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# Investigating the Role of Risk Management on Prevention of Fraud in Nigerian Commercial Banks

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### Abstract

isk management is a concept that has changed the performance of banking activities in the area of detection and prevention of frauds in commercial banks. It tries to ensure employee and customer service satisfaction, so as to discourage fraud among bank employees and customers. This study therefore aims to investigate the role of risk management on prevention of fraud among Nigerian commercial banks with specific reference to credit risk, liquidity risk and operational risk, using United Bank for Africa Plc. Minna Branch as case study. The study is premised on quantitative analysis through the use of well-structured questionnaire. A sample size of seventy (70) respondents was drawn from total population size of hundred (100) staffs of the bank. Three hypotheses were developed to test the relationships between credit risk, liquidity risk, operational risk and fraud prevention in commercial banks in Nigeria. The finding of the study reveals that there exist significant relationships between the three independent variables and the dependent variable. The study concludes that Nigerian commercial banks should strongly enshrine risk management portfolio into banking operations in order to prevent and/or reduce fraud in commercial banks. Finally, the study recommends that bank staff should be undergoing periodic training on risk management and fraud prevention strategies.

**Keywords**: Bank Fraud, Credit Risk, Liquidity Risk, Operational Risk, Risk Management, Preventions.

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### Background to the Study

Fraud in both public and private sector is becoming a serious concern to academia around the globe. Fraud could be seen as manipulating records, financial activities and other vices in organizations with intent to benefit from the act. As a result of frequent act of fraud in organization, business organizations put a strong risk management mechanism in place to check or reduce the effect of fraud on one hand, while public sector establishes economic and financial crime commission (EFCC), Independent Corrupt Practices and other related offences Commission (ICPC), BCC, etc to check fraud and corruption among members of the society. The onus of this paper is to concentrate on investigating the role of risk management on preventing cum reducing fraud in Nigerian commercial banks.

Fraud in the banking sector is a new phenomenon. It has always been associated with some degree of fraudulent activities by staff, customers, regulators and other stakeholders. According to recent studies, fraudulent activities have assumed alarming proportion. Fraud encompasses a wide range of practices and illegal acts involving intentional deception or misrepresentation to steal in the bank. Institute of Internal Auditors & International Professional Practices Framework (IPPF) (2010) defines fraud as any illegal act characterized by deceit, concealment or violation of trust. Nwankwo (1991) posited that fraudulent activity is one of the most intractable problems in the modern day banking in Nigeria. Adewole (1992) opined that fraud is a cankerworm that has eaten deep within the fabrics of the present banking industry. Fraudsters are often carrying out unlawfully activities, either with or without compromise with internal staff.

Fraud is not peculiar to banking industry alone but cut across all the strata of national economy in Nigeria. Against this background, government in its effort tries to combat economic and financial crimes by setting up Economic and Financial Crime Commission (EFCC) and Independent Corrupt Practices and other related offences Commission (ICPC). These commissions were established by an act in the year 2002. Section 3 of the act provides for the independence and power to prosecute economic, financial and other related crimes in Nigeria. It should be noted that the success or failure of any economy is a function of performance of its banking industry. The banking industry is charged with responsibility of intermediating funds for manufacturing, mining, construction, agriculture, international trade, local government projects, etc. Therefore, the concept of risk management as a tool to mitigate fraud in the commercial banks is inevitable to the national economy. Going from the foregoing, the study aims to investigate the role of risk management on prevention of frauds in among commercial banks in Nigeria.

### **Statement of Research Problem**

Fraud is a deception, therefore it is a bit difficult to determine and/or measure in the real context. Survey results are often reflecting instances of fraudulent activities discovered in the banking industry, but investigative studies are limited about the use of risk management to mitigate frauds in commercial banks. There is no gainsaying that fraud is prevalent within organizations and remains a serious issue that needs to be investigated. Fraud is often considered as social and psychological efforts of individuals, businesses and society.

There is increasing wave of fraud in commercial banks in recent years that need urgent attention. Fraud is often resulting in high financing loss and loss of confidence in commercial banks which may eventually bring about the closing or liquidation of banking industry. There is a decimated gap between risk management and fraud prevention in commercial banks in Nigeria. On the same clime, there is little or no recent research studies on the role of risk management on prevention of fraud among commercial banks in Nigeria. Therefore, this study aims to investigate the role of risk management on prevention of fraud among commercial banks in Nigeria.

### **Research Objectives**

The main objective of this paper is to investigate the role of risk management on fraud prevention among commercial banks in Nigeria. It is therefore pertinent to study the concept of risk management from view-lens of credit risk management, liquidity risk management and operational risk management to determine the extent to which these three elements of risk management prevent and/or reduce fraud in the banking industry. In view of this, the study therefore aims to achieve the following specific objectives:

- 1. To investigate the role of credit risk management in preventing fraud among commercial banks in Nigeria.
- 2. To investigate the role of liquidity risk management in preventing fraud among commercial banks in Nigeria.
- 3. To investigate the role of operational risk management in preventing fraud among commercial banks in Nigeria.

### **Research Hypotheses**

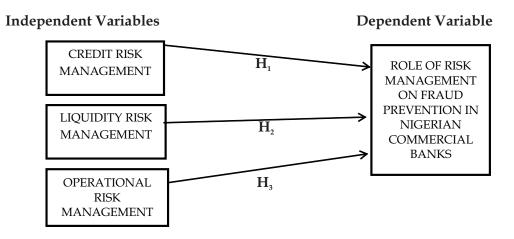
The below alternative hypotheses are formulated to assist in answering the research questions on one hand, and ensure that the research objectives are realized. Thus:

- **H**<sub>i</sub>: Credit risk management plays a significant role in preventing fraud among commercial banks in Nigeria.
- H<sub>2</sub>: Liquidity risk management plays a significant role in preventing fraud among commercial banks in Nigeria.
- H<sub>3</sub>: Operational risk management plays a significant role in preventing fraud among commercial banks in Nigeria.

### Conceptual Research Framework

A conceptual research framework is developed where three elements of risk management are conceptualized in this study. The three elements are the independent variables, while efficiency of risk management to prevent fraud among commercial banks is the dependent variable in the study. The conceptual research model is given in Figure 1 below as:

Fig. 1: Conceptual Model of Risk Management to Prevent Fraud among Commercial Banks



Salihu, A.A. and Abdullahi, B. Y. (2016): Use of Risk Management to Prevent Fraud

# Review of Related Theoretical Literatures Concept of Risk Management

Risk is an element of uncertainty or possibility of loss in business environment; therefore, it has to be properly managed. Risk management is a concept that has to do with rebuilding financial strength in the banking industry. Cantor and Parker (1997) did an intensive and consolidated study on risk management especially in the banking industry. The scholars postulated different risk models such as credit risk, operational risk, market risk, etc. Financial rebuilding has greatly impacted on banking industry. It serves a key motivational factor to inform bank operators on where to invest their scare capital resources, especially when it comes to internal growth in the banking industry.

### **Credit Risk Management**

Credit risk management can as well be referred to as default risk. Credit risk management is associated with repayment of loans and advances granted individual customers, corporate organizations and government institutions, and at times, customers do often fail in repayment of the said loans and advances. This is what is considered as credit risk management. According to Ngwu (2006), credit risk may lead to losses when bank customers fail to meet their financial obligations. Thus, the bank will not be able to retrieve both the principal and interests on loan issued to customers. The motive behind credit risk management is to minimize the risk of non-payment of loans and advances and maximize banks' risk adjusted rates of return by assuming and maintaining credit exposure with acceptable parameters.

Bagchi (2003) conducted study on credit risk management among banks, and found that risk identification, risk measurement, risk monitoring, risk control and risk audit are basic ingredients for risk management in banking industry. Muninarayanappa and Nirmala (2004) corroborated the study of Bagchi (2003) by outlining the concept of risk

management to include maintenance of proper credit risk environment, credit rating system, credit strategy and policies. According to Banerjee and Farooqui (2009), the principal objective of the credit risk management is to maximize the performing asset and minimize the non-performing asset as well as ensuring the optimal performance of loans and advances in the banking industry.

There are several types of credit risk management. Few amongst these risks are credit default risk, exchange rate risk, concentration risk, country risk, etc. According to Khan (2008), credit default risk is the total risk arising from debtors. It is a risk where debtors are unlikely to meet up with loan/advance obligations. Credit default risk may impact on credit transactions such as loans, advances, securities and derivatives. Concentration risk on the other hand is term used in the banking industry to refer to the overall spread of outstanding accounts over the number of debtors in the banking industry. Concentration risk is often arising from uneven distribution of loans/advances to borrowers. Muninarayanappa and Nirmala (2004) postulated that concentration risk may exist in asset categories such as real estate, automobiles, business loans, etc. According to Froot and Stein (1998), country risk refers to risk of doing business or investing in a country or probably borrowing from a country. It is sometimes referred to as a political risk.

### Liquidity Risk Management

In banking term, liquidity refers to availability of currency (cash-flow) in banking industry. Thus, it is the level of solvency in currency in the banking industry. Liquidity risk therefore is seen as the management of risk of funding in terms of cash-flow and/or market (asset) in the banking industry. Fund liquidity is often manifesting as credit risk, while market liquidity risk manifests as market risk. Simply put, market liquidity risk is a financial problem created by the interaction between sellers and buyers in the marketplace. According to Pandey (2006), liquidity risk is the type of risk that may arise from acute shortage of funds. Thus, firms may find it difficult to generate enough quantum of funds under which short-term obligations can easily be met. Ngwu (2006) posited that liquidity management is the act of storing enough funds and raising enough funds quickly from the market to satisfy depositors when it comes to issuing loans and advances.

There are challenges militating against liquidity risk management in the banking industry. Few of the challenges are securitization, complex financial instruments, funding from capital markets, financial innovation and global market development, payment system and intraday liquidity, cross border flows, etc. According to Cifuentes (2002), challenges of liquidity risk management is inability to fund increases in assets and meet obligations as they come due. Securitization is being used to create revenue through buying and distributing third party assets. According to Bervas (2006), securitization is often used by banks to expand sources of funding and free up additional balance sheet capacity. It provides liquidity risk which must be carefully managed. Allen and Gale (2005) outlined the use of complex financial instruments to include the use of bonds, securities, derivatives, etc to tackle liquidity risk management in the banking industry. On the other hand, Bernardo and Welch (2004) opined that financial innovation and global market development has extensively transformed liquidity risk management in the banking

industry. As a result of global market development, financial innovation has brought about greater reliance on capital markets, which seems to be a volatile source of liquidity solvency in the banking industry. Funding from capital markets on the other hand has been using wholesale funding sources such as commercial paper, repurchase agreements, money markets and other commercial money market instruments (Diamond and Rajan, 2000).

On the same clime, payment system and intraday liquidity is another major challenge under liquidity risk management in the banking industry. Eichberger and Summer (2005) posited that many banks are facing increasing challenges with respect to intraday liquidity management in relations to customers and banks. This challenge arises as a result of new financial innovation that has to do with payment and settlement systems such as the adoption of large-value payment systems with intraday conditions. On another clime, the new financial innovation has reduced some impediments on interbank credit risk as well as operational risks. The volume of activities on cross-border flows has increased tremendously. Many financial institutions have increased their international business and dependence on international markets. Therefore, there must financial cross-border flows, and most of the international financial institutions are managing their intraday and overnight transactions in a centralized system across currencies and across borders.

### **Operational Risk Management**

Operational risk management could be defined as risks associated with operations in the banking industry. According to Caballero and Krishnamurthy (1999), operational risk management are operation risks inherent in the handling of customer transactions and errors, unethical conduct and other circumstances that may lead to losses. Examples of such operational risk management may be disparities between actual balances and cash balances and complaints from customers covering transactions. Pfleiderer (1998) posited that accurate and rapid fulfillment of transactions requested by customers is the foundation of trust in the services of banking transactions, and as banking activities become more diverse, proper management of these activities are essential to lessen and minimize operations risk. The concern here is that system failure or human error will result in great loss to the bank, and dent the corporate image of the banks. Therefore, operational risk is conceptualized as the risk of loss arising from failed processes, people and systems in the banking industry. Operational risk can occur as a result of poor design, inadequate trained personnel and external disruptions.

Operational risk management in banking industry is equally being faced with challenges. Few of these challenges are identified by George (2004) as in-depth risk management, deliberate risk management, time critical risk management, assess-the-situation risk management, balance-your-resources risk management, communicate-risks-intentions risk management, take action and monitor change risk management, etc.

Briefly, In-depth risk management is often used with adequate time to plan and prepare before a project is implemented. Few examples of in depth risk management may include training, drafting instructions and requirements and acquiring personal protective equipment. Deliberate risk management is used at routine periods through the implementation stage of projects. Examples include on-the-job training, safety brief, performance review, etc. Time critical risk management is used during operational exercises such as tools used for check-lists and change management. There are three conditions attached to the assess-the-situation risk management. These are task loading, additive conditions and human factors. Balance-your-resources could be balancing resources in three ways, viz-a-viz: (i) balancing resources and options available – evaluating and leveraging all the informational, labour, equipment and material resources; (ii) balancing individual versus team effort – observing individual risk and warning signals; and (iii) balancing resources versus hazards – estimating how well prepared you are to safely accomplish a task and making judgment.

# **Concept of Fraud**

Fraud is perceived to be social and psychological in nature. Fraud could be defined as benefiting from mistake that is deliberate. The genesis of fraud is traceable to the commission of mistakes. Nwankwo (1991) postulated that the occurrence of fraud is often traced to the absence of inadequate breakdown of internal control system in organizations. Fraud can equally be perceived in employee, if the employee desires to get rich quickly using illegitimately means to amass wealth. In case of banking industry, fraud could be perceived from the following perspectives. Thus: (i) misrepresentation (ii) breach of trust (iii) passing of fictitious entries (iv) fraudulent encashment of instruments such as cheques, drafts and bill of exchange (v) unauthorized handling of securities and (vi) tampering with records/vouchers. There are different ways to perpetrate fraud in the banking industry. These ways are identified by Sidney (1986) to include (i) internal fraud—this type of fraud involves bankers/staff in the fraud; (ii) external fraud—this type of fraud involves bankers/staff in the fraud; (ii) external fraud—this type of fraud involves both internal and external stake players.

There are different types of fraud in the banking industry. Few of these frauds are: cheque fraud, loan fraud, computer fraud, cash fraud, fraud involving balancing with other banks, fraud in foreign exchange transactions, purchase bill fraud, inter-branch account fraud, etc. cheque fraud according to Bhasin (2007) refers to manipulation involving issuance of cheque. This may not be detected until when the bank internal auditor does a diligent work to prevent fraud on the issuance, credit and clearing of cheque in the banking industry. Loan fraud on the other hand refers to manipulation of due process on loan issuance in the bank by employee of the bank in question. Harris and William (2004) examined the reasons for loan fraud in the banking industry. According to the Scholars (i.e. Bhasin and William), lack of qualified staff, customer's reluctance to supply required information, frequent turnover by company directors may be responsible for loan fraud in the banking industry. A fraud-friendly environment may be characterized by lack of internal control, absence of requisite risk control mechanism, staff apathy, etc in the

banking industry. Another type of fraud committed in the banking industry is computer fraud. Sanusi (1986) posited that computer presents a hazard on greater scale. Computer fraud may arise from electronic fund transfer operations and data collection stage. Computer fraud at times may take the form of corruption of the software package and/or break into the system through remote sensory system. On the other side of the coin, cash fraud is perceived to be shortage in cash balances with individual cashier arising out of genuine mistakes such as short receipts or excess payments which are often discovered after the close of daily transactions. It is not categorized as fraud if it is reported at the end of daily transactions. But, it is fraud it is not reported. Besides the fraud arising from cash shortage, there could be cases where cashiers attempt to conceal through instrument/voucher kept along with cash indicating that the amount mentioned has been paid out of cash after cash balance of the daily transaction. Balancing with other banks involves fraud wherein banker's account is debited in respect of transactions which are not genuine. The fraud may occur as a matter of responding to debit advice received from bank with whom the account is maintained.

# Research Methodology Research Design

According to Burns and Grove (2001), research design is perceived as blue print of an investigative study. Designing a study enables the researchers to plan and implement the study in a way that will bring out the intended inferences. It involves techniques used by researcher(s) to elicit and analyze data in order to obtain the findings of the study. In this study, the researchers used structured questionnaire to elicit data from respondents. The respondents in this study are staff of the two branches of UBA Plc, Minna Metropolis, Minna, Niger State.

### Population and Sample of the Study

According to Polit and Hungler (1999), population of a study is an aggregate or totality of objects, subjects and/or members that conform to a set of specification. Frey (2003) defined sample as taking representative selection from the population. The population of the study is Seventy (70), which represents the entire staff of the two branches of UBA Plc in Minna Metropolis and the sample of the study is Sixty (60), which is determined through the use of Yamani Sample Size Formula.

### Sampling Framework

Devos (2002) argued that population and size of sample should be inversely proportionate. In this study, the sample size is derived using Yamani formula of sample size. Thus:

$$n = \frac{N}{1 + N(a)^2}$$

Where: 'n' is the sample size,

'N' is the total population which is 60,

'1' is constant and

' $\alpha$ ' is the level of significance.

The level of significance for this study is 5% i.e. out of every 70 questionnaires there is significance of 5, out of which 95% of the information collected would be considered as true.

$$n = \frac{70}{1+70 \cdot 0.05^{-2}}$$

$$n = \frac{70}{1+70(0.0025)}$$

$$n = \frac{70}{1+0.175}$$

$$n = \frac{70}{1.175}$$

$$n = 60$$

Therefore, the sample for the study is sixty (60), representing 86% of the total population.

### Method of data Analysis

Data analysis refers to strategy used to examining the relationship between for which data is elicited. For the purpose of this study, the researchers used Statistical Package for Social Sciences (SPSS) version 21 to analyze the data elicited from respondents. The statistical tool adopted in the study is multiple regression analysis and a model is designed in order to test the formulated hypotheses in the study. The model is given below as:

$$Y = \alpha + b_1 X_1 + b_2 X_2 + b_3 X_3$$

### Where:

Y is the value of the Dependent variable (Y),

α (Alpha) is the Constant or intercept

 $b_1$  is the Slope (Beta coefficient) for  $X_1$ 

 $X_1$  First independent variable that is explaining the variance in Y

b, is the Slope (Beta coefficient) for X,

X<sub>2</sub> Second independent variable that is explaining the variance in Y

 $b_3$  is the Slope (Beta coefficient) for  $X_3$ 

 $X_3$  Third independent variable that is explaining the variance in Y

# $Analysis\, of\, Data\, and\, Test\, of\, Hypotheses$

### **Analysis of Data**

Table 1: Variables Entered/Removed<sup>a</sup>

Mode	Variables	Variables	Method
1	Entered	Removed	
1	ORM, LRM, CRM <sup>b</sup>		Enter

a. Dependent Variable: EFP

b. All requested variables entered. **Source**: Researchers' Survey (2016)

Table 1 show that both the dependent and independent variables are entered by SPSS software. Effective fraud prevention (EFP) is entered as dependent variable, while other three independent variables are entered as requested variables.

Table 2: Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		В	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.464	.297		1.563	.001		
	CRM	.415	.118	.434	3.528	.000	.690	1.449
	LRM	.119	.114	.127	1.047	.000	.707	1.415
	ORM	.198	.128	.160	1.543	.000	.969	1.032

**a. Dependent Variable: EFP Source:** Researchers' Survey (2016)

Table 2 shows the model, un-standardized coefficients, standardized coefficients, significant levels and co linearity statistics. The tolerance level of the three independent variables is given as 0.690, 0.707 and 0.969. With the high level of tolerance level of above 0.500, the variables are accepted as indicators to prevent fraud in the banking industry.

The model on the other hand is obtained from Table 1 above as:

Y = 0.464 + 0.415 + 0.119 + 0.198

Table 3: Model Summary<sup>b</sup>

Mode	R	R Square	Adjusted R	Std. Error of
1			Square	the Estimate
1	.558a	.311	.280	.39663

a. Predictors: (Constant), ORM, LRM, CRM

b. Dependent Variable: EFP

Source: Researchers' Survey (2016)

Table 3 reveals that the model is fitted, having coefficient of correlation (R) of 0.558. The figure indicates that there is high positive relationship between the role of risk management, investigating credit risk, liquidity risk, operational risk and prevention of fraud in the Nigerian Commercial banks. R-square is given as 0.311. This value indicates that there exists 31% of putting to use the instrument of fraud prevention, while the remaining 69% explains the variance of the role of risk management in the banking industry. The adjusted R-square is given as 0.280, and it should be noted that the higher the adjusted R-square, the lower the standard deviation.

### **Test of Hypotheses**

Test of Hypothesis One (H₁)

### **Hypotheses One**

 $H_i$ :- Credit risk management plays a significant role in preventing fraud among commercial banks in Nigeria.

### **Decision Rule**

Since Psig. <Pvalue (0.05) hence, the null hypothesis ( $\mathbf{H}_{01}$ ) is rejected while alternative ( $\mathbf{H}_{1}$ ) is accepted.

### Interpretation

In Table 2, the significant level for credit risk management is given as 0.000, which is far below the Pvalue. Therefore, the researchers accept the alternative hypothesis ( $H_1$ ). Thus, the variable (credit risk management) is significant to prevention of fraud among commercial banks in Nigeria.

### Test of Hypothesis Two (H<sub>2</sub>)

H<sub>2</sub>:- Liquidity risk management plays a significant role in preventing fraud among commercial banks in Nigeria.

### **Decision Rule**

Since Psig. <Pvalue (0.05) hence, the null hypothesis ( $H_{02}$ ) is rejected while alternative ( $H_2$ ) is accepted.

# Interpretation

In Table 2, the significant level for liquidity risk management is given as 0.000, which is far below the Pvalue. Therefore, the researchers accept the alternative hypothesis ( $H_2$ ). Thus, the variable (liquidity risk management) is significant to prevention of fraud among commercial banks in Nigeria.

### Test of Hypotheses Three (H<sub>3</sub>)

 $H_3$ :- Operational risk management plays a significant role in preventing fraud among commercial banks in Nigeria.

### **Decision Rule**

Since Psig. <Pvalue (0.05) hence, the null hypothesis ( $\mathbf{H}_{02}$ ) is rejected while alternative ( $\mathbf{H}_{2}$ ) is accepted.

### Interpretation

In Table 2, the significant level for operational risk management is given as 0.000, which is far below the Pvalue. Therefore, the researchers accept the alternative hypothesis  $(H_3)$ . Thus, the variable (operational risk management) is significant to prevention of fraud among commercial banks in Nigeria.

### **Discussion of Findings**

From analysis of data and test of hypotheses, it is clearly shown that the three independent variables are highly significant to fraud prevention among commercial banks in Nigeria. Nigerian banks should embrace the concept of risk management as a concept to prevent fraud among commercial banks in Nigeria.

### Conclusion

The importance of risk management cannot be over emphasized as it is being used to reduce and/or prevent fraud in financial institutions. Security is key and increasingly becoming an important issue in today banking industry. Banking industry as an institution that intermediate funds in the national economy cannot be exposed to fraudulent activities either by the external influence or stake players. Therefore, there is need for continuing study on how to guide against the occurrence of fraudulent activities in the banking industry. Fraud may erode confidence and damage the integrity and stability of the economy. Therefore, researchers should always be on the move to conduct study that will enhance the confidentiality and issues that will prevent fraud in Nigerian financial institutions.

### Recommendations

Based on the findings of this study, the following recommendations are proffer:

- (i) Fraudsters should not have access to banking jobs;
- (ii) There should be constant rendition of monthly, quarterly and annual reports;
- (iii) There should be constant oversight audit process in the banking industry;
- (iv) Strong technology and communication gadgets should be installed in the banking industry to mitigate against fraud; and
- (v) Creation of awareness and sensitization about role of risk management should be embarked upon constantly.

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