

FRAUD PREVENTION IN ENTERPRISE RISK MANAGEMENT OF CORPORATE ORGANIZATIONS IN NIGERIA

Nwadighoha Chinedum Ephraim

Department of Accounting,

Michael Okpara University of Agriculture Umudike, Abia State Nigeria

Email: chinedumnwadighoha@yahoo.com

ABSTRACT

In the absence of workable internal control measures, the tendency of fraud prevention, detection and corrective measures become an inevitable process in any organization. Consequently, the study investigated fraud detection and enterprises risk management of corporate organizations in Nigeria. A population and sample size of one hundred and nine (109) corporate organizations in Nigeria were chosen for the study. Ordinary Least Square Regression analysis was used to test the hypotheses and the findings revealed that weak internal control measures would make it difficult for indices of fraud to be prevented and the cost of its investigation, detection and corrective measures may not be justified as it would not be commensurate with the amount lost and the image of the organizations being put in a bad light. It was therefore, recommended that control and workable internal control measures if put in place, would forestall the employees and the management from committing fraud and the prosecution and litigation cost will be greatly minimized or completely eliminated from the financial statements of such corporate organizations in Nigeria.

Keywords: *Fraud Prevention, Detection, Corrective Control, and Enterprise Risk Management*

INTRODUCTION

In every organization, Fraud Prevention is part of the larger enterprise risk-management (ERM) process, and as it is also part of the internal control process. In the classical fraud theory, the internal control process views fraud detection as a second line of defense with the first line being prevention. Furthermore when both prevention and detection fail, the internal control process seeks to implement corrective measures. Therefore, detection is one integral part of a three part defense process that consists of preventive, detective, and corrective sub-processes. This suggests that measures to detect fraud must be considered in conjunction with measures related to preventing and correcting fraud. The discussion that immediately follows explains the

relative roles of prevention, detection, and correction in managing fraud. These three roles are then put in an economic context and applied to the optimal design of a fraud detection system. Hopwood, Leiner & Young (2012).

STATEMENT OF THE PROBLEM

Frauds committed against an entity by customers, vendors and the public are typically detected by specialized functional area security departments. The position of such security departments within the organizations chart tends to vary from one industry to another. For example, the insurance industry, a department that prevents, detects, and investigates insurance claims fraud might be a branch of an insurance company's claims division. On the other hand, in the financial services industry, the department that deals with credit application fraud might be located in the lending division. In addition to functional area departments dedicated to fraud management, companies may also have a separate information – security department that also performs fraud management functions that overlap those of the functional area security department.

OBJECTIVE OF THE STUDY

The board objective of the study is to investigate the fraud detection in enterprise risk management in corporate organizations in Nigeria.

The specific objectives which the study seeks to achieve are:-

1. To determine the fraud preventive control measures
2. To investigate the fraud detective control measures
3. To ascertain the fraud corrective control measures

RESEARCH HYPOTHESES

H₀₁: Fraud Enterprise Risk Management has no significant relationship with fraud preventive control measures.

H₀₂: Fraud Enterprise Risk Management has no significant relationship with fraud detective control measures.

H₀₃: Fraud Enterprise Risk Management has no significant relationship with fraud corrective control measures.

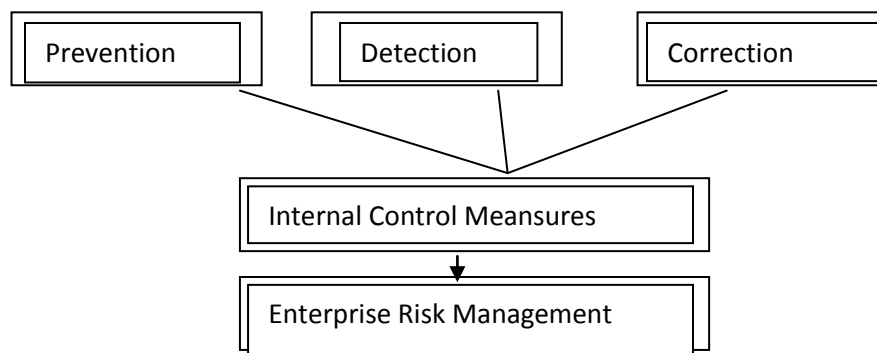
REVIEW OF RELATED LITERATURE

Conceptual Framework

The importance of detection relative to prevention and correction as fraud control measures, in their strongest form, preventive controls frequently rely on security barriers to prevent fraud. For example placing inventory in locked

storage monitored by video cameras would represent a security barrier that prevents fraud by limiting access to the inventory. Note that security barriers yield a much stronger form of prevention than that produced by early detection. Security barriers prevent fraud by making its commission more difficult or impossible whereas early detection assumes that either preventive controls have failed or do not apply of course, not all preventive controls are based on security barriers. For examples, good employee training can prevent fraud by increasing compliance with control policies and procedures in general; preventive controls seek to stop fraud before it happens.

Fig. 1 The diagram below: The relative Role of Fraud Detection in the Enterprise Risk Management Process in corporate organization



Source: Forensic Accounting and Fraud Examination Hopwood, Leiner & Young (2012)

Detective Control

It is not possible or economical to stop all fraud before it happens. For example, the only way to retail store can absolutely stop shoplifting might be to close and accept orders only over the internet. Similarly, the only way for a bank to absolutely stop all loan fraud might be for it to stop lending money. In general, increasing perceptive security can be reduced fraud losses. This is where detection comes in, it may be economical when prevention is not for example, one way to prevent a salesclerk from stealing from the register would be for the security department to carefully monitor, review and approve everyone of the clerk's sales. However, it would likely be much more cost – effective instead to implement a simple detective control; an end-of-shift reconciliation between the cash in the register and the transactions logged by the cash register during the clerk's shift. If refunds are not given at the point of sale, the end-of-shift balance of cash in the register should equal the shift's sales per the transaction logs minus the balance of cash in the

register at the beginning of the shift. Any significant failure of these numbers to reconcile would amount to a fraud indicator of course, further investigation could show that the clerk simply made an error and did not commit fraud. Hopwood, Leiner & Young (2012).

The cost effectiveness of detective controls, like preventive controls has limits. First, such controls are not cost free to implement, and improving detective controls may cost more than the results may provide. Second, detective controls produce both false positives and false negatives. A false positive occurs when a detective control signals a possible fraud that upon investigation turns up a reasonable explanation for the indication. A false negative occurs when a detective control fails to signal possible fraud when one exists. Reducing false negatives means measuring the fraud detection rate. In the same way, the cost-effectiveness of increasing preventive security has a limit as does the benefit of increasing the fraud detection rate. To increase the detection rate, it is necessary to increase the frequency at which the detective control signals possible fraud. The result is more investigations and the cost of the additional investigation, can exceed the resulting reductions in the fraud losses.

Corrective Controls

Controls are essentially policies and procedures designed to minimize losses due to fraud or other events such as errors or acts of nature. Corrective controls are merely special control types involved once a loss is known to exist. With respect to fraud, an important corrective control involves the investigation of potential frauds and the investigation and recovery process from discovered frauds. More generally speaking, fraud investigations serve not only a corrective function but also detective and preventive functions. Such investigations are detective of fraud to the extent that they follow up on fraud signals in order to confirm or disconfirm the presence of fraud. But once fraud is confirmed to exist, fraud examinations shift towards gathering evidence and become correctively by assisting in recovery from the perpetrator and other sources such as insurance. Fraud investigation is also corrective in that they can lead to revealing and repairing unknown weakness. For example, a fraud investigation of inventory shortages in a college bookstore reveals that an employee is secretly dropping new books into trash cans located throughout the store. The employee then turns after store hours and completes the fraud by removing the books from the outside trash dumpster. Hopwood, Leiner & Young (2012). Upon being confronted, the

employee confesses and makes restitution. The original loss, and the related discovery of the fraud sentence leads to prevention of similar losses in the future. In summary, the fraud examination has served to detect, correct, and prevent fraud. Thus, because fraud investigations can serve as a fraud-detection function, it is not really reasonable to call the fraud investigation a detective control. However, fraud investigations are not normally thought of as detective controls. This is so because fraud investigations tend to be much more costly than standard detective controls and therefore are normally used only when there is already some fraud indicator generated by a typical detective control. Therefore, the primary functions of fraud investigations are to correct existing frauds and prevent future ones. In some cases, the primary benefit of a Fraud investigation might be to prevent future frauds. Even when recovery is impossible or impracticable, because the thief has no asset, unwinding the fraud scheme may still have the benefit of leading to the preventing of the same scheme in the future. Furthermore, a company might benefit from spending a very large sum of money to investigate and prosecute a very small theft in order to deter other individuals from defrauding the company.

RESEARCH METHODOLOGY

Research Design:

The research design used in this study is descriptive one, with conceptual plan and theoretical analysis are some of the strategies used by the researcher to enhance the justification of the outcome of the study.

Types and Sources of Data

The research work relied mostly on the use of aggregate secondary data(ASD) key factors and indices that are incidental to corporate fraud prevention, detection and correlative control measures in Enterprise Risk Management. Information from professional journals of the institute of chartered accountings of Nigeria (ICAN), and the textbooks and Association of National Accountants of Nigeria (ANAN) other official sources of information.

Population / Sample Size of the Study

The population are made up of 109 companies selected from different sectors of the economy such as Agriculture and Extraction, Manufacturing, Marketing, Production and Service industries and the entire population was used as the sample size because the researcher can comfortably manage the sample size of 109 companies.

Measure of Variables and Data Analysis

The key variable for this study are the financial statement of these companies operationalized into fraud preventive cost, fraud detective cost, fraud corrective cost and non compliance to internal control measures that could result to poor enterprise risk management.

To Operationalize the Conceptual Model

Model 1: The first objective is to establish fraud preventive measures

$$FRP = \text{flao log} + B1 \text{ Log FRD} + B2 \text{ Log FRI} + B3 \text{ log INC} = B4 \text{ log } 1p + B5 \text{ log off} + \dots u$$

Model 2: The second objective is to establish fraud detective measures

$$FRD = \text{flao log} + B1 \text{ Log FRP} + B2 \text{ Log FRI} + B3 \text{ log INC} = B4 \text{ Log off} = B5 \text{ Log if} = \dots u$$

Model 3: The third objective is to establish the fraud corrective measures

$$FRC = \text{flao log} + B1 \text{ Log FRQ} + B2 \text{ log FRd} + B3 \text{ log } 1P + B4 \text{ log if} + B5 \text{ log IC} + \dots u$$

PRESENTATION OF RESULTS

The analysis of the data collected on the study are presented as follows:

Test of Hypothesis One

Hypothesis one: There is no significant relationship between Enterprise Risk Management and fraud prevention, detection and corrective measures.

The above hypothesis shall be tested with the use of Ordinary Least Squad Regression Analysis and with the aid of E-view Durbin Wastson F-Statistic model:

Table 1, the result of amount lost through fraud prevention, detection and corrective measures of the company's assets (see original data on Appendix 1)

Table 1: Empirical Fraud Indices

Cost of PDI	FRP	FRD	FRI	CWIC	COL/FR	ZCRIT
Cost of Fraud	X Million	Y (Million)	X2 (Million)	Y2 (Million)	XY	2.5
	3.2	0.4	10.24	0.16	0.128	
	3.9	0.5	15.21	0.25	1.95	
	0.5	0.5	2025	0.25	2.25	
	4.9	0.5	22.64	0.25	2.45	
	2.7	0.6	7.29	0.36	1.62	
	0.5	0.6	0.25	0.36	0.3	
	0.4	0.6	0.16	0.36	0.24	
	20.1	3.7	7.04	1.99	10.09	0.67

Source: Field Survey 2017 using e-view Durbin Watson F. Statistic Model

Note:

FRP	=	Fraud Prevention
FRD	=	Fraud Detection
FRI	=	Fraud Investigation
CWIC	=	Cost of Weak Internal Control (Corrective measure)
COL/FR	=	Cost of Litigation/Fraud Recovery
X	=	COF
Y	=	PDI

CONCLUSION

There is never any guarantee that investigating a fraud indicator will lead to discovering fraud. Depending on the situation, an investigation might lead to nothing at all, a reasonable explanation for the indicator or to the discovery of losses due to errors, waste, inefficiencies, or even uncontrollable events. If one is considering a loan application, a fraud indicator might indicate nothing, fraud, or an error. On the other hands, in regard to the possible theft or raw materials in a production process, a fraud indicator might indicate undocumented waste or scrap. Two important factors to consider concerning the general design of a fraud prevention, detection and corrective process are not only the costs and benefits to preventing, detecting and correcting fraud but also the cost and benefits of preventing, detecting and correcting errors, waste, uncontrollable events, and inefficiencies. Of course, the particular costs that are relevant will vary from one type of business process to another. For the purpose of simplicity, the discussion that follows refers only to fraud-related costs. However, this simplification poses little restriction on the discussion because, notwithstanding the limitation of fraud applying only to intentional acts, factors such as waste, uncontrollable events and inefficiencies can be thought of as fraud in which a perpetrator's intention is not discernable. Furthermore, many acts that could appear to be fraud can easily be accidents.

Appendix 1

EMPIRICAL DATA OF FRP, FRD, FRI, INC, IP, OFF, IF, AND WE

Companies	Fraud prevention	Fraud Detection	Indices Fraud	Incentives/Pressure	Fraud Evidence
FTNCocoa Processing Plc	267550	298614.4	3.2	7.5	10436.1
AG. Leventis Nig Plc	312129.7	328453.8	2.85	13	12243.5
UACN PLC	532613.8	328453.8	3.38	44.5	20512.7
Costain (WA) PLC	683869.8	328453.8	3.2	57.2	
Julius Berger (Nig) Plc	899863.2	328453.8	2.4	57	70714.6
DN Tyre & Rubber Plc	1933212	328453.8	2.8	72.8	11991.6
Guinness (Nig) Plc	2702719	328453.8	3.8	20.3	122600.9
Inter Brew Plc	2801973	328453.8	3.2	8.5	128331.8
Nigeria Breweries Plc	2708431	328453.8	4.7	10	152409.6
P.Z Cussons Nig Ltd.	319401	328453.8	8.2	6.6	154188.6
Uniliver (Nig) Plc	4582127	328453.8	13.1	6.9	157535.4
Access Bank Plc	4725086	328453.8	13.6	18.9	162343.4
Oiammond Bank Plc	6912381	328453.8	12.6	12.9	166631.6
Mansard Insurance Plc	8487032	328453.8	14.8	14	
Niger Insurance Plc	11411067	328453.8	13.9	15	249220.6
NPF Micro Finance Bank	14572239	328453.8	11.9	17.9	269844.7
Infinity Trust Mortgage Bank	18564595	328453.8	12.3	8.5	302843.3
Royal Exchange Plc	20657318	328453.8	12.7	6.6	364008.5
Evans Medical Plc	24296329	328453.8	14.9	15.1	399841.9
Charms Plc	24712670	328453.8	19.7	12.1	441271.3
CAP Plc	672202.6	328453.8	21.1	13	672202.55
DN Meyer Plc	718977.3	328453.8	23.1	0.98	718977.33

Source: Researcher's computation of cost of fraud prevention detection and investigation, internal control structure, incentive/pressure to commit fraud, opportunity to commit or not to commit fraud, indices of fraud and weak internal control system (2017).

REFERENCES

- Adebayo, P. A. (2002) International Public Sector Accounting: A Practice Implementation Guide for Students and Professionals 1st Ed. Lagos: Rainbow Graphics printers and Publishers.
- Ajileye, J. O. (2002). Accounting for Business Combination: Reconstruction and Dissolution. Lagos: Hudleg Press.
- Akeju, J. B. (2012). Accounting for Company Business. Lagos: JBA Limited.
- Alexander D. (2012). Financial Reporting: The Theoretical and Regulatory Framework. London: Chapman and Hall.

Albrecht, W. S. Howe K. R. and Romney M. B. (1984). Deferring Fraud: the Internal Auditors Perspective, Altamonte Springs, the Institute of Auditor's Research Foundation.

ANZ Bank (2003), Fortune Global 500. Retrieved from <http://money.cnn.com/magazines> (or tuneiglobalSO012008

Astrazeneca (2007). Annual Retrieved from www.astrazeneca.com

Banks and other Financial Institutions Acts (BOFIA 1991)

Insurance Act of 2003

Bayer Group (2007). Annual Report, Bayer Ag AG, Germany, Retrieved from www.bayer.com

Bright, F. (1997). Preventing Corporate Embezzlement: Boston, Butterworth.

BPP (2010). Financial Reporting. London: Drydem Press.

British Airways (2008). Annual Report and Accounts. Retrieved from www.ba.com

Claser, D. (1978. Crime in our Changing Society: New York, Holt, Reinhardt and Winton.

Companies Income Tax Act 2004 (as amended).

Cressey, D. R. (1973). Other People's Money, New Jersey: Patterson Smith Companies and Allied Matters Acts 1990.

Crumbley, D.L. Heitger L. E. and Smith G. S. (2007). Forensic and Investigative Accounting, 3rd Ed. Chicago, CCH.

Deloitte (2006) Heads up, Volume 13 (12).

Deloitte (2010). Deloitte Global Services Limited.

Deutsche Telecom Group (2007). Annual Report Deutsch Telcom AG Germany. Retrieved from www.deutschetelekom.com

Espirt (2008). Annual Report, Esprit Holdings Limited, Germany. Retrieved from www.espritholdings.com

- Fatimahim, A. E. (2004). Introduction to Bankruptcy Executorship and Trusteeship. Lagos: Fatimehin and Associates.
- Federal Inland Revenue Services Act 2007.
- Financial Reporting Council of Nigeria Act 2001.
- Finance (Control and Management) Act 1958 as amended.
- Gary and Steve, (1999). Delinquency and Drift: New York, Wiley.
- Helmk. (1997). Collaring the Crime not the Criminal, American Sociological Review: 55, 346-365/
- Hennie, G. (2010). International Financial Reporting Standards Standards-A Practical Guide 5th Ed. Washington: The World Bank.
- Hirschi, T. and G. H. Fredson M. (1987). "Causes of White Collar Crime": Criminology 25,949-974.
- LASCF(2008). Review of the Constitution Public Accountability and the Composition of the LASB-Proposals for Change.
- ICRC (2007). International Committee of the Red Cross Annual Report Switzerland. Retrieved from www.icre.org
- Hopwood, Leiner & Young (2012) Forensic Accounting and Fraud Examination Second Edition, Singapore.

Reference to this paper should be made as follows: Nwadighoha Chinedum Ephraim (2017), Fraud Prevention in Enterprise Risk Management of Corporate Organizations in Nigeria. *J. of Management and Corporate Governance*, Vol.9, No.3, Pp 19-28
