

## Internal Control Process and Organizational Performance of Selected Deposit Money Banks in Nigeria



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**ABSTRACT:** This study investigated the relationship between internal control process and organizational financial and non-financial performance of selected deposit money banks in Nigeria. with specific objectives of determining the effect of risk assessment and monitoring activities the performance of DMBs in Nigeria. Primary data was collected using questionnaires administered to top level employees and other employees of 11 banks using a purposive random sample of 150 respondents out of which 97 responses were collected. The data were analyzed using descriptive statistics, correlation analysis, exploratory factor analysis and regression with aid of Statistical Package for Social Sciences (SPSS) version 26. The result of the analysis shows that risk assessment risk assessment practice has a positive impact on the performance of deposit money banks in Nigeria ( $B= 0.390$ ,  $t= 4.019$ ,  $p < 0.01$ ) and that monitoring activities have a positive impact on the performance of deposit money banks in Nigeria ( $B= 0.415$ ,  $t= 4.019$ ,  $p < 0.01$ ) Each has a positive and significant impact on financial, non financial and overall organizational performance DMBs in Nigeria. Based on the findings, it is concluded that internal control mechanism is a significant predictor of organization financial and non-financial performance and that effective internal control systems must incorporate the effects of risk assessment and control activities to enhance organizational performance of DMBs. The study therefore recommended that internal control systems especially risk assessment and monitoring activities are significant areas and management of DMBs in Nigeria should give great attention to them in order to improve organizational performance.

**KEYWORDS:** Risk assessment, Monitoring Activities, Control Activities, Financial performance, Non financial performance.

### INTRODUCTION

Deposit money banks occupy a central position within the nation's financial system and are essential agents in the development process of the economy. Just like every other organizations, they are setup with the primary aim of making profits, therefore, profitability and/or customer satisfaction are generally used to evaluate their performance. Lots of interest are being generated as a result of the several changes taking place in the banking sector, with regards to how effective is the internal control system in the sector due to the key role it plays in ensuring achievement of organization's goals.

To perform excellently, organizations must critically examine how they treat customers and all other stakeholders in their business and choose the best way to continue meeting the needs of these crucial stakeholders (Livingstone & Isaac, 2017). Due to this, organizations must continuously improve their service systems through enhanced service quality, asset accumulation, value generation, and the maintenance of a flexible internal control system that is integrated with the organization's operational activities. This is most effective when the internal control plans integrated into the organization's system become an integral part of the organization's success in terms of continual performance improvement as a component of the organization's competitive advantage(Kinyua et al. 2015).

Tekalign (2019) stated that the performance of banks is a good indicator of how effectively management is allocating resources. Good financial and non-financial performance is desired in any organization, and every effort is made to improve it over time. Andrew (2018) pointed out that as expensive as it may be to put in place and maintain, internal control systems have evolved with time. Therefore it is critical for any organization to have effective internal control mechanisms in place in order to perform efficiently. According to Eke (2018)internal controls are the processes designed and implemented by those in charge of governance in the organization, management and other employees to provide reasonable assurance about the achievement of the entity's objectives in terms of financial reporting reliability, financial and non-financial performance, efficiency and effectiveness of

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operations and compliance with applicable regulations and laws.

It has been shown by scholars that lack of adequate internal controls in the banking sector has the unintended consequence of weakening the industry's ability to effectively provide needed services while also encouraging fraudulent activities such as collusion, the conversion of real and deliberate mistakes into financial assets, and the embezzlement of funds (Andrew, 2018; &Gberevbie 2011). Whether or not Nigeria's DMBs can improve their performance is a key topic to be answered in this study. In light of the foregoing and the noted issues, it appears that the establishment and implementation of an effective internal control system are essential for any deposit money bank.

Due to this, it has yet to be determined whether or not the internal control system has a major impact on performance. This research was prompted by the fact that there are still numerous unresolved issues in Nigeria's DMBs' internal control systems. The aim of this study is to establish the relationship between internal control and organizational performance of selected deposit money banks in Nigeria. In order to achieve the objective of this study, the following hypotheses were formulated and tested:

H<sub>01</sub>: Risk assessment has no significant effect on the performance of deposit money banks in Nigeria.

H<sub>02</sub>: Monitoring activities has no significant effect on the performance of deposit money banks in Nigeria.

The rest of the paper is organized as follows. Section 2 presents a review of related literature and the research framework, section 3 provides the methodology, including the model specification, variables and data. The result and discussion of findings will be reported in section 4, while section 5 contains the conclusion and recommendation.

## **2. LITERATURE REVIEW**

### **2.1 Internal Control**

Internal control is a process that those in charge of governance, management, and other staff design and influence in order to provide reasonable assurance about an entity's goals in terms of operational efficiency and effectiveness, compliance with applicable laws and regulations, and financial reporting reliability (Gamage & Fernando, 2014). Within organizations, the Committee of Sponsoring Organizations (COSO) framework identifies five areas of internal control which are the control environment, risk assessment process, the information and communication system, control activities, and monitoring (Eke, 2018). The objectives of internal control are: efficiency and effectiveness; reliability of financial reports; and compliance with applicable laws.

#### **2.1.1 Components Internal Control**

##### **Control Environment**

The components of control environment include ethical values, competencies, and integrity of the people that makes up an entity, which is the bedrock for the development of other internal control factors as it makes available the structure and discipline in which the organization operates (Avagre, 2014). Byaruhanga (2014) pointed out that the control environment establishes the tone for the organization and has an effect on employee consciousness. The control environment encompasses all employees' attitudes, integrity, awareness, and ethical ideals, as well as the activities of management and directors, as well as those responsible with governance, with respect to the entity's internal controls and their significance within the institution.

##### **Risk Assessment**

A risk assessment identifies and analyzes the internal and external elements that could have a negative impact on the performance, information, and compliance goals of the manufacturing organization from the standpoint of internal control. To be effective, this approach should address all of the company's risks and be implemented at all levels (Eniola & Akinselure, 2016). According to the COSO framework, any organization, whether private or public, large or little, has risks from both external and internal sources that must be evaluated (Fulbright, 2016).

##### **Information and Communication System**

The quality and nature of information required for effective control are emphasized in information and communication, as are the reports required to properly disseminate this information. Reports generated by information systems include operational and financial data, as well as information on regulatory compliance. Customers, suppliers, regulators, and shareholders all need to be communicated effectively with (Muganda, 2015).

##### **Control Activities**

An effective internal control system necessitates the creation of a control structure that clearly defines control activities at each organizational level (Etengu & Amony, 2016). Management directives help guarantee that essential actions are made to handle the risks associated in achieving the entity's objectives through control activities such as processes and policies. The following

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according to Emmanuel&Olang (2017) should be included: appropriate activity controls for different departments or divisions; high-level reviews, physical controls; a system of approvals and authorizations; checking for compliance with exposure limits and following up on non-compliance; and a verification system for balancing the budget.

### **Monitoring Activities**

Internal audit and business lines should monitor important risks on a regular basis, and the firm should also conduct periodic appraisals. Monitoring is a procedure that evaluates the quality of the performance of the internal control system over time. How successful the management's internal controls system is can only be determined by the results of sufficient monitoring (Hayes & Baker, 2014). Monitoring is done when the control is evaluated, not when ordinary management and supervisory controls and other routine statutory tasks are carried out.

### **Determinants and Factors of Success of an Internal Control System**

The following are the factors that can limit the success of an internal control system as identified by Gideon& Daniel(2020):

- i. The nature: size and volume of transactions
- ii. The geographical distribution of the enterprise
- iii. The control exercised personally by individual members of management
- iv. The cost of setting up controls and the benefits obtained therefore
- v. Management's attitude to control.

## **2.2 Organizational Performance**

The term performance in business is an essential one, it relates to how firm behave in term of its growth and financial stability. Basically, firm performance can be categorized into two: financial performance and non-financial performance.

### **Financial Performance**

A company's financial performance is based on the efficiency of the company, which is typically shown in the company's comprehensive income and financial position statement(Eke, 2018). When it comes to financial performance, it's all about making as much money as possible, returning as much on your assets as possible, and maximizing shareholder wealth. In this study, financial performance is from the lens of return on investment and increase in sales figures. Dividend yield, residual income, market capitalization, earnings per share etc are not considered.

### **Non-Financial Performance**

The performance of a company can be measured based on some variables which are non-financial. Non-financial performance in a company can be measured based on level of productivity, returns, growth, customer satisfaction. Non-financial metrics that indicate the quality of management, corporate culture, executive compensation effectiveness, and the quality of the system for interacting with shareholders must be used in addition to financial indicators when analyzing a company's success(Eke, 2018). In this study non-financial performance is measured by the level of productivity.

## **2.3 Review of Empirical Studies**

Internal control and financial performance have been the subject of numerous research studies. Some of the studies that were reviewed are discussed in more detail below, with the goal of creating a connection between them and the current study, as well as pointing out differences.

An investigation on the influence of internal controls on financial performance of selected companies was conducted in Nigeria by Ejoh & Ejom (2014) using multiple regression statistical methods. They found that there is a strong correlation between internal control and fraud in the company and that internal control has a significant role in achieving the organization's goals and objectives. Similar result was found in non profit organizations in Uganda where a high correlation between internal control measures (control environment, control activities, and monitoring) and financial performance of non-governmental organizations was found (Etengu & Amony, 2016).

Kolapo & Olaniyan (2018) employed a survey methodology to investigate the impact of internal control on commercial banks' performance in Nigeria and discovered that the four elements of internal control (control environment, control activities, monitoring, and risk assessment) have a positive and substantial association with bank performance. While it was discovered that communication and information had a negligible impact on bank performance meanwhile, Umar & Dikko (2018) investigated how internal control affects commercial bank performance in Nigeria with the aim of establishing the existence of a link between the

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two. They discovered that internal control have a favorable and significant association with bank performance. Despite this, they also found the association between bank performance and access to information and communication to be minor.

The robust system of internal controls in Nigeria's banking industry as an antidote to its hardship identifying the role of an effective internal control system in reducing or completely eliminating distress in Nigeria's banking sector is required. A survey research design was utilized in the study. The findings revealed that the existence of an effective internal control system has a positive impact on the elimination of fraud in banks; the effectiveness of the internal control system can be accurately determined, the effectiveness of the internal control system has a significant impact on the accuracy and reliability of bank records; and distresses in banks can be traced to a failure to adhere to the established internal control system (Siyanbola, 2013). In a related study on the impact of internal control on microfinance institutions' financial performance in the Kenyan constituency of Kisumu central by Oyoo (2014). He applied a descriptive and correlation research approach. It was found that there is a positive association between Micro-finance Institution internal control and financial performance.

There was an investigation into internal control system and financial performance of selected money deposit banks in Nigeria (Adejuwon and Adejuwon, 2020). The study used survey research methods to collect data, and stratified cum simple random sampling techniques. Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM) and Loans to Deposit Ratio (LDR) were used as dependent variables to measure the banks' performance over the independent variables of internal control system. Data collected was analysed using descriptive statistics and ANOVA. It was found out that internal control (control activities, control environment, information and communication, risk assessment and monitoring control) have strong positive relationship with the financial measures of the banks' performance ( $R = 0.0656$ ,  $p = 0.000$ ,  $F$  value (14.480). The study recommended that appropriate internal control systems should be put in place by the MDBs in order to improve their financial performance.

In another study by Adejuwon and Adejuwon (2022), the effect of internal control system on the performance of selected money deposit banks in Nigeria: Non-Financial Key Performance Indicators Approach was carried out, using stratified and simple random sampling techniques. The three non-financial KPIs of the Balanced Scorecard Model (BSM), i.e customer satisfaction, internal process and learning/innovative perspectives, were used as dependent variables on the independent variables proxied by control activities, control environment, information and communication, risk assessment and monitoring control. Survey research design was used and data collected were analysed using descriptive statistics and ANOVA. It was found out that the internal control elements have strong positive relationship with the banks' non-financial KPIs ( $R = 0.538$ ,  $p=0.0000$ ,  $F$  value 7.818 for internal process,  $R = 0.379$ ,  $p=0.0010$ ,  $F$  value 3.220 for customers' perspective and  $R = 0.829$ ,  $p=0.0000$ ,  $F$  value 42.124 for learning/innovation perspectives). The study concluded that internal controls adopted by the selected banks influence their non-financial KPIs and therefore their overall performance. The study therefore recommended that appropriate internal control systems should be put in place in order to improve their non-financial KPIs and therefore their overall performance.

Using a COSO framework, Gideon & Daniel (2020) evaluated the impact of internal controls on the performance of selected tertiary institutions in Ekiti state, Nigeria. The study's findings revealed a considerable favorable impact of COSO internal control components on the performance of selected tertiary institutions in Ekiti state. Similar study was carried out in Kenya by Benson & Jagongo (2018) evaluating the impact of internal control systems on financial performance in public higher education institutions in Nairobi, Kenya. Multiple linear regression was used to look into the relationship between the dependent and independent variables. They found that control environment, risk assessment, control activities and information and communication as indicators of internal control systems all had a significant impact on the financial performance of Nairobi City County's higher education institutions

Ibrahim, Diibuzie & Abubakari (2017) used health institutions in Ghana as a case studies to study the impact of internal control systems on financial performance. A sample fifty (50) respondents was considered in the study. An ordered logistic regression model was used to estimate the impact of internal control on financial performance at health facilities in the region. Findings revealed a link between health facilities' internal controls and their financial performance. Internal control effectiveness and efficiency are used to evaluate financial performance. They further found a positive correlation could be found for all five of the internal control variables tested (i.e. positive relationship with financial performance). Only three internal control factors (control environment and information and communication) exhibited a significant positive connection with financial performance, while the other two (control environment and information and communication) had no influence on financial performance.

Tiesieh & Ibiam (2019) also studied the Nigerian microfinance banks' financial performance using ex-post facto to determine the link between internal audit and financial performance. Ordinary least squares were used to examine data gathered from primary and secondary sources. This study's findings support our a priori expectations because the regression parameters' estimated

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coefficient is positive. As a result of this symbol, the variables Return on Asset, Profit Margin, and Return on Equity have a positive influence on the internal audit proxy by value of fraud. Findings also indicated that the value of fraud has a strong link to Return on Asset, Profit Margin, and Return on Equity.

Regarding the link between internal control and corporate performance, previous studies gave varied results. The majority of internal control research focus on individual institutions/companies that demonstrate unique traits or tangible flaws in the internal control systems. Prior research also largely focused on financial measures only as the measure Deposit Money Banks' performance. Few studies considered the effect of non-financial performance measures of performance. Majority of previous studies also concentrate on many control elements. This study concentrates on only two of the internal control measures (risk assessment and monitoring activities) as proxies for assessing internal control, as they affect financial and non-financial measures of performance in the selected Deposit Money Banks in Nigeria.

### 2.4 Theoretical Framework

The theoretical framework for this study is based on agency theory. The theory explained that the agent is working for the principal and one of their duty is to give the information on the performance of the business. Proponents of this theory were of the view that there is persisting conflicts of interest between principals and managers of resources which brings about principal-agent relationship (Jensen & Meckling, 1976).

This conflict of interest between principal and agents precipitates the need for implementation of internal control systems to checkmate the activities of the agents which has been shown to influence the company's efficiency thereby affecting performance (Nosa & Eromosele, 2020). This relationship can be expressed as follows;

$$\text{PERF} = f(\text{Internal Control}) \quad (2.1)$$

Where, PERF is the organizational performance.

However, owners of resources have measured the indicators of internal control based on international standards following the COSO framework components of internal control which include control environment (CE), risk assessment (RA), monitoring activities (MA), control activities (CA) and information and communication (IC). The equation 2.1 can therefore be modified by including the components of internal control as measures of internal control (Chepkirui, 2017).

$$\text{PERF} = f(\text{CE, RA, MA, CA, IC}) \quad (2.2)$$

## 3. METHODOLOGY

### 3.1 Research Design

A survey design-based approach is used in this research, focusing on data collection through the use of questionnaire. This study used survey design because survey design is good for ensuring a coherent research instrument for gathering data and generating information that will be drawn on the study.

### 3.2 Population and Samples

The population of this study is all the eight (8) deposit money banks with international authorization in Nigeria. Questionnaire was administered to 150 respondents who are staffs of the selected banks. The study used simple random sampling technique to select the needed sample from the population. The researcher chose simple random sampling because it is objective and unbiased.

### 3.3 Method of Data Analysis

To achieve the objective of the study, descriptive and inferential analysis was adopted. The inferential analysis was carried out to investigate the association between internal control management and performance of listed Nigerian DMBs using the correlation and the regression analysis. Also, descriptive analysis was conducted to show variations in responses and opinions of the respondents using frequencies and percentage denotations. The data for the study was analyze using version 26 of the SPSS (Statistical Package for Social Sciences) software.

### 3.4 Model Specification

The model for the study is based on the theoretical framework in the previous chapter which establish the relationship between internal control and organizational performance. The equation 2.2 is then re-expressed in its econometric form as;

#### Model for the analysis of the impact of risk assessment on performance of DMBs in Nigeria

The equation 2.2 expressed performance of DMBs as a function of risk assessment.

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$$PERF = f(RA)$$

$$PERF_t = \beta_0 + \beta_1 RA_t + \mu_1 \quad (3.1)$$

### Model for the analysis of the impact of monitoring activities on performance of DMBs in Nigeria

The equation 2.2 expressed performance of DMBs as a function of monitoring activities.

$$PERF = f(MA)$$

$$PERF_t = \beta_0 + \beta_1 MA_t + \mu_1 \quad (3.2)$$

Where,

PERF = a vector of Financial, Non financial and Overall organizational performance of DMBs in Nigeria

RA = Risk Assessment, MA= Monitoring Activities, CA= Control Activities,  $\beta_1$  = Coefficient of the parameter estimate,  $\mu_t$ = Error term,  $\beta_0$ = The intercept and t = Time dimension.

## 4. RESULTS AND DISCUSSION OF FINDINGS

This chapter presented the data collected from the survey. The data were analyzed and interpreted in accordance with the objectives of the study. The analysis and interpretation of data were based on the questionnaires administered and retrieved. This chapter revealed the responses of 97 respondents out of 150 participants considered for this study, which consisted of male and female respondents from 12 selected deposit money banks in Nigeria.

### 4.1 Demographic Data Analysis

The table 4.1 shows the demographic statistics of the participants in the survey carried out. It revealed that majority of the respondent were male representing 58.8% while the remaining 41.2% were female. It further shows that majority of the respondents are married (52.6%) followed by singles (44.3%) with only 3.1% divorced. With regards to academic qualification, majority of the participants are HND/B.Sc holders (73.2%) followed by M.Ed/M.Sc (17.5%) and NCE/OND (6.2%), while the least represented were the PhD holders with 1%. In addition, it was also discovered that majority of the respondent do not have any professional qualification (56.7%), however, 21.6% had ACA/ANAN/ACCA, 6.2% had CIBN, those with CITN were 3.1%, NIM were 4.1%, while those with other form of professional qualifications were 8.2%.

With regards to work experience, the survey report as shown in the table 4.1, revealed that majority are still relatively new at their respective banks as participants with less than 5 years work experience account for 54.6%, followed by 30% of those with 5 to 10 years work experience. Those with 11 to 15 years work experience were 9% followed by 20 years and above, while the least represented were those with 16 to 20 years (1%). Furthermore, years of experience in the banking industry is another indicator, it was shown in the table 4.1 that those with 1 to 3 years (37.1%) are the majority, followed by those with 3 to 5 years (21.6%). Those with less than a year experience in the banking industry had 19.6%, 5 to 10 years experience account for 12.4% while the least were those with more than 10 years experience in the banking industry (9.3%).

**Table 4.1.1 Demographic Characteristics of Respondents**

Variable		Frequency (n)	Percentage (%)
Gender	Male	57	58.8
	Female	40	41.2
	<b>Total</b>	<b>97</b>	<b>100</b>
Marital Status	Single	43	44.3
	Married	51	52.6
	Divorced	3	3.1
	<b>Total</b>	<b>97</b>	<b>100</b>
Academic Qualification	NCE/OND	6	6.2
	HND/B.Sc	71	73.2
	M.Ed/M.Sc	17	17.5
	PhD	1	1
	Others	2	2.1
<b>Total</b>	<b>97</b>	<b>100</b>	
Professional Qualification	ACA/ANAN/ACCA	21	21.6
	CIBN	6	6.2

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	CITN	3	3.1
	NIM	4	4.1
	Others	8	8.2
	None	55	56.7
	<b>Total</b>	<b>97</b>	<b>100</b>
Work Experience	Less than 5 Years	53	54.6
	5-10 Years	30	30.9
	11-15 Years	9	9.3
	16-20 Years	1	1
	20 Years and above	4	4.1
	<b>Total</b>	<b>97</b>	<b>100</b>
Years of Experience in the Banking Industry	Less than 1 Year	19	19.6
	1-3 Years	36	37.1
	3-5 Years	21	21.6
	in5-10 Years	12	12.4
	More than 10 Years	9	9.3
	<b>Total</b>	<b>97</b>	<b>100</b>

Source: Field Survey 2022

### 4.2 Presentation of Data

In order to achieve the objective of this study, exploratory factor analysis was carried out. Exploratory factor analysis is a statistical technique used to condense the information contained in a large number of variables into a number of information pockets. Its statistical purpose is to determine the combination of variables that will help summarize the data and identify underlying relationships. It also collectively analyse all variables under investigation to identify underlying factors. This was carried out via principal component analysis which is a variable reduction technique with the aim of reducing a larger set of variables into a smaller set of 'artificial' variables, called 'principal components', which account for most of the variance in the original variables. However, this method is subject to some assumptions, as a result, the following pre-test was carried out on the whole questionnaire.

#### 4.2.1 Correlation

The correlation matrix result produced a huge correlation table, which was recorded in the appendix. Factor analysis checks for relationships between the data, and it is expected that there should be at least some moderate-to-high correlations in the data (for instance correlations above the value of  $r=0.3$ ). As seen in the result of the correlation matrix for risk assessment, control monitoring,, control activities, performance and other factors that affect the performance of deposit money banks in Nigeria, there are several moderate correlations which suggest that the analysis is appropriate. However, in order to avoid multicollinearity in factor analysis, any variable with a very high correlation of  $r>0.9$  should be removed. In this case, there are no variables with  $r>0.9$  which indicate the absence of multicollinearity.

#### 4.2.2 Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

Table 4.2.1 The Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

Variables	KMO Test	Bartlett's Test	
		Approx. Chi-Square	Sig
Risk Assessment	0.805	278.472	0.000
Monitoring Activities	0.807	278.744	0.000
Control Activities	0.839	285.116	0.000
Performance	0.828	444.643	0.000
Financial Performance	0.730	194.889	0.000
Non Financial Performance	0.785	155.658	0.000

Source: Author's Computation using SPSS 26, (2022)

The table 4.2.1 presents the result of the Kaiser-Meyer-Olkin (KMO) which measures sampling adequacy for the overall data set and the Bartlett's test. The KMO test was conducted to examine the strength of the partial correlation (how the factors explain each other) between the variables. The KMO values that is considered ideal and acceptable ranges from 0.5 to 1.0, while values less than 0.5 are unacceptable. For the purpose of this study, ten (10) questions relating to risk assessment, nine (9) questions relating to monitoring activities, ten (10) questions relating to control activities, eleven (11) questions relating to performance of deposit money banks in Nigeria, five (5) questions relating to financial performance and six (6) questions relating to non financial performance.

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The result of Kaiser-Meyer-Olkin measure of sampling adequacy was 0.805 for risk assessment, 0.807 for monitoring assessment, 0.839 for control activities, 0.828 for organizational performance, 0.730 for financial performance and 0.785 for non financial performance which are all above the commonly recommended value of 0.5 for all variables. The implication of this is that there exist a strong partial correlation among the variables.

The Bartlett's test of Sphericity was used to test whether the correlation matrix is the same as the identity matrix. The purpose of this is to make sure that the correlation matrix of the variables in the dataset diverges significantly from the identity matrix, so that we know a data reduction technique is suitable to use. A significant statistical test is expected to be below 0.05 to show that correlation matrix is indeed not an identity matrix which means rejection of the null hypothesis. The Bartlett's Test of Sphericity in this study is less than 0.01 for all variables of interest. With the results meeting the assumptions of the principal components analysis (PCA) test, this means that PCA test can therefore be carried out.

### 4.2.3 Extracted Factors and Percentage of Variance

Using both the scree plot and eigenvalues  $> 1$  to determine the underlying components, the analysis for each of the components (risk assessment and monitoring activities) showed three extracted factors explaining a total of 62.87 per cent of the variance in the data for risk assessment, a single factor for monitoring activities explaining 46.82 percent and three factors were extracted for organizational performance which explained 66.83 percent. In addition, a single factor was extracted for financial performance which explains 60.04 percent of its variations while two factors were extracted for non financial performance which explains 64.46 percent of its variations. However, for the purpose of regression the factor with the highest load which is more relevant in defining the variable's dimension was considered for each of the variables.

### 4.3 Hypothesis Testing

The pre-set level of significance for this study is 0.05. The hypotheses presumed that there was no significant influence between the variables under consideration. Therefore, if the P-value which indicates the significance or the probability value exceeded the pre-set level of significance ( $P > 0.05$ ), the hypothesis stated in the null form was accepted, however, if the P-value was less than or equal to 0.05 ( $P \leq 0.05$ ), the null hypothesis was rejected.

A multiple regression was run to determine the impact of internal control variables (risk assessment, control activities and monitoring activities) and other factors affecting performance on organizational performance of deposit money banks in Nigeria. Further analysis were carried out by dividing organizational performance into financial performance and non financial performance such that the impact of internal control variables on financial and non financial performance of deposit money banks in Nigeria.

#### 4.3.1 Hypothesis One

$H_{01}$ : Risk assessment has no significant impact on the performance of DMBs in Nigeria. The hypothesis tests if there is a significant relationship between risk assessment and performance of deposit money banks in Nigeria. The dependent variable Performance of DMBs was regressed on predicting variable risk assessment (RA) to test hypothesis  $H_1$ .

**Table 4.3.1a Model summary of test of impact of risk assessment on performance of DMBs in Nigeria**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.390 <sup>a</sup>	.152	.143	.92251646

a. Predictors: (Constant), Risk Assessment

**Table 4.3.1b ANOVA of test of impact of risk assessment on performance of DMBs in Nigeria**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.748	1	13.748	16.154	.000 <sup>b</sup>
	Residual	76.593	90	.851		
	Total	90.341	91			

a. Dependent Variable: Performance of Deposit Money Banks

b. Predictors: (Constant), Risk Assessment



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**Table 4.3.1c Test of impact of risk assessment on performance of DMBs in Nigeria**

Coefficients <sup>a</sup>		Unstandardized		Standardized		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.018	.096		-.191	.849		
	Risk Assessment	.390	.097	.390	4.019	.000	1.000	1.000

a. Dependent Variable: Performance of Deposit Money Banks

Source: Author's Computation using SPSS 26, (2022)

The table 4.3.1a and table 4.3.1b shows the model summary and overall fit statistics. It was found that the correlation coefficient shows a moderate positive and moderate significant association between risk assessment and performance of DMBs: ( $r = 0.390$ ,  $p < 0.01$ ). This suggest that an increase in risk assessment practice will lead to an improvement in the performance of DMBs in Nigeria. The result also showed that risk assessment account for 15.2 percent ( $R^2 = 0.152$ ) of the variations in the performance of DMBs in Nigeria. The implication of this is that the internal control variables could be used to improve the performance of DMBs in Nigeria. The test for multicollinearity examined by the variance inflation factor (VIF) which is less than 3 ( $VIF = 1$ ) which imply the absence of multicollinearity in the model. Table 4.3.1c indicate that risk assessment has a positive and significant impact on the performance of DMBs in Nigeria ( $B = 0.390$ ,  $t = 4.019$ ,  $p < 0.01$ ).

Consequently, at a level of significance of 0.05, the t-statistics is 4.019 while the p-value of the t-statistics is 0.000 which is lower than 0.05 adopted level of significance. Hence the study rejected the null hypothesis which that state that there is no significant impact of risk assessment on the performance of DMBS in Nigeria.

The study further examined the impact of risk assessment on financial and non financial performance of DMBs in Nigeria. This is shown in the table 4.3.2 below.

**Table 4.3.2 Summary of test of impact of risk assessment on financial and non financial performance of DMBs in Nigeria**

Response Variables	r	R <sup>2</sup>	P-value	B	t-stat	P-value	VIF
Financial Performance	0.367	0.134	0.000	0.365	3.737	0.000	1
Non Financial Performance	0.178	0.032	0.088	0.175	1.726	0.088	1

Source: Author's Computation using SPSS 26, (2022)

The table 4.3.2 shows the summary of the analysis of impact of risk assessment on financial and non financial performance of DMBs in Nigeria. It could be observed from the result that risk assessment explains more variation in financial performance ( $R^2 = 0.134$ ) compared to non financial performance ( $R^2 = 0.032$ ). The correlation coefficient shows that there exist a moderate positive and significant relationship between risk assessment and financial performance ( $r = 0.367$ ,  $p < 0.01$ ). Although there's also a weak positive relationship between risk assessment and non financial performance as shown by the correlation coefficient, it is not significant at 5 percent but at 10 percent ( $r = 0.178$ ,  $p < 0.1$ ). The variance inflation factor also shows the absence of multicollinearity in both models ( $VIF < 3$ ). The result further shows that there exist a positive and significant relationship between risk assessment and financial performance of DMBs in Nigeria ( $B = 0.365$ ,  $t = 3.737$ ,  $p < 0.01$ ), whereas, there exist a positive relationship between risk assessment and non financial performance, however, it is not significant at 5 percent but significant at 10 percent ( $B = 0.175$ ,  $t = 1.726$ ,  $p < 0.10$ ).

This provides further evidence supporting rejection of the null hypothesis as a result of the existence of a positive and significant impact of risk assessment on the performance of DMBs in Nigeria.

### 4.3.2 Hypothesis Two

H<sub>02</sub>: There is no significant relationship between monitoring activities and the performance of DMBs in Nigeria. The hypothesis tests if there is a significant relationship between monitoring activities and performance of deposit money banks in Nigeria. The dependent variable Performance of DMBs was regressed on predicting variable- monitoring activities (MA) to test hypothesis H<sub>2</sub>.

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**Table 4.3.3a Model summary of test of impact of monitoring activities on performance of DMBs in Nigeria**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.403 <sup>a</sup>	.162	.153	.91983730

a. Predictors: (Constant), Monitoring Activities

**Table 4.3.3b ANOVA of test of impact of monitoring activities on performance of DMBs in Nigeria**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.283	1	14.283	16.880	.000 <sup>b</sup>
	Residual	73.611	87	.846		
	Total	87.893	88			

a. Dependent Variable: Performance of Deposit Money Banks

b. Predictors: (Constant), Monitoring Activities

**Table 4.3.3c Test of impact of monitoring activities on performance of DMBs in Nigeria**

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.001	.098		-.011	.991		
	Monitoring Activities	.415	.101	.403	4.109	.000	1.000	1.000

a. Dependent Variable: Performance of Deposit Money Banks

Source: Author's Computation using SPSS 26, (2022)

The table 4.3.3a and table 4.3.3b shows the model summary and overall fit statistics for the test of monitoring activities impact on the performance of deposit money banks in Nigeria. It was found that the correlation coefficient shows a strong positive and significant association between monitoring activities and performance of DMBs: ( $r = 0.403$ ,  $p < 0.01$ ). This suggest that an increase in monitoring activities practice will lead to an improvement in the performance of DMBs in Nigeria. The result also showed that monitoring activities account for 16.2 percent ( $R^2 = 0.162$ ) of the variations in the performance of DMBs in Nigeria. The implication of this is that the internal control variable could be used to improve the performance of DMBs in Nigeria. The test for multicollinearity examined by the variance inflation factor (VIF) which is less than 3 ( $VIF = 1$ ) which imply the absence of multicollinearity in the model. Table 4.3.3c indicate that monitoring activities has a positive and significant impact on the performance of DMBs in Nigeria ( $B = 0.415$ ,  $t = 4.019$ ,  $p < 0.01$ ).

Consequently, at a level of significance of 0.05, the t-statistics is 4.019 while the p-value of the t-statistics is 0.000 which is lower than 0.05 adopted level of significance. Hence the study rejected the null hypothesis which that state that there is no significant impact of monitoring activities on the performance of DMBs in Nigeria.

The study further examined the impact of monitoring activities on financial and non financial performance of DMBs in Nigeria. This is shown in the table 4.3.4 below.

**Table 4.3.4 Summary of test of impact of monitoring activities on financial and non financial performance of DMBs in Nigeria**

Response Variables	r	R <sup>2</sup>	P-value	B	t-stat	P-value	VIF
Financial Performance	0.494	0.244	0.000	0.513	5.298	0.000	1
Non Financial Performance	0.635	0.403	0.000	0.644	7.907	0.000	1

Source: Author's Computation using SPSS 26, (2022)

The table 4.3.4 shows the summary of the analysis of impact of monitoring activities on financial and non financial performance of DMBs in Nigeria. It could be observed from the result that monitoring activities explains more variation in non financial performance ( $R^2 = 0.403$ ) compared to financial performance ( $R^2 = 0.244$ ). The correlation coefficient shows that there exist a strong positive and significant relationship between monitoring activities and financial performance ( $r = 0.494$ ,  $p < 0.01$ ). Similarly, there

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exist a strong positive and significant relationship between monitoring activities and non financial performance as shown by the correlation coefficient ( $r=0.635$ ,  $p < 0.01$ ). The variance inflation factor also shows the absence of multicollinearity in both models ( $VIF < 3$ ). The result further shows that monitoring activities have a positive and significant impact on both financial ( $B= 0.513$ ,  $t= 5.298$ ,  $p<0.01$ ) and non financial performance ( $B= 0.644$ ,  $t= 7.907$ ,  $p<0.01$ ) of DMBs in Nigeria.

This provides further evidence supporting rejection of the null hypothesis as a result of the existence of a positive and significant impact of monitoring activities on the performance of DMBs in Nigeria.

### 4.4 Discussion of Findings

This study examined the impact of internal control on organizational performance of deposit money banks in Nigeria with the aim of investigating the impact of three of the components of internal control namely risk assessment and monitoring activities on organizational performance of selected banks in Nigeria.

The first objective was to investigate the effect of risk assessment on organizational performance of DMBs in Nigeria. The result of the analysis shows that risk assessment account for 15.2 percent ( $R^2= 0.152$ ) of the variations in organizational performance of DMBs in Nigeria. The findings of this study has also shown that risk assessment practice have a positive impact on the performance of deposit money banks in Nigeria ( $B= 0.390$ ,  $t= 4.019$ ,  $p < 0.01$ ) which is in line with the a priori expectation. In addition, when organizational performance was divided into financial and non financial performance, it was found that risk assessment explains 13.4 percent ( $R^2= 0.134$ ) and 3.2 percent ( $R^2= 0.032$ ) of the variations in financial and non financial performance of DMBs respectively. Furthermore, risk assessment was found to have a significant positive relationship with financial ( $B= 0.365$ ,  $t= 3.737$ ,  $p<0.01$ ) and non financial ( $B= 0.175$ ,  $t= 1.726$ ,  $p<0.10$ ) performance of DMBs in Nigeria. The implication of this is that the more risk assessment practice employed by the DMBs, the better the performance such that for each increase in the risk assessment, there is 0.39 increase in performance DMBs in Nigeria. In the same way, an increase in the practice of risk assessment will increase financial performance by 1.365 and non financial performance by 0.175.

The second objective was to investigate the effect of monitoring activities on organizational performance of DMBs in Nigeria. The empirical analysis shows that monitoring activities account for 16.2 percent ( $R^2= 0.162$ ) of the variations in organizational performance of DMBs in Nigeria. The findings of this study has also shown that monitoring activities practice have a positive impact on the performance of deposit money banks in Nigeria ( $B= 0.415$ ,  $t= 4.019$ ,  $p < 0.01$ ) which is in line with the a priori expectation. In addition, when organizational performance was divided into financial and non financial performance, it was found that monitoring activities explains 40.3 percent ( $R^2= 0.403$ ) and 2.44 percent ( $R^2= 0.244$ ) of the variations in financial and non financial performance of DMBs respectively. Furthermore, monitoring activities was found to have a significant positive relationship with financial ( $B= 0.513$ ,  $t= 5.298$ ,  $p<0.01$ ) and non financial ( $B= 0.644$ ,  $t= 7.907$ ,  $p<0.01$ ) performance of DMBs in Nigeria. The implication of this is that as more monitoring activities is employed by the DMBs, the better the performance such that for each increase in the monitoring activities, there is 0.415 increase in performance DMBs in Nigeria. In the same way, an increase in the practice of monitoring activities will increase financial performance by 0.513 and non financial performance by 0.644.

In summary it could be observed that the three components of internal control examined namely, risk assessment, monitoring activities and control activities were found to exert a positive and significant influence of the overall organizational performance as well as both the financial and non financial performance DMBs in Nigeria.

The findings of this study are in line with the study of Adejuwon & Adejuwon (2020), Adejuwon & Adejuwon (2022) and Hussaini & Dikko (2018) which investigated the effect of internal control systems on the performance of Money Deposit Banks in Nigeria using a survey method and stratified random sampling, using questionnaire administered to either staff of operations, marketing, or security department in the Nigerian commercial banks. Similarly, it follows the findings of Hanoon, et al. (2021) which studied control environment, control activity, risk assessment, information & communication, and monitoring on the Financial Performance (FP) of the Iraqi banking sector.

The findings of this study however contradict the result of Ofei et al., (2020) which found that there was a weak significant relationship between control activities and financial performance, the study further found a weak significant relationship between monitoring activities and financial performance. The study further found that there was no significant effect between control activities and financial performance of banks in Ghana, finally there was negative significant effect of monitoring activities on the financial performance of banks in Ghana.

The findings of this study further support Oluwafemi, 2013 and Nwude, 2018 focusing on risk management practices and bank financial performance in Nigeria. With a focus on monitoring activities, the findings is similar to the results of Kipro, 2017 and Toufaily, 2021 which further shows the importance of monitoring activities in enhancing the performance of commercial banks

### 5. CONCLUSION AND RECOMMENDATIONS

This study was conducted to investigate the impact of internal control on organizational performance of DMBs in Nigeria. Based on the research findings it can be concluded that internal control system is a significant predictor of organization performance. The findings of this study, confirmed by statistical significance, indicate that increasing unit levels of risk assessment and monitoring activities have a positive effect on the financial, non financial and the overall performance of DMBs in Nigeria. Further it can be concluded that effective internal control systems must incorporate the effects of risk assessment and monitoring activities to enhance organizational performance of DMBs. Hence this study widens the scope of identifying measures that enhances organization performance like risk assessment and monitoring activities.

It is therefore recommended that internal control systems especially risk assessment and monitoring activities are significant areas that management of DMBs in Nigeria should give great attention to them in order to improve organizational performance and that management of banks should strengthen the risk management and monitoring activities, by enhancing the policies and procedures adopted by the banks in protecting assets and properties.

#### Suggestion for Further Studies

This study focused on the Nigerian DMBs that have international authorization. To further confirm the link between the internal control and banks performance, future studies should consider the other components of internal control (control environment, control activities and information and communication) and increase the sample size and also consider some other Nigerian listed DMBs with only local authorization. In addition, future studies could consider using secondary data for analyzing the link between internal control and banks' performance.

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