



Asset Quality, Internal Control System and Profitability of Deposit Money Banks in Nigeria

Olaleye John Olatunde PhD

Department of Management and Accounting Faculty of Management and Social Sciences Lead City University, Ibadan, Oyo State Nigeria

Email Address : tundelaleye@yahoo.com

Tel: +2348023635085

&

Oluseyi Olayinka Abraham

Department of Management and Accounting Faculty of Management and Social Sciences Lead City University, Ibadan, Oyo State Nigeria

Tel. +2348023456413

E-mail address: seyolayinka18@gmail.com

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Abstract

Banking industry has witnessed several changes in the last decade from partial to full digital transformation which improved their customer engagement especially in the area of granting loans with implications on their profitability. This study investigated the effect of asset quality on the profitability of Deposit Money Banks (DMBs) in Nigeria and the moderating effect of internal control system on the interaction between asset quality and profitability of banks. Dearth of study that combines asset quality relevance and internal control system in one study to address profitability of DMBs in Nigeria was the gap filled. The study was anchored on Liabilities Management theory. Four research questions and hypotheses were formulated. The study adopted ex-post facto design which entails the utilization of historical data to forecast future trends. Inferential statistics adopted econometrics models with panel data using pooled ordinary least square, Fixed and Random effects Regression models. The

population comprises of twenty three DMBs in Nigeria. Sample size consisted of seven banks based on the problem identified in this study. The results showed that asset quality has significant effect on Return on asset ($F = 10.89, p = 0.001 < 0.05, R^2 = 0.434$); Return on Equity ($F = 4.442, p = 0.004 < 0.05, R^2 = 0.235$); no effect on Return on Capital Employed ($F = 1.193, p = 0.069 > 0.05, R^2 = 0.068$), Internal Control System has no moderating effect on the interaction between asset quality and profitability of DMBs ($F = 1.013, p = 0.071 > 0.05, R^2 = 0.066$). The study concluded that asset quality has effect on the profitability of DMBs and there is no moderating effect of internal control system between asset quality and profitability. It was therefore recommended amongst others that banks should review their credit policy regularly that will reduce non-performing loans and the DMBs should also re-strategise their policy on deposit mobilization that will minimize the impact of Payment Service Banks (PSBs).



Keywords: Asset Quality, Deposit Money Banks, Internal Control System, Loans, Profitability,

I. Introduction

The banking sector have witnessed several changes in the last decade, moving from analogue to digital across the world. Bank has moved closer to the people unlike in the past where you will need to get to the bank premises before transaction can be carried out. Banking has become one of the great tool in the world that countries depend to carry out their various transactions across borders especially financial transactions. Many non-banking entities have now joined them in carrying out the roles that the sector engages in the economy. The growth in the broader digital economy since 2011 has made global banking experience disruption. The Disruptability index anchor by Accenture shows that the banking sector has climbed to 0.52 in 2019 from 0.43 in 2011. The index measures disruption on a scale of 0 to 1 across industries. The sector has moved on the index to volatile from vulnerable¹.

By 2020, twenty percent (20%) of total players in the banking and payments sectors would be under the age of 15. Tech-driven new entrants increasing their volume by 73 percent in 2019 to over 40 million users. Powerful newly formed technologies, rising in consumer expectations, fast and agile new industry players and unpredictable changing of regulations are driving these changes and these are putting enormous force on the incumbent banks to introduce relevant innovation to existed businesses². COVID-19 pandemic has accelerated many pre-existing trends, such as the increased use of online banking services and the decline in branch traffic and cash usage. It created a level playing field in the banking industry by reshaping the competitive environment. The effect was visible in three major areas: profits have been squeezed, the amount of managing risks have risen, and the speed of digital transformations has greatly increased. Immediate impact of lower income brought a credit crisis, which resulted in a significant increase in the cost of managing risk for global banks during the first quarter of 2020. Bad loans rose again in the second quarter of 2020, albeit very moderately given the unparalleled public-sector fiscal support². The pandemic brought out new issue in the global banking, part of the portion of market and revenue sizes controlled by banking sector migrates to other industries, particularly big tech companies which include Apple, Amazon, Google, Rakuten and Tencent. Those big tech companies have now added financial services into the products they offer to the public².

Aim and Objectives of the Study

The aim of the study is to investigate the interaction of asset quality, internal control system and profitability of deposit money banks in Nigeria. To achieve this, the following specific objectives were considered,

1. examine the impact of asset quality on return on asset of DMBs in Nigeria.
2. assessing the effect of asset quality on return of equity of DMBs in Nigeria.
3. investigate the effect of asset quality on return on capital employed of DMBs in Nigeria.
4. determine the moderating effect of internal control system on the interaction between asset quality and profitability of DMBs in Nigeria

Research Questions

1. How does asset quality affects Return On Assets of DMBs in Nigeria?
2. What impact does asset quality have on Return on Equity of DMBs in Nigeria?
3. What degree does asset quality affects Return on Capital Employed of DMBs in Nigeria?
4. What is the moderating effect of internal control system on the interaction between asset quality and profitability of DMBs in Nigeria?

II. Literature Review; Conceptual Review Profitability

Profitability is the earnings/incomes that bank realized from revenue after deducting all expenses incurred during a given period. It is one of the indicators that show the achievement of the management. It reveals shareholders' satisfaction and serve as a bait to attract potential investors. Survival and sustainability of banks is depend on the profitability. Without doubt, the goal of any bank or company in both short and long term is to make profit by growing the values of its stocks which will maximize the wealth of its shareholders⁴.

Return on Assets (ROA)

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives a manager, investor, or analyst an idea as to how efficient a company's management is at using its assets to generate earnings. Return on assets is displayed as a percentage; the higher the ROA the better. In other word, return on asset is the ability of the bank to efficiently utilize their assets to generate profit. It is the ratio between profit before tax and total bank assets⁵.

Return on Equity



Return on equity is used to measure the ability of the company to create profits on the equity of shareholders. It is part of profitability ratios. It measures the ability of the company to generate profit based on the share capital owned by the company. The ratio is calculated based on division of net profit after tax and total equity. By measuring the earnings a company can generate from assets, return on equity (ROE) offers a gauge of profit-generating efficiency. Return on equity (ROE) helps investors determine whether a company is a lean, profit machine or an inefficient operator⁶.

Return on Capital Employed

Return on Capital Employed is one of the profitability ratios that use to assess the profits before interest and tax that the company could generate from its business by using shareholders' capital employed. Capital employed is the fund that shareholders injected into the company plus other capital and long-term debt. In other words, the fund that the company could use to generate profits. Capital employed at the end of a specific period could be calculated by eliminating total liabilities from total assets at that period in the balance sheet⁷.

Asset quality

Asset quality involves the evaluation of assets of bank that will facilitate the measurement of the level and size of credit risk that connect with its operation to ensure profitability resulting in improved financial performance⁸. Asset quality is a measure of how well a loan or asset is performing. It is a measurement of the level and size of credit risk that may prevent loan performance from yielding the greatest benefit to the organization.

Gross Loans and Advances

Gross loans and advances are loans and advances to customers, finance lease receivables and cash, cash equivalent. It comprises of overdrafts, term loans, project finance, advance under finance leases, credit cards, mortgage. It is a gross loans which comprises of performing, impaired and non-performing⁹.

Performing Loans and Advances

The loans and advance is said to be performing when the borrowers remains financial healthy and pays the agreed instalments and interest as scheduled. It means any loan or advances for which the last payment of principal, interest and any escrow amounts that is required to be paid by the terms of the note or collateral documents is less than sixty days. It is a loan where the repayments are made as at when due¹⁰. Performing loans and advances are those facilities in which borrowers repay agreed-upon installments and interest as soon as they become due, with no outstanding obligations.

Theoretical Review; Commercial Loan Theory (Real Bills Doctrine theory)

This theory was evolved from 18th century economic thought, such as Adam Smith's, the wealth of Nations in 1776¹¹. The commercial loan or the real bills doctrine theory states that a commercial bank should forward only short-term self-liquidating productive loans to business organizations. This theory also states that whenever commercial banks make short term self-liquidating productive loans, the central bank should lend to the banks on the security of such short-term loans. This principle assures that the appropriate degree of liquidity for each bank and appropriate money supply for the whole economy¹². The theory is also heavily criticized by economists favoring free banking, who argue that the government should not be involved in managing the money supply and that open commercial competition provides the optimal stabilization of money creation¹³.

Shiftability Theory

This theory was put forward by H.G. Moulton who stated that whenever there is need for liquidity, the commercial banks can move their assets, provided there is no material loss, to other banks in exchange for cash without waiting for the maturity of the assets. In banking, Shiftability is an approach to keep banks liquid by supporting the shifting of assets¹⁴. The criticism of the theory are that; only shiftability of assets does not provide liquidity to the banking system. It completely relies on the economic conditions; this theory neglects acute depression, the shares and debentures cannot be shifted to others by the banks. In such a situation, there are no buyers and all who possess them want to sell them; a single bank may have shiftable assets in sufficient quantities but if it tries to sell them when there is a run on the bank, it may adversely affect the entire banking system; if all the banks simultaneously start shifting their assets, it would have disastrous effects on both the lenders and the borrowers¹⁵.

Liabilities Management Theory

Liability management is the procedure whereby the banks maintain a balance between the maturities of their assets and their liabilities in order to maintain liquidity, profitability and to facilitate lending while also maintaining healthy balance sheets. The liabilities include money of depositor as well as funds borrowed from other financial institutions. A bank practicing liability management looks after these funds and also hedges against changes in interest rates. Banks are left with



a surplus after successfully matching assets and liabilities, which can be actively managed to maximize return on investment and boost profitability. A bank can face a mismatch between assets and liabilities because of illiquidity or changes in interest rates; and liability management reduces the likelihood of a mismatch¹⁶. Haynes, Kirton and Redington are the proponents of the liability management theory in 1952.

The theory's critics claimed that due to each department's unique characteristics, applying the theory across all bank departments would necessitate a proper framework, which would be very challenging.

Review of Empirical Studies; Asset Quality and Return on Asset

Return on Asset (ROA) is an indicator that helps to understand how much profit an institution can generate from investments made into assets. A study was carried to investigate the effect of asset quality on the profitability of the bank in Turkey. The result revealed that asset quality of banks has significant importance on financial system of the country and national economy. It was found that there is a significant, negative relationship between asset quality and return on asset¹⁷. Another study examined the effect of bank specific factors on asset quality of listed deposit money banks in Nigeria. The study revealed that return on asset (ROA) has a negative and significant effect on Asset Quality of listed deposit money banks (DMBs) in Nigeria.¹⁸.

Asset Quality and Return on Equity

Return of equity is the amount of net income returned as a percentage of shareholders equity. It measures profitability of bank by revealing how much profit a bank generates with the money shareholders have invested¹⁹. Study was conducted on Impact of non-performing loans on asset quality, profitability and lending behavior of banks in Oman. The result revealed that there exists a significant relationship between Return on Equity (ROE) and the independent variables²⁰.

2.4 Conceptual Framework

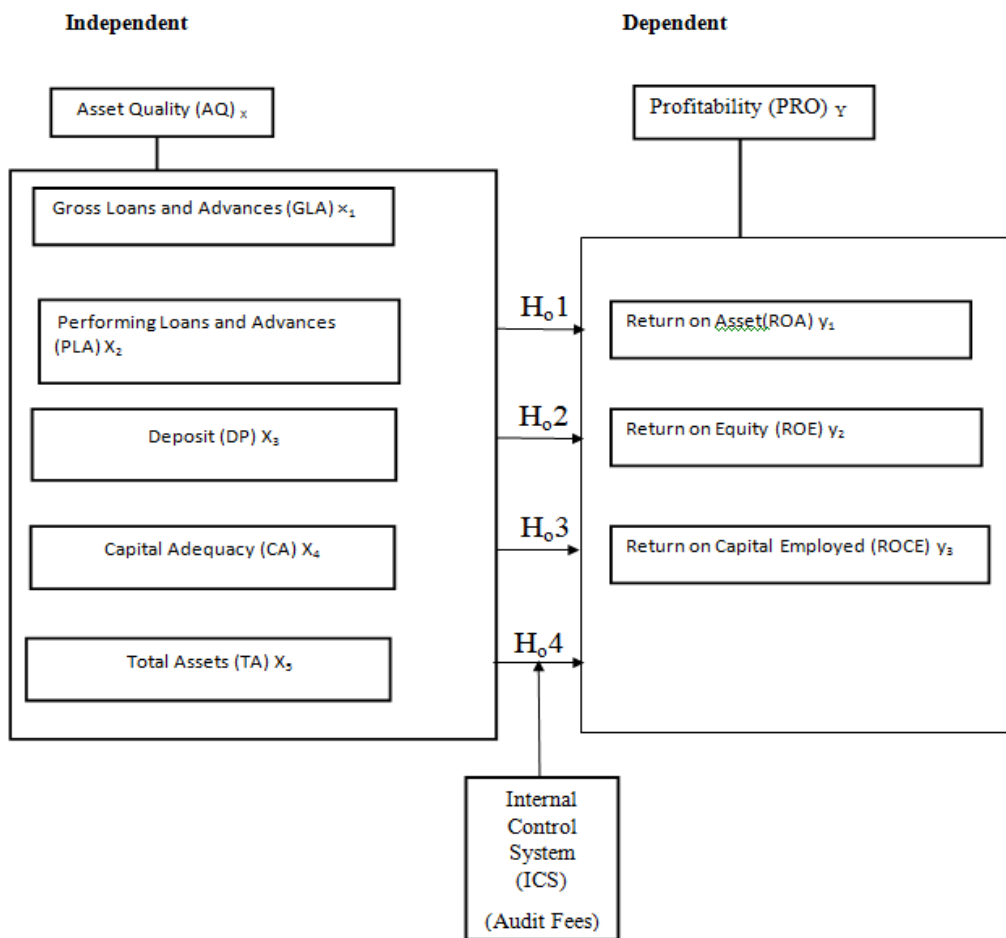
Another study analysis and compare the impact of Capital Adequacy, Asset Quality, Management Quality, Earning Ability and Liquidity (CAMEL) model on the profitability for both domestic and foreign commercial banks during the period 2000-2014. The findings showed that Asset Quality (AQ) has a negative and significant effect on Return on Equity (ROE)²¹.

Asset Quality And Return On Capital Employed

The study investigated the effect of liquidity management on the performance of banks in Nigeria. Eighteen (18) quoted banks in Nigeria were selected using judgmental sampling technique. The result revealed that there is a positive relationship between Return on Capital Employed and Asset quality. Asset quality has a significant positive effect on the Return on Capital Employed (Profitability)²². Another study examined the influence of financial distress on financial performance for commercial banks in Kenya. The finding revealed that asset quality distress has no effect on Return On Capital Employed (financial performance) of commercial banks in Kenya. The study concluded that asset quality distress has no significant effect on financial effect on Return on Capital Employed (financial performance) of commercial banks in Kenya²³.

Internal Control system, Asset quality and Profitability

The study investigated the Impact of Internal Control on the Profitability of Microfinance Institutions in Senegal. The internal control components have positive and significant effect on Return On Asset (ROA), Earnings per share (EPS), Profit margin (PM) and Return On Equity (ROE). It was found that the relationship between profitability and control environment, information and communication and monitoring is positive but insignificant²⁴.



Researcher's Conceptual Model (2022)

III. Methodology

Research Design

The study adopted ex-post facto research design which entails the utilization of historical/past data to forecast future trends.

Population of the Study

The universal population of this study include all deposit money banks in Nigeria that were in operational as at March 31, 2021 over the period 2010– 2020. The banks were group into three

categories; international (8), national(11) and regional (4)^{27,28,29}.

Sample and Sampling Techniques

Purposive sampling method was used to select seven banks for the study. The selection was based on the performance. The banks selected were subjected to performance test. The seven banks selected are Access Bank, Fidelity Bank, Sterling Bank, Union Bank, United Bank for Africa, Unity Bank and Wema Bank.

Model Specification

The model specified is based on empirical studies on the asset qualities and profitability of selected deposit money banks,

This shows the relationships among variables;

$$Y = f(X)$$

Y= Dependent Variable, X= Independent Variable

Where

Y = Profitability , X = Asset Quality , Y = (ROA₁ ,ROE₂ ,ROCE₃) ,X = (GLA₁ ,PLA₂ ,DEP₃ ,CA₄ ,TA₅)

Where: y₁ =Return on Asset, y₂=Return on Equity, y₃=Return on Capital Employed ,

x₁= Gross Loans and Advances, x₂= Performing Loans and Advances , x₃= Deposit

x₄= Capital Adequacy, x₅= Total Assets

ROA= f(GLA,PLA,DEP,CA,TA) ----- Equation 1



$$\begin{aligned} ROE &= f(GLA, PLA, DEP, CA, TA) \text{ ----- Equation 2} \\ ROCE &= f(GLA, PLA, DEP, CA, TA) \text{ ----- Equation 3} \\ \text{Transforming equation 1, 2 and 3 above to econometrics model we have;} \\ ROA &= \alpha + \beta_1 GLA + \beta_2 PLA + \beta_3 DEP + \beta_4 CA + \beta_5 TA + e \text{ ----- 4} \\ ROE &= \alpha + \beta_1 GLA + \beta_2 PLA + \beta_3 DEP + \beta_4 CA + \beta_5 TA + e \text{ ----- 5} \\ ROCE &= \alpha + \beta_1 GLA + \beta_2 PLA + \beta_3 DEP + \beta_4 CA + \beta_5 TA + e \text{ ----- 6} \\ PRO &= \alpha + \beta_1 AQ + \beta_2 ICS + \beta_3 AQ * ICS \text{ ----- 7} \end{aligned}$$

Where;

ROA: Return on Asset, ROE : Return on Equity, ROCE: Return on Capital Employed

GLA : Gross Loans and Advances , PLA : Performing Loans and Advances, DEP : Deposit

CA :Capital Adequacy, TA : Total Assets, PRO : Profitability, AQ : Asset Quality

ICS : Internal Control System

μ : Error Term, β_0 : Regression Intercept, β_1 - β_5 : Coefficient of the independent Variables to the dependent variables

Data Collection

Secondary data was used for this study. The data were collected from the published annual financial audited reports of the seven selected banks. The period covered from 2010 to 2020.

Data Analysis

The data was analyzed based on descriptive statistics, inferential statistics and Ordinary Least Square (OLS) regression. The panel study

employed the Pooled Ordinary Least Square (POLS), Fixed and Random Effects Regression Models. The panel data collected for 7 banks sampled for this study between the periods 2010 to 2020 were analyzed using Fixed and Random Effect Models, while Hausman test was used to select the best model. Hypotheses were tested using the Ordinary Least Square (OLS) technique of estimation.

IV. Results and Discussion of Findings

The following result revealed the interaction of asset, internal control system and profitability of deposit money banks in Nigeria

Regression Result on the Effect of Asset Quality on ROA

Dependent Variable: ROA

Variables	Pooled OLS	Fixed Effect	Random Effect
C	- 12.356** (0.012)	-6.920 (0.440)	12.356** (0.014)
Ln Gross Loan	17.730*** (0.000)	18.342*** (0.000)	17.370*** (0.000)
Ln Performing Loan	-15.507*** (0.000)	-15.953*** (0.000)	-15.507*** (0.000)
Ln Deposit	0.705 (0.577)	0.379 (0.799)	0.705 (0.586)
Capital adequacy	0.797 (0.245)	-2.116 (0.204)	-1.547 (0.252)
Ln Total Assets	-1.548 (0.241)	0.020 (0.983)	0.797 (0.256)
R ²	0.434	0.458	0.434
F	10.891	4.989	10.891
F (Prob)	0.001		
Observations	77	77	77
Model	POLS	Fixed	Random

***, ** and * indicate significance at 1%, 5% and 10% respectively.

Source: Author's Computation (2022)

Hausman Test for ROA

Chi square: 2.791 Prob: 0.732

Source: Author's Computation (2022)



The table above represents Hausman test probability ($0.732 > 0.05$) value which shows that the random effect estimator is more efficient than the fixed effect estimator. The random effect results presented in table above shows a significantly positive relationship between gross loan and return on assets at 1 percent significance level. This means that a percentage increase in gross loan will increase return on assets by 17.370 units given that gross loan is expressed in the logarithmic form. Performing loan on the other hand is seen to exert a negative influence on financial performance as measured by return on assets with a percentage

increase in performing loans reducing return on assets by 15.507 units. Deposits, capital adequacy and total assets are seen not to have significant effects on financial profitability of the banks as measured by ROA. Also, the result shows that the test statistics $F_{(1, 74)} = 10.89, p = 0.001$, with level of significance for a variable considered is below 0.05 implying that the H_0 hypothesis which states that there is no significant effect of Asset Quality on return on asset of DMBs in Nigeria is rejected. Hence, Asset Quality has significant effect on return on asset of DMBs in Nigeria.

Regression Result on the Effect of Asset Quality on ROE

Dependent Variable: ROE

Variables	Pooled OLS	Fixed Effect	Random Effect
C	-164.712*** (0.002)	-161.019 (0.102)	-165.723*** (0.005)
Ln Gross Loan	128.062*** (0.000)	134.674*** (0.000)	129.186*** (0.000)
Ln Performing Loan	-130.388*** (0.000)	-137.830*** (0.000)	-131.733*** (0.000)
Ln Deposit	21.186 (0.126)	19.673 (0.229)	21.170 (0.144)
Capital adequacy	0.686 (0.926)	-1.857 (0.857)	0.424 (0.958)
Ln Total Assets	-6.626 (0.643)	-4.670 (0.795)	-6.335 (0.675)
R ²	0.238	0.268	0.235
F	4.442	2.164	4.359
F (Prob)	0.004		
Observations	77	77	77
Model	POLS	Fixed	Random

Source: Author's Computation (2022)

Hausman Test for ROE

Chi square: 1.108

Prob: 0.953

Source: Author's Computation (2022)

Given that the Hausman test probability ($0.953 > 0.05$) value in table above shows that random effect estimator is more efficient than the fixed effect estimator, results are reported based on the random effect estimates. There is a positive and significant relationship between gross loan and return on equity as a percentage increase in gross loan is seen to increase return on equity by 129 units. Conversely, there is a negative relationship between performing loans and return on assets as a percentage increase in performing loans will reduce

ROE by 131 units. Deposits, capital adequacy and total assets are seen not to have significant effects on financial profitability of the banks as measured by ROE. Also, the result shows that the test statistics $F_{(1, 74)} = 4.442, p = 0.004$, with level of significance for a variable considered is below 0.05 implying that the H_0 hypothesis which states that there is no significant effect of Asset Quality on return on equity of DMBs in Nigeria is rejected. Hence, Asset Quality has significant effect on return on equity of DMBs in Nigeria.

Regression Result on the Effect of Asset Quality on ROCE



Dependent Variable: ROCE			
Variables	Pooled OLS	Fixed Effect	Random Effect
C	- 222.522* (0.053)	-257.056 (0.226)	-220.* (0.077)
Ln Gross Loan	35.553 (0.604)	24.654 (0.733)	34.464 (0.624)
Ln Performing Loan	-26.859 (0.686)	-26.784 (0.704)	-27.084 (0.691)
Ln Deposit	21.463 (0.474)	24.851 (0.481)	21.511 (0.491)
Capital adequacy	-0.332 (0.984)	16.665 (0.457)	1.675 (0.922)
Ln Total Assets	12.930 (0.677)	3.654 (0.925)	11.892 (0.716)
R ²	0.077	0.121	0.068
F	1.193	0.811	1.037
F (Prob)	0.069		
Observations	77	77	77
Model	POLS	Fixed	Random

Source: Author's Computation (2022)

Hausman Test for ROCE

Chi square: 1.669 Prob: 0.893

Source: Author's Computation (2022)

Given that the Hausman test probability (0.893 > 0.05) value in table above shows that random effect estimator is more efficient than the fixed effect estimator, results are reported based on the random effect estimates. The random effect results in table above show that all variables employed in measuring asset quality, gross loan, performing loan, deposits, capital adequacy and total assets do not significantly influence

ROCE. Also, the result shows that the test statistics $F_{(1, 74)} = 1.193, p = 0.069$, with level of significance for a variable considered is above 0.05 implying that the H_0 hypothesis which states that there is no significant effect of Asset Quality on return on capital employed of the DMBs in Nigeria is accepted. Hence, Asset Quality on return on capital employed has no significant effect on return on asset of DMBs in Nigeria.

Regression Result on the Effect of Internal Control on the Interaction between Asset Quality and Profitability

Dependent Variable: TOTAL PROFITABILITY			
Variables	Pooled OLS	Fixed Effect	Random Effect
C	3.159 (0.985)	-80.319 (0.708)	3.159 (0.985)
ICS*Capital Adequacy	1.366* (0.080)	5.646** (0.044)	1.365** (0.088)
ICS*Performing Loan	-0.002 (0.985)	-0.023 (0.862)	-0.002 (0.986)
ICS*Deposit	2.621 (0.634)	2.209 (0.778)	2.621 (0.642)
ICS*Gross Loan	2.621 (0.634)	-1.083 (0.849)	1.253 (0.803)
ICS*Total Assets	25.111* (0.053)	2.425* (0.096)	25.111** (0.062)
R ²	0.066	0.105	0.066
F	1.013	0.694	1.013



F (Prob)	0.071		
Observations	77	77	77
Model	POLS	Fixed	Random

Source: Author's Computation (2022)

Hausman Test for Total Profitability

Chi square: 2.258

Prob: 0.812

Source: Author's Computation (2022)

The Hausman test probability ($0.81 > 0.05$) value in table above shows that the random effect estimator is more efficient than the fixed effect estimator. The random effect results presented in table above shows a significantly positive relationship between the interaction of internal control with total assets and capital adequacy at 10 percent significance level. A percentage increase in the interactive effect of internal control with total assets will increase total profitability by 25.1 units. Similarly, a percentage increase in the interactive effect of capital adequacy will increase total profitability by 1.365 units. The interaction of internal control with other variables employed in measuring asset quality; gross loan, performing loan, deposits, do not significantly influence total profitability. Also, the result shows that the test statistics $F_{(1, 74)} = 1.013, p = 0.071$, with level of significance for a variable considered is above 0.05 implying that the H_0 hypothesis which states that Internal Control System has no significant moderating effect on the interaction between assets quality and profitability of DMBs in Nigeria is accepted. Hence, Internal Control System has no significant moderating effect on the interaction between assets quality and profitability of DMBs in Nigeria.

V. Summary of Findings, Conclusion and Recommendation.

Asset quality has impact on Return on Asset of DMBs in Nigeria. Asset quality have effect on Return on Equity of DMBs in Nigeria. Asset quality have no effect on Return on capital employed of DMBs in Nigeria. Internal control system has no moderating effect on the interaction between assets quality and profitability of DMBs in Nigeria.

On the basis of findings, the study concluded that asset quality has effect on; the return of asset; return on equity. Asset quality has no effect on return on capital employed of DMBs in Nigeria. And there is no moderating effect of internal control system on the interaction between asset quality and profitability of DMBs in Nigeria.

From the findings the following recommendation were drawn:

1) The bank should review and re-strategise their policy on deposit mobilization which focus more on aggressive deposit mobilization with preference for cheap deposits (savings, Time), innovative products and relevant technologies that will minimize the impact of competition from Payment Service banks (PSBs).

2) The bank should raise additional capital through sales of shares to improve capital adequacy.

3) The bank should review their total assets to see if there are assets that are dormant, where it is necessary, the unused / dormant and other assets that are not yielding income should be sold or modified to bring in income.

4) Monitoring and recovery of loans should be reviewed regularly in order to prevent performing loans from turning to non-performing.

5) Bank should embark on comprehensive review of internal control system on Gross loans, Performing loans and Deposits.

The study has contributed to knowledge in conceptual term by adding new definitions to the existing concept. Empirically, this study contributes to the existing empirical literatures by reporting the significant effect of asset quality on the performance of the Deposit money banks and the moderating effect of internal control system on the interaction between asset quality and profitability of DMBs in Nigeria. Theoretically, liability management theory was the major theory used in this study. This study gave an additional application of this theory to the effect of asset quality on the performance of Deposit commercial banks.

The scope of the study could be expanded by including Non interest Banks, Micro finance and Payment Service Banks. Future research can also perhaps employ a mixed research method.

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