Evaluation of the Effect of Monitoring and Control Activities on Fraud Detection in Selected Nigerian Commercial Banks.

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Abstract

The study examined the effects of monitoring and control activities on fraud detection in selected Nigerian quoted commercial banks. The relationship between monitoring and fraud detection were examined, while the relationship between control activities on fraud detection were also investigated. Data were sourced from the respondents through structured and well designed questionnaires. Multiple Regression Analysis (MRA) and Analysis of Variance (ANOVA) were used to analyze data collected. The results revealed that there is significant relationship between effective and efficient monitoring and fraud detection in Nigeria commercial banks with P-values of $0.000***$, $0.005***$, $0.005***$, $0.000***$ and $0.004***$ (3- asterisks) from the first hypothesis; and hypothesis two also showed there is significant relationship between control activities and fraud detection in Nigeria commercial banks whenever there is incidence of fraud with P- values of $0.004***$, $0.000***$, $0.000***$, $0.005***$ and $0.000***$, (3-asterisks) with the level of significant of ($P<0.005$)(5% significant level). Review of transactions after they have been processed and completed can be effective in identifying fraudulent or corrupt activity.

Key words: Monitoring, Bank, Fraud Detection, Economy, Fraud Control.

1. Introduction

Monitoring activities provide information about potential and actual breakdowns in a control system. Monitoring can occur through self-assessments, external audits, or through direct testing of a control. It is important that any significant deficiencies be reported to the individual responsible for the activity as well as to management one level higher. Monitoring can be done in two ways: through ongoing activities or separate evaluations. Ongoing monitoring is performed routinely and includes activities which managers perform routinely like comparisons or reconciliations. In fact, ongoing monitoring creates an effective balancing feedback loop for managers' decisions about internal control. Separate evaluations may vary in scope and frequency which are driven by risks. The more significant risks, the more important are control activities which reduce the risks (COSO ICIF, 1994). Management should have a strategy to ensure that ongoing monitoring is effective and will trigger separate evaluations where problems are identified. Management's strategy provides for routine feedback and monitoring of performance and control objectives. The monitoring strategy includes identification of critical operational and mission support systems that need special review and evaluation.

Also, control activities include the policies and procedures maintained by an organization to ensure management directives are carried out. They include a range of activities such as "approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets, and segregation of duties." Control activities are the most visible element of internal control and arguably the most important in preventing wrong actions from occurring. However, the COSO suggests that the control environment is more critical because it influences motivation for proper behavior. Control activities can be easily established and should be considered a start-up elements for developing the internal control system of a new organization. The COSO identifies six categories of control activities. These categories include segregation of duties; physical controls over cash and other assets; top-level reviews of performance; effective direct management of activities; information processing of transactions; restriction of access to data; investigation of unusual performance indicators, and maintenance of proper documentation of transactions. In addition, the COSO dedicates an entire section to categories specifically related to control activities for information systems, such as data centers, system-software acquisition and maintenance and access security (COSO-ICIF, 1994).

It also involves information and communication concerns include the identification, capture, and exchange of financial, operational, and compliance-related data in a timely manner. People within an organization who have timely, reliable, and understandable information are better able to conduct, manage, and control operations. Information and communication stress the quality of information. Information should be appropriate, timely, current, accurate, and accessible. All these elements are extremely important and must be applied by the internal control system design otherwise, the components of the internal control system will be unable to operate as a whole. Information is identified, captured, processed, and reported by information systems. Information systems

can be formal or informal, can operate in routine monitoring mode or on call, and can be integral part of every activity, whether strategic planning, operations, or control. (Broader, 2000).

The COSO stated that communication is inherent to information systems can be internal or external. Effective communication also must occur in a broader sense, flowing down, across and up the organization. All personnel must understand their own role in the internal control system, as well as how individual activities relate to the work of others. There also needs to be effective communication with external parties, such as customers, suppliers, regulators and shareholders.

The COSO also suggests several practical means for effective communications, which include policy manuals, memoranda, bulletin-board notices, videotaped messages, and the most powerful form of communication, action by management in dealing with subordinates (COSO-ICIF, 1994).

1.1. Research Questions
i.   Is there any significant relationship between effective and efficient monitoring and fraud detection in the selected quoted banks?

ii.   Is there any significant relationship between control activities and fraud detection in the banks selected?

iii.   What are the effects of bank fraud on the Nigerian economy?

iv.   What are ways of detecting and preventing fraud through system control assessment?

2. Conceptual Framework

Monitoring strategy includes a plan for periodic evaluation of control activities for critical operational and mission support systems. Florio, (1996) mentioned some of these monitoring techniques which are:

Separate Monitoring Evaluations: The scope and frequency of separate evaluations of internal control should be appropriate for the organization. Consideration is given to the risk assessment results and the effectiveness of ongoing monitoring when determining the scope and frequency of separate evaluations. Separate evaluations are often prompted by events such as major changes in management plans or strategies, major expansion or downsizing, significant changes in operations or processing of financial or budgetary information, or by decision of the oversight agencies. Separate evaluations usually are conducted by external auditors, but can be conducted by personnel with the required skills from the evaluated organization. The methodology for evaluating the organization's internal control should be logical and appropriate. The methodology used may include self-assessments using checklists, questionnaires, or other tools which include:

Internal Monitoring Effects:

Through financial reports, when fraud has taken place, there is definitely loss of funds and assets. This is never made known to the public or reported in the financial statement of the bank affected, because fraud is seen as a big loss to the bank and measure for its safety. Litigation is considered by the time the fraud is discovered, this is because various machineries are set in motion to handle the situation through the engagement of lawyer, and therefore litigation cost reduces the profit of the bank for that period (Adeleke, 1996).

External Monitoring Effects: Fraud in banks also has effects on staff whereby staff strength is reduced by way of dismissal. Huge fraud affects the staff welfare like, salaries, promotions, training allowances, and general working conditions, increased work load on staff and possibly retrenchment or outright loss of jobs. On this, it therefore, reduces the goodwill of the banks. On the other hand, recruitment of staff might even be the problem, because a company already corrupted with fraud and still continues honest applicants might be afraid of being corrupted together if applied. The bank might end up employing applicants that are ready to join the queue of fraudulent staff in the bank (Beasley, 2000).

2.1 Control Activities in Banks Against Frauds

Ekechi, (1990) explained control activities as those which include the policies and procedures maintained by an organization to ensure management directives are carried out. They include a range of activities such as "approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets, and segregation of duties." Control activities are the most visible element of internal control and arguably the most important in preventing wrong actions from occurring. However, the COSO suggests that the control environment is more critical because it influences motivation for proper behavior. Control activities can be easily established and should be considered startup elements for developing the internal control system of a new organization. The COSO identifies six categories of control activities. These categories include segregation of duties, physical controls over cash and other assets, top-level reviews of performance, effective direct management of activities, information processing of transactions, restriction of access to data, investigation of unusual performance indicators, and maintenance of proper documentation of transactions. In addition, the

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The COSO stated that communication is inherent to information systems can be internal or external. Effective communication also must occur in a broader sense, flowing down, across and up the organization. All personnel must understand their own role in the internal control system, as well as how individual activities relate to the work of others. There also needs to be effective communication with external parties, such as customers, suppliers, regulators and shareholders. The COSO also suggests several practical means for effective communications, which include policy manuals, memoranda, bulletin-board notices, videotaped messages, and the most powerful form of communication, action by management in dealing with subordinates.

Researches on bank fraud are normally prompted by the perceive effects of fraud on banks, and the desire to find the means of curbing such adverse effects. Attempts have therefore, been made by many authors to identify the effects of fraud on banks. Fraud leads to loss of money, which belongs either to the banks or customers. Such losses results in reduced level of resources availability, which could hamper the operations frequency and size of such frauds (Bosley, 2000). Other effects of fraud on banks include the loss of confidence in banks by customers and therefore a setback on efforts aimed at prompting the banking habit. In addition, the distraction of management's attention, increased operation costs, times and resources spent on fraud prevention are other effects of frauds (Beasley *et al*, 2000). Effects of fraud on banks can be classified into internal and external effects. Bank frauds cannot be wholly eradicated, thus it can only be controlled or minimized. Such controls which have been recognized to be effective have to be undertaken via the sequence of identification, prevention, detection. In essence, "fraud will exist as long as society exists" (Nwankwo, 1991).

Identification of Fraud: Fraud identification should precede any preventive measure as the success of any measure will be largely dependent on the knowledge of the nature and type as well as frequency of fraud, the causes and methods of the frauds and the potentials and prospects of some of them occurring in the bank. The volume, types and concentration of the bank business operations will be the function of internal control system. Internal checks are operational controls; which are built into the banking system to simplify the processing of entries in order to ensure prompt services to help in minimizing errors and to act as insurance against collusion. Also, the external auditors who examine the books of the banks to determine its truth and fairness have their own part too. This is known as statutory audit which is called for by the law (Ogwuma,1998).

Detection of fraud: Fraud detection is central to fraud prevention, as when fraudsters known their fraudulent acts will be detected with ease, they will think twice before acting rightly recognizes this by making reference to the statement that "the best deterrent is the certainty of detection" (Nwankwo, 1991). On the part of management, these can be part of the general system of controls or in the form of a special internal audit or both. Banks have put to use the following to detect fraud that have been committed or are about to be committed:
-    Regular balancing and reconciliation of accounts at branch and Head Office levels.
-    Regular call – over of completed transactions
-    Constant checking of cashiers etc (Nwankwo, 1991).

The role of internal audit in deterring fraud is very vital because they are saddled with the responsibility of investigating mal-practices like fraud. The government on its own part can contribute to fraud deterrence through investigations undertaken by the police. However, such roles are not being effectively discharged as either the police lack the necessary knowledge of banking expertise and resources for adequate investigation compiled with complicated court procedures, having received bribes from the suspects. On the other hand, the Institute of Chartered Accountants of Nigeria (ICAN) provides specialized training and technique for its members for deterring and elimination of fraud, through its continuous mandatory educational programmes etc. Also, it is of the opinion that fraudulent bank directors and staff are to be sanctioned with such report being duly circulated among banks and also that banks take advantage of Risk Management System (Credit Bureau) to monitor fraudulent customers and accomplices (Dorminey *et al*.2011)

Prevention of Fraud: Frauds cannot be eradicated. It is true that all thieves do not think alike so every fraud has its own unique approach, hence, there may be no unique approach to forestall frauds. But the good thing about moves to forestall frauds is that the red flags of forgery beam the light for those that can follow up with know-how. The following could prevent frauds:
-    Institute obvious deterrents
-    Provision for strict compliance with authority and responsibility so as not to overstep the bounds.
-    Periodic rotation of staff, especially in sensitive areas, to avoid undue familiarization and hence ease of perfecting fraudulent practices.
-    Effectives, efficient and functional internal check and control.
-    Provision of referees, guarantors and bonds.

- Appropriate general personnel policies as regarding the performance and staff motivation (which includes discipline) which serves as deterrent to others.
- An accounting system which is sound in principles and effective in practice.
- Realistic personnel policies which cover such issues as merit, qualification, experience, remuneration, advancement and motivation just to stress the equity and proper reference checks.
- Restriction of access to data on computer generally.
- Clearly defined report modalities.
- Verification of signatures and specimen signature cards should be accessed only by authorized persons. "Positive policies evolved by management aimed at safeguarding the bank's assets and ensuring that staff did not exploit weaknesses in internal control" (Nwankwo, 1991 and Idowu, 2009)

3.   Objectives

The main objective of the study is ascertain whether there is significant relationship between effective and efficient monitoring and fraud detection in some selected Nigerian quoted commercial banks. Specific objectives are:

- To ascertain whether there is significant relationship between effective and efficient monitoring and fraud detection in the selected quoted banks.
- To appraise the effects of bank fraud on the Nigerian economy
- To determine the ways of detecting and preventing fraud through system control activities assessment.
- To ascertain whether there is any significant relationship between control activities and fraud detection in the banks selected.
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4.   Research Hypotheses

H_{01}: There is no significant relationship between effective and efficient monitoring and fraud
          detection in Nigerian quoted banks selected.

H_{02}: There is no significant relationship between control activities and fraud detection in some
          selected Nigerian commercial banks.

5.   Methodology

Ten quoted commercial banks were randomly selected for this study. Structured questionnaire was used to obtain information from one hundred (100) respondents selected from the quoted commercial banks (that is, 10 questionnaire per bank). However, analysis was based on the eighty two (82) well completed questionnaire. Regression Analysis was used to test hypothesis I and II.

Table 1: The study sample size

S/NO	NAME OF BANKS	CLASSIFICATION	SAMPLE SELECTED	NUMBER SELECTED
1	Access Bank PLC	International	BM,OM,HHR,HIC,HFOREX	(2X5)=10
2	Diamond Bank Nigeria PLC	International	BM,OM,HHR,HIC,HFOREX	(2X5)=10
3	EcoBank	International	BM,OM,HHR,HIC,HFOREX	(2X5)=10
4	Fidelity Bank Nigeria PLC	International	BM,OM,HHR,HIC,HFOREX	(2X5)=10
5	First Bank of Nigeria PLC	International	BM,OM,HHR,HIC,HFOREX	(2X5)=10
6	First City Monument Bank PLC	International	BM,OM,HHR,HIC,HFOREX	(2X5)=10
7	Guaranty Trust Bank PLC	International	BM,OM,HHR,HIC,HFOREX	(2X5)=10
8	Skye Bank	International	BM,OM,HHR,HIC,HFOREX	(2X5)=10
9	Stanbic IBTC Bank Nigeria Ltd	International	BM,OM,HHR,HIC,HFOREX	(2X5)=10
10	United Bank for Africa PLC.	International	BM,OM,HHR,HIC,HFOREX	(2X5)=10
	Total			100

Source: www.cbc.gov.ng (2012). Banks selected constitute 50% of the study population.

Regression Analysis model:

$Y = a_0 + b_1 x_1 + b_2 x_2 + b_3 x_3$ ----------------------- $b_n x_n + ei$

Y= Fraud Independent variable

a_0= Constant

X_1= Internal control

X_2= Control/System assessment

X_3= Security

X_4 = Computerization

ei= Stochastic error.

Also

X_1= Supervisory Control

X_2= Data Control

X_3= Management Control

X_4 = Physical Control

ei= Stochastic error.(Cendrowski,2009).

6.   Data Analysis and Discussion

Hypothesis 1

Ho_1: There is no significant relationship between effective and efficient monitoring and fraud
      detection in Nigeria Commercial banks selected.

Table 2:   Relationship between effective and efficient monitoring and fraud detection in
some selected banks in Nigeria.

Variables	Co-efficient	T – value	P – value
Constant	- 62.033	-4.713	0.000***
Internal control	33.348	5.342	0.005**
Control Assessment	- 32.389	6.712	0.005**
Security	22. 832	4.815	0.000***
Computerization	27.723	3.128	0.004**

      Source: Author's Computation, 2013.

Dependent variable: estimate of monitoring activities in banks

R^2= 0.542**, Adjusted R^2= 0540*** significant at 5%

Monitoring activities = -62.033 + 33.345$_{x1}$ + 32.389$_{x2}$ + 22.832$_{x3}$ + 27.723$_{x4}$

Adjusted R^2 is 0.542 implies that 54.2 percent of the variation on performance is explained by the two variables considered in the model. Internal control had co- efficient of 33.348, T- value of 5.342 and P- Value of 0.000*** which is positively significant at 5% level means that there is positive significant relationship between monitoring and fraud detection in banks

Likewise, assessment of the activities had T- value of 5.342 are P- value of 0.005** and significant level of 5% implies that the system control assessment have significant impact on the fraud detection in the banks selected. Security had T- Value of 4.815 and P- value of 0.000*** (P < 0.05) indicates that security in terms of regis cope camera, surveillance camera alarms had positive and significant effect on the fraud detection in the selected quoted banks. Lastly, computerization in form automation had T- value of 3.128 and P-value of 0.004** (2-asterisks) means automation/ computerization on the fraud detection in these selected quoted banks.

Decision: Since variables internal control, control assessment security and computerization with P- values 0.000***, 0.005**, 0.005**, 0.000*** and 0.004** showed that there is positive significant relationship between effective and efficient monitoring on fraud detection in the selected banks. Therefore, null hypothesis which stated that there is no significant relationship between effective and efficient monitoring and fraud detection in Nigeria commercial banks selected was rejected.

Hypothesis 2

H_{02}: There is no significant relationship between control activities and fraud detection the   selected banks in Nigeria.

Table 3:   Relationship between control activities and fraud detection in the selected commercial banks in Nigeria.

Variable	Co-efficient	T – values	P – values
Constant	- 0.0072	-1.0031	0.004***
Supervisory Control	0.4370	0.2410	0.000***
Data Control	0.0980	0.3411	0.000***
Management Control	0.2330	0.4231	0.005***
Physical Control	0.2230	0.2220	0.000***

Source: Author's Computation, 2013.

Dependent variable: estimate of control activities in banks

$R^2 = 0.792$, Adjusted $R^2 = 0.79021$*** significant at 5%

Dependent variable: control activities on fraud detection

Control Activities = $-0.0072 + 0.4370_{x1} + 0.0980_{x2} + 0.2330_{x3} + 0.2230_{x4}$

Four factors were considered, supervisory control, data control, management control and physical control. Adjusted R^2 of 0.7921 implies that 79.2 percent of the variation on the control activities has significant effect on fraud detection in the selected banks.

F - ratio of 523.230 which is significant at the level of 5% for example, ($P<0.005$) implies that the regression parameters are significantly different from zero. The co-efficient of supervisory control is 0.4370 which is positively significant at ($P<0.05$) shows that supervisory activities have a significant effect on fraud detection in Nigeria commercial banks. Data control had co- efficient of 0.2330, T-value of 0.4231 and P-value of 0.000*** and significant at P(<0.05).   This implies that, review of transactions after they have been processed and completed can be effective in identifying fraudulent or corrupt activity. In addition to the possibility of detecting fraudulent transactions, such a strategy can also have a significant fraud prevention effect as the threat of detection may be enough to deter a staff member who would otherwise be motivated to engage in fraud and corruption. Management control also has significant impact on fraud detection in that relatively straightforward techniques in analyzing the management accounting reports; trends can be examined and investigated which may be indicative of fraudulent conduct. Some examples of the types of management accounting reports that can be utilized on a compare and contrast basis are: budget reports for each division; reports comparing expenditure against public sector benchmarks; and reports highlighting unusual trends in bad or doubtful debts. The organization will implement a strategy to ensure appropriate management accounting report reviews are conducted and controlled.

Physical control is positive and highly significant, indicating that the additional increase in physical control level leads to 0.24 unit increase in the fear of involving in fraudulent activities and the speed at which they will respond to the fraudulent activities. Physical control level of activities can be a critical success factor in helping banks curb the fraudulent activities of the perpetrators, helping banks to survive, manage in difficult conditions and keep that banks free or reduce fraudulent activities (Dorminey *et al*. 2011).

Decision: Since variables supervisory controls, data control, management control and physical control from control activities with P- values 0.004**, 0.000***, 0.000***, 0.005 and 0.000*** showed that there is strong, positive and significant relationship of control activities on fraud detection in Nigerian commercial banks. Therefore, null hypothesis which stated that, there is no significant relationship between control activities and fraud detection in the selected banks in Nigeria was rejected.

7.   Conclusion and Recommendations

 Fraud being a social menace can affect the economy of a nation negatively, in that it reduces the liquidity ratio of the organization involved as well as the strength and welfare of staff. It was discovered that, if fraud goes undetected or unpunished, it also affects the morale of good number of other staffs in the organizations who may want to leave their employment for fear of being corrupted or implicated by fraudulent colleagues. The study revealed that banks are really not reluctant or unable to report fraud cases to their regulatory bodies but that perpetrators get sophisticated even the more and thereby increase the occurrences of fraud cases. Adequate, effective and efficient monitoring and control activities are capable of preventing employees from indulging in fraudulent acts if effectively complied with. It was observed during the study that, lack of adequate training and teaching of ethics to bank staff can to an extent lead to fraud.

 The study discovered that the time it takes to uncover perpetuated fraud depends on the magnitude, those involved and the method of perpetuation. Benjamin (2001) corroborated this by saying that, though there seems to be effective internal audit and control in operation yet the incidence of fraud and fraudulent activities are on

the increase. Nevertheless investors and bankers still have confidence in the banking industry in Nigeria with the hope that things will get better.

In view of the above findings, the study recommended that:

Bank staff should be adequately trained and taught the ethics of the banking profession in order to minimize fraud in banks.

Lack of proper prosecution and punishment of fraudsters could be said to partially or fully cause/lead to the continuous incidence of fraud in banks. Hence, fraudulent activities should be reported to the law enforcement agents for adequate prosecution to serve as deterrence to others.

Maintenance of an effective internal audit unit/inspectorate division, and it is important that these units/divisions should be visited/monitored constantly too. Routine or regular visits will either undiscovered or prevent cases of fraud.

The re-engagement of previously terminated fraudulent staff from other organizations as well as the downturn in the economy of the nation could also be one of the major causes of fraud in the banking sector. Banks should seriously investigate the would-be staff's previous work experience and also double check with the law enforcement agencies if they had any record of wrong doings.

If the banks and other financial organizations are able to put the aforementioned recommendations into use, it will enable them to control fraud and fraudulent activities, pay more attentions to its financial health, become vibrant as expected and perform focused role that will guarantee renewal of public confidence, increased patronage, increased profitability and survival.

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