

# THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

## Internal Control Information and Communication Effect on Operational Risk of Quoted Banks in Nigeria

**Ozuomba Chidinma N.**

Lecturer, Department of Accounting, Hezekiah University, Nigeria

**Nwadiolor Eugene O.**

Lecturer, Department of Accountancy, Tansian University Umunya, Nigeria

**Ogujiofor Magnus Nkemjika**

Lecturer, Department of Accounting, Novena University, Nigeria

### **Abstract:**

*Operational risk disclosure is expected to close the gap in communication between banking management and its stakeholders especially lenders and investors. The objective of this study is to investigate the effect of internal control information and communication on operational risk of quoted banks in Nigeria. 16 selected quoted banks in the Nigerian stock exchange from 2013-2017 were studied based on the 2012 banking reform on corporate governance by the then CBN governor Sanusi Lamido Sanusi's "Project Alpha Initiative" (PAI). Data were collected from banks published annual reports, CBN statistical bulletin, NDIC report, CBN fact book, company website and banks' Pillar III disclosure report for the relevant years sampled for analysis. The analysis carried out included pooled OLS regression, fixed and random effect and Hausman tests to determine the most suitable model for result interpretation. This was conducted with the aid of E-View 7 software. It was concluded that information and communication (FDB, FDF, and TLG) has a significantly positive effect on operational risk (OPR) and can help in curbing operational risk losses in the banking sector. It was recommended that there should be timely information communication in the banking sector of Nigeria, time lag between sending and receiving information should be minimized to the barest minimum and full disclosure in the financial statement should be embraced to help investors make investment decisions as well as inform the judgment of financial statement users*

**Keywords:** Internal control, information, communication, operational risk

### **1. Introduction**

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 (COSO, 1992).

Corporate organisations are obligated to disclose fully issues that concerns their operations in order to help investors make investment decisions as well as inform the judgment of financial statement users (Hossian, 2008). Operational risk disclosure is expected to close the gap in communication between banking management and its stakeholders especially lenders and investors (Verrechia 1999; Archambault & Archambault, 2003). Wallace, 1988, Adeyemi, 2006 and Ofoegbu & Okoye, 2006 have investigated the extent of disclosure of Nigerian firms in the banking sector, they all found the same result of weak corporate reporting practices. The internal control system of an organization is shouldered with the responsibility of improving effectiveness and efficiency of activities. They ensure that laid down rules, laws, policies and guidelines are adhered. Financial reporting quality and reliability of the internal control system of an organization is important if organizational goals must be achieved. Internal control system assists banks in the prevention and detection of fraud and errors as well as the causes of such financial losses that may arise. One of the main reasons for banking failures which results in major financial loss and even bankruptcy is high risks taken by bank management on an excessive scale and inability of controlling them. The lack of an internal control system whose duty is to keep the risks or major breakdowns within an existing internal control system under control poses a threat against the success of the banking sector. These operational risk has risen drastically in recent times. Corporate governance in many banks failed because their boards ignored best practices for various reasons, ranging from being misled by executive management and participating in obtaining unsecured loans at the expense of depositors, to lack of capacity to enforce good governance on bank management. Uneven flow of information in the system. There were also the problems of the overbearing influence on the boards by the Chairmen/CEOs, lack of independence of some boards, unclear lines of authority to failure to make meaningful contributions to safeguard the growth and development of the banks, weak ethical standards, failure to adhere to well established policies and procedures, poor communication among employees, and ineffective board committees information flow. These Internal control weaknesses are revealed in operational losses in

banks. This obstacle has also tempered with investors’ confidence in the business world. Cabedo and Tirado (2004) are of the view that current practice of companies’ external reporting is considered insufficient because it is lacking an adequate information on the corporate organization so as to aid investors in making investment decisions. The main objective of this study is to investigate the effect of internal control information and communication on operational risk of quoted banks in Nigeria. This research work is anchored on Contingency theory.

**2. Methodology**

The ex-post factor design type was used in this research work because it deals with historical facts and is designed to test an event that has already taken place. (Asika 2006; Agbadudu, 2002 cited in Ordu, Eneke and Anyanwaokoro, 2014; Onwumere 2009). Secondary data was used in this work. The data machinery adopted for secondary data was Panel data set from banks published annual reports, NDIC report, CBN statistical bulletin, CBN fact books and banks’ Pillar III disclosure report was utilized for this study. The panel covers a time frame of 5 years from 2013-2017 and a cross section of 16 banks from the population of 23 commercial Banks quoted in the Nigerian Stock Exchange as at 28 September 2018. However, Heritage bank, Savannah bank, Sky bank, keystone bank, Enterprise bank, Rand bank and Jaiz bank were eliminated based on availability of data, commencement of operation and Islamic bank with different characteristics from commercial banks. The sample size is justified based on the theory of Mugenda and Mugenda, (2003), that a good sample covers at least 10%-30% of the representative population. Thus, at 67% coverage the sample is a fair representation of the population and sufficient for this study. Multiple regression analysis technique was used in this study. Panel data regression model was adopted in order to control for individual unobserved heterogeneity, obtain more accurate results because it provides more observations and information to work with, it allows a follow up on individual dynamics and before and after effect can be easily estimated (Temple, 1999; Woodridge, 2002; and Hsiao, 2003 as cited in Alajekwu, 2018). Cross-sectional and time series data are pooled in the regression to overcome the problem of insufficient degree of freedom. The Fixed Effects model (FEM) can be used to control the unobserved characteristics. Random effects model (REM) assumes that firm specific characteristics are not constant and the time effects are absent. The Hausman’s specification test in Panel data models was conducted for fixed and random effects test of individual characteristics or time effect. The core difference between fixed and random effect models lies in the role of dummy variables.

		<b>Variables</b>	<b>Proxy Variables</b>
Dependent	Operational Risk:	3 years Gross income @ 15% divided by 3	OPR
Independent	Information and Communication	Feedback Feedforward Time lag	FDB FDF TLG

*Table 1: Operational Definition of Variables  
Source: Author’s Conception, 2019*

We indicate that there are bank-specific and other variables which could affect the dependent variable in one way or the other and must be controlled. These variables are bank size and Leverage.

$$\text{Model: } opr = (bds, ias, bdi, bef) \dots \dots \dots 1$$

$$opr_{it} = a_{0it} + b_1 + bds_{it} + b_2 + ias_{it} + b_3 + bdi_{it} + b_4 + bef_{it} + \epsilon_{it} \dots \dots \dots 2$$

$$opr_{it} = a_{0it} + bds_{it} * ias_{it} * bdi_{it} * bef_{it} * bks_{it} * lev_{it} + \epsilon_{it} \dots \dots \dots 3$$

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$  = coefficients

$\epsilon_i$  = error terms.

**3. Data Presentation and Analysis**

Variables	Commercial Banks				
		Mean	Max	Min	Std. Dev.
Dependent Variable	Operational Risk	5.38	6.87	4.30	30.09
Information and Communication	Feedback (FDB)	0.69	1.00	0.00	17.19
	Feedforward (FDF)	0.61	1.00	0.00	18.84
	Time lag (TLG)	0.67	1.00	0.00	17.44

*Table 2: Descriptive Analysis for Internal Control Variables and Operational Risk Variable from 2013-2017  
Source: Output Generated Using Eviews 7*

Information and communications is represented by three (3) proxy variables FDB, FDF and TLG explained as follows: (i) Feedback measured by 0 and 1. 0 is used when it takes more than 48hrs for board decision to be communicated to management and more than two weeks to be implemented and 1 when information is timely. This showed a mean of 0.69, maximum value of 1.00, minimum of 0.00 and standard deviation of 17.19. (ii) Feedforward measured by 0 and 1. 0 is used when it takes more than 48hrs for management decision to be communicated to the Board and more than two weeks for board decision. This showed a mean of 0.61, maximum value of 1.00, minimum of 0.00 and

standard deviation of 18.84. (iii) Time Lag measured by 0 and 1. 0 is used when there is no delay in feedback and feedforward and 1 when there is delay. This showed a mean of 0.67, maximum value of 1.00, minimum of 0.00 and standard deviation of 17.44.

### 3.1. Normality Test

Variables	Commercial Banks		
		Jarque-Bera	Prob.
Dependent Variable	Operational Risk	1.59	0.35
Information and Communication	Feedback (FDB)	14.76	0.00
	Feedforward (FDF)	13.29	0.01
	Time lag (TLG)	14.08	0.00

Table 3: Result of Jarque- Bera Statistics for the Test of Normality  
Source: Output Generated Using Eviews 7

Jarque-Bera test of normality was used to identify the normality of error term. It is tested at 0.05 level of significance. The decision rule is to reject the null hypothesis, when P. value is less than 0.05 level of significance, otherwise, do not reject. The null hypothesis that error terms are normally distributed is rejected at 5% level of significance for all the variables. Thus, error term is not normally distributed. The variable used in the study lacks normality for selected commercial banks quoted in the Nigerian Stock Exchange.

### 3.2. Test for Multicollinearity

	OPR	BKS	LEV
OPR	0.729393		
BKS	0.065918	0.798290	
Lev	-0.218296	-0.345518	0.747946

Table 4: Correlation Matrix for Test for Multicollinearity in Operational Risk (Opr) and Control Variables (Bks and Lev) of the Study.  
Source: Output Generated Using Eviews 7

The test is conducted to check for suitability of the of the control variables in the model. Bank size and Leverage being control variables were tested for the existence of multicollinearity between variable using correlation matrixes as shown on table 4. The existence of collinearity shows that the regression cannot precisely intercept the influence of independent variable towards dependent variable (Gujarati and Porter, 2009). High pair wise correlation between two variables means there is a serious multicollinearity problem in the regression model. The level of high multicollinearity exist when the correlation between two variables exceed 0.8 (Gujarati and Porter, 2009). The result on table 4 showed correlation matrix for quoted banks. The highest pair wise correlation is 0.79 and the lowest is -0.21. Since it is not more than 0.8, the researcher concludes that the two variables do not suffer from serious multicollinearity and that the model in which the objective of the study is anchored is suitable for regression analyses.

- H0: information and communication does not have significant effect on operational risk.

Independent Variables	Pooled OLS	Fixed Effect (Preferred Model)	Random Effect
Constant (C)	5.191865* (10.10583)	5.189148* (9.733047)	4.943228* (7.152091)
Feedback (FDB)	0.060915* (0.406122)	0.070295* (0.436522)	0.001855* (0.030868)
Feed forward (FDF)	-0.047084* (-0.327893)	-0.055182* (-0.365899)	-0.053181* (-0.942173)
Time Lag (TLG)	0.137966* (0.922687)	0.139575* (0.902803)	0.071315* (1.218837)
Bank Size (BKS)	-0.005280* (-2.199771)	-0.028710* (0.494289)	-0.045921* (-1.104690)
Leverage (LEV)	0.005280* (10.10583)	0.005269* (2.101734)	0.012585* (1.569632)
R-Squared	0.084603*	0.087514*	0.900624*
F-Statistics (Prob.)	(0.260974)	0.724635	25.82886(0.000000)
Durbin Watson (DW)	0.183778	(0.684723)	1.526130
Hausman Test		174.984190(0.0000)**	1.478024(0.9156)**

Table 5: Showing the Effect of Information and Communications on Operational Risk  
Legend: Dependent Variable: Operational Risk (OPR), Significant At \*1%, \*\*5%  
Source: E-Views 7, 2019

Three proxy variables representing the model on the effect of information and communications on operational risk were employed to test the hypotheses of this study. From the regression analysis result as shown on table 5, it is observed that  $r^2$  for pooled OLS, fixed effect and random effect are 0.08 and 0.08 respectively and that of random effect is 0.90 that is, for each model used 08%, 08% and 90% of the dependent variable (OPR) is explained by the Independent variables: FDB, FDF and TLG and control variable BKS and LEV. The coefficient value of the independent proxy variable: FDB, TLG and LEV are positively correlated with the dependent variable OPR while FDF and BKS are negatively correlated with the dependent variable OPR. This implies that any increase/decrease in the independent variables will result in an increase/decrease in the dependent variable. From the further test conducted, the redundant (Hausman) fixed effect model showed a value of 174.984190 with a probability of 0.0000 and the Hausman random effect model showed a value of 1.478024 and a probability of 0.9156. The fixed effect is preferred because the probability of the Chi. Square is less than 0.05% level of significance. From the result obtained, we accept the alternate Hypotheses which states that information and communications has a significantly positive effect on operational risk of quoted banks in Nigeria and reject the null hypothesis. The variables employed showed positive value that is, any increase/decrease in any of the independent variables will lead to an increase in the dependent value except for FDF and BKS that is negatively significant. Durbin Watson is close to 2.0 as such the variables are highly significant. Probability values of the coefficient at 0.1 – 0.7 implies that the regression parameters are significantly different from zero and the probability for the variables reveals a normal curve. The F-statistics is 25.82886 to show that the coefficient of explanatory variables has a significant effect on operational risk in the annual financial reports of quoted companies in Nigeria. From the result obtained, we accept the alternate Hypothesis which states that information and communications has a significantly positive effect on operational risk of quoted banks in Nigeria and reject the null hypotheses.

#### 4. Findings

The main objective of this study is to investigate the effect of internal control information and communication on operational risk of quoted banks in Nigeria. Secondary data was sourced from annual reports, banks websites, CBN statistical bulletin, CBN fact book, NDIC report and banks pillar III disclosures. Using a sample of 16 quoted firms in the period 2013 to 2017; the study first provided both empirical and statistical evidence on the aggregate impact of the three proxy variables internal control information and communication on operational risk of quoted banks in Nigeria. Secondly, the study also provides evidence information and communication have a significantly positive effect on operational risk of quoted banks in Nigeria except for Feed forward (FDF) and Bank size which has a significantly negative effect on operational risk of quoted banks in Nigeria. It was concluded that information and communication has a significantly positive effect on operational risk and can help in curbing operational risk loses in the banking sector. It was recommended that there should be timely information communication in the banking sector of Nigeria, time lag between sending and receiving information should be minimized to the barest minimum and full disclosure in the financial statement should be embraced to help investors make investment decisions as well as inform the judgment of financial statement users.

#### 5. References

- i. Adeyemi, S.B. (2006). *Impact of Accounting Standards on Financial Reporting in Nigeria*. Unpublished PhD. Thesis, University of Lagos.
- ii. Archambault, J. J., & Archambault, M. E. (2003). A Multinational Test of Determinants of Corporate Disclosure. *The International Journal of Accounting*, 38, 173-194.
- iii. Asika, N. (2006). *Research Methodology in Behavioural Sciences*. 2<sup>nd</sup> Edition, Longman Nigeria PLC.
- iv. Alajekwu, U. B. (2018). *Dividend policies and performance of quoted firms in Nigeria*.
- v. Unpublished Doctoral thesis presented at Nnamdi Azikiwe University Awka. COSO (Committee of Sponsoring Organisations of the Treadway Commission) (1992). Internal
- vi. Control-Integrated Framework. New York: AICPA.
- vii. Gujarati, D. N. and Porter, D.C. (2009). *Basic Econometric*. 5<sup>th</sup> edition. Kuala Lumpur. McGraw-Hill Higher Education.
- viii. Hossain, M. (2008). The Extent of Disclosure in Annual Reports of Banking companies: the case of India. *European Journal of Scientific Research*, 23(4), 659-680.
- ix. <http://www.eurojournals.com/ejsr.htm>
- x. Mugenda O.M. and Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi press, African Center for Technology studies (ACTS).
- xi. Onwumere, J.U.J. (2009). *Business and economic research methods*. Enugu: Vougasen publishers. 29-67.
- xii. Ordu, M.M., Enekwe, C.I. and Anyanwaokoro, M. (2014). Effect of Dividend payment on the market price of shares: A study of quoted firms in Nigeria. *IOSR Journal of Economics and Finance*, 5(4) 49-62.
- xiii. Ofoegbu, G. and Okoye, E. (2006). The relevance of accounting and auditing Standards in corporate financial reporting in Nigeria: Emphasis on compliance. *The Nigerian Accountant*, 39(4), 45-53.
- xiv. Verrecchia, R. E. (1999). Disclosure and the Cost of Capital: A Discussion. *Journal of Accounting and Economics*, 26, 271-283
- xv. Wallace, R. S. O. (1988). Corporate financial reporting in Nigeria. *Accounting and Business Research*, 18 (72), 352-362.