounting in the fight against tax fraud, which is on the rise. The study came to the conclusion that those who set tax policy should enact stricter measures to combat tax evasion. In a similar vein, Gbegi and Adebisi (2014) investigated the use of forensic accounting skills and techniques in fraud investigation in the Nigerian public sector. The study utilised analysis of variance and time series to analyse the primary and secondary sources of data. The study's findings demonstrated that forensic accounting skills and techniques have a substantial impact on reducing fraud. They advise governments to institutionalise forensic accounting, while anti-corruption authorities should set up forensic teams and labs for speedy examination of fraudulent acts. Hunady and Orviska (2015) examined the effect of corruption on tax revenue in OECD and Latin American countries. The study looked at 46 OECD countries and data from 1998 to 2013. The results of the study, which used fixed and random effect models, showed that corruption had a significant negative effect on overall taxable income. Further analysis was conducted utilising tax revenue, and the study discovered compelling evidence that corruption had a more detrimental effect on taxes on goods and services than on income taxes. Rezaee, et al. (2016) presented the study of forensic accounting education and practice in China. The study found among others that majority of both Chinese and international students expect that future demand for and interest in all three areas of forensic accounting will increase alongside more demand for litigation support.

In empirical research on forensic accounting and fraudulent practises in the Nigerian public sector, Akani and Ogbeide (2017) conducted using all public institutions in Edo State, Nigeria, and ten (10) government institutions chosen at random for the study. A structured four-scale Likert-type questionnaire was used to collect data from respondents. The frequency counts and simple percentages methods were used to analyse the data. According to research results, there is a strong correlation between forensic accounting and a decline in fraud in the Nigerian public sector. The study recommended that government and regulatory agencies need to ensure the provision of standards and guidelines to regulate forensic accounting activities in Nigeria. Similarly, Claire & Jude (2016) equally wrote on how the forensic accounting can be used for fraud detection in Nigerian public sector. The study revealed that there is a relationship between forensic accounting and litigation support service in Nigeria's

court and lastly the application of forensic accounting in the public sector is effective in preventing fraud. However, the study failed to establish a link between forensic accounting investigation in detection and prevention of tax frauds.

III. THEORETICAL FRAMEWORK AND METHODOLOGY

This study is anchored on the comparative treatment theory, which evolved from the theory of equity. According to Kirchler and Hoelz (2006), fairness and equity in taxes foster trust and mutual cooperation between tax authorities and taxpayers, which ultimately results in voluntary tax compliance. This indicates that if the entire tax system is equitable, fair, transparent, and honest, a high percentage of tax compliance may be attained (OECD, 2010). Walsh (2012) asserted that the effect of tax fairness on taxpayer compliance behaviour extends beyond the individual taxpayer and includes other citizens' tax compliance conduct. To put it another way, the fundamental element influencing an individual's and a company's motivation to comply with tax laws is directly tied to the societal attitude that the taxpayers live in towards taxes and the obligations of the government in terms of the supply of social amenities to the citizens.

The study adopted Wilson (2014)'s Honey Comb Research Methodology. The approach groups research method into six distinct areas that include research philosophy, research approach, method, design, data collection and data analysis technique.

This study adopted positivism that takes note of scientific approach through epistemological research philosophy in achieving the study objectives. The study considered this approach more appropriate for this present study because it uses scientific method to arrive at valid inferences. Positivism approach through epistemological are concerned with solving problem(s) through the use of scientific inquiry to arrive at conclusions (Creswell & Poth, 2017). This study used inductive research approach through observation of data collected from distributed questionnaires from the staff of Kaduna State Internal Revenue Service (KIRS) especially staff within the accounting unit of the parastatal and few random professional accountants in public and private sectors of the Nigeria economy. This study mainly considered quantitative research method because questionnaires were used to obtained primary data. The rationale for using quantitative is due to the fact that the questionnaire was in categorical form; hence, makes data collected to be in nominal form. The research design applied in this study is a case study through a survey research design. In the course of this work, 100 questionnaires were made available for staff members within the accounting unit of KIRS and other respondent; only 74 of the questionnaire were retrieved from the respondents. The rationale for selecting the sample size was via random sample. Random sample is often used by researcher(s) to give equal opportunity of being chosen to respondents (Ayeomoni & Falade, 2020). The method of data collection used in this study was mainly primary data collection through the use of questionnaire instrument. The validity of the instrument was confirmed through pilot study carried out prior to a large distribution of the questionnaire. Thereafter, the internal consistency of reliability of the questionnaires distributed was confirmed using Cronbach alpha on 5-likert scale of agreed, strongly agreed, disagreed, strongly disagreed and not certain. The obtained value of the 5-likert scale was 0.61; hence, showed high consistency value. Also, the data analysis technique applied was Chi-Square technique. The rationale for selecting the technique was due to the objectives of the study that are concerned with statistical significant difference.

IV. RESULT AND DISCUSSION

A. Socio-Economic Characteristic of the Respondents:

Table 1: Frequency Distribution of Respondents' Year of Experience, Gender and Educational Level

Years of Experience			Gender of Respondents				Educational Level				
Years	F	(%)	Cum.	Gender	F	(%)	Cum.	EDU	F	(%)	Cum.
1-4years	18	25.7	25.7	Male	38	54.3	42.4	OND/Diploma	11	15.7	15.7
5-8years	8	11.4	37.1	Female	32	45.7	100.0	HND/BSc	30	42.9	58.6
9-12years	28	40.0	77.1	Total	70	100.0	О	MSc/MBA	17	24.3	82.9
13year-above	16	22.9	100.0					others	12	17.1	100.0
Total	70	100.0						Total	70	100.0	
Where F indicates frequency, (%) indicates percentage											

Source: Field Survey, (2023)

As obtained from the Table 1, it was discovered that 18 respondents representing 25.7% had been in the Kaduna State Internal Revenue Service (KADIRS), Nigeria, within the period of 1-4years, 8 (11.4%) for 5-8years, 28 (40.0%) for 9-12years and

16(22.9%). The implication of such years of services is that 74.3% of the sampled respondents were adequately knowledgeable on issue related to forensic accounting, as well as, tax fraud detection within the ministry. For gender category, it was established that 38 respondents representing 54.3% were male; while, 32 (45.7) were female. Implying that both two legally gender in Nigeria were adequately represented in the study; therefore, gender category is not biased. For educational level, 11 of the sampled respondents, that indicates 15.7% has OND/Diploma, 30 (42.9%) had HND/BSc, 17(24.3%) had MSc/MBA; while, 12 (17.1%) possessed others category of academic qualification. This suggests that majority of the respondents acquired education that made qualified to know the adverse effect of fraud on government's parastatals.

B. Distribution of Respondents by Professional Education:

Table 2: Respondents' Professional Education

Professional level	F	(%)	Cum.				
ICAN	14	20.0	20.0				
ACCA	10	14.3	34.3				
ANAN	36	51.4	85.7				
Others qualification	4	5.7	91.4				
None	6	8.6	100.0				
Total	70	100.0					
Where F indicates frequency, (%) indicates percentage							

Source: Field Survey, (2023)

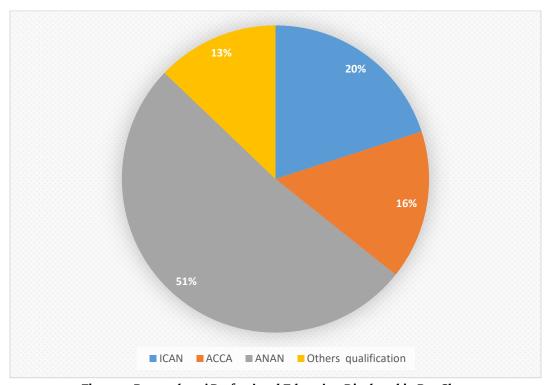


Figure 1: Respondents' Professional Education Displayed in Bar Chart

As shown in both the Table 2 and Figure 2, it was discovered that the sampled respondents with ICAN was 14 (20.0%), respondents with ACCA was 10(14.3%), ANAN certificate holders 36(51.4%), other professional holders carried 4(5.7%); while, people with none of the professional certificate were 6(8.6). This suggests that 91.4% of the sampled respondents within the study area were certified professional accountants who are capable to work in Kaduna State Internal Revenue Service (KADIRS), Nigeria, as well as, know the implication fraud on government's parastatals.

C. Frequency Distribution of the Responses:

Table 3: Forensic Accounting Investigation Adoption and Tax Fraud Detection

Items							
		A	SA	SD	D	NT	Total
1. You are familiar with forensic accounting investigation and its roles in	F	36	32			2	70
detecting and prevention of tax fraud	%	51.4	45.7			2.9	100.00
2. Your organisation understand the benefits of adopting forensic accounting	F	25	38		1	6	70
practices for tax fraud detection and prevention	%	35.7	54.3		1.4	8.6	100.00
3. The adoption of forensic accounting investigation will help tax authorities	F	26	35			9	70
in detecting and prevention of hidden tax fraud	%	37.1	50.0			12.9	100.00
4. Your organisation has utilise forensic accounting investigations technique	F	20	13	3	10	24	70
for tax fraud detection and prevention	%	28.6	18.6	4.3	14.3	34.3	100.00
5. You are aware of the current methods and techniques used in forensic	F	28	17	1	6	18	70
accounting investigations for tax fraud detection and prevention	%	40.0	24.3	1.4	8.6	25.7	100.00
Averaged Total	F	27	27	1	3	12	70
	%	38.56	38.58	1.14	4.86	16.8	100.00

Source: Field Survey, (2023)

The Table 3 displays the obtained response on forensic accounting investigation adoption and tax fraud detection, as it relates to Kaduna State Internal Revenue Service (KADIRS), Nigeria. It was discovered that 97.1% of the sampled respondents affirmed that they are familiar with forensic accounting investigation and its roles in detecting and prevention of tax fraud; while, 2.9% was uncertain of such claim. Also, 90.0% proved that KADIRS understand the benefits of adopting forensic accounting practices for tax fraud detection and prevention, 1.4% did not agree; while, 8.6% could not confirmed such. On whether the adoption of forensic accounting investigation helps tax authorities in detecting and prevention of hidden tax fraud, it was discovered that 87.1% did say yes; while, 12.9% could not agree with such. Furthermore, 47.2% of the sampled respondents within KADIRS showed that the organization has utilised forensic accounting investigations technique for tax fraud detection and prevention; while, on the contrary 18.6% did say no, with 34.3% could not confirmed the statement. Lastly, 64.3% proved that they are aware of the current methods and techniques used in forensic accounting investigations for tax fraud detection and prevention, 10% did say no; while, 25.7% were uncertain. On the average estimate, it was proven that 77.14% supported the claim that relationship existed between forensic accounting investigation adoption and tax fraud detection within KADIRS; 6.0% did say no; while, 16.88% were very much uncertain of such statement. It was discovered that there exists a positive relation between forensic accounting investigation adoption and tax fraud detection of forensic accounting investigation within KADIRS promotes tax fraud detection.

Table 4: Forensic Accounting Investigation Adoption and Tax Fraud Prevention

Items							
		A	SA	SD	D	NT	Total
1. The adopting and implementing of forensic accounting investigations for	F	23	18	1	13	15	70
tax fraud detection and prevention lack personnel with specialised skills and	%	32.9	25.7	1.4	18.6	21.4	100.00
expertise in your organisation/firm.							
2. In your opinion, the adopting of forensic accounting practices for tax fraud	F	33	33			4	70
detection and prevention will benefit your organisation.	%	47.1	47.1			5.7	100.00
3. Your organisation collaborate with external experts or agencies	F	27	11	1	7	24	70
specialising in forensic accounting investigation for tax fraud investigations.	%	38.6	15.7	1.4	10.0	34.3	100.00
4. Your organisation provide sufficient resources and training for forensic	F	23	7	3	12	25	70
accounting investigations relating to tax fraud case.	%	32.9	10.0	4.3	17.1	35.7	100.00
5. The awareness of forensic accounting techniques for tax prevention and	F	33	30		3	4	70
detection will deter taxpayers from committing tax fraud.	%	47.1	42.9		4.3	5.7	100.00
Averaged Total	F	28	20	1	7	14	70
	%	39.72	28.28	1.42	10	20.5	100.00

Source: Field Survey, 2023

Table 4 reveals the relationship between forensic accounting investigation adoption and tax fraud prevention in KADIRS. The first question raised showed that 58.6% confirmed that the adoption and implementation of forensic accounting investigations for tax fraud detection and prevention lack personnel with specialised skills and expertise in the organization, 20% had a contrary claim; while, 21.4% was not certain about it. On a claim that the adoption of forensic accounting practices for tax fraud detection and prevention will benefit the organization was supported by 94.2%; while, 5.7% was uncertain. Also, 54.3% agreed that KADIRS collaborates with external experts or agencies specialising in forensic accounting investigation for tax fraud investigations; 11.4% did say no; while, 34.3% came to conclusion that they were uncertain. On whether if KADIRS provides sufficient resources and training for forensic accounting investigations relating to tax fraud case, 42.9% did say yes, 21.4% say no; while, 35.7% was uncertain on such statement. Lastly, it was proven by 90.0% that the awareness of forensic accounting techniques for tax prevention and detection will deter taxpayers from committing tax fraud, 4.3% did say no; while, 5.7% was uncertain.

Furthermore, it was proven using the average value that 47.6% did agreed that a positive relation did occur between forensic accounting investigation adoption and tax fraud prevention, 11.42% did say no; while, 20.56% were not certain. This suggests that forensic accounting investigation is needed within KADIRS to prevent the tax fraud that persists within the state government's parastatals.

D. Chi-Square Estimate

Table 5: Chi-Square Estimate for Objective One

Items							
		Α	SA	SD	D	NT	Total
Forensic Accounting Investigation Adoption and Tax Fraud Detection	F	27	27	1	3	12	70
	%	38.56	38.58	1.14	4.86	16.88	100.0
Chi square	X2	45.14					
	Df	4					
	P	< 0.05					

Source: Obtained values from Chi-Square Output (2023)

As shown in Table 5, it was confirmed that the X^2 Calculated from the estimated Chi-Square test was much higher than the tabulated critical value of 9.49, which was gotten from the Chi-Square table with a degree of freedom of 5%. Hence, this implies that a direct relationship exist between forensic accounting investigation adoption and tax fraud detection in the Kaduna State Internal Revenue Service (KADIRS) and other tax collection agencies in Nigeria. This shows that adoption of forensic accounting investigation by KADIRS in combating incomplete and fraudulent tax filling by taxpayers in the course of filling their annual tax return will assist in revealing the rate of tax fraud that occurred, as well as, areas that such criminal activities did occur.

Table 6: Chi-Square Estimate for Objective Two

Table 6. cm Square Estimate for	objec	LIIVC I W	U				
Items							
		A	SA	SD	D	NT	Total
Forensic accounting investigation adoption and tax fraud prevention.	F	28	20	1	7	14	70
	%	39.72	28.28	1.42	10	20.56	100.0
Chi square	X^2	32.14					
	df	4					
	P	< 0.05					

Source: Obtained values from Chi-Square Output (2023)

It was established from the Chi-Square analysis in Table 6 that X^2 Calculated was much higher than the tabulated critical value of 9.49 which was gotten from the Chi-Square table with a degree of freedom of 5%. This shows that forensic accounting investigation adoption is related to tax fraud prevention; such that adoption of forensic accounting investigation gives caution and limitations to taxpayers that have the intentions of perpetuating tax fraud in the filling of their tax returns.

V. DISCUSSION OF FINDINGS

As confirmed from the estimated value of Chi-square in Table 5, the X^2 Cal (45.14) was much higher than the critical value of 9.49. Hence, suggesting that X^2 Cal > X^2 tab. This shows that there is a direct relationship between forensic accounting investigation adoption and tax fraud detection as acknowledged by the Kaduna State Internal Revenue Service (KADIRS). The policy implication of this findings based on the responses of KADIRS personnel and other tax practitioners is that the adoption of forensic accounting investigation by tax administrators (KADIRS Staff), as well as, tax professional practitioners (external) on the available submitted tax returns file by taxpayers reveals areas in which tax fraud, and other related financial frauds have occurred. Given this, existing studies have come to the conclusion that forensic accounting and tax investigation technique would be the answer the world need to detect and prevent tax fraud in the form of tax avoidance and invasion (Rezaee et al., 2016; Okoye & Gbegi 2013; Modugu & Anyaduba, 2013). Also, studies done outside Nigeria like Balios et al. (2020), Khersiat (2018) and Al-Sharairi (2018) discovered a similar finding, with a conclusion that forensic accountants have the required expertise to spot financial statement manipulation, tax fraud, as well as, other types of financial misconduct. Also, studies within Nigeria like Akani and Ogbeide (2017) and Claire and Jude (2016) established the same findings.

As shown in Table 6 above, the obtained coefficient value of X2 calculated was much higher that the critical value of 9.49 with a degree of freedom of 4. Thus, suggesting that a nexus did occur between forensic accounting investigation adoption and tax fraud detection and prevention. The implies that the availability of well-trained forensic experts within KADIRS, as well as, the use of external financial experts on forensic accounting will boosts financial integrity amongst tax collection personnel and taxpayers; therefore, preventing them to perpetuate tax fraud. However, it is on record that a critical appraisal of the documents submitted by taxpayers by tax auditors will quickly reveals whether individual or organization taxpayer has committed financial crime. In view of this, Okoye and Gbegi, (2013) disclose that the incidence of fraud continues to increase across private and public sector. Also, Akani and Ogbeide (2017), Rezaee et al. (2016) and Hunady and Orviska (2015) in their respective study showed that a direct link existed between forensic accounting and tax fraud prevention.

VI. CONCLUSION AND RECOMMENDATIONS

It was confirmed from the Chi-square estimates that a direct relationship did occur between forensic accounting investigation adoption and tax fraud detection in KADIRS, as well as, between forensic accounting investigation adoption and tax fraud prevention. Therefore, the study concluded that accounting professional practitioners whom are well-trained in forensic accounting investigation agreed that forensic accounting will assist in the detection of tax fraud, as well as, preventing its occurrence in the filing of tax returns and also play the role of expert witness in any tax litigation confronting the Kaduna State Internal Revenue Service (KADIRS) and any other tax collection agency in Nigeria. Therefore, the following recommendations were made;

- a) The state government should ensure that forensic accounting investigations is fully implemented, as well as, sustain its adoption through the appraisal of tax returns filed by taxpayers annually and other required documents submitted by taxpayers. Doing this would make taxpayers to be more prudent and do the right thing by filling the correct tax returns.
- b) Also, those responsible for forensic accounting investigations within the agency must be up-to-date in terms of current methods and techniques used in forensic accounting investigations, which can be achieved through training and massive investment in human capital. As such, KADIRS should set some certain amount aside for continuous training of their respective accounting experts.
- c) If there are external financial experts that KADIRS consults in carrying out forensic accounting investigations, such experts or firms must be firms with professional goodwill and of high reputation over the years.
- d) The organization should keep collaborating with external experts or agencies specialised in forensic accounting investigation for tax fraud investigations, detection and prevention in order to ensure that all the revenue accrued to the state government from tax collection are properly collected as at when due.

VII. REFERENCES

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