

## **The Impact of Internal Control Mechanisms on Fraud Detection and Prevention in Nigeria Deposit Money Banks**



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**ABSTRACT:** This study examined and assessed the impact of internal control mechanisms on fraud detection and prevention in Nigeria's deposit money banks. Specifically, the study evaluated the impact of control environment risk assessment, control activities, and monitoring activities on fraud detection and prevention in Nigerian deposit money banks. The descriptive research design was used in the study. Primary data was obtained from the management staff of FUGAZ Banks. Data gathered was estimated using descriptive statistics of respondents' demographics, correlation analysis, Multiple OLS estimation and post-estimation tests. Discoveries from the study revealed that the control environment exerts a positive significant relationship with fraud detection and prevention in Nigeria DMBs with a coefficient estimate of 0.03483 ( $p=0.0054 > 0.05$ ); risk assessment exerts a positive significant relationship with agricultural investment in Nigeria with a coefficient estimate of 0.4082 ( $p=0.0199 < 0.05$ ); control activities exert positive insignificant impact on fraud detection and prevention in Nigeria DMBs with a coefficient estimate of 0.3058 ( $p=0.0992 > 0.05$ ) and monitoring activities exert a positive significant impact on fraud detection and prevention in Nigeria DMBs with coefficient estimate of 0.0307 ( $p=0.0215 > 0.05$ ). Hence, the study suggested that the management of DMBs should adopt proactive actions towards its internal control; risk assessment of DMBs should be constantly carried out by the management and those charged with governance; management of DMBs should frequently modify the modalities of its operation per time and DMBs management staffs should on a constant basis monitor its internal control system to improve its soundness and control fraudulent activities.

**KEYWORDS:** Fraud Prevention and Detection, Control Environment, Risk Assessment, Control Activities, Monitoring Activities.

### **INTRODUCTION**

The banking industry is distinctive in the worldwide monetary system and important throughout economic progress. This business encourages savings and investment and helps move wealth from surplus to deficit units, promoting sustainable development in any nation (Ajala, Amuda, & Arulogun, 2013). The banking sector is the top of every economy since its size and expansion reflect its significance. Its influence on unemployment and inflation, which directly affect a country's quality of life and growth, is undisputed. Thus, deposit money banks (DMBs)' intermediary function has largely dictated Nigeria's major and little financial crises throughout the years. DMBs are vital to the financial system and must be preserved at all costs due to their unique client relationships. Therefore, people will trust the bank's services. Nigeria's deposit money banks are failing to meet the country's high requirements (Taiwo, Agwu, Babajide, Okafor, & Isibor, 2016).

Deposit Money Banks (DMBs) internal control problems contribute to banking sector fraud. The banking sector in several nations, including Nigeria, has seen an upsurge in compromised controls and financial record manipulation to present fake accounting information for personal advantage (Nyakarimi, Kariuki, & Kariuki, 2020). Fraud has cost \$3.8 trillion USD globally, estimates say. To make things worse, fraudsters are continually discovering new techniques to scam businesses, particularly financial ones, while leaving as little evidence as possible (Georgios, 2017). Businesses prioritize fraud prevention to decrease fraud. Management must address employee pressing requirements to succeed. This may reduce the likelihood of employees engaging in dishonest behaviour (Nyakarimi et al., 2020). Kabue and Aduda (2017) recommend ethical principles, a strong corporate culture, risk mitigation techniques, and a sound internal control system for fraud prevention and detection.

Bruwer, Coetzee, and Meiring (2013) describe internal control as a network of processes and procedures that meet management goals. Internal control measures are crucial to a company's success. The banking industry emphasizes internal control. However, deposit money institutions' control processes are infamously prone to risks, allowing fraudulent activities to flourish. Thus, unlawful activities have increased, hurting the banking sector (Asiligwa & Rennox, 2017). A company's internal control is crucial to monitoring operational trends and minimizing faults. These processes may reveal intentional errors, particularly in corporate

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difficulty locations (Ifeoluwa, 2017). These goals must be accomplished for a successful internal control system, according to COSO (1992). Business efficiency that follows all rules and regulations is one of these aims. The COSO framework identifies five fundamental principles for internal control. Business practices should be consistent, efficient, and effective, and financial reporting should be dependable. Organizational goals are the goal.

Control environment strength is also important for internal control system assessments. This emphasizes the necessity for management, directors, and governance to take additional safeguards and strengthen the firm's internal control. The corporate procedures and policies would become more efficient (Albert & Byaruhanga, 2014). Repeating that risk is part of internal control in business organizations and may undermine present control mechanisms is important. Thus, it is crucial to examine, recognize, and communicate any threats to the company's survival (Frazer, 2014). Human and automated controls must be implemented to limit the possibility of undesirable occurrences that might threaten the control system and the entity's ability to fulfill its goals (Ndamenenu, 2011). Changing processes, employing new staff, time and resource restrictions, and the environment in which the control system was built all offer hazards to its continuing usage. Thus, control systems must be monitored often until the desired outcome is achieved (Hayali, Dinc, Sarili, Dizman, & Gundoglu, 2013).

Growing and unregulated banking sector threats cause continual interruptions and the incapacity of banks to accomplish their intended functions. Fraud has become a major concern to the financial system (Sruthi & Prasanna, 2016). Fraud offenders threaten banks' financial stability notwithstanding deposit money institutions' compliance with monetary authorities' strict minimum standards. Note that top banking executives have conspired with outsiders. Financial fraud has skyrocketed due to this problem (Usman & Shah, 2013). The Nigerian banking sector has seen more fraud despite anti-corruption and other law enforcement initiatives. The increase of numerous forms of bank fraud (Akindele, 2011) causes a daily financial loss of around one million naira.

A 2013 survey indicated banks lost N485,194,350 to fraud despite their best efforts. It was closer to N6,215,987,323 in 2014. Fraud cases increased annually from 822 in 2013 to 1,461 in 2014. The NeFF (2017) reported that Nigerian deposit money institutions lost N2.19 billion in 2016 due to fraud. According to Fadayo (2018), chronic fraud is a primary cause of Nigerian bank failures. To combat this issue, the Economic and Financial Crimes Commission (EFCC) and Independent Corrupt Practices and Other Related Offences Commission (ICPC) have had limited success. Due to control environment, risk assessment, control operations, and monitoring problems, deposit money institutions cannot identify fraud. Financial fraud in Nigeria has been extensively investigated by the Central Bank of Nigeria. The lack of adequate fraud prevention and detection information makes it difficult for Nigerian deposit money institutions to survive due to rampant banking fraud.

Several studies have examined financial fraud to reduce its frequency. However, majority of these studies (Akinyemi, Peter & Cole, 2021; Nwobodo, Adeigbe & Banmore, 2020; Nugraha & Bayunitri, 2020; Igbodo, Josiah & Igbodo, 2019; Kashona, 2019; Singal & Nagi, 2019; Al-Fatlawi, 2018; Fadayo, 2018) Surrogates of internal control have been studied by Owusu-Boateng, Amofa, and Owusu (2017) and Nyakarimi, Kariuki, and Kariuki (2020). Deposit money banks in Nigeria were not the focus of their investigation. Owusu-Boateng, Amofa, and Owusu (2017) examined Ghana banks' internal control alone. Since their study relied on descriptive data, internal control, fraud detection, and prevention were inadequate. This research examines Nigerian deposit money banks' internal control mechanisms for fraud detection and prevention.

## **REVIEW OF LITERATURE**

### **Internal Control System**

The internal control system of Nigerian financial institutions protects assets, ensures compliance, and monitors performance (Gamage et al., 2014). The Treadway Commission's Committee of Sponsoring Organizations (COSO) defines internal control as ensuring organizations achieve their goals. This helps banks and other financial institutions evaluate financial data and ensure customers are following all rules and regulations (COSO, 2013). Adeyemi and Adenugba (2011) observe that most Nigerian financial institutions lack internal controls, threatening their long-term viability and efficiency.

### **Fraud**

The practice of deception has survived. Fraud is generally not reported and not all instances are made public, therefore its real magnitude is unclear. Olufidipe (1994) defines fraud as using dishonest techniques to attain a goal, generally financial gain. According to Boniface (1991), fraudsters misrepresent or fabricate evidence to gain an unfair advantage. Fraud is "the intentional deception of another person or organization in order to obtain something of value through deception" (Idowu, 2009). Any fraud strategy aims to trick someone into giving up money, property, or other possessions by offering incorrect or misleading information (Ajayi, 2010). Webster (1972) defines "fraud" as "an act of deceit," "a deceptive maneuver," "unethical conduct," or "a violation of trust." The Oxford Advanced Learner's English Dictionary defines fraud as illicit deception.

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## METHODOLOGY

### Model Specification

This research modified Idogei, Josiah, and Onomuhara (2017)'s model to evaluate how internal control quality influences financial fraud detection. In their examination of internal control, Idogei et al. (2017) assessed quality, scale, and independence. The model is condensed:

$$FINFD = \beta_1 + \beta_2INTCQ + \beta_3INTCS + \beta_4INTCIND + \mu \dots\dots\dots 3.1$$

Where:

- FINFD = Financial Fraud Detection
- INTCQ = Internal Control Quality
- INTCS = Internal control size
- INTCIND = Internal control independence
- $\mu$  = Error Term.
- $\beta_1 - \beta_4$  = Slope Coefficients

The study gap demonstrates that the model does not accurately depict internal control's best indicators. Thus, the Nigerian deposit money banking business may benefit from a unique model that determines internal control, fraud prevention, and detection metrics. The modified model is provided as follows for readability and comprehension:

$$FRPD = f(CRE, RIA, CRA, MOA) \dots\dots\dots 3.2$$

$$FRPD = \alpha_0 + \alpha_1CRE + \alpha_2RIA + \alpha_3CRA + \alpha_4MOA + \mu \dots\dots\dots 3.3$$

Where:

- FRPD = Fraud Prevention and Detection
- CRE = Control Environment
- RIA = Risk Assessment
- CRA = Control Activities
- MOA = Monitoring Activities

### Population of the Study

The population will include 22 deposit money banks (DMBs), formerly commercial banks. This study will focus on deposit money banks, previously Nigerian Commercial Banks, since they have the most senior management people. Deposit money banks were selected because they have 3,978 branches and control a disproportionate percentage of banking sector assets.

### Sample and Sampling Technique

A purposive sampling technique chose five systemically significant banks (SIBs), comprising tier-one institutions First Bank, UBA, Guaranty Trust Bank, Access Bank, and Zenith Bank. These banks were chosen for their enormous assets and dominance among deposit money banks. Twenty management staff members were randomly selected from each purposely sampled bank based on their financial fraud training and experience in deposit money banking. The research sample includes 100 management team members.

### Source of Data Collection

This research used primary data to ensure relevance. A well constructed questionnaire was given to a sample of arable farmers to get this information. The questionnaire was rated on a four-point Likert scale from "strongly agree" through "agree," "strongly disagree," and "disagree." The questionnaire was created to address the study's research questions and collect data to test hypotheses and advance its general and particular goals.

## DATA ANALYSIS

### Descriptive Results

**Table 4.1: Demographic Characteristics of Respondents**

S/N	Demographics	Frequency	Percent	Valid Percent	Cumulative Percent
1	Sex	Male	64	64.0	64.0
		Female	36	36.0	100.0
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Age	21-30 Years	59	59.0	59.0
		31-40 Years	26	26.0	85.0
		41-50 Years	15	15.0	100.0
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Marital Status	Single	55	55.0	55.0

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	Married	31	31.0	31.0	86.0
	Divorced	6	6.0	6.0	92.0
	Separated	8	8.0	8.0	100.0
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	
<b>4</b>	<b>Education Qualification</b>	First Degree	69	69.0	69.0
		Master Degree	31	31.0	31.0
		First Degree	69	69.0	69.0
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>5</b>	<b>Banking Experience</b>	Below 3 Years	14	14.0	14.0
		3-5 Years	44	44.0	44.0
		6 Years and Above	42	42.0	42.0
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

*Source: Author's Computation, 2022*

Table 4.1 shows the demographics of the respondents, who were recruited from well-established Nigerian banks and are operating in Ado-Ekiti. According to the table, 64% of the study population is male and 36% female. Despite more males than women participating, the investigation found no gender prejudice. Table 4.1 shows that 59% of participants are in their prime (21–30 years old). Only 26% of the sample is between 31 and 40, whereas 84% is between 41 and 50. The data also reveals that 55% of respondents are single, 31% are married, 6% are divorced, and 8% are separated. As seen above, 31% of research participants had Master's degrees, whereas 69% have First degrees. This survey suggests that respondents were well-educated. Table 4.1 also reveals that 14% of individuals have more than 3 years of experience, 44% have 3–5 years, and 42% have 6+ years. This indicates that the respondents have extensive banking sector expertise and practical knowledge. Thus, they have spent a lot of time in banking and learned a lot. This finding also shows that the researcher satisfied demographic parameters for gathering study data.

### Correlation Analysis

**Table 4.2: Correlation Matrix**

	FDP	CRE	RIA	CRA	MOA
FDP	1.000000				
CRE	0.315584	1.000000			
RIA	0.560266	0.482178	1.000000		
CRA	0.539593	0.467056	0.600495	1.000000	
MOA	0.283538	0.715573	0.339241	0.483577	1.000000

*Source: Field Survey (2022)*

Table 4.2 shows the variable pairing correlation coefficients. The table reveals a 0.315584 association between FDP and CRE, 0.560266 with RIA, 0.539593 with CRA, and 0.283538 with MOA. The factors analyzed are strongly correlated, according to the findings. As shown in the table, the control environment, risk assessment, control activities, and monitoring activities positively affect fraud detection and prevention. This examines the study model's paired variables' connections.

### Regression Analysis

**Table 4.3: Regression Estimation Result**

Dependent Variable: FDP

Variable	Coefficient	Std Error	t-statistics	Prob.
C	5.800560	5.453933	1.063556	0.0002
CRE	0.034835	0.289456	-0.120346	0.0054
RIA	0.408202	0.251280	1.624490	0.0199
CRA	0.305847	0.230319	1.327927	0.0992
MOA	0.030758	0.308048	0.099849	0.0215

R-Squared=0.7389

Adjusted R-Square=0.6547

F-statistics=3.0505

Prob (F-statistics) = 0.0409

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A regression investigation showed that control environment, risk assessment, control measures, and monitoring activities had estimated coefficients of 0.034835, 0.408202.305847, and 0.030758, respectively, in Table 4.3. All of the study's explanatory criteria improve Nigerian fraud identification and prevention. Results reveal that stricter control regimes in Nigeria's deposit money banks (DMBs) improve fraud detection and prevention. The report also demonstrates that risk assessment audits have helped Nigeria's DMBs discover and prevent fraud. The research found that more control activities may improve Nigerian deposit money bank fraud detection and prevention. Fraud detection and prevention should increase as Nigerian DMB monitoring efforts improve.

This study demonstrated a positive association between Nigerian deposit money banks' control environments and fraud detection and prevention. The calculated coefficient is 0.03483 and the p-value is 0.0054 (p 0.05) suggest a relationship between these variables. Risk assessment also positively and statistically significantly affects agricultural investment in Nigeria. Correlation is statistically significant with an estimated coefficient of 0.4082 and p-value of 0.0199. The study shows that control activities reduce and identify fraud in Nigerian DMBs somewhat but positively. The calculated association coefficient is 0.3058, and the p-value is 0.0992, which is more than 0.05. The findings conclude that monitoring efforts help Nigerian DMBs avoid and identify fraud. This relationship is statistically significant at 0.0215 and the calculated coefficient p-value is 0.0307. Table 4.3 shows 0.6547 R-squared values. This suggests that the control environment, risk assessment, control methods, and monitoring activities may explain 65% of fraud detection and prevention variability in Nigerian Deposit Money Banks. If the probability value for table 4.3 statistics is less than 0.05, the model fits. F-statistics show this.

### Post Estimation Test

**Table 4.4: Post Estimation Test Result**

<b>Linearity Test</b>		
<i>Statistics</i>	<i>Values</i>	<i>Probability</i>
T-statistic	1.982780	0.0620
F-statistic	3.931416	0.0620
Likelihood ratio	4.701721	0.0301
<b>Normality Test</b>		
<i>Statistics</i>	<i>Values</i>	<i>Probability</i>
Jarque-Bera Stat	27.6704	0.0001
<b>Serial Correlation LM Test</b>		
<i>Statistics</i>	<i>Values</i>	<i>Probability</i>
F-statistic	4.2259	0.0313
<b>Heterogeneity Test</b>		
<i>Statistics</i>	<i>Values</i>	<i>Probability</i>
F-statistic	0.2649	0.8970

**Source:** Field Survey (2022)

The Ramsey test estimates in the table above include the t-statistic, f-statistic, and likelihood ratio statistic. The table shows the study's probability values. For this investigation, probability values of 0.0620, 0.0620, and 0.0301 matched the t-statistic of 1.9827, f-statistic of 3.9314, and likelihood ratio statistic of 4.7017. The alternative hypothesis is well-formed and the model incorporates the important financial performance drivers, according to probability estimates and data. The study's linear association between agricultural investment and the model's risk mitigation techniques supports this assumption.

Estimates throughout the investigation yielded a Jarque-Bera statistic of 27.6704 and a probability of 0.0001. This computation implies the null hypothesis is probable and well supported. Importantly, the probability result ( $0.6878 > 0.05$ ) confirms that the model's error component follows a normal distribution. The Breusch-Godfrey serial correlation LM test f-statistics and probability values are also included in the table. The values are 4.2259 and 0.0313. Statistics do not support the null hypothesis, which states that the estimated outcomes have no serial relationship. This increases the likelihood that the calculated model error components are autocorrelated. An heteroskedasticity test determined if the variables were heterogeneous. Since the f-statistics and probability values are 0.2649 and 0.8970, respectively, the null hypothesis, which presupposes homoscedasticity, cannot be rejected. The results confirmed the models' error terms lacked heteroscedasticity.

### DISCUSSION OF FINDINGS

Table 4.3 shows research that consistently reveal a positive, statistically significant association between control environment and fraud detection and prevention. This shows that control environment stability helps fraud detection and prevention. To assess the effectiveness of policies, procedures, and methods to ensure process efficacy, one must analyze the whole control environment. This strategy also relates to how management teaches personnel values and ethics. Honesty, effective communication, ethical

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human resource practices, authority and responsibility, and general ethical concepts are needed to promote excellent attitudes and a strong work ethic among all employees. The company's internal control system helps detect and prevent fraud, therefore applying these principles demands big changes.

The research supports the idea that risk assessment improves fraud detection and prevention. This suggests that emphasizing risk assessment in organizations will boost fraud detection and prevention. The bank's internal control system is sophisticated, thus errors are unavoidable during installation and maintenance. These flaws threaten the system by disrupting internal controls and allowing anybody in the firm to commit fraud. However, identifying these flaws and implementing rules and systems to detect them may considerably minimize fraud. Thus, the company's inputs become more efficient, making it simpler to achieve its goals. The findings demonstrate that control initiatives can minimize fraud, but not much. Improving control processes may help identify and prevent fraud. All levels of management must utilize a variety of controls to better manage resources and lower the possibility of difficulties preventing the organization from accomplishing its objectives. Routine operational reviews, monitoring, and technology infrastructure are needed for strong internal controls. The research found that each business process should incorporate control actions to avoid unauthorized access to the company's control system. This is crucial to contain fraudsters and correctly address their behavior.

The research found that monitoring actions improve fraud detection and prevention statistically. The number of monitoring activities seems to be directly related to fraud detection and prevention efficiency. A frequent internal control system evaluation and efficiency assessment is needed. This is because people and other circumstances may change, requiring system modifications. Therefore, system monitoring must be continual. This method enhances system design and performance by monitoring internal control activities, according to previous research. This reduces fraud, preventing it.

### CONCLUSION AND RECOMMENDATIONS

This study found a positive and significant correlation between Nigerian DMB control environments and fraud prevention and detection. Risk assessment and fraud detection and prevention are positively and statistically correlated in Nigerian DMBs. Nigerian DMB fraud prevention and detection are excellent but minimal with control measures. However, research suggests that monitoring activities help Nigerian DMBs detect and halt fraud. From the above, Nigerian DMBs can identify and prevent fraud better using internal control measures. According to the research, the following guidelines are crucial.

- i. Management of DMBs should adopt proactive actions towards its internal control so as to control any potential breakdown in its system;
- ii. Risk assessment of DMBs should be constantly carried out by the management and those charged with governance towards guaranteeing constant detection and prevention of risk and ultimately detecting and preventing fraud;
- iii. Management of DMBs should frequently modify the modalities of its operation per time so as to assure a consistent effectiveness in its control activity;
- iv. DMBs management staffs should on a constant basis monitor its internal control system to improve its soundness and control fraudulent activities.

### REFERENCES

- 1) Ajala, O.A. Amuda, T. & Arulogun, L. (2013). Evaluating Internal Control System as Preventive Measure of Fraud in the Nigerian Banking Sector. *International Journal of Management Sciences and Business Research*. 2(9), 15-22.
- 2) Ajayi, M. A. (2010). Determinants of fraud in Nigerian banking industry. Thesis submitted at the Department of Accounting and Finance, University of Ilorin, Ilorin, Nigeria
- 3) Akindele, R. I. (2011). Fraud as a negative catalyst in the Nigerian banking industry. *Journal of Emerging Trends in Economics and Management Sciences*. 2(5), 357-363.
- 4) Akinyemi, A.O., Peter, I. & Cole, A.A. (2021). Internal Control System And Financial Performance Of Manufacturing Companies.
- 5) Albert, M.M.O & Byaruhanga, J. (2014). Effects of Internal Control Systems on Financial Performance of Sugarcane outgrower companies in Kenya. *IOSR Journal of Business and Management*. 16(12): 62–73.
- 6) Asiligwa, M. & Rennox, G. (2017). The Effect of Internal Controls on the Financial Performance of Commercial Banks in Kenya. *IOSR Journal of Economics and Finance*. 08(03), pp. 92–105.
- 7) Bruwer, J.-P., Coetzee, P. & Meiring, A. (2013) 'The perceived adequacy and effectiveness of internal control activities in South African small , medium and microenterprises', *The Southern African Journal of Entrepreneurship and Small Business Management*. 1(1), 1-11.
- 8) COSO. (2013). COSO - Internal control / integrated framework executive summary. Committee of Sponsoring Organisation of the Treadway Commission. 1–8
- 9) Fadayo, O.M. (2018). An Examination of E-Banking Fraud Prevention and Detection in Nigerian Banks. Unpublished Thesis. De Montfort University, England.

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- 10) Frazer, L. (2014). The Effect Of Internal Control On The Operating Activities Of Small Restaurants. *Journal of Business & Economics*. 10(6), 36-41.
- 11) Gamage, C.T., Lock, K.L & Fernando, A.A. (2014). A Proposed Research Framework : Effectiveness of Internal Control System in State Commercial Banks in Sri Lanka. *International Journal of Scientific Research and Innovative Technology*. 1(5), 25–44.
- 12) Georgios, L.V. (2017). Advancing theory of fraud: The S.C.O.R.E. Model Abstract. *Journal of Financial Crime*. 1(1), 1–20.
- 13) Hayali, A., Dinc, Y., Sarılı, S., Dizman, A.S. & Gundogdu, A. (2013). Importance of Internal Control System in Banking Sector : Evidence From Turkey. Turkey: Marmara University.
- 14) Idogei, S.O., Josiah, M. and Onomuhara, O.G. (2017). Internal Control as the Basis for Prevention, Detection and Eradication of Frauds in Banks in Nigeria. *International Journal of Economics, Commerce and Management*. 5(9), 61-88
- 15) Idowu, I. (2009). An assessment of fraud and its management in Nigeria commercial banks, *European Journal of Social Sciences*, 10(4), 628-640
- 16) Ifeoluwa, M.A. (2017). Impact of Effective Internal Control in the Management of Mother and Child Hospital Akure, Ondo State. *Journal of Finance and Accounting*. 5(1), 61-78.
- 17) Igbodo, A.A., Josiah, J. & Igbodo, R.O. (2019). The Impact of Internal Audit Effectiveness on Financial Fraud Detection In Nigeria Public Sector. *Journal of Leadership, Accounting Development and Investigation Research*. 3(1), 157-168
- 18) Kabue, L. N. & Aduda, J. (2017). Effect of Internal Controls on Fraud the Detection and Prevention Among Commercial Banks in Kenya. *Journal of Management Research*. 2(1), pp. 52–68
- 19) Ndamenu, D.K. (2011). Internal Control and Its Contributions To Organizational Efficiency and Effectiveness: a Case Study of Ecobank Ghana Limited . Master’s Thesis Submitted to KNUST.
- 20) Nugraha, R. & Bayunitri, B.I. (2020). The influence of internal control on fraud prevention (Case study at Bank BRI of Cimahi City). *International Journal of Financial, Accounting, and Management*. 2(3), 199-211
- 21) Nwobodo, H., Adeigbe, F.F. & Banmore, O.O. (2020). Effect Of Bank Internal Control System On Non-Financial Performance Of Selected Quoted Deposit Money Bank In Nigeria. *Journal of Management, Economics, and Industrial Organization*. 4(2), 77-88
- 22) Nyakarimi, S.N., Kariuki, S.N. & Kariuki, P. (2020). Application Of Internal Control System In Fraud Prevention In Banking Sector. *International Journal Of Scientific & Technology Research*. 9(3), 6524-6536.
- 23) Olufidipe, E. O. (1994). Fraud in Nigeria and its implication for bank and financial institutions. *Nigeria Institute of Bankers Lagos*. 30(1), 7-10
- 24) Owusu-Boateng, W., Amofa, R. & Owusu, I.O. (2017). The Internal Control Systems of GN Bank- Ghana. *British Journal of Economics, Management & Trade*. 17(1), 1-17.
- 25) Siyad, B.A. & Omar, N. (2016). Effects of Internal Control Systems on Fraud Detection in Commercial Banks in Somalia. *Bile Abdi Siyad and Nagib Omar / Elixir Fin. Mgmt*. 99 (1) 42929-42943
- 26) Sruthi T.V., & Prasanna. (2016). Fraud detection in banking institutions. *International Journal of Engineering and Technology (IJET)*. 8(2), 1127-1130
- 27) Taiwo, J.N., Agwu, M.E., Babajide, A.A., Okafor, T.C. & Isibor, A.A. (2016). Growth of bank frauds and the impact on the Nigerian banking industry. *Journal of Business Management and Economics*. 4(12), 1-10.
- 28) Usman, A. K., MSc, & Shah, M. H. (2013). Strengthening E-banking security using keystroke dynamics. *Journal of Internet Banking and Commerce*, 18(3), 1-11.



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