



INFLUENCE OF LEGAL ACCOUNTING TOOL ON THE EFFICACY OF ECONOMIC CONTROLLING IN COMMUNAL SEGMENT

Ahakiri, Francis Idiegeⁱ

Inyang, Ochi Inyang

Ejabu, Fidelis E.

University of Calabar,

Calabar, Nigeria

Abstract:

The study focused on influence of legal accounting tool on the efficacy of economic controlling in communal segment. The purpose was to examine the extent to which legal accounting tool could be used to ensure efficacy of economic controlling in communal segment of Cross River State, Nigeria. Data were collected from both primary and secondary sources. And these data were analysed using appropriate statistical tools. Findings revealed that legal accounting tool has significantly influenced efficacy of economic controlling in communal segment of Cross River State, Nigeria. The study therefore recommended that, in considering and providing more swindle hotlines and improving the beep haranguing strategy, legal accounting tool should be given greater consideration in order to enhance the swindle revealing, enquiry and preclusion device in the communal segment. The State legal system should be up to date with cutting-edge innovation in technology to ensure permissibility of substantiation in courts for efficacious trial of unlawful and public cases.

Keywords: legal accounting tool; economic controlling, communal segment, swindle revealed, preclusion device

1. Introduction

For any organization or society to function well, it must be financially viable. This is because finance is required for the establishment of infrastructure, equipment, payment of salaries and maintenance of the organizational structure etc. Finance pervades all disciplines and is involved in all human and economic activities. It highly influences the psychological behaviour of individuals as well as the sociological and economic environment of organizations. It therefore occupies a very crucial position in decision making of business such as determination of optimal capital structure/working capital

ⁱ Correspondence: email ahakirfrancis.1@gmail.com

management (Asuquo, 2011a), non-business organizations and the government, at whatever level; be it local, state or federal government as well as international. Financial information can be seen to be a potent influence in society, which affects everyone. Hence, liquidity and profitability and important factors (Akpan, Ahakiri & Ebyte, 2020).

Financial resources mean purchasing power, in the form of cash or credit. The essence of financial management is the effective and efficient administration of an organization's financial resources to achieve the stated goals as well as objectives of the organization. The backbone of an institution is finance and the principal is the manager of this finance. The principal is, therefore, the "officer controlling votes". Financial management is indeed important in the achievement of set objectives in a State. Management involves both planning and controlling. A manager forecasts the likely outcome of particular actions which are intended to assist the achievement of his objective. If the forecast is satisfactory, those actions are adopted as operating plans. Therefore, the manager keeps watch on the implementation of the plan and the results achieved so that if these deviate from his forecast, he can either modify the plan or the manner in which it is being implemented (Ukeje, 2006; Asuquo, Effiong, & Tiesieh, 2012).

Planning and controlling are therefore two closely bound management functions which the financial manager performs in modern enterprises. The function of financial management is to review and control decisions to commit and recommit funds to new or ongoing uses. Financial management is again seen as the wise managing of funds with a view to maximizing the revenue available in achieving financial objectives. A Financial manager has functions which include the review and control of decisions to commit funds to use. Thus, in addition to raising funds, financial management is directly concerned with decision making on proper use of available funds. Thus, financial management is an integral part of the overall management of an organization. The roles and responsibilities of administrators (finance officers) in the prudent management of funds should therefore include the following: Review and control of management decisions taken, Supervision of cash receipts and payments and safe-guarding of cash balances, Custody and safeguard of very vital securities, finance policies and other valuable papers. Record keeping based on financial accounting standards done in such a way as to their effects on the performance of the organizations (Asuquo, 2013b); corporate and sustainability reporting and the reporting effects on corporate performance, Investment and finance decision/ earnings management were using creative accounting approach. These roles include both the managerial finance functions which require skilled planning, and the routine finance functions which do not require great managerial ability to carry out. These roles are chiefly clerical and incidental to handling of managerial finance functions (Pandy, 2000; Asuquo, Effiong, & Tiesieh, 2012; Ezra, 2008; Onye, 2000; Asuquo, Dada & Onyeogaziri, 2018; Asuquo, 2011b). Maurice (2007) posited that a good way to appreciate what financial management is to relate it to economics as an applied economics which concerns itself with the allocation of scarce financial resources among competing uses. Financial management, therefore, requires skilled financial managers who, in the midst of scarce resources, can list their needs in order of

preference. This will ensure wise utilization of available funds through the application of sound management principles. Morelus (2001) maintained that where there is a wide gap between planned goals and actual performance in most government establishments of developing countries, it is due to the failure of the financial administrators to perceive vital aspects of the budget as a bridge between the plan and the action. A money He supported this by stating that the goals and objectives must generate new budget, hence budget is an important tool for financial management. As well as strict application of money measurement concept, this will aid in keeping track of financial transaction (Ahakiri, Ogar & Mbu, 2019). There is an alarming increase in the number of fraud and fraudulent activities in the Nigeria public service, clamouring for the services of forensic Accountants. Most public service mechanisms fail due to the inability to reduce financial fraud. This increasing sophisticated financial fraud has posed serious threat to government, and general public (Ojaide, 2000; Asuquo & Akpan, 2011).

Failure of statutory audit to prevent and reduce misappropriation of fraud and increase in crime has put pressure on professional accountants and legal practitioners to find better ways of exposing fraud in the business world. Though, the use of forensic accounting is not yet common in public service in Nigeria, the rate at which financial irregularities in Nigeria public service is spreading especially in MDAs, parastatals, local government units have put the focus on the need for forensic accounting mechanism to be utilized. Hence this study is carried out to examine the extent forensic accounting mechanism has aided the public financial management in the public sector of Cross River State (Owojori & Asoula, 2009; Asuquo, 2012a; Asuquo & Akpan, 2011).

To operate any system or project without adequate finance is quite an up-hill task which could lead to either non-accomplishment or frustration on the job. The situation in public offices today, is just as in most other facets of our national life; most austere to say the least. Most of government owned establishments are poorly equipped, and maintained. This arises from the “no-money explanation” usually given by our government functionaries even as tax payers keep complaining of high tax rates and multiple taxes in the State. The question then is, is it that state funds are not judiciously utilized? How then do we expect government owned establishments to function effectively in such severe situation? (Asuquo & Effiong, 2010)

2. Literature Review and Theoretical Framework

The Fraud Diamond theory offers a better view of the factors that instigate fraud. The theory adds a fourth variable to the three-factor theory of the fraud triangle. Wolf and Hermanson believe many fraud cases would not have occurred without the right person with the right capabilities implementing the details of the fraud. They also suggest four observation traits for committing fraud; first, authoritative position or function within the organization, second capacity to understand and exploit accounting systems and internal control weakness, third, confidence that he/she will not be detected or if caught

he/she will get out of it easily, fourth; capability to deal with the stress created within and otherwise good person when he or she commits bad acts.

Reviewing the literature shows that researchers classify the motive side of the fraud diamond differently. Some researchers classify them under personal, employment or external pressure, while others classified it as financial and non-financial pressure. However, it can be noticed that both classifications are interrelated. For instance, personal pressure can come from both financial and non-financial. A person's financial pressure in this case could be gambling addiction or a sudden financial need, while a personal non-financial pressure can be lack of personal discipline or greed. By the same token, employment pressure and external pressure can come from either financial or non-financial pressure. Thus, Forensic Accountants have to keep in mind that pressure/motive to commit fraud can be either a personal pressure, employment pressure or external pressure, and each of these types of pressure can also happen because of financial and non-financial pressure. Forensic Accountants also need to understand the opportunity for fraud to help them in identifying which fraud schemes an individual can commit and how fraud virus occurs when there is an ineffective or missing internal control. However, it can be criticized that even though the fraud diamond added the fourth variable 'capability' to the fraud triangle and filled the gap in other theories, the model alone is an inadequate tool for deterring, preventing or detecting fraud. This is because, the two sides of the fraud diamond (incentive/pressure and rationalization) cannot be observed, and some important factors like national value system are ignored. Our present national value system is not good, little or no premium is put on things like honesty, integrity and good character. The society does not question the source of "wealth". Any person who stumbles into wealth is instantly recognized and honoured. It is a fact of our time that fraud has its root firmly entrenched in the social setting where wealth is honoured without questions. Ours is a materialistic society which to a large extent encourages fraud. The desire to be with the high and mighty calibre in society is a major component inherent in our values system that encourages fraud. Extreme want what is often characterized by need, cultural demands or cultivation of a life too expensive for the legitimate income of individual. The researcher believes that, it is important for forensic Accountants to consider all the fraud models in order to better understand why and how fraud occurs. Therefore, all other fraud models should be regarded as an extension to wolf and Hermanson's fraud diamond and should be integrated in one model that include national value system. This would help them in effective investigation and assessment of fraud risks.

2.1 Concept of Forensic Accounting

Forensic Accounting is the application of specialized knowledge and specific skills to stumble up on the evidence of economic transactions. Forensic accounting could also be seen as the integration of accounting, auditing and investigative skills. Simply put, Forensic Accounting is a branch of accounting that is suitable for legal review, offering the highest level of assurance and including the generally accepted connotation of having

been arrived at in a scientific fashion. Forensic Accounting involves the application of accounting concepts and techniques. It demands reporting, where accountability or fraud is established and the report is considered as evidence in the court of law or in the administrative proceedings. It provides an accounting analysis that is suitable to law courts, which forms the basis for discussions, debates, and ultimately dispute resolution (Zysman, 2004; Joshi, 2003; Crumbley, 2006; Coenen, 2005; Asuquo, 2012a; Asuquo & Akpan, 2011).

This means that Forensic Accounting is a field of specialization that has to do with provision of information that is meant to be used as evidence especially for legal purposes. The persons practicing in this field (i.e. Forensic Accountants) investigate and document financial fraud and white-collar crimes such as embezzlement, and investigate allegations of fraud, estimate losses, damages and assets, and analyses complex financial transactions. They provide those services for corporations, attorneys, criminal investigators and the Governments (Coenen, 2005). Their engagements are usually geared towards finding where money went, how it got there, and who was responsible. Forensic Accounting utilizes Accounting, auditing and investigative skills to conduct an examination into a company's financial statement. Thus, Forensic Accounting provides an accounting analysis suitable for courts. Forensic Accountants are trained to look beyond the numbers and deal with the business reality of a situation. They are frequently used in fraud cases. This is affirmed by Zysman (2004). Hao (2010) believes that Forensic Accounting is the result of the integration between legal framework and the accounting framework. Zysman (2001) believes Forensic Accounting as the integration of Accounting, auditing, and investigative skills. Simply put, Forensic Accounting is a division of Accounting that is suitable for legal review, offering the highest level of assurance and including the generally accepted connotation of having been arrived at in a scientific fashion (Crumbley, 2006).

2.2 Concept of Public Financial Management

Public Financial Management (PFM) is concerned with aspects of resource mobilisation and expenditure management in the public sector. Ola and Offiong (2008) define public financial management as "*the measures put in place to control people's money or funds.*" You will note that the word 'public' means 'people', while 'finance' connotes 'funds' or 'money'. The management of public funds is known as public financial management. Ekpung (2001), also defines public financial management as the management of the flow of money or financial resources through an organisation (public), whether it is a company, a school, a bank, or a government agency. The actual flow of money or financial resources as well as claims against money in a judicious way is its concern. Public financial management is a specialised, functional area found under the general classification, public administration and finance.

The traditional concept of finance (providing funds needed by an organisation) has the merit of highlighting the central core of the financial function –the treasury function- which is simply keeping the organisation supplied with enough funds to

accomplish its objectives. In line with this, (Akpan, Ahakiri & ebaye 2020) described financial management on the efficiency of Liquidity management and profitability as a very important factor in the growth and survival of businesses. In the present modern economy, there is increase in complexity, size, technology, inflation and inflation accounting through monetary policy measures, recession and government control with a lot of implications to financial management in many organisations. In public financial management, every decision is based on equity and efficiency, backed-up by public policy so as to ensure efficient employment of resources. Thus, public financial management deals with judicious use of funds, and also ensures accountability and financial control (Asuquo, 2012b).

The subject of public financial management is the acquisition and disposal of resources by the government, be it federal, state or local government. It is about government income and expenditure. Therefore, Government at all level must be efficient in income generation and spending, hence the literature on processing cost and eco-efficiency of oil and gas productiveness (Akpan, Ahakiri and Etibensi, 2019). It deals with budgets which are statements about how a government plans to obtain income, and the ways the government plans to spend such income during a particular financial year. A budget can be deficit, surplus or balanced. The flow and management of funds is the life-blood of our system of public administration. In public administration, the system of public financial management rests on designs and reforms over the years. In a modern money-using economy, finance may be defined as the provision of money at the time it is wanted. Every person responsible for finance, whether it be the finance of company (business), household (private) or government (public), is confronted with the prospect during the coming days, months or years of an inflow of receipts on the one hand and an outflow of payments on the other (Asuquo, 2012a).

The subject matter of public financial management could be summed to be the acquisition and disposal of resources by government and its agencies through proper management and control through budgeting usually prepared annually or through developmental plans for a specified period depending on the government's needs. At the heart of the design of an effective system of public financial management, are the following principles: Democratic consent, Equity, Transparency, Probity, Prudence and Accountability (Asuquo & Effiong, 2011; Asuquo & Effiong, 2010; Asuquo, 2012a).

2.3 Importance of Public Financial Management

A strong public financial management system is an essential aspect of the institutional framework for an effective state (Lawson, 2015). It is important in the following headings; Effective delivery of public services: effective delivery of public services is closely associated with poverty reduction and growth, and countries with strong, transparent, accountable public financial management systems tend to deliver services more effectively and equitably and regulate markets more efficiently and fairly. In this sense, a good public financial management system is a necessary, if not sufficient condition for most development outcomes; fair tax, efficiently and responsible spending. Also, setting

targets and monitor performance as a managerial tools for evaluating progress (Akpan, Ahakiri & Etibensi 2019). A key element of statehood is the ability to tax fairly and efficiently and to spend responsibly. Improving the effectiveness of a public financial management system can generate widespread and long-lasting benefits, and may in turn help to reinforce wider societal shifts towards inclusive institutions, and thus towards stronger states, reduced poverty, greater gender equality and balanced growth. Even w.here donor staff do not seek to strengthen public financial management systems, they need to understand them because they will often work through them, by providing budget support or climate finance, or with them, by providing project-financed interventions, which are then staffed and maintained through the national budget. In short, public financial management matters, and all donor staff need a basic knowledge of public financial management (Asuquo, 2013a).

2.4 Empirical Review

A study by Bierstaker, Brody and Pacini (2006) researched on Accountants' perception regarding fraud detection and prevention methods. The findings revealed that organizational use of Forensic Accountants was the latest often used of anti-fraud methods, but has the highest effectiveness rating. Omar and Bakar (2012), conducted a survey on Fraud Prevention Mechanisms of Malaysian Government-Linked Companies: An Assessment of Existence and Effectiveness. Their results showed that management review of internal controls and external audits of financial statements ranked as the top-most fraud prevention mechanisms in terms of the percentage of existence in organizations as perceived by internal auditors and fraud investigators, followed by operational audits, internal audits or fraud examination departments, and internal control review and improvements by departments.

Enofe, Omagbon and Ehigiator (2015) focusing their study on forensic audit and corporate fraud, using survey method and least square regression technique reveals that frequent utilisation of forensic audit services significantly helps in the detection, prevention and reduction of corporate fraud. In an empirical study conducted by Akani and Ogbeide (2017) on Forensic Accounting and fraudulent practices in the Nigerian public sector, it was revealed that there is a significant relationship between forensic accounting and reduction of fraudulent practices in the Nigerian public sector. The survey method and least square regression technique used in the process of the study reveals that frequent utilisation of forensic audit services will significantly help in the detection, prevention and reduction of corporate fraud.

Okoye and Gbegi (2013) investigated Forensic Accounting on fraud detection and prevention in the public sector in Kogi State using survey research methods of 370 questionnaire and analysis of variance. Their result reveals that Forensic Accounting does significantly reduce the occurrence of fraudulent activities in the public sector. An empirical study conducted by Sidharts and Fitriyah (2015) on Forensic Accounting and fraud prevention in Indonesian public sector also shows that the use of Forensic Accounting does significantly reduce the occurrence of fraud cases in the public sector.

A study conducted by Dauda, Ombugadu and Aku (2016) on Forensic Accounting; a preferred technique for modern fraud detection and prevention in the public sector of Nasarawa State. Their study shows that Forensic Accounting is relevant in fraud detection and prevention in the Nigerian public sector.

Igweonyia (2016) focusing her study on Forensic Accounting on fraudulent practices in Nigerian public sector using questionnaire and chi-square for data analysis. The result shows that Forensic Accounting will significantly reduce the occurrence of fraud cases in the public sector. In an empirical study conducted by Akani & Ogbeide (2017) on Forensic Accounting and fraudulent practices in the Nigerian public sector, it was revealed that there is a significant relationship between Forensic Accounting and reduction of fraudulent practices in the Nigerian public sector.

2.5 Relevance of Forensic Accounting Mechanism on the Effectiveness of Financial Management

Forensic Accounting plays a key role in examining and investigating financial processes and standards which help in the identification of effective and efficient solutions. The whole process is one of detecting problems and areas of improvement for the benefit of the business organization. According to a newly launched KPMG's fraud barometer, more than N500 million worth of fraud has been passing through the courts every six months since the last five years, (Bolgna & Linqvist, 2010; Rumaswamy, 2009; Asuquo & Akpan, 2011). According to Okolo (2007) financial crime has become really pervasive, and the likelihood of corporate fraud occurring has also become more severe. Kapmag (2008) posited that fraud and abuses cost businesses more than \$84 billion dollars annually and an average organization loses six percent of its total revenue to fraud and abuse committed by its own employees. The Senate Committee Chairman on Public Service, Sen. Aloysius Etok described the pension fund fraud of N273.9 billion as "*syndicated and institutionalized fraud and embezzlement in the management of pension fund in the country*" (Aderibigbe, 2013).

Also, the World Bank ex vice president Oby Ezekwesili observed that an estimated \$400 billion U S dollars of Nigeria's oil revenue was stolen or misspent since independence in 1960 (The Citizen, 2014). The immediate past governor of Central Bank of Nigeria, Lamido Sanusi stated that 3380 cases of fraud involving N17.97billion was reported in 2012 while 2352 cases involving N28.40 billion was reported in 2011 in Nigerian banks (CBN, 2013). Crumbley (2009) noted that no matter how optimistic we aim to be about the future, the recession has given birth to more criminalists' tendencies than ever with many more fraud cases yet to be discovered.

Ideally, fraud detection ought to be recognized as an important responsibility throughout every organization, every employee in an organization ought to be familiar with disciplinary consequences for breach of trust as well as failure to report criminal misdeeds against the organization (Jonita, 2010; Okolo, 2007). The Panel of Audit Effectiveness (PAE) observed that unlike the external auditor, the forensic accountant modifies the otherwise neutral concept of professional skepticism and presumes the

possibility of dishonesty at various levels of management, including collusion, override of internal control and falsification of documents (Grazoli et al, 2006). Financial crime or fraud can be detected through a variety of ways such as; internal control, internal audit, notification by employees, discovery by accident, anonymous tips, notification by customers, notification by regulatory or law enforcement agencies, notification by vendors, external audit, the organization's top management requesting an inspection on the basis of mere suspicion.

The Forensic Accountant handles his work in a meticulous manner in a way that he comes out with sound, objective and reliable results. Zysman (2006); Aderibigbe (2010); Crumbley (2003) outlined the following steps in executing forensic accounting work; Meeting with the client - to obtain an understanding of the important facts, players and issues at hand, perform a conflict check as soon as the relevant parties are established, perform an initial investigation to allow subsequent planning to be based upon a more complete understanding of the issues, develop an action plan that takes into account the knowledge gained by meeting with the client and carrying out the initial investigation and which will set out the objectives to be achieved and the methodology to be utilized to accomplish them. Obtain relevant evidence; this may involve locating documents, economic information, asset, a person or company, another expert or proof of the occurrence of an event through the use of accounting practices and information technology.

Performing the analysis proper involves calculating economic damage, summarising a large number of transactions, determination of financial progress by the use standard magnitude variance model, performing a tracing assets, performing present value calculations utilizing appropriate discount rates, performing a regression or sensitive analysis, utilizing charts and graphics to explain the analysis and a report will often be prepared which may include sections on the nature of the assignment, scope of the investigation, approach utilized, limitation of scope and findings or opinions, cross checking tax and transfer price related issues, capital budgeting with respect to wealth maximization goals of the firms. This way, the effectiveness in financial management is enhanced within the organization, as a lot of loop holes that give rise to fraud may have been identified and handled by the forensic accounting procedures and discretionary accruals and going concern approaches (Effiong, Asuquo, & Enya, 2020; Asuquo & Udoayang, 2020; Asuquo, 2020; Udoayang, Akpanuko & Asuquo, 2009; Uwah & Asuquo, 2016).

3. Research Methodology

3.1 Research Design

This study adopted survey research design in the selection of data modes. Both primary and secondary data were employed.

3.2 Research Population and Sample Size

A target sample size of 300 Accountants and internal Auditors were used in the public service of Cross River State, Nigeria; using a purposive sampling technique for the period January 2019 to May, 2019.

3.3 Sources of Data

Data for the study was gotten from two main sources: primary and secondary sources.

Primary Data: This is the data obtained specifically for the problem under consideration. They include the following: questionnaires, oral and informal interviews and personal observations. Secondary Data: All data collected from review of available documents, made up of written works that are in existence on the subject matter; text books, journals, financial publications, newspapers, lecture notes and lecture room discussions.

3.4 Methods of Collection Data

To guard against exhaustive exposition of objectivity, reliability and validity of this research work, a multi-dimensional search for more comprehensive data was made. This involved a wide range of research instruments amongst which are questionnaires, critical observations and library research.

3.4.1 Questionnaire

The orientation of the research is such that only relevant/classified information that is necessary to the purpose of this research was used. The questionnaire was designed to consist four sections. The first part of the questionnaire contained questions on organization and respondents' characteristics. The second part contained questions on Forensic Accounting items using five point calibrated scale; ranging from Strongly Agree (coded as '5') to Strongly Disagree (coded as '1'). The third part of the questionnaire examined forensic auditing items and the last part consists accountability in public financial management. The 300 questionnaires were distributed to respondents and a response rate of 88% was recorded. Hence 264 copies were used for data analysis.

3.4.2 Observations Method

The research analysis also included data obtained through personal observations. Some physical measures/practices by different departments and agencies of government in Cross River state. This method afforded the researcher the opportunity to highlight weak practices inherent in the management of funds in the Cross River State public service.

3.4.3 Library Research Method

A lot of materials were used from different library sources to obtain data for this research. Some of those libraries may include: Faculty of Management Sciences resource room, University of Calabar library, Cross River State library, my private library. Generally, the procedure adopted was highly objective, systematic and valid. Therefore, the researcher believes the data collected are consistent, reliable and testable.

3.5 Validity of Research Instruments

Face validity, content validity and pilot tests were used to validate the instruments. The Cronbach’s Alpha reliability test gave a result of (r = 0.758) and (r = 0.714). Regression was used for data analysis at 5% levels of significance.

3.6 Model Specification

The ordinary least square was adopted for the purpose of hypotheses testing. The ordinary least square was guided by the linear model below:

$$APFM = \beta_0 + \beta_1BDA1 + \beta_2DMA2 + \beta_3FRA3 + \beta_4CAATS4 + \beta_5COA5 + \varepsilon \text{ ----- (1)}$$

that is $\beta_1 - \beta_5 > 0$

Where:

APFM = Accountability of Public financial management;

BDA = Bedford Digital Analysis;

DMA = Data Mining Analysis;

FRA = Financial Ratio Analysis;

CAATs = Computer Assisted Tools and Techniques;

$\beta_1 - \beta_5$ are the coefficients of the regression, while ε is the error term capturing other explanatory variables not explicitly included in the model.

4. Results

This section of the study examines the results obtained from questionnaires administered to respondents from the sampled Accountants and internal Auditors in the public sector in Cross River State, Nigeria.

Table 1: Descriptive Analysis - Demographic Profile of Respondents

Variable	Characteristics	Frequency	%
Gender	Male	170	64
	Female	94	36
Educational Qualification	First Degree	106	40
	Second Degree	54	20
	First Degree with Professional	71	27
	Second Degree with Professional	28	12
	Third Degree with professional	5	2
Length of Work Experience	0 - 5	87	33
	6 - 10	92	35
	11 -15	58	22
	Above 15	27	10
Department Function	Internal Audit	125	47
	Accountant	139	53

Source: Field Survey, 2020.

Table 2: Forensic Accounting and Auditing Techniques and accountability of public finance management

Options	Responses	% of Response
Strongly agree	145	55
Agree	64	24
Not Sure	16	6
Disagree	18	7
Strongly disagree	21	8
Total	264	100

Source: Field Survey, 2020.

Table 3: Multiple Regression Analysis

Dependent Variable: APFM

Method: Least Squares

Sample(adjusted): 1 264

Included observations: 264 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob. C
3.275444	2.256856	1.451330	0.1488	BDA
0.285935	0.095662	2.989017	0.0033	DMA
0.249495	0.106627	2.339885	0.0206	FRA
0.216547	0.102573	2.111150	0.0363	CATTs
0.273341	0.123184	2.218965	0.0400	COA
0.220526	0.104976	2.100727	0.0327	
R-squared	0.435481	Mean dependent variable	12.99346	
Adjusted R-squared	0.382318	S.D. dependent variable	3.098167	
S.E. of regression	2.888766	Akaike info criterion	4.997962	
Sum squared residue	1226.711	Schwarz criterion	5.116803	
Log likelihood	-376.3441	F-statistic	5.567008	
Durbin-Watson stat	2.16401	Prob(F-statistic)	0.000100	

Source: E-view output analysis by Researchers, 2020.

Table 1 displays the demographic profile of the respondents. Out of the total respondents, there were 190 males (64%) and 94 females (36%). The educational qualification of the respondents shows that 106 (40%) holds first degree only, 54 (20%) holds second degree, 71 (27%) holds first degree with professional certification of ICAN and ANAN, 28 (12%) possesses second degree with professional certification of ICAN and ANAN and 5 (2%) possesses third degree with professional certification of ICAN and ANAN. It is noted that 87 (33%) of the respondents have work experience between 0 – 5 years, 92 (35%) have work experience between 6 – 10 years, 58 (22%) have work experience between 11 – 15 years and 27 (10%) have work experience above 15 years. These statistics suggest that respondents are expected to possess requisite academic and professional qualifications and work experiences to address the questions contained in the research instruments, thus ensuring that the perception provided is typical of internal Auditors and Accountants on Forensic Accounting and auditing on public sector fraud detection, investigation and prevention in Nigeria.

Table 2 reveals the frequency of each item on Forensic Accounting and auditing techniques on the accountability of public finance in the administered questionnaire. 145 (55%) of the respondents strongly agree that Forensic Accounting and auditing techniques assist in accounting for effectiveness of public funds in Cross River State. 64 (24%) of the respondents agree, 16 (6%) of the respondents not sure, 18 (7%) of the respondents disagree and 21 (8%) of the respondents strongly disagreed. This means that the respondents agreed that Forensic Accounting and auditing assist in accounting for effectiveness of public funds in Cross River State. The result is supported by Okoye & Gbagi (2013); Dauda, Ombugadu & Aku (2016) and Akani & Ogbeide (2017). They affirm that Forensic Accounting and auditing helps public sector organisations to detect fraudulent activities. This position was further supported by a study on forensic audit and corporate fraud in Nigeria conducted by Enofe, Omagbon & Ehigiator (2015) where they found that the application of forensic audit would result in an increase in the detection of corporate fraud incidence.

Table 3 reveals the multiple regression analysis of Forensic Accounting mechanism and accountability of public finance management. The result suggests that Bedford digital analysis (BDA), data mining analysis (DMA), financial ratio analysis (FRA), and computer assisted tools and techniques (CAATs) and continuous auditing (COA) with p-values of 0.0033, 0.0206, 0.0363, 0.0400 and 0.0327 is less than the critical value of 0.05. Hence, it is deduced that there is a significant relationship between the various Forensic Accounting mechanism and accountability of public finance management in Cross River State. The R^2 (coefficient of determination) of 0.318414 and adjusted R^2 of 0.285935 shows that the variables combined determines about 32% and 29% of public sector fraud. The F-statistics and its probability shows that the regression equation is well formulated explaining that the relationship between Forensic Accounting mechanism and accountability of public finance management in Cross River State are statistically significant (F-stat = 5.567008; F-pro. = 0.000100). The result was supported by Okoye & Gbagi (2013), Dauda, Ombugad & Aku (2016) and Akani & Ogbeide (2017). They aver that Forensic Accounting and auditing helps public sector organisations to detect fraudulent activities. This position was further supported by a study on forensic audit and corporate fraud in Nigeria, conducted by Enofe, Omagbon and Ehigiator (2015) where they found that the application of forensic audit would lead to an increase in the detection of corporate fraud incidence.

5.1 Summary of Findings

The study presented a detailed investigation on the relevance of Forensic Accounting mechanism on the effectiveness of finance management in Cross River State public sector. Review of related literature provided strong evidence of the effectiveness of forensic accounting and auditing methods on fraud detection, investigation and prevention. This research empirically substantiated the results of prior studies of Okoye & Gbagi (2013), Othman et al (2015), Dauda, Ombugadu, & Aku (2016) and Akani & Ogbeide (2017). The study highlights the various techniques of fraud detection, investigation and prevention.

The empirical analysis provided a significant relationship between Bedford digital analysis, data mining analysis, financial ratio analysis, continuous audit and computer assisted audit tools on public sector fraud detection, investigation and prevention, although the study also discover the application of Forensic Accounting in the Cross River State public sector is comparatively low.

5.2 Conclusion

On the basis of the empirical result, the study concludes that the adoption of forensic accounting mechanism in Cross River State aids the accountability of public funds, and therefore should be fully employed in the Cross River State public sector.

5.3 Recommendations

Based on findings and conclusion of the study however, the following was recommended:

- 1) Cross River State Government should consider providing more fraud hotlines, improve the whistleblowing policy and establish forensic accounting department in the public sector in order to enhance the fraud detection, investigation and prevention mechanism in the public sector.
- 2) The State legal system should be up to date with latest advancement in technology to ensure admissibility of evidence in courts for successful prosecution of criminal and civil cases.
- 3) The State public sector should fully embrace the practice of Forensic Accounting and auditing techniques with complete implementation of International Public Sector Accounting Standards (IPSAS) and the establishment of Forensic accounting departments.
- 4) Government ministries, departments and agencies should take advantage of modern accounting and auditing software packages for the purpose of enhancing efficiency and smooth operation of Forensic Accounting and auditing practice.
- 5) The government should organize recurrent training programs for staff in government (public) domains on the applicability of Forensic Accounting and Auditing techniques in the public sector. This would keep the staff updated on latest techniques, skills and practices in line with International Public Sector Accounting Standards (IPSAS).

References

- Aderibigbe, P. (2013). Auditors Independence and Corporate Fraud in Nigeria Journal of Research and Development.
- Ahakir F. I., Mbu O. G. B., & Ogar A. A. (2019). Applicability of Accounting Concepts and Conventions in recording of business transaction (A conceptual overview). International Journal of Social Science Economic Research. 5 (12), 2455-8834.

- Akani, F. & Ogbeide, S. O. (2017). Forensic accounting and fraudulent practices in the Nigerian public sector. *International Journal of Arts and Humanities*, 6(2), 171-181.
- Akpan A. U., Ahakiri F. I. & Ebaye T. M. (2020). Solvency Controlling and Return on Asset of industrial Organisation in Nigeria. *European Journal of Management and Marketing Studies* 5(1) <http://www.oapub.org/soc>.
- Akpan A. U., Ahakiri F. I., & Etibensi J. E. (2019). *International Journal of Social Science Economic Research* 5 (12), 2455-8834.
- Asuquo, A. I. & Akpan, A. U. (2011). Management involvement and the relevance of forensic investigations of selected financial institutions in Cross River State. *Nigerian Journal of Education, Health, and Technology Research (NJEHETR)*. 1(2) 35-44.
- Asuquo, A. I. (2012a). Empirical analysis of the impact of information technology on forensic accounting practice in Cross River State-Nigeria. *International Journal of Scientific and Technology Research* 1(7). (August 2012). 25-33. [IJSTR www.ijstr.org](http://www.ijstr.org).
- Asuquo, A. I. (2012b). Inflation accounting and control through monetary policy measures in Nigeria: Multi-regression analysis (1973-2010). *IOSR Journal of Business and Management (IOSRJBM)*.1(2)53-62 (May-June),www.iosrjournals.org ISSN: 2278-487X.
- Asuquo, A. I., Effiong, S. & Tiesieh, A. (2012). The effect of financial management practice on profitability of small and medium enterprises in Nigeria. *International Journal of Research in IT, Management and Engineering*, 2(3).
- Asuquo, A. I. & Effiong, S. A. (2010). Tax management as an alternative tool for Economic recovery and development in Cross River State. *International Journal of Accounting*, 1(1) 38-44.
- Asuquo, A. I. & Effiong, S.. A. (2011). Empirical analysis of Nigerian fiscal policies and revenue generation processes. *Multidisciplinary Journal of Research Development (MULJORED)*, 17(2), 1-11
- Asuquo, A. I. (2013a). Revenue base and social assets creation in Local Government Areas in Cross River State, Nigeria: A virile tool for overcoming exclusion and strengthening inclusion for sustainable development in third world. *IOSR Journal of Social Sciences and Humanity (IOSRJSSH)*. 7(3) 59-66, www.iosrjournals.org.
- Asuquo, A. I. (2013b). Analysis of financial accounting standards and their effects on financial reporting and practices of modern business organizations in Nigeria. *European Journal of Business and Management*. 5(4), 60-68, www.iiste.org.
- Asuquo, A. I. (2011a). The application of standard magnitude variance in optimal capital structuring/working capital management in business organizations. *Multi-Disciplinary Journal of Academic Excellence*.5(1), 109-120, www.globalacademicgroup.com.
- Asuquo, A. I., Dada, E. T. & Onyeogaziri, U. R. (2018). The effect sustainability reporting on corporate performance of selected quoted brewery firms in Nigeria.

- International Journal of Business & Law Research, 6(3) 1-10 July-September, www.seahipaj.org.
- Asuquo, A. I. (2011b). Impact of creative accounting and earnings management on modern financial reporting. The Nigerian Academic Forum, 20(1) 1-6. www.globalacademicgroup.com (online).
- Asuquo, A. I. (2020). Applicability of Standard Magnitude variance in the determination financial progress of business organizations. International Journal of Scientific and technology research, 9(3), 6351-6358.
- Effiong, S. A; Asuquo, A. I. & Enya, E. F. (2020). Discretionary accruals and going Concern of the manufacturing companies. International Journal of Scientific and Technology Research, 9(3), 6351- 6358.
- Asuquo, A. I. & Udoayang, J. O. (2020). Effect of Accounting practices on trade and information technology in Calabar Metropolis. International Journal of Recent Technology and Engineering, 8(6), 1572-157.
- Bierstaker, J. L., Brody, R. D., & Pacini, C. (2006). Accountants' perceptions regarding fraud detection and prevention methods. Managerial Auditing Journal, 21(5), 520-535.
- Bolgna, I. G. & Liqvist, R. I. (2010). Fraud Auditing and Forensic Accounting John Willey Press, New York.
- Crumbley, D. L. (2006). Forensic Accountants Appearing in the Literature, www.forensicaccounting.com. Retrieved on 10th July 2009.
- Crumbley, D. L. (2003). What is Forensic Accounting?, www.edwardspub.com. Retrieved on 29 December 2011.
- Crumbley, D. L. (2009). Forensic Accounting: Older than you Think, Journal of Forensic Accounting, Vol. 2(2) p181.
- Dauda, I. A., Ombugadu, B. A. & Aku, S. U. (2016). Forensic accounting: A preferred technique for modern fraud detection and prevention in the public sector (A case of Nasarawa State). Account and Financial.
- Ekpung, E. (2001). The essentials of public finance and public financial management in Nigeria. Calabar: University of Calabar Press.
- Enofe, A. O., Omagbon, P. & Ehigiator, F. I. (2015). Forensic audit and corporate fraud. International Journal of Economics and Business Management, 1(7).12-24.
- Federal Government of Nigeria (2004). Revised financial regulations. Lagos: Federal Ministry of Information, Printing Division.
- Gray, D. (2008). Forensic accounting and auditing: Compared and contrasted to traditional accounting and auditing. American Journal of Business Education, Fourth Quarter, 1 (2), 115 – 126. 14.
- Hao, X. (2010). Analysis of the necessity to develop the forensic accounting in China. International Journal of Business and Management, 5 (5), 185.
- Igweonyia, O. V. (2016). Forensic accounting as a panacea to alleviation of fraudulent practices in Nigeria public sector organisations: A case study of selected ministries

- in Enugu state). *International Journal of Management and Applied Science*, 2(9), 183 – 188.
- Jonita, D. (2010). Issues Facing Forensic Accountants, *Journal of Forensic Accounting*. Vol 10. No3 pp 45- 61.
- Maurice, B. A. (2007). *Financial management*. New York: Basic Books.
- Morelus, M. (2001). *Financial planning and control*. Delphi: Vikas Publishing House P.V.T. Ltd.
- Obinna, A. C. (1985). *Administering education in Nigeria: Problems, prospects and views*. Ibadan; Heinemann.
- Ojaide, F. (2000). Frauds detection and prevention: the case of pension accounts ICAN News January/March, 8.
- Okoye, E. I. & Gbegi, D. O. (2013). Forensic accounting: A tool for fraud detection and prevention in the public sector: A study of selected ministries in Kogi State. *International Journal of Academic Research in Business and Social Sciences*, 3(3): 1-18.
- Ola, R. O. F. & Offiong, O. J. (2008). *Public financial management in Nigeria*. Lagos: AMFITOP Books.
- Omar, N. & Bakar, K. M. A. (2012). Fraud prevention mechanisms of Malaysian government-link companies: An assessment of existence and effectiveness. *Journal of Modern Accounting and Auditing*, January, 8(1), 15-31.
- Onye, C. O. (2000). *A handbook on school administration*. Owerri: Black Academic Press Inc.
- Owojori, A. A. & Asaolu T. O. (2009). The role of forensic accounting in solving the vexed problem of corporate world. *European Journal of scientific Research* 29(2), 183-187.
- Pandy, I. M. (2000). *Financial management*. Delphi: New Print P.V.Ltd.
- Ribadu, N. (2011). Obstacle to Effective Persecution of Corrupt Practice and Financial Crimes in Nigeria, A Paper Present at Four Day Stakeholders Summit on Fraud and Corruption Organized by House of Assembly Committee on Finance, Nigeria.
- Sidharts, E. A. & Fitriyah, F. K. (2015). Forensic accounting and fraud prevention in Indonesia public sector. *International Journal of Business and Management Studies*, 4(1), 123 – 131.
- Ukeje, B. O. (2006). *School and society in Nigeria*. Owerri: Black Academic Press Inc.
- Udoayang, J. O., Akpanuko, E. E. & Asuquo, A. I. (2009). Multinational transfer pricing and international taxation: What, why, how and reporting challenges. *African Research Review*. 3(5.), 165-181.
- Uwah, U. E. & Asuquo, A. I. (2016). Capital budgeting processes and wealth maximization objectives: Implications for firms in Nigeria. *Research Journal of Finance and Accounting*, 7(10) 73-85.
- Wolf, D. T. and Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud. *The CPA Journal*, December.

Zysman, A. (2001). Forensic accounting demystified. Would investigators 31. Network standard practice for investigation and forensic accounting engagement. Retrieved Statement 32.

Zysman, A. (2004). Forensic accounting demystified. World investigators network standard practice for investigative and forensic accounting engagements, Canadian Institute of Chartered Accountant, Nov. 2006.

Creative Commons licensing terms

Authors will retain copyright to their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Management and Marketing Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).