

Forensic Accounting and Fraud Prevention of Federal Government Agencies in Rivers State, Nigeria

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Abstract

The study empirically investigated the relationship between forensic accounting and fraud prevention of federal government agencies in Rivers State, Nigeria. The population of the study comprises of 450 management staff of 90 federal government agencies in Rivers State, Nigeria. The study adopted Taro Yamane sampling techniques to determine the sample size of 212. The study adopted the use of primary data obtained through five point likert scale questionnaire to elicit responses from respondents. A total of 212 questionnaires were distributed to the respondents while 210 were used for the analysis. The study adopted Pearson product moment correlation coefficient to analyze the formulated hypotheses with the aid of statistical package for social sciences version 22. The findings show that investigative accounting, litigation support services significantly influenced whistleblowing policy and fraud risk assessment of federal government agencies in Rivers State, Nigeria. The study concludes that there is a significant relationship between forensic accounting and fraud prevention of federal government agencies in Rivers State, Nigeria. The study recommends among others that federal government agencies should introduce automated internal control systems, implement whistleblower mechanisms, develop and enforce anti-fraud policies, established specialized fraud units, and promote awareness and ethics. Introduce data mining tools to regularly analyze vast amounts of transaction data to spot patterns, anomalies, or suspicious transactions. Conduct periodic fraud risk assessments to identify vulnerable points in their financial systems.

Keywords: *Forensic Accounting, Fraud Prevention, Nigeria*

Introduction

Forensic accounting is a rapidly growing field within the broader profession of accounting and has become increasingly relevant in the wake of numerous high profile cases of fraud and financial mismanagement. Forensic accounting combines accounting, auditing, and investigative skills to detect and prevent fraud, embezzlement, and other financial irregularities (Davia, 2017). In Nigeria, public sector has been marred by significant financial mismanagement and corruption; this necessitated the need for the introduction of forensic accounting is more urgent than ever (World Bank, 2020). Fraud has been a persistent issue in Nigeria's public sector, greatly undermining the nation's economic development and public trust in governmental institutions. Fraud is a pressing issue worldwide and it is a fraud committed by an employee on an employer in the course of their employment (ACFE, 2020). Fraud has become especially problematic in the public sector where resources intended for public use can be misappropriated for personal gain. Nigeria, Africa's largest economy, has

been grappling with extensive fraud, resulting in significant economic losses and inhibiting the nation's growth and development (Transparency International, 2020). Given these realities, the role of forensic accounting in detecting and preventing fraud in Nigeria's public sector cannot be overstated. By employing techniques like financial statement analysis, ratio analysis, and sophisticated software tools, forensic accountants are uniquely equipped to unearth and document evidence of financial malfeasance (Coenen, 2018). As the Nigerian public sector continues to pursue transparency, efficiency, and accountability, the importance of forensic accounting in this fight against fraud will continue to grow. The adoption of forensic accounting in the Nigerian public sector for fraud prevention is a promising approach. Forensic accounting presents an opportunity to introduce robust financial controls, foster a culture of transparency, and bring perpetrators of fraud to justice. Forensic accounting with its potent blend of financial analysis, ratio analysis, and investigative skills, is increasingly recognized as a potent weapon in the fight against fraud (Coenen, 2018). Forensic accountants possess the unique ability to unravel complex financial transactions, detect irregularities, and provide invaluable evidence for legal proceedings (Hopwood et al., 2012). In the Nigerian context, their role in ensuring transparency, accountability, and efficiency within the public sector cannot be overstated. The implementation of forensic accounting in Nigeria, while promising, is not without its challenges. The labyrinthine structure of the public sector, spanning a vast number of departments and agencies, demands a forensic accountant's meticulous examination (Esoimeme, 2018). Moreover, forensic accounting in Nigeria confronts hurdles such as a dearth of technical expertise, potential corruption within enforcement agencies, and a need for stringent punitive measures to deter future fraud (Akinleye, 2021). Nevertheless, Nigeria has made considerable strides in embracing forensic accounting. An uptick in the establishment of forensic accounting firms, university programs emphasizing this discipline, and developing regulatory frameworks supportive of forensic accounting are encouraging signs (Esoimeme, 2018; Uadiale & Fagbemi, 2012). These developments signal a commitment to fostering a culture of financial integrity, indispensable in the quest to combat fraud. Public sector reforms are crucial in creating an environment conducive to forensic accounting.

As Akinleye (2021) asserts fostering a culture of integrity and transparency is as important as the technical proficiency in detecting and combating fraud. The increased adoption of technology also plays a vital role in the evolution of forensic accounting. Modern forensic accountants need to be proficient in using advanced software tools and data analysis techniques to efficiently detect fraudulent transactions (Singleton & Singleton, 2010). In the Nigerian context, leveraging technology can significantly enhance the detection and prevention of fraud in the public sector. International cooperation is also a crucial component in fortifying forensic accounting in Nigeria's public sector. Through collaborations with global organizations like the World Bank and International Monetary Fund, Nigeria can gain access to much needed resources and expertise in the field (World Bank, 2021). Furthermore, such partnerships can facilitate the sharing of best practices and contribute towards improving the global response to fraud prevention. The effectiveness of forensic accounting in combating fraud hinges on strong enforcement of legislation and punitive measures. The Nigerian government has been taking steps to enforce tougher laws and regulations that prescribe stiff penalties for perpetrators of financial crimes (Gbegi & Okoye, 2013). This is an essential deterrent, sending a clear message that fraud will not be tolerated. It is important to note that forensic accounting is not just about detecting and preventing fraud.

It also plays a crucial role in helping to restore public trust in the Nigerian government. Through its commitment to transparency and accountability, forensic accounting can demonstrate the government's commitment to ethical practices and good governance, thus boosting public confidence (Carnes & Gierlasinski, 2001). The societal impact of forensic accounting cannot be underestimated. It extends beyond the monetary recovery from fraudsters to the restoration of trust in public institutions. This trust is particularly important in Nigeria, a country where public confidence in governmental financial integrity has been eroded due to widespread corruption (Transparency International, 2020). As noted by Ezejiolor et al. (2014) the ability of forensic accountants to detect and prevent fraud plays a significant role in rebuilding public trust and promoting economic stability. The role of forensic accounting in enhancing corporate governance cannot be overlooked. The Association of Certified Fraud Examiners (ACFE) (2021) defines fraud as an intentional or deliberate act to deprive another of property or money by guile, deception, or other unfair means. The ACFE (2020) reported that forensic accounting utilizes accounting, auditing and investigative skills to conduct an examination into a company's financial statements. Thus, forensic accounting provides an accounting analysis suitable for court. The American Institute of Certified Public Accountants (AICPA) (2020) stated that forensic accounting is the application of financial skills and an investigative mentality to fraud issues, conducted within the context of the rules of evidence. It encompasses litigation support, investigation, and dispute resolution. Forensic accounting is a specialized area of accounting that combines investigative techniques, accounting skills, auditing, and legal knowledge to analyze and interpret financial information. The aim is often to uncover fraudulent activities, financial misrepresentation, or to prepare information for legal proceedings. Forensic accountants are often called upon when a company suspects fraudulent activity. This can include internal fraud, such as embezzlement or payroll fraud, or external fraud, like fraudulent financial reporting. Forensic accountants utilize their understanding of business information and financial systems, along with knowledge of fraud schemes, to uncover irregularities and identify fraudulent activities.

Forensic accountants provide assistance in legal matters, including the quantification of economic damages in lawsuits. They may be required to provide written reports and may appear as an expert witness in court to explain complex financial matters in a clear and understandable way. Dispute resolution they can also assist in resolving disputes, such as those related to acquisitions, bankruptcy, insurance claims, and contractual disputes. They do this by examining, analyzing, and interpreting the financial and business facts related to the dispute. Forensic accountants are often involved in investigations conducted by regulatory bodies. Their role can involve assisting in the investigation of breaches of regulations, quantifying the impact of such breaches, and providing reports for regulatory bodies. Forensic accountants can also help businesses prevent fraud by assessing their financial systems for vulnerabilities and recommending controls to mitigate these risks. There are different branches of forensic accounting such as investigative accounting, litigation support services, digital forensic or computer forensic or cyber forensic. Association of Certified Fraud Examiners (2020) observed that investigative accounting is often associated with investigations of criminal matters. A typical investigative accounting assignment would be an investigation of employee theft. Other examples include securities fraud, insurance fraud, kickbacks, and proceeds of crime investigations. Singleton et al. (2010) stated that investigative accounting involves the use of investigative and analytical skills for the purpose of resolving financial issues in a manner that

meets standards required by courts of law. It may involve quantification of damages sustained by parties involved in legal disputes and can assist in resolving disputes, even before they reach the courtroom.

Investigative accounting is a specialized field of accounting that involves the use of accounting skills to investigate fraud or embezzlement and to analyze financial information for use in legal proceedings. A major aspect of investigative accounting involves the detection and investigation of fraud. It involve scrutinizing financial records for signs of fraudulent activities such as falsified records, exaggerated revenues, understated expenses, or misappropriated assets. Fraud investigations might be conducted in response to suspected or reported fraudulent activity or as a proactive measure to identify and prevent fraud. Investigative accountants often play a crucial role in legal cases by providing financial analysis that can assist in settling disputes. Investigative accountants might also provide expert testimony in court to explain their findings. Investigative accountants use their skills to conduct detailed financial analyses. Association of Certified Fraud Examiners (2020) described that litigation support provides assistance of an accounting nature in a matter involving existing or pending litigation. It deals primarily with issues related to the quantification of economic damages. A typical litigation support assignment would be calculating the economic loss resulting from a breach of contract. American Institute of Certified Public Accountants (2020) narrated that litigation support services encompass the preparatory work involved in getting ready for trial, including development of a strategy, gathering and documenting evidence, reviewing the opposition's financial calculations, formulating questions for the deposition, and providing expert witness testimony. Litigation support services may include document review and management, financial analysis, expert witness testimony, preparation of visual aids, deposition and interrogatory assistance, damage calculations. Carrier (2006) stated that digital forensics involves the identification, preservation, extraction, and documentation of computer evidence stored in the form of magnetically encoded information with the aim to recover data in a legally admissible manner. Sammons (2012) noted that digital forensics is the use of scientifically derived and proven methods toward the preservation, collection, validation, identification, analysis, interpretation, documentation, and presentation of digital evidence derived from digital sources for the purpose of facilitating or furthering the reconstruction of events found to be criminal or helping to anticipate unauthorized actions shown to be disruptive to planned operations. Digital forensics, also known as computer forensics, is the process of identifying, preserving, analyzing, and presenting digital evidence. The objective of digital forensics is to perform a structured investigation while maintaining a documented chain of evidence to find out exactly what happened on a digital system and who was responsible.

Association of Certified Fraud Examiners (ACFE) (2020) reported that fraud prevention refers to the proactive identification and removal of the factors that induce fraud, encompassing policies, procedures, and controls designed to stop fraudulent actions from occurring. Institute of Internal Auditors (IIA) (2019) stated that fraud prevention is a series of actions to proactively mitigate the likelihood of the occurrence of fraud by addressing both human and systemic vulnerabilities within an organization. The Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013) noted that fraud prevention encompasses the processes, structures, and governance used by an organization to deter fraudulent activities, primarily through effective design and operation of internal controls. A regular assessment of fraud risks

should be conducted to understand and measure the potential vulnerabilities within an organization (Albrecht et al., 2018). Controls such as segregation of duties, routine reconciliations, and double sign-offs can reduce the opportunity for fraud (Committee of Sponsoring Organizations of the Treadway Commission, 2013). Conducting routine internal and external audits can identify and deter fraudulent activity. Continuous monitoring of transactions can identify irregular patterns which may signify fraud (Singleton & Singleton, 2010). Encouraging employees and other stakeholders to report suspicious activities can be an effective way to detect fraud early (Association of Certified Fraud Examiners, 2020).

A whistleblowing policy is a risk management strategy that allows organizations to identify and address internal risks promptly, including misconduct and illegal activities (Financial Reporting Council, 2018). A whistleblowing policy is a set of guidelines and procedures established by an organization to encourage employees and other stakeholders to report any suspected wrongdoing, misconduct, unethical behavior, or violations of policies or laws within the organization. The policy aims to create a supportive and confidential environment that allows individuals to come forward with information without fear of retaliation. Traditional accountants and auditors lacked the requisite skills in fraud detection, investigation, and litigation (Owojori & Asaolu, 2009). Scholars generally believe that the introduction of forensic accounting will help mitigate, reduce the occurrence of fraud in the public sector. Weak internal controls have been a chronic issue in the Nigerian public sector. These controls are crucial to prevent and detect fraudulent activities by identifying and correcting discrepancies in financial transactions. However, weak internal controls often provided an enabling environment for fraud (Uadiale & Fagbemi, 2012). A poor ethical climate can exacerbate the problem of fraud prevention. In the absence of a strong ethical culture, employees may be more likely to engage in fraudulent activities, especially when coupled with opportunities and pressure (Adebisi & Gbegi, 2013). Widespread corruption in the Nigerian public sector has long been a significant barrier to effective fraud detection and prevention. Corruption can distort the incentives for public officials and undermine efforts to prevent and detect fraud (Transparency International, 2020). Forensic accounting has the capacity and technical knowledge and skills to reinforce internal control measures and provide a more robust and proactive approach to fraud detection and prevention. Before the advent of forensic accounting, the use of technology in fraud detection and prevention was relatively limited.

Traditional accounting and auditing practices often did not include the use of advanced analytical tools, which can be instrumental in identifying irregular patterns indicative of fraud. As a result, many fraudulent activities might have gone undetected (Houck et al., 2006). The introduction of forensic accounting will help address these challenges by providing a more targeted, proactive, and multidisciplinary approach to fraud detection and prevention. One of the main issues hampering the fight against fraud was the absence of a comprehensive and specific legal framework. The lack of clear laws and regulations about the roles, responsibilities, and powers of forensic accountants, coupled with poorly defined penalties for fraudulent activities, undermined the effectiveness of fraud detection and prevention efforts (Izedonmi & Ibadin, 2015). The introduction of forensic accounting as a strategic policy tool in the fight against fraud in the Nigerian public sector will help in the reduction of fraud prevention. Enyi (2012) highlighted that the conventional audit methodology which was appropriate for the industrial age may not be sufficient, broad enough for the information technology age when

assets are intangible, business activities are transacting electronically, markets are global and the pace of change is ever accelerating. Based on this assertion, it is high time to call for new field of forensic accounting to combat the fraud moving at high pace with the modern technology. Ahadiat (2010) reported that failure of traditional auditing in preventing and identify fraudulent activities in the public sector entities had necessitate the need for forensic accounting which required technical skill that allow: ability to synthesize, critical thinking, ethical behavior, computer competence, analytical and ability to detect and investigate fraud evidence suitable as evidence in court of law.

Bragy (2010) stated that forensic accountant provide services in area such as business valuation, investigative accounting, litigation support, criminal investigation, computer forensic, anti-trust, insurance claim, personal injury, fraudulent claims, tracking terrorism, royalty audit, dispute resolution etc. Center for forensic studies (2010) reported that it is crystal clear that the traditional auditor still issue report, that are materially fraudulent as showing a true and fair view when infact, it fails to divulge existing fraud. However, the general expectation is that forensic accounting offer reliefs to the existing vulnerability of conventional accounting and auditing system to financial fraud. Therefore the incorporation of modern forensic accounting techniques in any industry is necessary in order to prepare the accounting profession to deal effectively with the problem of unearthing imaginative fraud. Injection of forensic accounting techniques in auditing could be used to reverse the leakages that caused wide spread public sector fraud. This can be attributed to the fact that proactive forensic accounting seeks out error and deviant transaction before they crystallize into fraud. The above debate led the researcher to carry out this study to ascertain the level of the relationship between forensic accounting practices and fraud prevention of federal government agencies in Nigeria. Extensive empirical literature review indicates that studies have been carryout on forensic accounting and fraud prevention in private sectors, Ndah and Okoye (2019) investigated forensic accounting and fraud prevention in manufacturing factory in Nigeria. Forensic accounting was proxied by fraud investigative practice and fraud litigation practices while fraud prevention was proxied by fraud prevention. Firas (2021) examined the role of forensic accounting techniques in reducing cloud based accounting risks in the Jordanian five stars hotels. Forensic accounting techniques was proxied by interviewing skills, mediation and arbitration skills, computer assisted review while reducing cloud based accounting was proxied by fraud prevention and detection. Obiora et al. (2022) examined forensic accounting services and its effect on fraud prevention in health care firms in Nigeria. Forensic accounting services were proxied by forensic accounting service while fraud prevention was proxied by fraud prevention. Kolawole et al. (2018) examined determinants of forensic accounting and its effects on alleviation of fraud practices in Nigerian deposit money banks. Forensic accounting was measured by information technology and auditor independence while fraudulent practices were measured by asset misappropriation. Olaoye and Adebayo (2019) examined forensic accounting as a tool for fraud prevention and detection in deposit money banks in Nigeria. Forensic accounting was proxied by forensic accounting techniques while fraud prevention and detection were measured by fraud prevention and fraud detection. Ozigbo and Orife (2023) investigated forensic accounting and prevention of corporate fraud: A survey of selected firms in Delta State. Forensic accounting was proxied by forensic accounting service while fraud prevention was proxied by fraud prevention. Forensic accounting was proxied by investigative accounting, litigation support service and digital forensics while fraud prevention was proxied

by whistleblowing policy, fraud risk assessment and data mining and internal control proxied by control activities as a moderating variable for the study. This proxied has not been combined in a single study to the best knowledge of the researcher.

However, the current studies focused on federal government agencies in Rivers State, Nigeria, which is public sector. The study focused on the relationship between forensic accounting and fraud prevention of federal government agencies in Rivers State, Nigeria. Empirical evidence also indicates that studies have been conducted on forensic accounting with a focused on fraud detection, fraud control, financial crime, fraud mitigation (see Dada & Jimoh 2020; Appah & Inini (2021) Owolabi et al. 2013; Akkeren and Tarr 2014; Joseph et al. 2016; Ewa 2022; Bana 2019; Abdulrahman 2019; Uniamiogbo et al., 2019; Ogiriki & Appah 2018; Aigienohuwa, et al. 2017). However, our current study focused on forensic accounting and fraud prevention of federal government agencies in Rivers State, Nigeria. The study focused on fraud prevention while previous study mentioned above focused on fraud detection, fraud control, financial crime, fraud mitigation. Our emphasis on this study is fraud prevention proxied by whistleblowing policy. Most previous study on forensic accounting and fraud detection are conducted in developed countries see Widnyana and Widyawati (2022); Evans (2017); Akinbowale et al. (2020); Serhii et al. (2019); Hegazy et al. (2017); Huber (2012); Popoola et al. (2014); Alshurafat et al. (2019). The current study is conducted in Rivers State, Nigeria and focused on forensic accounting and fraud prevention of federal government agencies in Rivers State, Nigeria. Previous studies on forensic accounting and fraud prevention have shown conflicting and contradictory result. Some studies shows that forensic accounting has significant effect on fraud detection and prevention while other studies shows that forensic accounting had no significant relationship on fraud detection and prevention, some studies shows inconclusive result. See Barzinji et al. (2022); Ejoh, (2017); Godwin et al. (2018); Mbugua, (2020); Ocansey, (2017); Tapang, & Ihendinihu, (2020); Adebisi et al. (2016); Claire & Jude, (2016); Fyneface & Oseiweh, (2017); Idris, (2017); Imoniana et al.(2018); Ogundana et al. (2018); Okafor, & Agbiogwu (2016); Ozuomba et al. (2016); Suleiman, & Othman, (2016); Umar et al. (2016). This mixed result and findings necessitated the need for further research to determine the relationship between forensic accounting and fraud prevention of federal government agencies in Rivers State, Nigeria. This methodology adopted for the study is different from the methodology adopted by previous researcher as some of the researcher adopted only Pearson product moment correlation coefficient or regression analysis. Thus, the study intends to fill in the perceived gap in literature by investigating the relationship between forensic accounting and fraud prevention of federal government agencies in Rivers State, Nigeria.

Statement of the Problem

The Nigerian public sector lacked robust systems and procedures to detect and prevent fraud. Traditional auditing methods were primarily focused on ensuring compliance with regulations and policies, rather than proactively identifying fraudulent activities (Efiong, 2012). There is a significant shortage of skilled personnel with specialized knowledge and skills to detect and prevent fraud prevention. Traditional accountants and auditors lacked the requisite skills in fraud detection, investigation, and litigation (Owojori & Asaolu, 2009). Scholars generally belief that the preface of forensic accounting will help mitigate, reduce the occurrence of fraud in the public sector. Weak internal controls have been a chronic issue in the Nigerian public

sector. These controls are crucial to prevent and detect fraudulent activities by identifying and correcting discrepancies in financial transactions. However, weak internal controls often provided an enabling environment for fraud (Uadiale & Fagbemi, 2012). A poor ethical climate can exacerbate the problem of fraud prevention. In the absence of a strong ethical culture, employees may be more likely to engage in fraudulent activities, especially when coupled with opportunities and pressure (Adebisi & Gbegi, 2013). Widespread corruption in the Nigerian public sector has long been a significant barrier to effective fraud detection and prevention. Corruption can distort the incentives for public officials and undermine efforts to prevent and detect fraud (Transparency International, 2020).

Forensic accounting has the capacity and technical knowledge and skills to reinforce internal control measures and provide a more robust and proactive approach to fraud detection and prevention. Before the advent of forensic accounting, the use of technology in fraud detection and prevention was relatively limited. Traditional accounting and auditing practices often did not include the use of advanced analytical tools, which can be instrumental in identifying irregular patterns indicative of fraud. As a result, many fraudulent activities might have gone undetected (Houck et al., 2006). The establishment of forensic accounting will help address these challenges by providing a more targeted, proactive, and multidisciplinary approach to fraud detection and prevention. One of the main issues hampering the fight against fraud was the absence of a comprehensive and specific legal framework. The lack of clear laws and regulations about the roles, responsibilities, and powers of forensic accountants, coupled with poorly defined penalties for fraudulent activities, undermined the effectiveness of fraud detection and prevention efforts (Izedonmi & Ibadin, 2015). The introduction of forensic accounting as a strategic policy tool in the fight against fraud in Nigerian public sector will help in reduction of fraud prevention. Another major challenge was the lack of awareness about the seriousness and consequences of fraud prevention. In many cases, employees might not have been aware of the indicators of fraud, nor did they have the necessary training to detect such indicators. This lack of awareness and training further hampered the effectiveness of fraud detection and prevention measures (Dandago & Rufai, 2013). Auditors play a critical role in fraud detection, but their efforts in Nigeria's public sector have been historically hindered by limited autonomy. Auditors, before the introduction of forensic accounting, often worked under the influence and pressure from their superiors, compromising their ability to execute independent investigations. This lack of independence reduced the auditors' effectiveness in detecting and exposing fraudulent activities (Iyoha & Oyerinde, 2010). The effectiveness of fraud detection and prevention measures often depends on the commitment and support from management. In the absence of such support, efforts to detect and prevent fraud may not receive the necessary resources or priority. Whistleblowing mechanisms can be a potent tool in the fight against fraud prevention. However, in Nigeria's public sector, these mechanisms were often ineffective due to various factors such as fear of retaliation, lack of anonymity, and inadequate incentives for whistleblowers. This further hindered the detection of fraudulent activities (Nwoye, 2017). The study seeks to address these perceived gaps in the literature and contribute to a more comprehensive understanding of fraud and forensic accounting in federal government agencies in Rivers State, Nigeria. This study aims to fill these gaps, providing valuable insights that will aid in the development of more effective fraud prevention strategies in Rivers State, Nigeria.

Objective of the Study

The purpose of this study is to investigate the relationship between forensic accounting and fraud prevention of federal government agencies in Rivers State, Nigeria. The specific objectives are to:

1. Determine the relationship between investigative accounting and whistleblowing policy of federal government agencies in Rivers State, Nigeria.
2. Investigate the relationship between investigative accounting and fraud risk assessment of federal government agencies in Rivers State, Nigeria.
3. Evaluate the relationship between litigation support services and whistleblowing policy of federal government agencies in Rivers State, Nigeria.
4. Determine the relationship between litigation support services and fraud risk assessment of federal government agencies in Rivers State, Nigeria.

Research Questions

The following research questions were addressed:

1. What is the relationship between investigative accounting and whistleblowing policy of federal government agencies in Rivers State, Nigeria?
2. What is the relationship between investigative accounting and fraud risk assessment of federal government agencies in Rivers State, Nigeria?
3. What is the relationship between litigation support services and whistleblowing policy of federal government agencies in Rivers State, Nigeria?
4. Determine the relationship between litigation support services and fraud risk assessment of federal government agencies in Rivers State, Nigeria.

Research Hypotheses

The following research hypotheses were tested:

- H₀₁:** There is no significant relationship between investigative accounting and whistleblowing policy of federal government agencies in Rivers State, Nigeria.
- H₀₂:** There is no significant relationship between investigative accounting and fraud risk assessment of federal government agencies in Rivers State, Nigeria.
- H₀₃:** There is no significant relationship between litigation support services and whistleblowing policy of federal government agencies in Rivers State, Nigeria.
- H₀₄:** There is no significant relationship between litigation support services and fraud risk assessment of federal government agencies in Rivers State, Nigeria.

Conceptual Framework

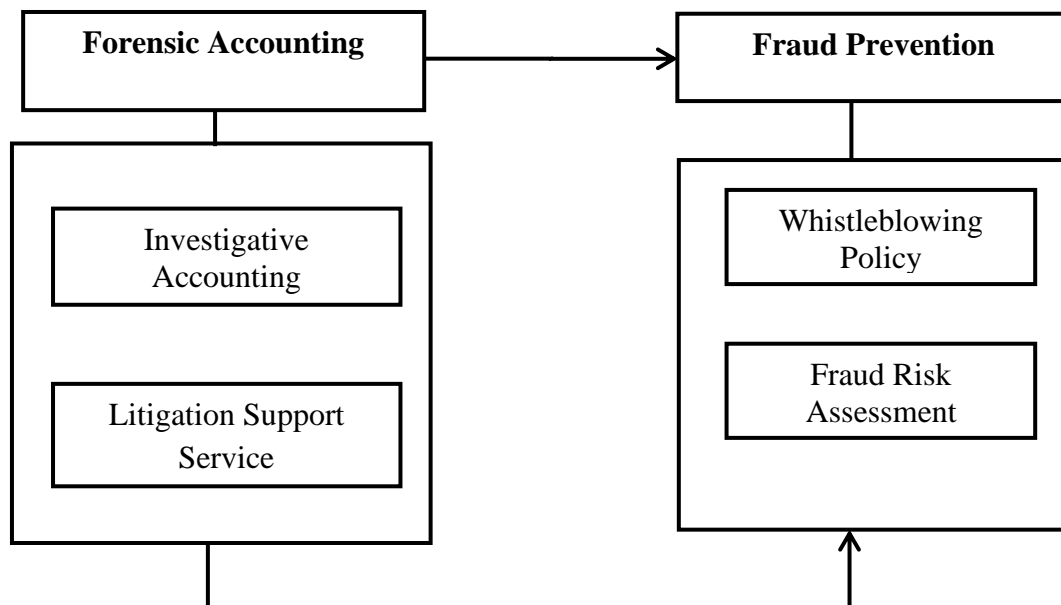


Figure 1.1: Conceptual Framework of the Relationship between Forensic and Fraud Prevention

Conceptual framework is a tool that researchers use to guide their studies. It's an analytical tool with various uses, including clarifying concepts and organizing ideas. It's a roadmap or plan that helps to identify the key concepts or variables in a study and elucidates the relationships between them. Hence, the above conceptual framework shows the relationship between the dimension of the independent variable and the measure of the dependent variable of the study. The explanatory variable of this study is forensic accounting proxied by investigative accounting and litigation support services while the explained variable is fraud prevention measured by whistleblowing policy and fraud risk assessment.

Literature Review

Theoretical Framework

Fraud Triangle Theory

Donald Cressey, a criminologist, invented the fraud triangle theory in 1950 as a way to solve fraud cases. It was published in 1953. He began his investigation into fraud by arguing that there must be a motive behind what people do. This led him to concentrate his research into what motivates people to break the law. In a five-month stretch, he interviewed 250 offenders whose behavior met two requirements. People embrace trust obligations in good faith at first, but circumstances force them to break the trust. He explained that for an offense to occur, three factors (pressure, opportunity, and rationalization) must be present. Trust violators, when they conceive of themselves as having a non-sharable financial problem and have information or understanding that this problem can be genuinely resolved by a breach of the status of financial trust. Wells (2005) reported that pressure is the driving force behind fraud. Medical bills, costly tastes, addiction issues, and other sources of stress can all add up to a lot of pressure. The majority of the time, pressure stems from a serious financial need or problem. In the eyes of the fraudster, this need or problem is frequently shareable. That is, the individual feels that their problem must be solved in secret for some purpose. Some frauds, on the other hand, are

committed solely for the sake of profit. The factors that contribute to unethical actions are referred to as perceived pressure. This perceived pressure will be financial or nonfinancial. Wells (2005) stated that fraudsters assume that their actions will not be noticed because they do not want to be caught. Weak internal controls, poor management supervision, or the use of one's power and authority generate opportunity. Failure to develop proper protocols for detecting fraudulent activity raises the chances of fraud occurring. Opportunity is the leg that companies have the most influence over out of the three. Organizations must develop systems, procedures, and controls that do not place workers in a position to commit fraud unnecessarily and that efficiently identify fraudulent conduct when it occurs. Perceived opportunity is the second requisite factor for fraud to occur. An inadequate management or governance structure creates an opportunity for a person to commit organizational fraud. Internal control vulnerabilities are referred to as such in the accounting industry. The fraud triangle theory's third component is rationalization. This implies that before engaging in immoral conduct, the victim must come up with a morally appropriate idea. Rationalization refers to the justifications that distinguish unethical behavior from illegal activity.

It is unlikely that a person would commit fraud if he or she cannot justify their acts. I was just borrowing the money, or I was entitled to the money because my boss was exploiting me, are two examples of rationalizations for dishonest conduct. Furthermore, some fraudsters justify their actions by saying, I had to cheat to feed my family, or some people did it, so why not me? (Cressey, 1953). Rationalization is difficult to detect because it is impossible to read the mind of a fraud perpetrator. Individuals who commit fraud have a mentality that helps them to justify or excuse their fraudulent conduct (Hooper & Pornelli, 2010). Rationalization is an excuse for fraudulent conduct based on a lack of personal responsibility or moral judgment on the part of an employee (Rae & Subramanian, 2008). The study is underpinned on fraud triangle theory because it offers a systematic approach to diagnosing and understanding fraud incidents. The theory has universal relevance and can be applied to various sectors, including federal government agencies. It covers both the internal and external aspects that lead to fraud, making it more holistic. The study is underpinned on fraud triangle theory because forensic accountants can proactively identify areas of concern before fraud occurs, by recognizing the warning signs in the three elements. The study is underpinned on fraud triangle theory because the fraud triangle provides a framework for training and sensitizing employees about fraud. By understanding the underlying causes, stronger internal controls can be designed. The theory takes into account the human element, which is often the most unpredictable factor in fraud cases.

Conceptual Review

Forensic Accounting

Huber (2015) stated that forensic accounting is a science that deals with the application of accounting facts gathered through auditing methods and procedures to resolve legal problems. Crumbley et al. (2005) reported that forensic accounting is the action of identifying, recording, settling, extracting, sorting, reporting, and verifying past financial data or other accounting activities for settling current or prospective legal disputes or using such past financial data for projecting future financial data to settle legal disputes. To build on the true position of things, forensic accounting has been dubbed the fastest growing field of accounting today. Despite the recent media attention, forensic accounting is not a novel concept. Its origins can be traced all

the way back to the early 1800s in Glasgow, Scotland. Forensic accounting as a discipline remained largely obscure until a slew of high-profile corporate scandals and tighter reporting and internal control regulations brought it to light (Wallace, 1991). Maurice E. Peloubet is credited with coining the word forensic accounting in his 1946 essay forensic accounting. Although the word may not have been coined until the 1940s, Frank J. Wilson, the man who spearheaded the effort to convict Alphonse "Scarface" Capone for tax evasion in 1931, may be considered the first high-profits forensic accountant (Joshi, 2003). According to Webster's Dictionary, 'Forensic' means belonging to, used in or suitable to courts of judicature or to public discussion and debate. According to Black's Law Dictionary, forensic is used in or suitable for courts of law or public debate. America Institute of Certified Public Accountant (2020) reported that forensic procedures involve the systematic gathering of evidentiary data through the use of recognized investigative techniques that can be presented in a court of law. A forensic specialist, though not specifically defined, is an individual having expertise and/or training and experience in one or more disciplines that could be used in a forensic environment. Disciplines commonly applicable to forensic environments include accounting, auditing, fraud examination, law, computer and other technologies. Forensic accounting services generally involve the application of special skills in accounting, auditing, finance, quantitative methods, specific areas of law and research, and investigative skills to collect, analyze, and evaluate evidential matter, as well as the interpretation and communication of findings, and may involve either an attest or consulting engagement. Dhar and Sarkar (2010) reported that forensic accounting is the application of accounting principles and techniques to legal problems. It necessitates reporting, in which the fraud's responsibility is determined and the report is used as evidence in court or administrative proceedings. Degboro and Olofinola (2007) noted that forensic investigation is about determining and establishing facts in support of a legal argument. To put it another way, using forensic methods to diagnose and solve a crime exposes all of the crime's accompanying features and identifies the perpetrators.

Investigative Accounting

Dhar and Sarkar (2010) observed that investigative accounting involves the examination of financial records and reports to obtain evidence that can be presented in court proceedings. It requires the application of auditing procedures, principles of accounting, and an investigative mindset. Huber (2015) stated that investigative accounting is the process of interpreting, summarizing and presenting complex financial issues in a manner that will withstand judicial scrutiny and are clearly understandable in court. American Institute of Certified Public Accountants (2020) reported that an investigation is a structured gathering of documentary evidence and testimony to resolve allegations of improper activity, including reported fraud. Investigation is the action of investigating something, someone or systematic examination of perceived fraud and wrong doing. Investigative accounting encompasses forensic services such as analysis and investigation that may or may not be involved in litigation but may acquire the same skills used in litigation services. Crumbely (2013) stated that investigative accounting is concerned with the investigation of criminal matters, and a typical investigative accounting feature will be on employee bribery, insurance fraud, kickbacks, securities fraud and proceeds of crime investigations.

Singleton and Singleton (2010) reported that investigative accounting is similar to fraud auditing, but specialist investigation usually requires a lot more non-financial facts, such as

testimony from interviews, than fraud auditing. So, when a fraud investigation includes a fraud examination, it also includes the collection of non-financial forensic evidence. Jafaru (2011) suggested that investigative accounting is the use of financial expertise and investigative mindset within the framework of the rules of proof to overcome unresolved fraud issues. There are different forms of investigative accounting such as employee misconduct, criminal investigations, asset discovery, funds tracing and recovery, forensic intelligence gathering, and due diligence analysis. Employee fraud investigation entails procedures and processes for determining the presence, nature, and scope of fraud, as well as the identification of a perpetrator. These investigations also include interviews with those who had access to the funds as well as a thorough examination of the documentary evidence. Albrecht and Albrecht (2012) identified four forms of evidence gathered during a fraud investigation: testimonial evidence, photographic evidence, and eyewitness testimony. Fingerprints, identification numbers or marks on stolen items, and other identifiable evidence that can be linked to a fraudulent act are examples of physical evidence. Expert forensic analysis is often used in the collection of physical evidence. Personal observation entails information that the investigator has seen, heard, or thought. Personal observation investigation methods include invigilation, monitoring, and undercover operations, among others. Investigative accounting, which encompasses forensic accounting techniques, is instrumental in addressing fraud issues in government agencies. Its systematic approach to financial investigation not only detects fraudulent activities but also aids in their prevention. Investigative accounting provides tools and techniques to delve deep into financial records, allowing for the identification of discrepancies, irregularities, and suspicious transactions that could signal fraud (Huber, 2017). The very presence of investigative accounting within government agencies can act as a significant deterrent to potential fraudsters. Awareness that financial records and transactions are subject to scrutiny can dissuade many from pursuing fraudulent activities (Singleton & Singleton, 2010). Investigative accounting often involves reviewing an agency's internal controls. By identifying weaknesses, agencies can proactively fortify these controls to prevent fraud (Moeller, 2013). The findings derived from investigative accounting can be crucial in building a case against those involved in fraudulent activities. The rigorous and methodical approach ensures that the evidence is robust and can stand up in a court of law (Davis et al., 2010).

Litigation Support Service

Grippio and Ibex (2013) explained that litigation support services refer to the process of advising, researching, documenting, analyzing, and presenting information in a manner that is understandable and legally sufficient to support court proceedings. Weil et al. (2017) described that litigation support services involve providing assistance to legal professionals in assessing the financial aspects of a case, through appraisal, accounting, financial analysis, or forensic analysis. This may involve calculating economic damages, critiquing opposing party's financial analyses, or providing expert witness testimony. Litigation support is providing accounting assistance in a matter involving existing or pending litigation and deals primarily with issues related to quantifying economic damages. The litigation support specialist may provide this assistance to the attorney in all stages of preparing the case, or could be on the stand serving as an expert witness. American Institute of Certified Public Accountants (2020) reported that litigation services entail the role of the forensic specialist as an expert or consultant and consist of providing assistance for actual, pending, or potential legal or regulatory proceedings before a trier of fact in connection with the resolution of disputes between parties. Litigation services

generally consist of expert witnesses, consulting, and other services. These services are defined as follows: Expert witness services are litigation services in which a member is designated to render an opinion before a trier of fact as to the matters in dispute.

Consulting services are those litigation services in which a member provides advice about the facts, issues, and strategy of a matter. The consultant does not testify as an expert witness before a trier of fact unless the consultant's role subsequently changes to that of an expert witness. Other services are litigation services in which a member serves as a trier of fact, special master, and court appointed expert, referee, arbitrator, or mediator on behalf of a client. American Institute of Certified Public Accountants (2011) stated that forensic accountants can be called upon to testify in criminal and civil cases involving financial fraud, embezzlement, misapplication of funds, and irregular accounting practices. They can also be called as a prosecution witness or to assist the defendant's attorney in matters involving accounting or auditing. Association of Certified Fraud Examiners (2020) stated that forensic accounting experts will testify as expert witnesses or act as consulting experts during the trial process. When advanced expertise is required to help the jury interpret facts or decide a fact in dispute, expert witnesses testify. On the other hand, consulting experts seldom appear in court. Instead, they are employed to help the plaintiff with technical aspects of the case preparation. In general, all testifying and consulting experts work with the litigation team on a regular basis. Litigation support services, Singleton and Singleton (2010) stated that litigation support services apply to a forensic accountant supporting an attorney in prosecuting or defending a case in the legal system. This assistance can take on a range of skills, but it is ultimately intended to end with the forensic accountant giving an opinion in a Court of Law as an expert witness on matters of accounting fraud. Zysman (2013) suggested that litigation support services is where a forensic accountant provides accounting assistance in a matter involving ongoing or pending litigation, and it mostly deals with the issue of quantifying economic damages. A typical litigation support service, or assignment provided by a forensic accountant, will be calculating the economic damages. Amadiababe (2008) posited that a forensic accountant's primary function as an expert witness is to evaluate, interpret, summarize, and present complex business and financial transactions in a rational, understandable, and fact-based manner. An expert witness is a person who, due to their education, training, ability, or experience, is assumed to have knowledge of a subject beyond that of the average person, to the point where others may legally rely on them for specialized science, technological, or other opinions on evidence or facts within their expertise

Fraud Prevention

Fraud prevention is a subject of great interest to many organizations due to the potential financial and reputational risks associated with fraudulent activities. Association of Certified Fraud Examiners (2020) stated that fraud prevention refers to the proactive identification and removal of the factors that induce fraud, encompassing policies, procedures, and controls designed to stop fraudulent actions from occurring. Institute of Internal Auditors (2019) reported that fraud prevention is a series of actions to proactively mitigate the likelihood of the occurrence of fraud by addressing both human and systemic vulnerabilities within an organization. The Committee of Sponsoring Organizations of the Treadway Commission (2013) noted that fraud prevention encompasses the processes, structures, and governance used by an organization to deter fraudulent activities, primarily through effective design and

operation of internal controls. Fraud prevention is the proactive set of measures and strategies employed by organizations to deter the occurrence of fraudulent activities, reducing the potential damage and cost caused by such illicit acts. Implementing fraud prevention mechanisms not only saves money but also safeguards the organization's reputation. A regular assessment of fraud risks should be conducted to understand and measure the potential vulnerabilities within an organization (Albrecht et al., 2018). Controls such as segregation of duties, routine reconciliations, and double sign-offs can reduce the opportunity for fraud (Committee of Sponsoring Organizations of the Treadway Commission (2013). Conducting routine internal and external audits can identify and deter fraudulent activity. Continuous monitoring of transactions can identify irregular patterns which may signify fraud (Singleton & Singleton, 2010). Encouraging employees and other stakeholders to report suspicious activities can be an effective way to detect fraud early (Association of Certified Fraud Examiners 2020). Regularly training employees about the importance of ethical behavior and the means to report suspicious activity can create a culture resistant to fraud (Wells, 2017). Advanced analytics and machine learning can help in predicting and identifying fraudulent transactions based on historical patterns (Nigrini, 2019). Establishing a clear organizational policy against fraud and ensuring that all employees are aware of the consequences can act as a deterrent (Green, 2018). Performing background checks on new employees, especially those in sensitive positions, can prevent hiring individuals with a history of fraudulent behavior (Association of Certified Fraud Examiners 2020). Scrutinizing and monitoring third-party relationships can prevent fraudulent invoices, billing schemes, and other vendor-related frauds (Hopwood et al., 2018). Singleton and Singleton (2010) maintained that occupational fraud refers to an employee's systematic and ongoing use of their occupational role for personal financial gain, through intentional misuse or misappropriation of the employing organization's resources or assets.

Whistleblowing Policy

A whistleblowing policy is an internal control mechanism that enables employees to report illegal, unethical, or inappropriate actions within an organization without fear of retaliation. This definition emphasizes the role of whistleblowing in maintaining internal control and integrity within an organization (Committee of Sponsoring Organizations of the Treadway Commission, 2013). A whistleblowing policy is a set of procedures that guide employees on how to report misconduct and provides protection to those who do so. This definition focuses on the procedural aspect of whistleblowing (Near & Miceli, 1985). A whistleblowing policy is a practice within organizations that enables individuals to voice concerns about unethical or illegal practices without fear of retribution, thus promoting a culture of transparency and integrity (Vandekerckhove, 2006). Whistleblowing is a term used to refer to the act of reporting or disclosing any type of information or activity that is deemed illegal, unethical, or not correct within an organization that is either private or public (Johnson, 2003). The whistleblowing policy is intended to encourage and enable employees to raise serious concerns within the organization rather than overlooking a problem or 'blowing the whistle' outside. A typical whistleblowing policy will include: Purpose and scope, protection, confidentiality, reporting procedure, investigation, remedies, responsibilities, awareness and training. The policy should clearly state why it is being established and who it applies to. This can include all employees, contractors, board members, and others who interact with the organization (Miceli et al., 2008).

Fraud Risk Assessment

Fraud risk assessment is the systematic process of identifying, analyzing, and evaluating potential fraud risks within an organization, in order to develop effective strategies to prevent, detect, and respond to fraudulent activities. It involves assessing internal control systems, identifying vulnerabilities, and implementing risk mitigation measures (ACFE, 2017). Fraud Risk Assessment refers to the evaluation of the likelihood and potential impact of fraudulent activities on an organization, and the development of a comprehensive plan to manage and mitigate those risks. It involves the identification of fraud indicators, assessment of internal controls, and the implementation of preventive measures to reduce the organization's exposure to fraud (COSO, 2013). Fraud Risk Assessment is a proactive approach to evaluating and managing the risks associated with fraud within an organization. It involves the systematic identification and assessment of fraud risks, considering both internal and external factors, and the development of control activities and response plans to mitigate those risks. The assessment process typically includes the analysis of business processes, identification of vulnerabilities, and the establishment of monitoring mechanisms (IFAC, 2012). Fraud risk assessment is a crucial process within an organization's broader risk management strategy. It involves identifying and assessing the risks of fraud within an organization to develop and implement controls that mitigate these risks. Fraud risk assessment involves a systematic process to identify where and how fraud might occur and who might perpetrate it. This process includes assessing the risk, considering existing controls, and devising a plan to mitigate the risk. The aim is to foster a proactive approach to fraud prevention (Singleton et al., 2006; Vona, 2018).

Empirical Review

Bingilar et al. (2021) examined forensic audit as a tool for fraud detection and prevention in Nigerian banks. The study took a census of the 27 Deposit Money Banks listed on the Nigerian Stock Exchange as of 31st December 2019. Secondary source was used to collect data from the Nigerian Deposit Insurance Corporations' annual report for 2019. The study covered a period of 10 years spanning 2010- 2019. Data were analyzed using charts, graphs, tables, and regression. The study revealed that forensic audit has a significant and negative effect on several fraud cases, the number of staff involved in bank fraud, and the actual amount of bank losses through fraud in Nigerian DMBs. However, forensic auditing has an insignificant impact on expected losses generated through fraud activities in Nigerian banks.

Dada and Jimoh (2020) studied the association between forensic accounting and financial crimes using the Nigerian Public Sector as focal point. The data for the work was gotten via administered questionnaire and personal interviews of sampled public sector officials in Nigeria's economic capital, Lagos. Data was collected from only three hundred and eighty-four (384) respondents. The collected data was subsequently analyzed using the regression technique and results indicated that litigation support service as a benchmark for forensic accounting had significant inverse impact on financial crimes. This implied that the adoption of litigation support service was found to be crucial in ensuring the fruitful trial of financial fraudulent schemes. It then suggested that as financial frauds become more digital in nature, public institutions should also seek out avenues to use forensic accounting software to be able to combat the scourge.

Research Methodology

This study investigates the relationship between forensic accounting and fraud prevention of federal government agencies in Rivers State, Nigeria. The study adopts descriptive and correlational research design. Descriptive research design is widely used because of its versatility and capacity to provide details about phenomenon or situation. The correlational design allows the researcher to explore the relationships between variables. Research design is the framework that shapes the overall strategy for conducting a research study, including the choice of methods, data collection, and analysis techniques (Creswell & Creswell, 2017). Yin (2014) views a research design as a logical plan for getting from here to there, where here may be defined as the initial set of questions to be answered, and there is some set of conclusions (answers) about these questions, emphasizes the role of research design in providing a roadmap for the research process, guiding the researcher from the research questions to the findings. The population of the study consists of 450 management staffs of 90 federal government agencies in Rivers State, Nigeria. The study adopts Taro Yamane sampling techniques to determine the sample size of the study which is 212. The study adopts the use of primary data obtained through five point likert scale questionnaire to elicit responses from respondents. The study adopts descriptive statistics for univariate analysis and Pearson product moment coefficient were used to analyze the formulated hypotheses for the study with the aid of statistical package for social sciences version 22. We utilized the framework by Field (2018) to ascertain the 'r' value and gauge the relationship intensity among the study's variables. Decision Rule: If the significant/Probability Value (PV) < 0.05 (level of Significance) = reject the null and conclude Significant Relationship. If the Significant Probability value (PV) > 0.05 (level of Significance) = Accept the null and Conclude Insignificant Relationship.

Table 4.1: Extent and Nature of Relationship

r Value	Strength of Relationship	Magnitude of Relationship	Interpretation
0.00 to 0.19	Very Weak	Negligible	Very weak linear relationship
0.20 to 0.39	Weak	Low	Weak positive linear relationship
0.40 to 0.59	Moderate	Moderate	Moderate positive linear relationship
0.60 to 0.79	Strong	High	Strong positive linear relationship
0.80 to 1.00	Very Strong	Very High	Very strong positive linear relationship

Model Specification

Our model shows that forensic accounting is proxied by investigative accounting, litigation support services while fraud prevention is proxied by whistleblowing policy and fraud risk assessment. An econometric model was developed to establish the relationship between forensic accounting practices and fraud prevention of federal government agencies in Rivers State, Nigeria.

The functional relationship of predictor and criterion variable of the study is shown below;

Function:

$$FRP = f(FSA) \quad (3.1)$$

$$FRP = \alpha_0 - \alpha_1 FSA + \varepsilon_{it} \quad (3.2)$$

$$WBP = f(IVA, LSS) \quad (3.3)$$

$$FRA = f(IVA, LSS) \quad (3.4)$$

$$WBP_{IT} = \beta_0 + \beta_1 IVA_{it} + \beta_2 LSS + \varepsilon_{it} \quad (3.5)$$

$$FRA_{IT} = \beta_0 + \beta_1 IVA_{it} + \beta_2 LSS + \varepsilon_{it} \quad (3.6)$$

Where

- FSA = Forensic Accounting
- FRP = Fraud Prevention
- IVA = Investigative Accounting
- LSS = Litigation Support Services
- WBP = Whistleblowing Policy
- FRA = Fraud Risk Assessment
- $it_1 - it_4$ = Slope
- $\beta_1 - \beta_4$ = Regression Coefficient
- α = Regression Constant
- ε_{it} = Error Term

Data Analysis and Presentation

Data analysis is the process where raw data is cleaned, organized, transformed, and modeled to extract meaningful and actionable insights, thus facilitating informed decision-making (Field, 2018). The data obtained from management staffs of federal government agencies in Rivers State, Nigeria were clean, transformed, organized and used to describe, evaluate the variables of the study to provide a meaningful insight that facilitate informed decision making.

Table 4.2: Correlation Analysis for Investigative Accounting and Whistleblowing Policy Correlations

		Investigative Accounting	Whistleblowing Policy
Investigative Accounting	Pearson Correlation	1	.959**
	Sig. (2-tailed)		.000
	N	210	210
Whistleblowing Policy	Pearson Correlation	.959**	1
	Sig. (2-tailed)	.000	
	N	210	210

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

Table 4.2 shows the correlation analysis on the extent and direction of the relationship between investigative accounting and whistleblowing policy. It showed the correlation coefficient of r

= .959** with the significant/probability value = 0.00 less than 0.05 level of significant. The value is very strong indicating a strong relationship between investigative accounting and whistleblowing policy. Also, the correlation coefficient is positive which indicates that an improvement in whistleblowing policy is associated with an increase in investigative accounting. Thus the researcher concludes that there is a strong relationship between investigative accounting and whistleblowing policy of federal government agencies in Rivers State, Nigeria.

Table 4.3: Correlation Analysis for Investigative Accounting and Fraud Risk Management

		Correlations	
		Investigative Accounting	Fraud Risk Management
Investigative Accounting	Pearson Correlation	1	.758**
	Sig. (2-tailed)		.000
	N	210	210
Fraud Risk Management	Pearson Correlation	.758**	1
	Sig. (2-tailed)	.000	
	N	210	210

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

Table 4.3 shows the correlation analysis on the extent and direction of the relationship between investigative accounting and fraud risk management. The table showed a correlation coefficient of $r = 0.758^{**}$ with a correspondent significant/probability value of 0.000. Thus the analysis shows that there is a strong positive significant relationship between investigative accounting and fraud risk management. The result showed that the probability/significant value is 0.000, < 0.05 level of significance hence the researcher rejects the null hypothesis and conclude that there is significant relationship between investigative accounting and fraud risk management of federal government agencies in Rivers State, Nigeria.

Table 4.4: Correlation Analysis on Litigation Support Services and Whistleblowing Policy

		Correlations	
		Litigation Support Services	Whistleblowing Policy
Litigation Support Services	Pearson Correlation	1	.817**
	Sig. (2-tailed)		.000
	N	210	210
Whistleblowing Policy	Pearson Correlation	.817**	1
	Sig. (2-tailed)	.000	

N 210 210

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

Table 4.4 shows the correlation analysis on the extent and direction of the relationship between litigation support services and whistleblowing policy. The table showed a correlation coefficient of $r = 0.817^{**}$ with a correspondent significant/probability value of 0.000. Thus the analysis shows that there is a strong positive significant relationship between litigation support services and whistleblowing policy of federal government agencies in Rivers State, Nigeria. The result showed that the probability/significant value is 0.000, < 0.05 level of significance hence the researcher rejects the null hypothesis and conclude that there is significant relationship between litigation support services and whistleblowing policy of federal government agencies in Rivers State, Nigeria.

Table 4.5: Correlation Analysis on Litigation Support Services and Fraud Risk Assessment

		Correlations	
		Litigation Support Services	Fraud Risk Assessment
Litigation Support Services	Pearson Correlation	1	.851**
	Sig. (2-tailed)		.000
	N	210	210
Fraud Risk Assessment	Pearson Correlation	.851**	1
	Sig. (2-tailed)	.000	
	N	210	210

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

Table 4.5 presents the correlation analysis between litigation support services and fraud risk assessment. The table displays a correlation coefficient (r) of 0.851** and a significance value (p-value) of 0.000. This indicates a strong and significant relationship between litigation support services and fraud risk assessment in federal government agencies in Rivers State, Nigeria. Since the p-value is below the 0.05 threshold, the null hypothesis is rejected. It can be concluded that there is a significant relationship between litigation support services and fraud risk assessment within the federal government agencies of in Rivers State, Nigeria.

Conclusion and Recommendations

This study ascertains the relationship between forensic accounting and fraud prevention of federal government agencies in Rivers State, Nigeria. The study explored the critical role of forensic accounting mechanisms in combat fraudulent activities. Forensic accounting is an effective tool in detecting and preventing fraud in federal government agencies in Rivers State, Nigeria. The study highlights that the Nigerian public sector is susceptible to various forms of fraud, such as management fraud, employee fraud, internal fraud, misappropriation of funds, and financial statement manipulation. These fraudulent activities not only result in substantial

financial losses but also erode public trust, hinder socio economic development, and impede good governance. The study concludes that there is a strong positive significant relationship between forensic accounting and fraud prevention of Federal Government Agencies in Rivers State, Nigeria; there is a strong positive significant relationship between investigative accounting and whistleblowing policy of federal government agencies in Rivers State, Nigeria; there is a strong positive significant relationship between investigative accounting and fraud risk assessment of federal government agencies in Rivers State, Nigeria; there is a strong positive significant relationship between litigation support services and whistleblowing policy of federal government agencies in Rivers State, Nigeria. There is a strong statistical significant relationship between litigation support services and fraud risk assessment of federal government agencies in Rivers State, Nigeria.

The following recommendations are made: Federal government agencies in Rivers State, Nigeria should enhance their internal control systems to ensure proper checks and balances, segregation of duties, and regular monitoring of financial transactions. Establish and promote anonymous reporting channels for employees and stakeholders to report suspected fraud. Encourage a culture of whistleblowing by ensuring protection for whistleblowers and conducting thorough investigations into reported incidents. Establish comprehensive anti fraud policies that clearly define unacceptable behaviors, provide guidance on reporting and investigating fraud, and outline disciplinary actions. Ensure strict enforcement of these policies to deter fraudulent activities. Embrace technological advancements such as data mining, data analytics, artificial intelligence, and machine learning in forensic accounting practices. These tools can assist in identifying patterns, anomalies, and red flags that may indicate fraudulent activities. Create dedicated units within public sector organizations responsible for investigating and addressing fraud prevention. These units should have the necessary resources, authority, and expertise to conduct thorough investigations and ensure appropriate actions are taken. Promote awareness about the importance of ethical behavior, integrity, and the detrimental impact of fraud within the public sector. Create independent oversight bodies or agencies tasked with monitoring and evaluating the effectiveness of anti fraud measures in the public sector. These bodies should have the authority to conduct investigations, impose penalties, and provide recommendations for improving fraud prevention and detection mechanisms. Review and strengthen the legal framework governing fraud detection and prevention in the federal government agencies in Rivers State, Nigeria. Ensure that the penalties for engaging in fraudulent activities are sufficiently deterrent and that the legal processes for investigating and prosecuting fraud cases are efficient and effective. The federal government needs to establish a secure and anonymous whistleblowing platform where employees and the general public can report suspicious activities without fear of reprisal. Implement reward systems for genuine whistleblowers to encourage reporting and cultivate a culture of transparency. Government agencies should conduct periodic fraud risk assessments to identify vulnerable points in their financial systems and processes.

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