

Effect of Forensic Auditing on Public Expenditure Management of Federal Agencies in Bayelsa State

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Abstract

The study looked at the impact of forensic auditing on public expenditure management of federal agencies in Bayelsa state. Financial mismanagement, fraud, low accountability, and poor use of government resources are perennial problems in government institutions, prompting the study. More specifically the study focused on financial litigation and fraud risk assessment on public expenditure management. A Cross Section Survey research design was used and the data collected were administered by means of a structured questionnaire to the employees of selected Federal agencies in Bayelsa State. The study employed a census sampling technique where the number of respondents were 137 and the entire population was the ones to be sampled. Data collected were analyzed using descriptive statistics and simple linear regression with the aid of Statistical Package for Social Sciences (SPSS) version 26. The findings showed that financial litigation had a strong positive impact on public expenditure management, which means that through effective legal enforcement, recovery of misappropriated funds and prosecution of financial offenders, the accountability in public expenditure utilization is increased. The study also revealed that the fraud risk assessment significantly enhances public expenditure management as it helps agencies identify vulnerabilities, reinforce internal control and neutralize fraudulent activities. The study has revealed that forensic audit is an effective tool for enhancing transparency, accountability and efficient management of federal funds in federal agencies. It suggested that the federal agencies should put more effort into strengthening the forensic auditing practices by incorporating fraud risk assessment frameworks and financial litigation mechanisms, for better public expenditure management.

Keywords: *Forensic auditing, financial litigation, fraud risk assessment, public expenditure management, federal agencies, financial accountability.*

1. Introduction

Public expenditure management is an important aspect of good governance which has the potential to influence the mobilization of government resources, allocation, use and supervision of public funds for socioeconomic development. Effective expenditure management has become even more vital in developing economies, especially where there is high public expenditure and accountability problems are widespread. Public sector institutions are responsible for a large amount of financial resources, derived from taxes, natural resources, grants and other revenue streams, and so there is a need to ensure that these are applied efficiently, transparently and according to regulations for the achievement of the public sector objectives (Allen, Hemming, & Potter, 2023). In several developing nations, particularly Nigeria, the effectiveness of the public expenditure has been continually compromised by

inadequate financial control, poor accountability and improper practices in the financial control systems (Okoye & Gbegi, 2023). Public sector in Nigeria has long been plagued with problems of mismanagement of public funds, corruption, fraudulent procurement practices, diversion of government resources and institutional weakness. The impacts of these difficulties have been negative on the quality of services provided by government agencies and effectiveness of developmental programmes being implemented. Government institutions are facing a growing complexity of financial crimes, which makes traditional auditing methods inadequate in the detection of sophisticated financial crimes. The traditional approach to auditing involves reviewing financial documents and ensuring that financial reporting practices adhere to the accounting standards, but it may not be as detailed as necessary to detect intentional manipulation of financial information and fraudulent schemes (Singleton & Singleton, 2020). As a result, forensic auditing has become a cutting-edge audit technique that aims to detect signs of fraud and financial irregularity, and gather evidence for legal action.

Forensic auditing, which is an amalgamation of accounting knowledge, auditing techniques, investigation skills and legal expertise, is used to uncover, prevent and react to financial misconduct. Forensic auditing is proactive and investigative, and not only determines the accuracy of financial statements, but also seeks to discover the cause, how and who they were illegal, as well. (Wells, 2017) Forensic auditing has been gaining traction in different countries around the world and has been linked to better fraud detection, greater accountability and better financial governance systems. Enofe, Okpako and Atube (2023) have added that forensic auditing would be useful to organisations in discovering fraudulent activities and strengthening internal control systems. Forensic auditing is especially important in the public sector because of the size of public sector spending and the susceptibility of public institutions to financial abuse. Resources managed by public agencies are for public good, infrastructure, education, healthcare and other critical services. The consequences of the misuse of these resources range from financial losses, to a loss of public trust, to the quality of service delivery and institutional legitimacy (Transparency International, 2023). For this reason, measures to enhance financial accountability and minimise opportunities for fraud are needed to improve public expenditure management. Public expenditure management relates to the systems and processes that governments use to plan, allocate, execute, monitor and evaluate their public expenditure. Expenditure management effectively allows public resources to be used in accordance with the priorities, allows control of expenditure, and allows for the government programmes to deliver the desired outcomes (Schick, 2014). But poor monitoring systems, lack of financial discipline, poor budget implementation and fraudulent expenditure often end up leading to ineffective expenditure management. Critics have accused multiple federal agencies in Nigeria of procurement mismanagement, unauthorized spending, disproportionate contracts, and public funds being misused, and questioned the ability of financial controls to work properly.

Financial litigation is one such aspect in which forensic auditing becomes a factor in Public Expenditure Management. Financial litigation is the use of litigation to get the money back, prosecute financial criminals and hold financial wrongdoers accountable. Investigative reports, documentation, and expert testimony by forensic auditors can help support legal action against financial crimes perpetrators or the financial institution they engaged in the crimes (Hopwood, Leiner, & Young, 2022). Forensic auditing enhances deterrence by providing a legal penalty for fraudulent activity through financial litigation. If criminals realize that public officials, public employees and civil servants will be able to investigate and take legal action against those they defraud, it may decrease the chance of financial misconduct.

Forensic accounting is especially important in financial disputes, especially within government agencies, where financial offenses frequently feature intricate transactions and subterfuge. An irregularity might be detected in a traditional audit report but might not be enough for criminal or civil action. However, forensic auditors use the investigative methods including financial

tracing, document analysis, data analysis, and interviewing individuals with relevant information to build cases that can withstand legal challenges (Bologna & Lindquist, 2015). Thus, good financial litigation, coupled with forensic auditing, can help to enhance expenditure discipline of federal agencies. Another key area of forensic accounting is the identification of fraud risks. Fraud risk assessment is the process of systematically identifying, evaluating, and managing fraud risks in an organization. It allows institutions to pinpoint weaknesses in financial processes, evaluate the risk and potential effects of fraud schemes, and create a framework for prevention strategies (COSO, 2016). Fraud risk assessment is crucial in public sector organizations due to the high number of opportunities available for fraudulent activities in the government sector. One of the most important ways forensic auditors are able to assist in fraud risk assessment is in reviewing financial operations, assessing internal control deficiencies, uncovering transactions that appear to be suspicious, and proposing measures to lessen the likelihood of fraud occurring. To prevent fraud, companies should be aware of the risks and have good fraud monitoring systems in place, according to Kranacher, Riley, and Wells (2021). The addition of forensic auditing to public financial management systems allows government to shift from a reactive fraud detection approach to a proactive fraud prevention approach. The literature has been silent about the specific effects of forensic auditing on PEMA of public institutions operating in Bayelsa State, Nigeria, with few empirical studies focusing on the effects of forensic auditing on public expenditure management. The current research has been mainly centered on forensic auditing and fraud prevention in private or general public sector institutions and not specifically around financial litigation and fraud risk-management. There is a research gap on how dimensions of forensic auditing will affect expenditure control, accountability, and utilization of the resources among the federal agencies in the state. The study therefore aims at investigating the impact of forensic auditing on public expenditure management of federal agencies in the study area, Bayelsa state.

1.2 Statement of the Problem

Despite ongoing efforts to enhance financial accountability and transparency in public sector reform, public expenditure management still continues to pose a significant concern in the public sector in Nigeria. Federal agencies have been set up to carry out government policies and provide critical services but poor expenditure management has remained a constraint on their effectiveness in achieving institutional goals. Some shortcomings in internal systems, like spending without authorization, procurement fraud, diversion of public money, poor internal controls and weak monitoring systems, have hindered the efficient use of government resources. While there are some traditional auditing practices in federal agencies, the evidence shows that they have not been effective enough to deal fully with the sophistication of financial crimes. The traditional audit approach tends to focus on the examination of compliance and verification of the financial statements, but it may not detect deliberate fraudulent activities consisting of collusion, manipulation of records and concealing transactions. This means that in companies in which auditing systems have been established, it is possible for fraud practices to continue. Lack of proper forensic auditing systems poses difficulties in detecting financial misconduct and holding them accountable. If the investigative auditing is not strong, financial irregularities can be ignored, and the recovery of misappropriated funds can be challenging. This is due to concerns over the effectiveness of financial litigation as a means of accountability in federal agencies. In addition, many public institutions have failed to establish a complete fraud risk assessment process that is able to detect potential vulnerabilities before fraudulent activities take place. The failure to integrate forensic auditing into public financial management systems could limit agencies' proactive identification and prevention ability of financial losses. Public resources then can continue to be misused, which can impact on expenditure efficiency and the performance of institutions. Studies on forensic auditing and its relationship with fraud

detection and the performance of organizations have been conducted but there is little empirical evidence on the effect of forensic auditing dimensions like financial litigation and fraud risk assessment on public expenditure management in federal agencies with specific reference to Bayelsa State. This lack of knowledge can hamper financial accountability efforts by policymakers and administrators in identifying the impact of forensic auditing practices. Thus, the issue raised in this study is the persistent poor performance in the management of public expenditure by federal agencies in the presence of auditing procedures. The study aims to find out whether the efforts of forensic auditing with financial litigation and fraud risk assessment has any significant contribution to the management of public fund of federal agencies in Bayelsa State.

1.3 Research Hypotheses

The following null hypotheses will guide the study:

H₀₁: Financial litigation has no significant effect on public expenditure management of federal agencies in Bayelsa State.

H₀₂: Fraud risk assessment has no significant effect on public expenditure management of federal agencies in Bayelsa State.

2. Literature Review

2.1 Conceptual Review

2.1.1 Concept of Forensic Auditing

As financial transactions become increasingly complicated, technology has developed, and fraud becomes increasingly sophisticated, there is a need for more sophisticated methods of auditing than traditional financial examination. Forensic Auditing has become a specialised branch of accounting which unites accounting, auditing, investigation and legal skills to detect, investigate and prevent financial irregularities. Forensic auditing is investigative rather than opinion-based, unlike conventional auditing, which mainly provides an opinion on the fairness and reliability of the financial statements, and aims to determine if there has been fraud, corruption, financial misconduct or other types of economic crime (Singleton & Singleton, 2020). Forensic auditing is the use of accounting principles, accounting practices, accounting investigations, and accounting law to analyse financial documents and transactions with the aim of diagnosing fraud, assessing the extent of financial loss, and supplying evidence for legal proceedings that can be used in court (Hopwood, Leiner, & Young, 2022). It is the process of systematically analyzing financial information for the purpose of identifying fraudulent relationships, suspicious transactions, and intentional misrepresentation of financial data. The word “forensic” suggests being fit to be used in court, and that the results of a forensic audit need to be evidence-based and fit for use in litigation (Bologna & Lindquist, 2015).

Forensic auditing has become a hot topic in the public sector due to the significant amount of public money handled by government institutions and the extent to which they are vulnerable to various forms of fraud and mismanagement, including corruption and procurement fraud. Public agencies should ensure that resources are used efficiently and transparently, but there are often gaps in the internal control systems and accountability structures that leave room for practices that could be considered fraudulent. Forensic auditing offers a solution to help identify these weaknesses and enhance financial governance (Enofe, Okpako, & Atube, 2023). Wells (2017) states that forensic auditing takes a proactive and investigative approach when compared to regular auditing. Although traditional auditors can uncover errors or control weaknesses, forensic auditors try to find out who is responsible for financial irregularities, find out where the money has gone, and then make recommendations for correction. This is especially pertinent in public expenditure management where financial losses may be caused by intentional rather than inadvertent causes.

Forensic auditing can be broken into a number of processes: Fraud investigation, Financial analysis, Document examination, Documenting interviews with relevant parties, Asset tracing, and Expert reports. These activities will help organisations to learn what went wrong and how to prevent it from happening again (Kranacher, Riley, & Wells, 2021). Federal agencies with complex administrative processes can enhance transparency and accountability by implementing an independent investigation of suspected financial misconduct through forensic auditing. Moreover, forensic auditing helps to build public trust in government agencies. The lack of investigation and punishment of incidences of financial misappropriation can erode public trust. Forensic auditing can help detect fraudulent activities and aid in legal action against those responsible, promoting accountability and the responsible management of public resources (Transparency International, 2023).

2.1.2 Dimensions of Forensic Auditing

This research involves a study of forensic auditing under two broad categories namely; financial litigation and fraud risk assessment. These dimensions are important mechanisms by which forensic auditing helps to enhance public expenditure management.

2.1.2.1 Financial Litigation

Financial litigation is the legal action that individuals, organizations or government bodies use to seek a remedy for financial abuse, to retrieve misused funds and to hold accountable those who commit economic crime. Financial Litigation is the use of forensic audit findings in legal proceedings to prosecute offenders, recover stolen assets and provide financial accountability in the context of forensic auditing. The role of forensic auditors in financial litigation is paramount as they bring evidence to the table that links financial wrongdoing to specific people, transactions, or failings in the organization. Forensic audit reports differ from standard audit reports in that they include detailed analysis of the transactions, evidence that is documented, and explanations of fraud mechanisms, which makes them more suitable for legal review (Bologna & Lindquist, 2015). Financial Litigation is especially significant in the public sector as financial offences tend to involve large amounts of public funds. If fraudulent activity is detected and no legal action is taken, then fraud may be seen as a low-risk activity and perpetrators may become more likely to repeat fraud. Financial violations are deterred by effective litigation processes because they have legal consequences. (Wells, 2017) The scope of forensic accounting in financial litigation is bigger than looking for fraud. A forensic auditor can help the legal system with the following tasks: to determine the damages, to find the missing money, reconstruct financial transactions, and testify in court about them. They provide assistance to courts and investigative agencies in matters where complex financial arrangements may be difficult to comprehend (Hopwood et al., 2022).

With rising worries about corruption and mismanagement of public funds, financial litigation has emerged as a vital aspect of public financial accountability in Nigeria. Anti-corruption agencies, like other institutions, use financial investigations and forensic evidence to continue with prosecutions of cases involving public officials and organizations. But for such litigation to be effective, the quality and reliability of forensic audit investigations are crucial. Financial litigation is thus important to public expenditure management because it fosters accountability, recovers misappropriated resources and deters future fraudulent activities. Where government employees and contractors are aware that financial misconduct will lead to an investigation, prosecution and financial penalties, compliance with expenditure regulations is likely to be enhanced.

2.1.2.2 Fraud Risk Assessment

Fraud Risk Assessment, is the systematic evaluation of conditions that could introduce a risk of fraud in an organisation. It requires analysis of an organisation's structures, financial operations, internal control and operations to identify potential fraud risks (COSO, 2016). Fraud risk assessment is a preventive aspect of forensic audit since it examines the potential fraud risks in advance without significant losses. Often, fraud investigations take place after a fraud is detected, but through fraud risk assessment, organizations can predict potential frauds and put in place the right control measures.

The Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2016) states that Fraud Risk Management is all about identifying risks of fraud, measuring their relative importance, putting in place some controls to prevent or reduce the risk and continually reviewing the effectiveness of those controls. Forensic auditors do their part in this by assessing financial systems, examining past incidences of fraud, reviewing the transaction patterns, and figuring out what are the indicators of potential fraud. Government spending comes in many forms, and the sheer scale and complexity of government expenditure activities means there are many opportunities for fraud. Common fraud types include procurement processes, contract management, payroll systems, revenue collection and financial reporting. Lacking proper fraud risk assessment tools, these systems can have vulnerabilities that are never identified and can lead to monetary losses. Fraud risk assessment techniques employed by forensic auditors include data analytics, trend analysis, financial ratio analysis and analysis of unusual transactions. These techniques can help detect unusual trends that could signal that someone is defrauding. For instance, payment over and over similar vendors, unexplained growth in spending, and irregular procurement practices could be indicators of further investigation (Kranacher et al., 2021). A fraud risk assessment also enhances the internal control systems and offers suggestions to improve financial processes. Recognizing weaknesses early will allow organizations to implement more effective authorization systems, segregation of duties, monitoring, and accountability measures to prevent fraud. So, fraud risk assessment is important in increasing the effectiveness of public expenditure management by minimising financial abuse opportunities.

2.1.3 Public Expenditure Management

Public expenditure management (PEM) is the institutional mechanisms by which government resources are planned, allocated, implemented, monitored and evaluated to meet policy goals. It involves budgeting, expenditure management, financial reporting, procurement and accountability systems to ensure that public funds are used effectively and efficiently (Allen, Hemming, & Potter, 2023).

Government spending affects sustainable development, whether through economic growth or infrastructure development, social services or public welfare, and effective public expenditure management is critical. A well-functioning expenditure system helps to ensure that resources are allocated to a priority area, waste is reduced and government programmes provide for their desired effects. In many developing countries, however, the management of the use of resources poses a big problem. Public resources are sometimes not as effective as they could be due to budget deviations, poor monitoring mechanisms, corruption, procurement irregularities and unauthorized spending. Schick (2014) argues that good institutions, good financial information systems, and accountability mechanisms are important to effective expenditure management.

The management of public expenditure in Nigeria has been an issue of concern because of the high level of corruption and inefficiencies in the utilization of available resources. Several reforms have been implemented to enhance the public financial management, but there are difficulties related to transparency, compliance and enforcement. Effective monitoring of

federal agencies for the implementation of the government programmes is needed to ensure that the resources allocated are utilized effectively. Forensic auditing assists in the public expenditure management by enhancing elements of accountability and financial control mechanisms. Forensic auditing can help agencies minimize financial losses and optimize the use of the limited resources they have available by investigating for financial irregularities and identifying fraud risks.

2.1.4 Forensic Auditing and Public Expenditure Management

Forensic Auditing relates closely to Public Expenditure Management in the following ways: Forensic auditing and public expenditure management are not a one-to-one match and instead share an ethos of improving transparency, accountability and efficiency in the use of government resources. In order to manage expenditures effectively, it is necessary to have mechanisms that can identify misuse of expenditure, prevent financial misconduct, and ensure adherence to financial regulations. Forensic auditing helps in the management of the expenditures by detecting fraudulent transactions and evidence for corrective action. With financial litigation, the findings from the forensic audit can be used to prosecute and/or recover misappropriated resources. Likewise, forensic auditing can be used to detect vulnerabilities and take preventive measures through fraud risk assessment.

Enofe et al. (2023) found that having forensic auditing practices in an organization is associated with better fraud detection and internal control. Likewise, Singleton and Singleton (2020) state that forensic auditing improves financial accountability because of the investigative methods and the accounting skills of the forensic accountant. Forensic auditing is therefore an important tool in enhancing the management of public expenditure through minimizing the opportunities for fraud, increasing accountability and encouraging good financial governance by government departments.

2.2 Theoretical Framework: Fraud Triangle Theory

This study is based on the Fraud Triangle Theory of Donald Cressey, 1953. The theory will help to understand the factors that motivate people to commit fraud. Cressey (1953) stated that there are three elements that must be present in order to commit fraud: pressure, opportunity and rationalization. Pressure is the reason to convince someone to commit fraud. Pressure can come from personal financial concerns, unrealistic organizational goals, or the interest in personal gain in public organizations. Opportunity is the presence of weaknesses in a company's system of internal controls that enable people to perpetrate and cover up fraudulent transactions. Rationalization is the explanation or excuses that people make for themselves to make their wrongful behaviour seem right.

Forensic auditing is applicable to the Fraud Triangle Theory as forensic auditors are interested in discovering circumstances that allow for the perpetration of fraud. Fraud risk assessment is especially directed towards identifying opportunities that arise as a result of inadequate controls, inadequate monitoring and inadequate accountability systems. Forensic auditors also recognise these weaknesses, which can help minimise the chances for fraud within an organisation. The theory also reinforces the idea of the function of financial litigations for regulating fraudulent conduct. The perceived consequences of fraud are higher when people know that fraudulent activity could lead to investigation, prosecution and punishment. This minimises rationalisation by increasing ethics and legal accountability.

The Fraud Triangle Theory describes how inadequate internal financial controls might lead to abuse of public funds in the federal agencies in Bayelsa State. Forensic auditing can help solve these problems by detecting fraud, investigating fraud, and taking legal action against perpetrators. In this regard, Fraud Triangle Theory is appropriate for use as a theoretical basis in studying the influence of a forensic auditing dimension on public expenditure management.

2.3 Empirical Review

Empirical research has focused on the link between forensic auditing practices, fraud control systems and financial accountability in both private and public sector companies. Previous research mostly suggests that forensic auditing is effective in detecting fraud, increasing internal control and the efficiency of financial management. But certain aspects of forensic auditing, including financial litigation and fraud risk assessment have been minimally studied in the federal agencies that exist in Bayelsa state. This section critically reviews the related empirical studies in order to create some knowledge background and to find gaps that make this study so valuable.

Enofe, Okpako and Atube (2023) investigated the impact of Forensic Accounting on fraud detection and prevention in Nigeria. The study was triggered by the growing concerns on fraudulent practices and financial mismanagement in Nigerian organizations. The survey research was used to collect data from accounting professionals and auditors and regression analysis was used to test the relationship between forensic accounting practices and fraud control. The study results indicated the significant role of forensic accounting in the detection and prevention of fraud. The study suggested that forensic investigation tools, being able to provide litigation support and expert financial analysis improves the effectiveness of organizations in detecting fraudulent transactions. The authors claimed that traditional audit methods are no longer effective in combating today's financial crimes as fraudsters constantly find new ways to cover up illegal activities. The study also found that forensic accounting extends accountability by giving clear evidence which can back up legal proceedings against the offenders. Since financial litigation is a part of forensic auditing, the research places emphasis on the fact that it can enhance financial accountability by providing sufficient legal responses to the fraudulent activities. This study, however, was generally about forensic accounting and fraud prevention rather than its impact on the management of public expenditure. Furthermore, financial litigation and fraud risk assessment were not identified and separated as distinct dimensions in the study. Thus, the current study builds on the existing literature, as it aims to explore the effect of these forensic auditing dimensions on expenditure management in federal agencies in Bayelsa state.

Okoye and Gbegi (2023) studied forensic accounting in the context of fraud detection and prevention in the Nigerian public sector. The study aimed to explore potential of forensic accounting as a tool for enhancing accountability and minimizing financial irregularities in public institutions. A questionnaire was prepared in the structured form and the subjects were accounting professionals, auditors and public sector employees, and data were analyzed by regression analysis. The results revealed that forensic accounting plays a great role in the prevention of fraud in public institutions. Forensic investigation, fraud examination, and financial analysis enhance an organization's ability to detect fraudulent activity, the study revealed. The researchers noted that forensic accounting offers a more robust means to detect complex financial crime than traditional auditing techniques. The study also emphasized the need for legal enforcement tools that are in place to make sure that those committing fraud are held accountable. The authors argue that if fraud isn't identified then sanctions won't have the desired impact on accountability systems. This is an important reminder that financial litigation is an important tool that can help to advance the goal of good public financial management through forensic audit outcomes. Although the study included this contribution, it focused primarily on fraud prevention and did not include public expenditure management outcomes including expenditure efficiency, compliance with financial procedures and resource utilization. In addition, the study did not look at the federal agencies within specific state contexts. The present study is filling this gap, because it aims at investigating the Federal Agencies in Bayelsa State.

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2016) reviewed practices relating to fraud risk management and how they contribute to increasing organizational accountability. The study was conceptual and practice related, but it also included a lot of evidence from organizational experiences concerning the significance of fraud risk assessment. The results showed that organizations which have a structured fraud risk assessment framework have better fraud prevention and internal controls. The report highlighted the importance of fraud risk assessment for organisations in being able to foresee threats, assess vulnerabilities and put in place preventative measures before they suffer significant financial loss. The study highlighted some key elements of the fraud risk assessment process: fraud risk identification, control weaknesses assessment, monitoring of high-risk activities and continuous enhancement of the fraud prevention process. These components are important in public sector agencies where spending is shared among a number of people and complicated monetary processes. The argument for the contribution Proactive Forensic Auditing makes to Public Expenditure Management is reinforced by the COSO framework. The study however does not specifically focus on Nigerian federal agencies and does not determine the statistical correlation between fraud risk assessment and the outcomes of expenditure management. This study adds to the literature by empirically analyzing this relationship in Federal agencies in Bayelsa State.

Adebisi and Gbegi (2015) investigated the Forensic Accounting as a means of improving public financial accountability in Nigeria. The study was rooted in the premise that corruption and financial wrongdoing are significant impediments to good public sector performance. The study evaluated whether or not forensic accounting practices enhance accountability mechanisms based on data gathered via questionnaires from accounting professionals and public sector workers. The results indicated that there is a positive impact of forensic auditing on financial accountability, and this financial accountability could be achieved through improved fraud detection, transparency and increased monitoring. The study revealed the critical role the forensic auditors can play in the investigation process of the government institutions to detect irregularities in financial transactions and corrective measures. The study also identified that forensic audit reports have a role in legal proceedings in that they are required in court proceedings for prosecution and recovery of financial losses. This reflects the importance of financial litigation as a facet of forensic auditing, since accountability involves more than just identifying the wrongdoing, it also involves ensuring that there are repercussions for it. However, the study did not examine forensic auditing and public expenditure management relationship directly. It also failed to look into the contribution of fraud risk assessment to expenditure control. The current study aims to fill this gap by combining the financial litigation and the fraud risk assessment aspects.

Bhasin (2017) discussed the role of Forensic Accounting Skills and Litigation support in the fight against Financial crimes. The investigation was conducted on the role of Forensic Accountants in Fraud investigation and Legal processes. The study applied the evidence from the professional accounting practice to examine the role of forensic accountants in the investigation of financial crimes. The findings indicated that forensic accounting has the ability to improve fraud investigation by using sophisticated analytical techniques, gathering of evidence, and expert testimony. The study highlighted that litigation support is one of the most significant roles that forensic auditing plays is that it makes the findings of an audit acceptable in a court of law. The study also found that good litigation support will help get your financial losses back and prevent future frauds. This discovery should reinforce the notion that more effective financial litigation contributes to better expenditure management through increased accountability and decreased opportunities for misuse of public funds. Bhasin (2017) however, only had a strong emphasis on professional forensic accounting practices and did not specifically address the management of public sector expenditure. Additionally, it was not

given the Nigerian environment for federal agencies. Therefore, the legal aspects of forensic auditing and its impact on public expenditure management within particular government bodies needs further research.

2.4 Summary of Literature Review

This chapter examined pertinent conceptual, theoretical and empirical work pertinent to forensic auditing and public expenditure management. It was concluded in the conceptual review that forensic auditing is a form of investigation which involves accounting, auditing and legal skills to identify fraud, aid litigation, and improve financial accountability. The study found that financial litigation and fraud risk assessment are important aspects through which forensic auditing contributes to the financial practices of the organization. The Fraud Triangle Theory of Cressey (1953) was used as the theoretical framework for this study. The theory states that fraud is driven by pressure, opportunity and rationalization. The theory serves as a base for the understanding of how forensic audit diminishes the fraud opportunities by risk assessment and increases the accountability by litigation.

Based on the empirical review, previous literature has consistently demonstrated that forensic auditing positively contributes to fraud prevention, financial accountability and effective internal control. Enofe et al. (2023), Okoye and Gbegi (2023), Modugu and Anyaduba (2023), Adebisi and Gbegi (2015), Bhasin (2017) and COSO (2016) have established that forensic auditing can improve the capacity of an organization to identify and manage financial misuse. But there are still some gaps in the financial litigation and fraud risk assessment's impact on public expenditure management especially in the federal agencies of Bayelsa State. Hence, the work of this study adds to the body of knowledge in a way that it examines the effect of forensic auditing dimensions on public expenditure management in the public sector environment of Nigeria using empirical approach.

3. Methodology

The design of this study was Cross Sectional Survey research as it was focused on the study of the effect of forensic auditing on public expenditure management of the federal agencies in Bayelsa state. The design allowed for the collection of data from respondents at a given time and allowed the assessment of the relationship between the dimensions of forensic auditing (financial litigation and fraud risk assessment) and public expenditure management. The respondents of the study were the financial management, auditing, procurement and administrative employees of selected Federal agencies in Bayelsa State with a population of 137. The sampling technique used was the census sampling method which means that the entire population was automatically the participants in the study. A structured questionnaire was used to collect data. For the validity of the research instrument, it was conducted by experts to check whether the questionnaire was able to capture the variables of the study and the reliability test was carried out using Cronbach Alpha coefficient with the minimum acceptable value of 0.70. The data obtained was analyzed descriptively, by means of frequency, mean and standard deviation, and inferential statistics (simple linear regression analysis) to test the formulated hypotheses at 5% significance level. The Statistical Package for Social Sciences (SPSS) version 26 was used to perform the analysis. The models used to analyze the relationship between financial litigation and public expenditure management in the federal agencies of Bayelsa State and also between risk assessment of fraud and public expenditure management of the federal agencies of Bayelsa state were regression models. The models were specified as:

$$PEM = \beta_0 + \beta_1 FL + \varepsilon$$

$$PEM = \beta_0 + \beta_2 FRA + \varepsilon$$

Where: PEM represents public expenditure management, FL represents financial litigation, FRA represents fraud risk assessment, β_0 represents the constant term, β_1 and β_2 represent regression coefficients, and ε represents the error term.

4. Results and Discussions

The study employed linear regression to analysed the established hypotheses.

Table 1: Model Summary of the Effect of Financial litigation on Public expenditure management in Federal agencies, Bayelsa State

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Sig.	F
					Change	Change	df1 df2		
1	.941 ^a	.885	.884	.26702	.885	2150.702	1 280	.000	

a. Dependent Variable: Public expenditure management

b. Predictors: (Constant), Financial litigation

Source: SPSS Output

Linear regression analysis was used for the study to test the effect of financial litigation on public expenditure management of federal agencies in the state of Bayelsa. As seen in the summary of the model in Table 1, financial litigation has a very strong and statistically significant impact on public expenditure management. The correlation coefficient ($R = 0.941$) shows that there is a strong relationship between financial litigation and public expenditure management, suggesting that the improvement of financial litigation mechanisms is significantly correlated with the improvement of expenditure management mechanisms. The coefficient of determination ($R^2 = 0.885$) suggests that about 88.5% of the variations in public expenditure management among the federal agencies in Bayelsa State can be explained by financial litigation. The R Square value (0.884) further shows that the adjusted R Square value in the model is reliable and good in explaining the results of the public expenditure management, and the Standard Error of Estimate is also small (0.26702) which shows that the model is able to predict the public expenditure management result in good condition. In addition, the F-change statistic ($F = 2150.702$, $p < 0.001$) indicates the statistical significance of the developed model, which presents the fact that financial litigation is a large predictor of public expenditure management. The discovery suggests that the implementation of effective financial litigation processes such as prosecution of financial offenders, recovery of misappropriated funds, implementation of audit recommendations in law, and the provision of forensic evidence for court proceedings, play a significant role in enhancing public expenditure management. This indicates that with strong legal actions taken by federal agencies in response to financial irregularities, there is the potential for increased accountability, transparency and efficient use of public resources by employees and contractors.

The discovery aligns with the study conducted by Enofe, Okpako, and Atube (2023) which found that forensic accounting practices play a very significant role in detecting and preventing fraud since forensic investigation can provide evidence that can be used to prosecute fraudsters. Their report highlighted that litigation support services play a vital role in holding people accountable for fraudulent financial activities by determining who they are and imposing sanctions on them. Likewise, Okoye and Gbegi (2023) noted that forensic accounting plays a critical role in safeguarding public sector against frauds, enhances investigative process and enhances the public assets recovery mechanism. These results reiterate the ones obtained in the current study, and highlight the role of financial litigation as an effective channel for enhancing public financial accountability in the context of forensic auditing.

Moreover, the finding aligns with Bhasin's (2017) research that found that forensic accounting could enhance financial crime investigations by converting audit results into admissible

evidence in court. The research finds that successful legal action after the forensic investigation helps to deter and discourage repeated financial wrongdoing. Hence, the findings of this study that financial litigation plays a vital role in financial discipline in public institutions corroborates the previous empirical findings that accountability through the legal mechanism is vital to financial discipline in public institutions.

Table 2: Regression Coefficient of the Effect of Financial litigation on Public expenditure management in Federal agencies, Bayelsa State

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
1 (Constant)	2.123	.043		49.183	.000	2.038	2.208
Financial litigation	.653	.014	.941	46.376	.000	.626	.681

a. Dependent Variable: Public expenditure management

Source: SPSS Output

Financial litigation has a positive and statistically significant impact on public expenditure management of federal agencies in Bayelsa State as reflected in the regression coefficient in table 2. The unstandardized coefficient ($B = 0.653$) shows that, when other factors are constant, a one-unit increase in financial litigation practices leads to an increase of 0.653 in public expenditure management. The standardized beta coefficient ($\beta = 0.941$) shows that financial litigation has a very strong predictive influence on public expenditure management. The t value (46.376) and significance level ($p < 0.001$) show that it is statistically significant. Furthermore, the confidence interval (0.626–0.681) excludes zero, which indicates that the estimated relationship is reliable. This means that improved financial litigation in federal agencies can make a substantial contribution to the improvement of expenditure management. When financial malfeasance is brought to light and those responsible are sanctioned under the law, public officials are more vigilant in handling their Government's assets. Financial litigation is thus a "deterrent" tool that facilitates adherence to the budgetary procedures, procurement regulations and requirements to financial reporting.

This study corroborates the findings of Adebisi and Gbegi (2015) that the forensic accounting helps to enhance the accountability of the public finances by implementing the investigative process and the legal enforcement mechanisms. Their research found that it is more effective when there is a legal punishment for fraud that goes along with the process of holding someone accountable. Likewise, Modugu and Anyaduba (2023) concluded that forensic accounting is a valuable component of financial management and fraud control as evidence of fraud can be used in corrective measures against financial misconduct.

The outcome is also consistent with the argument of Singleton and Singleton (2020) that forensic auditing is more than just detecting irregularities, it is an evidence-based process that can be used in litigation and recovery proceedings. Therefore, the result of the significant coefficient in this study proves that financial litigation is not just a reactive tool to deal with fraud, but it is also a proactive tool to enhance public expenditure management.

Table 3: Model Summary of the Effect of Fraud risk assessment on Public expenditure management in Federal agencies, Bayelsa State

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. Change
1	.961 ^a	.924	.924	.21629	.924	3424.471	1	280	.000

a. Dependent Variable: Public expenditure management

b. Predictors: (Constant), Fraud risk assessment

Source: SPSS Output

From the model summary in Table 3, it can be seen that fraud risk assessment has a very strong and statistically significant impact on the public expenditure management of Federal Agencies in Bayelsa State. The correlation coefficient ($R = 0.961$) shows that between fraud risk assessment and public expenditure management, there is a very strong positive relationship. The coefficient of determination ($R^2 = 0.924$) would show that fraud risk assessment accounts for 92.4% of public expenditure management, therefore an important factor in effective expenditure management within federal agencies. The adjusted R Square value (0.924) shows that the model is robust and stable, and the standard error of estimate (0.21629) shows that the model is accurate for predicting. The F-change statistic ($F = 3424.471$, $p < 0.001$) also shows that the model is statistically significant. The finding indicates that good fraud risk assessment systems can help public expenditure better managed, by helping federal agencies detect financial weaknesses, assess fraud risks, and enhance internal controls and avoid the misuse of public funds before it happens. The discovery underlines the need to shift the paradigm from reactive to proactive fraud prevention, proactively identifying and managing fraud risks before they happen. The finding agrees with the empirical evidence provided by COSO (2016), which emphasized that fraud risk assessment is a critical component of effective fraud risk management. The model showed that those organizations that have well-developed fraud risk identification and monitoring systems have better internal controls and lower risks of financial misconduct. Likewise, the study by Kranacher, Riley and Wells (2021) revealed that a fraud risk assessment helps to improve an organisation's capacity to identify warning signs and then take measures to prevent fraudulent behavior. The result also corroborates with the findings of Enofe et al. (2023) who determined that forensic auditing enhances fraud prevention through forensic investigative procedures and risk identification. Their research focused on the role of forensic auditors in uncovering the weaknesses in financial systems that may lead to fraud opportunities for the organization. The findings in this study, therefore, validate the high level of fraud risk assessment influence identified in the study, which is testimony to the need for preventive forensic auditing practices to enhance expenditure efficiency and expenditure accountability in federal agencies.

Table 4: Regression Coefficient of the Effect of Fraud risk assessment on Public expenditure management in Federal agencies, Bayelsa State

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
1 (Constant)	-.298	.074		-4.017	.000	-.445	-.152
Fraud risk assessment	.996	.017	.961	58.519	.000	.963	1.030

a. Dependent Variable: Public expenditure management

Source: SPSS Output

The regression coefficient results of the regression in Table 4 show that the fraud risk assessment positively and significantly affects public expenditure management of federal agencies in Bayelsa State. The unstandardized coefficient ($B = 0.996$) indicates that if fraud risk assessment is increased by one-unit, public expenditure management is increased by nearly 1 unit, with other variables held constant. The standardized beta coefficient ($\beta = 0.961$) shows that the fraud risk assessment has a very high predictive power for expenditure management. The t-value (58.519) and the significance value ($p < 0.001$) validate the statistical significance of the relationship and the confidence interval (0.963–1.030) strengthens the validity of the estimate. The research reveals that the federal agencies' fraud risk assessment practices can significantly improve expenditure management results. In particular, agencies with a consistent practice of conducting fraud risk assessments, monitoring financial transactions, reviewing control issues, and taking preventive action are more likely to be effective in resource use and transparency. This finding aligns with COSO (2016) that having a fraud risk assessment enhances the resilience of an organization by enabling it to detect and address fraud risks. It also supports the view of Bologna and Lindquist 2015 who stated that Forensic Auditing techniques offers organizations sophisticated ways to identify unusual financial transactions and financial crimes. Likewise, Wells (2017) pointed out that to prevent fraud, organizations must first be aware of the factors that can lead to fraud and then put in place safeguards to minimize the likelihood of fraud. This is supported by the significant relationship obtained in this study, which showed that fraud risk assessment is indeed a very important forensic auditing tool that can enhance the management of public expenditure. Overall, the findings support the fact that financial litigation and fraud risk assessment are seen to have a great impact on public expenditure management of Federal Agencies in Bayelsa State. The findings also confirm that forensic auditing continues to be relevant as a tool to enhance accountability, minimize financial wrongdoings and promote effective management of public funds.

5. Conclusion

The study investigated effects of forensic auditing on the public expenditure management of federal agencies in Bayelsa State, particularly financial litigation and fraud risk assessment. The results showed that financial litigation has a strong positive relationship with public expenditure management, and that proper investigation, prosecution and recovery of funds in relation to financial misconduct enable proper public expenditure management and the responsible use of public resources. The study also revealed that the fraud risk assessment plays an important role in improving public expenditure management as it can help agencies to identify financial risks and increase internal control measures to stop fraud activities. Thus, it is concluded that forensic auditing is one instrument that could help better the public expenditure management of federal agencies. Improved litigation processes and proactive fraud risk assessment will improve transparency, accountability and effective use of government resources through strengthening forensic auditing practices.

6. Recommendations

Based on the findings, the study recommends that:

1. Federal agencies need to enhance financial litigation mechanisms to assure that financial misconduct is fully investigated, prosecuted, and recovered to deter future instances of financial fraud.
2. Governments need to practice fraud risk assessment regularly to pinpoint vulnerabilities in financial systems and put measures in place to prevent fraud.
3. Federal agencies should establish a forensic audit process as part of their financial management systems and train their auditors and financial staff on fraud detection and investigation procedures.

4. Internal control systems should be strengthened and technology-based monitoring of the systems should be implemented to increase transparency and the minimisation of financial irregularities at agencies.

7. Contribution to Knowledge

This study makes a contribution to knowledge by offering empirical evidence of the impact of forensic auditing dimensions (financial litigation and fraud risk assessment) on public expenditure management. This study is different from previous studies which were more focused on forensic auditing in general, as it focuses on the specific mechanisms in which forensic auditing enhances accountability and financial control.

The study also adds value to the existing literature on federal agencies in Bayelsa State by focusing on the state and its local agencies. Moreover, the results offer practical lessons for the policy makers and public administrators about the relevance of the combination of fraud prevention measures and effective legal action in enhancing public financial management is a prime example.

8. References

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