# Effect of Internal Control on Fraud Prevention and Detection in the Public Sector in Nigeria

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#### Abstract

This research article examines how internal control can prevent and detect fraud in the public sector. This study covers the accounts section of Anambra state government of the 247 staff in the accounts section, 152 staff in the director of accounts office, internal control unit, cash unit and pay office were sampled using well-structured questionnaire. Data were analyzed using Pearson's moment correlation coefficient. This study shows internal control of Anambra state public sector is not adequately staffed, equipped with qualified personnel to prevent and detect fraud. It is recommended that their accounting systems provide an efficient means of recording and reporting financial transactions, providing management information and protecting the public's asset from fraud and misappropriation.

**Keywords**: internal control, fraud, preventive controls, detective controls.

#### Introduction

Internal control, the strength of every organization, has become of paramount importance today in Nigerian banks. The reason being that the control systems in any organization is a pillar for an efficient accounting system. (Olaoye, 2009).

The need for the internal control systems in the public sector, is paramount due to the fact that the public sector, which has a crucial role to play in the economic development of a nation is now being characterized by macro-economic instability, slow growth in real economic activities, corruption and the risk of fraud.

An internal control system is designed as being the whole system of controls financial and otherwise established by the management in order to carry on the business of the enterprise in an orderly and efficient manner, ensure adherence to management policies, safeguard the assets and secure as far as possible the completeness and accuracy of the records. It involves the control environment and control procedure, all the policy and procedure adopted by the directors and management of an entity to assist in achieving their objectives, including adherence to internal

policies, the safe guarding of assets, the prevention and detection of fraud and error as well as the completeness and accuracy of records, with the timely preparation of reliable financial information (Benjamin, 2001). The incidence of misappropriation of government fund, cooking the books and theft has been on the increase. Some argue that the internal control is unreliable, others attribute it to an inadequately functioning internal control system as a result of poor staffing, poor training and unqualified personnel, manual record keeping which makes it easy for the perpetrators of fraud. The damage which this menace, called fraud has done to the public fund is innumerable and needs urgent attention. Therefore, the attempt to put an end to this economic degradation, gave rise to the topic of this research study impact of internal control measures on fraud prevention and detection in the public sector: The Nigerian experience. Which is the main objective of this study, The specific objectives are; 1. To examine if the internal control of Anambra state public sector is adequately staffed to prevent and detect fraud in the public sector. 2. To investigate if the internal control staff of Anambra state is qualified to carry out control measures in the public sector. 3. To analyse if there is a well-equipped internal control system in the Anambra state public sector. H0<sub>1</sub>: Internal control of Anambra state public sector is not adequately staffed to prevent and detect fraud in the public sector. HO<sub>2</sub>: Internal control staff of Anambra state is not qualified to carry out control measures in the public sector. H<sub>03</sub>:Internal control system in the Anambra state public sector is not well equipped to detect and prevent fraud.

#### Literature review

Internal control, as defined in accounting and auditing, is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting, and compliance with laws, regulations and policies. A broad concept, internal control involves everything that controls risks to an organization. (The Institute of Internal Auditors Research Foundation. 2012).

Under the COSO Internal Control-Integrated Framework, a widely used framework in not only the United States but around the world, COSO defines internal control as having five components:

- 1. Control Environment-sets the tone for the organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control.
- 2. Risk Assessment-the identification and analysis of relevant risks to the achievement of objectives, forming a basis for how the risks should be managed
- 3. Information and Communication-systems or processes that support the identification, capture, and exchange of information in a form and time frame that enable people to carry out their responsibilities
- 4. Control Activities-the policies and procedures that help ensure management directives are carried out.
- 5. Monitoring-processes used to assess the quality of internal control performance over time.

**Preventive Controls** are designed to discourage errors or irregularities from occurring. They are proactive controls that help to ensure departmental objectives are being met. Examples of preventive controls are:

- Segregation of Duties: Duties are segregated among different people to reduce the risk of error or inappropriate action. Normally, responsibilities for authorizing transactions (approval), recording transactions (accounting) and handling the related asset (custody) are divided.
- Approvals, Authorizations, and Verifications: Management authorizes employees to perform certain activities and to execute certain transactions within limited parameters. In addition, management specifies those activities or transactions that need supervisory approval before they are performed or executed by employees. A supervisor's approval (manual or electronic) implies that he or she has verified and validated that the activity or transaction conforms to established policies and procedures.
- Security of Assets (Preventive and Detective): Access to equipment, inventories, securities, cash and other assets is restricted; assets are periodically counted and compared to amounts shown on control records.

**Detective Controls** are designed to find errors or irregularities after they have occurred. Examples of detective controls are:

- Reviews of Performance: Management compares information about current performance to budgets, forecasts, prior periods, or other benchmarks to measure the extent to which goals and objectives are being achieved and to identify unexpected results or unusual conditions that require follow-up.
- Reconciliations: An employee relates different sets of data to one another, identifies and investigates differences, and takes corrective action, when necessary.
- Physical Inventories
- Audits

### The concept of fraud

Fraud has been widely defined in literature by scholars and experts. Hornby (1998) defines Fraud as an action or an instance of checking somebody in order to make money or obtain goods illegally. The same dictionary defines the perpetrators of frauds as fraudsters.

According to the ICAN study Pack (2006a, b) Fraud consists of both the use of deception to obtain an unjust or illegal financial advantage and intentional misrepresentations, affecting the financial statements by the one or more individuals among management, employees, or third parties.

# **Empirical study.**

Idowu and Adedoku (2013) in their study effects of internal control system on fraud detection in selected Nigerian commercial banks. using the least square regression analysis, result showed that fraud was visible as a result of poor employee training. Ogudaet al. (2015) in their work the effect of internal controls on fraud prevention and detection in district treasuries of kakamega using SPSS, their result showed that there was a statistically significant and positive relationship

between the adequacy of internal control systems and fraud prevention and detection in district treasuries in kakamega county. Chukwu (2012) in her work the impact of internal control system on the financial management of an organization utilized regression analysis and result shows that perpetration of fraud and losses of revenue in an organization are as a result of weakness in the internal control system. There are few studies on internal audit control on fraud prevention and detection in the public sector of Nigeria.it is on this gap that the researcher bases this study.

# Methodology

The structural framework of this study is based on survey design (Asika 2006). This study covers the Population of 247 staff in the finance and accounts unit in the public sector with a sample size of 152 calculated using the Yaro Yamen formular. The respondents of this study are the staff of the director of accounts unit comprising of internal control and audit unit, cash unit and pay office all in the accounts section of Anambra state government. A total number of 152 questionnaires were distributed, while 97 were attended to and returned. The research instrument contains 15 questions on internal control and fraud against which the respondents were asked to indicate their level of agreement upon a five point Likert scale (where 5 = strongly agree, 4 = agree, 3 = undecided, 2 = disagree and 1 = strongly disagree). Selected questions in the questionnaires which are closely related to the purpose of the study are tabulated and analysed using Pearson's moment correlation coefficient.

#### **Analysis of hypothesis**

 $H0_1$ : questions which relate to staffing of internal control (X) and fraud prevention and detection (Y) were tabulated and analysed.

 $H0_2$ : questions which relate to qualified internal control staff (X) and fraud prevention and detection (Y) were tabulated and analysed.

H03: questions which relate to well-equipped internal control (X) and fraud prevention and detection (Y) were tabulated and analysed.

## Test of hypothesis 1

H1: Internal control of Anambra state public sector is adequately staffed to prevent and detect fraud in the public sector.

	X	Y	XY	$X^2$	$Y^2$
Director of	46	23	1058	2116	529
accounts unit					
Internal audit	59	38	2242	3481	1444
unit					
Cash unit	37	20	740	1369	400
Pay office	44	27	1188	1936	729
	186	108	5228	8902	3102

Source: Author's computation.

$$\frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{N\sum x^2 - (\sum x)^2}][(N\sum y^2 - (\sum y^2)]}$$

$$\frac{4(5228) - (186)(108)}{\sqrt{4(8902) - (186)^2} \left[ (4(3102) - 108^2) \right]}$$

$$\frac{20912 - 20088}{\sqrt{[35608 - 34596]} \left[ 12408 - 11664 \right]}$$

$$\frac{824}{\sqrt{(1012)(744)}}$$

$$\frac{824}{\sqrt{(752928)}}$$

$$\frac{824}{867.71}$$

:. r = 0.95

There is a high positive correlation coefficient between the adequate staffing of internal control and fraud prevention and detection in Nigeria.

## Test of hypothesis 2

H1: Internal control staff of Anambra state is qualified to carry out control measures in the public sector.

	X	Y	XY	$X^2$	$Y^2$
Director of	45	25	1125	2025	625
accounts unit					
Internal audit	33	39	1287	1089	1521
unit					
Cash unit	15	5	75	225	25
Pay office	30	27	810	900	729
	123	96	3297	4239	2900

Source: Author's computation.

$$\frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{N\sum x^2 - (\sum x)^2}][(N\sum y^2 - (\sum y^2)]}$$

$$\frac{4(3297) - (123)(96)}{\sqrt{4(4239) - (123)^2}][(4(2900) - 96^2)]}$$

$$\frac{13188 - 11808}{\sqrt{[16956 - 15129]}[11600 - 9216]}$$

$$\frac{1380}{\sqrt{(1827)(2384)}}$$

$$\frac{1380}{\sqrt{(4355568)}}$$

$$\frac{1380}{2086.9998}$$

$$:. r = 0.71$$

There is a high positive correlation coefficient between qualified internal control staff and fraud prevention and detection in Nigeria.

## Test of hypothesis 3

H1: Internal control system in the Anambra state public sector is well equipped and to detect and prevent fraud.

	X	Y	XY	$X^2$	$Y^2$
Director of	24	12	288	576	144
accounts unit					
Internal audit	30	17	510	900	289
unit					
Cash unit	16	7	112	256	49
Pay office	24	11	286	676	121
	96	47	1196	2408	603

Source: Author's computation.

$$\frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{N\sum x^2 - (\sum x)^2}][(N\sum y^2 - (\sum y^2))]}$$

$$\frac{4(1196) - (96)(47)}{\sqrt{4(2408) - (96)^2}][(4(603) - 47^2)]}$$

$$\frac{4784 - 4512}{\sqrt{[9632 - 9216]}} \frac{272}{\sqrt{(416)(203)}}$$

$$\frac{272}{\sqrt{(84448)}}$$

$$\frac{272}{290.5994}$$

:. r = 0.94

There is a high positive correlation coefficient between well equipped internal control and fraud prevention and detection in Nigeria public sector.

#### **Conclusion**

Control system should address the risks associated with the financial management of the agency and clearly articulate expectations and internal accountabilities for management of these risks. It is important that the public sector must have an internal audit department that is adequately functioning, to ensure that their accounting systems provide an efficient means of recording and reporting financial transactions, providing management information and protecting the public's asset from fraud and misappropriation (Achibong, 1993). Fraud will be difficult to eradicate completely. This gives rise to the following recommendations: Adequate remuneration and motivation other welfare issues such as promotion, giving staffers a sense of belonging so as to prevent segregation or alienation

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