Contemporary Journal of Management | *ISSN 2766-1431*
Published by AIR JOURNALS | *https://airjournal.org/cjm*
12011 WestBrae Pkwy, Houston, TX 77031, United States
airjournals@gmail.com; enquiry@airjournal.org

RESEARCH ARTICLE

RISK ASSETS MANAGEMENT AND INVESTMENT INCOME OF DEPOSIT MONEY BANKS IN NIGERIA: A PANEL LEAST SQUARES METHOD

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Abstract

This study examined risk assets management and investment income of deposit money banks in Nigeria. The study specifically examined the effect of total loans and advances, Total Performing Loans and Total equity in subsidiaries on net cash generated from investing activities of Nigerian deposit money banks. The researcher adopted ex-post facto research design. Data were collected through annual report and accounts of the sampled banks. Data collected were analysed using multiple regression analysis, result of the analysis revealed that Total loan and advances has positive and significant effect on net cash generated from investing activities in the Nigerian deposit money banks with t-statistics of 7.548348 was greater than 2.0 and probability value of 0.0000 which is less than 0.05. It was also observed that equity securities have significant effect on net cash generated from investing activities in the Nigerian deposit money banks with t-statistics of 4.979062 was greater than 2.0 and probability value of 0.0011. The study also revealed that total equity in subsidiaries have significant effect on net cash generated from investing activities in the Nigerian deposit money banks with t-statistics of 4.734520 was greater than 2.0 and probability value of 0.0001. Based on the findings, the study recommends among others that all banks should comply with cash reserve requirements, which help them to avoid insolvency and maintain sustainability in profit.

Keywords: Risk Assets Management; Investment Income; Equity Securities; Deposit Money Banks

Introduction

The process of financial intermediation by Deposit Money Banks (DMBs) whereby funds are channelled from the surplus to deficit sectors of the economy involves borrowing on short-term and lending on long-term bases. This phenomenon, according to Adegbite (2017) promotes savings-investment process, capital formation and real growth of the economy. However, the short-term versus long-term dichotomy has created a risky adventure that throws at the DMBs, liquidity, profitability and going concern challenges. The longer tenured loans make credit payment period longer than the debt collection period of the depositors who can withdraw their deposits on demand. Frank Knight (1921), the most famous scholar to formalize definition of risk and make a distinction between risk and uncertainty (Holton, 2004) defines risk as situations where the outcome of a given action is unknown but the odds are measurable. Uncertainty on the other hand refers to a situation where all needed information to set the odds in the course of a given action are unknown. Recent global economic crisis has revealed that, it is difficult for institutions to accurately capture the riskiness of their activities. In managing risks, rather than trying to hedge against risk, there is a strategic step to determine the risks to ignore, the ones to reduce or eliminate and those ones to exploit in order to take advantage of opportunities to achieve the objectives of the organisation. Increasing exposures to some risk is an integral part of business success, and any entity that wants large rewards must be ready to take considerable amount of risk (Damodaran, 2017). For any business venture of which the DMBs are part, Audu (2014) submitted that it is difficult to evade risk altogether because without taking some level of risk, the returns from operations will no doubt be compromised and therefore Audu advocated avoidance of risks as much as it is feasible saying that the rational approach to risk, is at the very least to restrict exposure to it.

Statement of Problem

Bank failure is contagious and can pull down many other business ventures. This explains why regulatory disclosure requirement of DMBs' risk management structure has become part of audited financial statements. The main cause of bank failures has been attributed to poor risk management practices in all its ramifications. Owojori, Akintoye and Adidu (2011) said that banks in Nigeria generally take a lot of risks; although their risk appetites are different, many of them take more risks than their capital could carry. The effects of the recent financial/economic crisis on the banking sector included reduced foreign credit lines and capital market downturn, causing second round effects on the balance sheet with increased loan loss provisioning (Soludo, 2009). The treasury single account (TSA) introduced by the government in 2015 has become a policy earthquake that threw the banking system into a debilitating liquidity crisis, especially with banks whose bulk of deposit liability portfolio is from the public sector. Although liquidity ratio in the banking industry increased from 39.32% by year-end 2014 to 48.63% by year-end 2015 (CBN Report, 2015), which is above the benchmark of 30% set by the CBN, it is expected that without appropriate monetary policy measure, the liquidity position of the DMBs may get worse. The underlying problems that are still recurring and begging for solutions include, firstly, banks are susceptible to high risks, which affect their performance both financial and non-financial.

Objectives of the Study

The aim of this seminar paper is to examine risk assets management and investment income of deposit money banks in Nigeria. The specific objective of this study is to;

a. Examine the effect of total loans and advances on net cash generated from investing activities of Nigerian deposit money banks.
b. Ascertain the effect of total Performing Loans on net cash generated from investing activities of Nigerian deposit money banks.
c. Determine the effect of total equity in subsidiaries on net cash generated from investing activities of Nigerian deposit money banks.

Research Questions

The following research questions guided the study:

a. What are the effects of total loans and advances on net cash generated from investing activities of Nigerian deposit money banks?
b. How does total Performing Loans affect net cash generated from investing activities of Nigerian deposit money banks?
c. To what extent does total equity in subsidiaries affect net cash generated from investing activities of Nigerian deposit money banks?

Statement of Hypotheses

The following null hypotheses guided the study:

Ho_1: Total loans and advances does not have significant effect on net cash generated from investing activities of Nigerian deposit money banks.

Ho_2: Total Performing Loans do not have significant effect on net cash generated from investing activities of Nigerian deposit money banks.

Ho_3: Total equity in subsidiaries does not have significant effect on net cash generated from investing activities of Nigerian deposit money banks.

Scope of the Study

This study focused on risk assets management and investment income of deposit money banks in Nigeria for a period of ten (10) years spanning through 2011 to 2020. The geographical area of the study is Nigeria with reference to the financial sector. In term perm of variables, the study focused on total Loans and Advances (TLA), Total Performing Loans (TPL) and Total equity in subsidiaries (TEQTS) as proxies for risk assets while the dependent variable is net cash generated from investing activities as proxy for investment income.

Review of Related Literature

Conceptual Review

Risk Asset

A risk asset is any asset that carries a degree of risk. Risk asset generally refers to assets that have a significant degree of price volatility, such as equities, commodities, high-yield bonds, real estate, and currencies. Specifically, in the banking context, a risk asset refers to an asset owned by a bank or financial institution whose value may fluctuate due to changes in interest rates, credit quality, repayment risk, and so on. The term may also refer to equity capital in a financially stretched or near-bankrupt company, as its shareholders' claims would rank below those of the firm's bondholders' and other lenders.

Investment Income

Investment income is money received in interest payments, dividends, capital gains realized with the sale of stock or other assets, and any additional profit made through an investment vehicle. Interest earned on bank accounts, dividends received from stock owned by mutual fund holdings, and the profits on the sale of gold coins are all considered investment income. Income from long-term investments undergoes different and often preferential tax treatment, which varies by country and locality. Investment income is the profit that is earned from investments such as real estate and stock sales. Dividends from bonds also are investment income. Investment income is taxed at a different rate than earned income, the profits from the sale of gold coins or fine wine could be considered investment income.

Investment income refers solely to the financial gains above the original cost of the investment. The form the income takes, such as interest or dividend payments, is irrelevant to it being considered investment income so long as the income is generated from a previous investment. Additionally, investment income may be received as a lump sum or in regular interest instalments paid out over time.

Theoretical Framework

Agency Theory

The study is anchored on agency theory which originated formally by the independent but concurrent work of Stephen Ross and Barry Mitnick in the third quarter of 20th century (Mitnick, 2006). The most referenced work on agency theory in literature is that of Jensen and Meckling (1976) which proposed the agency theory of the firm, holding that managers acting as agents will not operate to maximize returns to shareholders except an appropriate governance structure is put in place to safeguard the interest of the shareholders (Donaldson & Davis, 1991). Namazi (2013), referring to the studies of various scholars (including Spence and Zeckhuaster, 1971; Jensen and Meckling, 1976; Harris and Raviv, 1976; and Holmstrom, 1979) also submitted that agency theory was developed to determine the optimal risk- sharing level among different individuals. The differences between the interests of the principal and the agent led to agency problem. There is information asymmetry between the principal and the agent in that the actions of the agent are not known by the principal. While the agent may be striving to take additional risks by expanding the business to other market or sectors in the quest for more profit that will bring more returns to the principal, the principal may be more interested in short-term quick returns at the expense of business growth and long-term future earnings. DMBs have responsibility to generate and enhance shareholders wealth. To do this, they need to issue and grow their loan portfolio which they may do beyond the risk appetite of the shareholders. The risk borne by the shareholders and the corporate executives are not even. The shareholders bear all the losses while the corporate managers bear little or no risk even though they take most decisions of running the entity. However, where the dividing line between ownership and management is thin, the larger society may bear all the risk of sharp or unethical business practices in an attempt by owner managers to maximize the gains from the activities.

Empirical Review

Several empirical studies conducted by many scholars in this area of study revealed the relationship between risk management factors and financial performance of deposit money banks showing variability of these findings from various contexts and perspectives. Tanveer, Muhammad and Sadaf (2017) examined the impact of risk management practices on banks' financial performance in Pakistan for the period 2004 to 2016 using panel data regression analysis revealed a significant impact of risk management practices on financial performance of Pakistani banks categorised into large, medium and small banks. Specifically, cash reserve was found to be statistically significant at 5% and positively impactful on ROE, while Liquidity risk (measured by interest sensitive asset/total asset), NPLR, interest rate risk was statistically significant at 5% and influence ROE negatively. However, for small banks, liquidity risk impacted ROE positively. In the work of Harelimana (2017) on The Role of Risk Management on Financial Performance of Banking Institutions in Rwanda: case study Unguka Bank Limited, both quantitative and qualitative techniques were employed. The result of the interviews from 43.3% response rate identified the key determinants of risk management as credit risk, operational risk, interest rate risk and liquidity risk. Findings from the multiple regression analysis of the secondary data showed that there is a strong positive relationship between risk management indicators (credit risk, liquidity risk, interest rate risk, operational risk and loan default risk) and financial performance. Same result was obtained from the research work of Li & Zou (2014) on the impact of credit risk management on profitability of commercial banks in Europe which showed a positive relationship between credit risk management and profitability.

Gap in Empirical Review

Some observed gaps in literature show that despite the attraction of many scholars in this area of study, their approaches have come from different perspectives. Generally, they focused more on few risk factors and their effect on financial performance without considering the interplay of those risks (Li & Zou, 2014; Hussain, Ihsan & Hussain, 2016; Harelimana, 2017; Ofosu, 2016; Olusanmi, Uwuigbe & Uwuigbe, 2015; Adebisi & Oladunjoye, 2014). Apart from this, gaps noticed include non-consideration of such factors like risk asset diversification, interbank funding, and the very significant impact of asset-liability maturity mismatch and the effects they have on interest rate spread and consequently profitability. Risk assets are the most profitable assets of a bank since bulk of reported profit comes from interest income. In order to achieve higher profit, banks need to increase their interest margin and a key factor to achieving this is to reduce as much as possible their cost of funds. An optimal mix of asset and liability portfolios within regulatory constraints is important to minimize cost of funds and increase income.

Methodology

Research Design

The researcher adopted *ex-post facto* research design. The choice of the *ex-post facto* design is because the research relied on already recorded events, and researchers do not have control over the relevant dependent and independent variables they are studying with a view to manipulating them (Onwumere, 2009).

Area of the Study

This study was carried out in the financial sector of the Nigerian Stock Exchange with specific reference to the deposit money banks with the emphasis to determine risk assets management and investment income of deposit money banks in Nigeria.

Sources of Data

This study made use of secondary data covering a period of 10 years, 2011- 2020 and obtained from the annual report and accounts of sampled deposit money banks in Nigeria.

Population of the Study

The population of study comprises of all the 19 deposit money banks in Nigeria quoted in the Nigerian stock exchange as at the end of 31st December, 2020. The banks are as follows; Access Bank Plc, Fidelity Bank Plc, First City Monument Bank Plc, First Bank Nigeria Limited, Guaranty Trust Bank, Plc, Union Bank of Nigeria, Plc, United Bank of Africa Plc, Zenith Bank Plc, Citibank Nigeria Limited, Ecobank Nigeria Plc, Heritage Bank Limited, Keystone Bank Limited, Polaris Bank Plc, Stanbic IBTC Bank Plc, Standard Chartered Bank Limited, Sterling Bank Plc, Titan Trust Bank Limited, Unity Bank Plc and Wema Bank Plc.

Sample Size Determination

The sample selection technique adopted was the systematic sampling techniques. This was used to minimize bias in selection and as well give room for generalization. The study made use of a sample of three (3) deposit money banks in Nigeria; the banks selected: Guaranty Trust Bank Plc, Access Bank Plc and United Bank for Africa Plc.

Model Specification

In order to evaluate risk assets management and investment income of deposit money banks in Nigeria. A multiple regression model was used, and it was specified as follows:

$logNCOA = \beta_0 + \beta_1 log\ TLA + \beta_2\ TPL + \beta_3 log\ TEQTS + \mu............\ \varepsilon_t$

Where:

NCOA	=	Net Cash Generated from Investing Activities
TLA	=	Total Loans and Advances
TPL	=	Total Performing Loans
TEQTS	=	Total equity in subsidiaries
ε	=	Stochastic disturbance (Error)
β_0	=	Coefficient (constant) to be estimated
β_1- β_3	=	Parameters of the independent variables to be estimated
t	=	Current period

Description of Variable

The variables were structured into dependent and independent variables for data analysis. The dependent variable of the study is Net Cash Generated from Investing Activities while the independent variables are Total Loans and Advances (TLA), Total Performing Loans (TPL) and Total equity in subsidiaries (TEQTS).

Table 1: Description of Model variables

Short-form	*Proxy*	*Sources*
Net Cash Generated from Investing Activities	Investment income	Annual Report & Accounts
Total Loans and Advances	Risk Assets Management	Annual Report & Accounts
Total Performing Loans	Risk Assets Management	Annual Report & Accounts
Total equity in subsidiaries	Risk Assets Management	Annual Report & Accounts

Source: Authors computation (2022)

Method of Data Analysis

Descriptive Statistics, correlation analysis and multiple regression analysis was used as the statistical tool for data analysis.

Procedures for Data Analysis

The data were analysed in the following sequence:

1. Descriptive Statistics to describe the data and the statistics.
2. A correlation analysis was conducted to examine risk assets management and investment income of deposit money banks in Nigeria.
3. Multiple regression analysis was conducted to ascertain the relationship between the variables.

Data Presentation

Table 2: Logged Data

Year	*Firms*	*TPL*	*TLA*	*TEQTS*	*NCOA*
2011	**Guaranty Trust Bank Plc**	6.299157	6.259367	5.990504	-0.85387
2012		6.325535	6.379285	6.035226	-1.09691
2013		6.325535	6.421878	5.931287	-1.30103
2014		6.325535	6.563431	5.984558	-0.85387
2015		6.325535	6.546915	6.037147	5.911736
2016		6.325535	6.553301	6.017447	-1.22185
2017		6.626565	6.722908	6.232317	5.911736
2018		6.626565	6.864461	6.285588	-0.55284
2019		6.626565	6.847945	6.338177	5.911736
2020		6.626565	6.854331	6.318477	-0.92082
2011	**Access Bank Plc**	4.989356	4.358468	4.574772	5.911736
2012		4.989356	4.340246	4.744395	5.911736
2013		4.989356	4.340246	4.419146	5.911736
2014		4.989356	4.340246	4.499879	-1.52288
2015		4.989356	4.625806	4.625806	-1.1549
2016		4.989356	5.829147	4.916512	5.911736
2017		5.290386	4.641276	4.720176	5.911736
2018		5.290386	4.641276	4.800909	-1.22185
2019		5.290386	4.926836	4.926836	-0.85387
2020		5.290386	5.829147	5.217542	5.911736
2011	**UBA**	6.11586	5.704712	5.731961	5.911736
2012		6.11586	5.688666	5.774969	5.911736
2013		6.11586	5.813033	5.688038	5.911736
2014		6.296162	5.680368	5.629244	-0.95861
2015		6.297259	5.72468	5.63831	-0.88606
2016		6.297259	5.72468	5.72468	-0.4437
2017		6.41689	6.114063	5.989068	6.02571
2018		6.597192	5.981398	5.930274	-0.65758
2019		6.598289	6.02571	5.93934	-0.58503
2020		6.598289	6.02571	6.02571	-0.14267

Source Bank's Annual Reports and Accounts

Data Analysis

Table 3: Descriptive Result

	NCOA	*TLA*	*TPL*	*TEQTS*
Mean	1.540365	5.716447	6.086752	6.032760
Median	-0.094215	5.768857	6.297259	6.030468
Maximum	6.025710	6.864461	6.871928	7.376179
Minimum	-1.698970	4.291768	4.989356	4.419146
Std. Dev.	3.106131	0.814679	0.588374	0.801912
Skewness	0.633204	-0.312139	-0.652635	-0.386083
Kurtosis	1.560136	1.865030	2.232002	2.383337
Jarque-Bera	7.660412	3.495580	4.778231	2.034406
Probability	0.021705	0.174158	0.091711	0.361605

Sum	77.01824	285.8223	304.3376	301.6380
Sum Sq. Dev.	472.7545	32.52141	16.96299	31.51011
Observations	30	30	30	30

The summarized descriptive statistics of the explained and explanatory variables as presented in Table 4.2 below for the period 2011 to 2020, revealed the following observations. First, the net cash generated from investing activities is reported to have a mean (median) value of 1.540365 (-0.094215) and standard deviation of 3.106131. Equally, the mean of net cash generated from investing activities is about 1.540365 or above 100% and the mean of total loan and advances is 5.716447 or above 100%, the mean of total performing loans is 6.086752 or below 100%, the mean of total equity in subsidiaries is 6.032760 which is also below 100% and the mean of cash reserve is 6.254509 which is also below 100%. The result indicated that in the average of every ₦5.768857K of TLA, ₦6.297259K of TPL and ₦6.030468K of TEQTS was earned as net cash generated from investing activities. The maximum values of these series are 6.025710, 6.864461, 6.871928 and 7.376179 for net cash generated from investing activities, total loan and advances, total performing loans and total equity in subsidiaries respectively. The minimum values are; -1.698970, 4.291768, 4.989356 and 4.419146 for net cash generated from investing activities, total loan and advances, total performing loans and total equity in subsidiaries respectively. The value of skewness and Kurtosis reveals the extent normality is achieved in the distribution. Table 1 reveals that the observed distribution for net cash generated from investing activities, Total performing loans, Total equity in subsidiaries, and total loan and advances respectively have skewness co-efficient of 0.633204, -0.312139, -0.652635 and -0.386083 respectively, which are not in excess of unity. The table further indicates that Kurtosis coefficient for net cash generated from investing activities, total loan and advances, total performing loans and total equity in subsidiaries respectively are; 1.560136, 1.865030, 2.232002 and 2.383337 respectively.

Test of Hypotheses

The test of hypotheses was carried out as follows:

Step 1: Re-statement of the hypothesis in the null and alternate forms

Step 2: Statement of decision criteria

Step 3: Presentation of test result

Step 4: Decision

Table 4: Hypothesis Table

Dependent Variable: NCOA
Method: Panel Least Squares
Date: 02/12/22 Time: 05:54
Sample: 2011 2020
Periods included: 10
Cross-sections included: 3
Total panel (balanced) observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TLA	1.382986	0.183217	7.548348	0.0000
TPL	0.833585	0.167418	4.979062	0.0011
TEQTS	0.093947	0.019843	4.734520	0.0002

R-squared	0.618094	Mean dependent var	1.540365
Adjusted R-squared	0.545078	S.D. dependent var	3.106131
S.E. of regression	3.164638	Akaike info criterion	5.218573
Sum squared resid	460.6869	Schwarz criterion	5.371535
Log likelihood	-126.4643	Hannan-Quinn criter.	5.276822
Durbin-Watson stat	1.851265		

Source: *Author's Computation from E views 9.0, 2022*

Hypothesis one

Ho: Total loans and advances does not have significant effect on net cash generated from investing activities of Nigerian deposit money banks.

H_1: Total loans and advances has significant effect on net cash generated from investing activities of Nigerian deposit money banks.

Decision Rule: Reject H_O if the t-statistics is >2.0 and the probability of the t-statistics is <0.05.

Step 4: Decision

Given the decision criteria to reject H_O if the t-statistics is >2.0 and the probability value is < 0.05. Table 5 shows the t-statistics as 7.548348 while the probability is 0.0000<0.05. We reject the null hypothesis (Ho) and conclude that total loans and advances has significant effect on net cash generated from investing activities of Nigerian deposit money banks.

Hypothesis Two

Ho: Total Performing Loans do not have significant effect on net cash generated from investing activities of Nigerian deposit money banks.

H_1: Total Performing Loans has significant effect on net cash generated from investing activities of Nigerian deposit money banks.

Decision Rule: Reject H_O if the t-statistics is >2.0 and the probability of the t-statistics is <0.05.

Step 4: Decision

Given the decision criteria to reject H_O if the t-statistics is >2.0 and the probability value is < 0.05. Table 5 shows the t-statistics as 4.979062 while the probability is 0.0011<0.05. We reject the null hypothesis (Ho) and conclude that total Performing Loans has significant effect on net cash generated from investing activities of Nigerian deposit money banks.

Hypothesis Three

Ho: Total equity in subsidiaries does not have significant effect on net cash generated from investing activities of Nigerian deposit money banks.

H_1: Total equity in subsidiaries does has significant effect on net cash generated from investing activities of Nigerian deposit money banks.

Decision Rule: Reject H_O if the t-statistics is >2.0 and the probability of the t-statistics is <0.05.

Step 4: Decision

Given the decision criteria to reject H_O if the t-statistics is >2.0 and the probability value is < 0.05. Table 5 shows the t-statistics as 4.734520 while the probability is 0.0001<0.05. We reject the null hypothesis (Ho) and conclude that total equity in subsidiaries does has significant effect on net cash generated from investing activities of Nigerian deposit money banks.

Discussion of Findings

Effect of Total Loans and Advances on Net Cash Generated from Investing Activities of Nigerian Deposit Money Banks

Result of hypothesis one shows that total loan and advances has positive and significant effect on net cash generated from investing activities in the Nigerian deposit money banks with t-statistics of 7.548348 which was greater than 2.0 and probability value of 0.0000 which is less than 0.05. This result is in agreement with the studies of Tanveer, Muhammad and Sadaf (2017) on the impact of risk management practices on banks' financial performance in Pakistan which revealed a significant impact of risk management practices on financial performance of Pakistani banks categorised into large, medium and small banks. Specifically, CAR was found to be statistically significant at 5% and positively impactful on ROE, while Liquidity risk (measured by interest sensitive asset/total asset), NPLR, interest rate risk was statistically significant at 5% and influence ROE negatively. However, for small banks, liquidity risk impacted ROE positively.

Effect of Total Performing Loans on Net Cash Generated from Investing Activities of Nigerian Deposit Money Banks

Result of hypothesis two shows that equity securities have significant effect on net cash generated from investing activities in the Nigerian deposit money banks with t-statistics of 4.979062 was greater than 2.0 and probability value of 0.0011 which is less than 0.05. This result is in agreement with the study of Harelimana (2017) on the role of risk management on financial performance of banking institutions in Rwanda: case study Unguka Bank Limited, both quantitative and qualitative techniques were employed. Findings from the multiple regression analysis of the secondary data showed that there is a strong positive relationship between performing loans and cash generated.

Effect of Total Equity in Subsidiaries on Net Cash Generated from Investing Activities of Nigerian Deposit Money Banks

Result of hypothesis three shows that total equity in subsidiaries have significant effect on net cash generated from investing activities in the Nigerian deposit money banks with t-statistics of 4.734520 was greater than 2.0 and probability value of 0.0001 which is less than 0.05. This result is in agreement with the study Olusanmi, Uwuigbe & Uwuigbe, (2015) on the effect of risk management on bank's financial performance in Nigeria. The result gave a non-significant, indirect relationship between risk management and financial performance measured by ROE. Specifically, non-performing loan, loan to deposit, risk disclosure, and total asset showed an inverse non-significant relationship with ROE, while capital risk revealed a positive, insignificant relationship with ROE. A study was carried out by Bassey & Moses (2015) on bank profitability and liquidity management of some selected deposit money banks in Nigeria, the results showed a negative relationship between cash to deposit ratio and ROA, and a positive relationship between loans to deposit ratio and ROE. Similar results were obtained when ROA was used as a measure of profitability.

Summary of Findings

I. Having carried out extensive study on risk assets management and investment income of deposit money banks in Nigeria, the study found out the following:

II. Total loan and advances have positive and significant effect on net cash generated from investing activities in the Nigerian deposit money banks with t-statistics of 7.548348 was greater than 2.0 and probability value of 0.0000 which is less than 0.05.

III. It was also observed that total performing loans have significant effect on net cash generated from investing activities in the Nigerian deposit money banks with t-statistics of 4.979062 was greater than 2.0 and probability value of 0.0011.

IV. The study also revealed that total equity in subsidiaries have significant effect on net cash generated from investing activities in the Nigerian deposit money banks with t-statistics of 4.734520 was greater than 2.0 and probability value of 0.0001.

Conclusion

The results of the findings show that there is a significant relationship between risk asset, liquidity management and sustainable performance of deposit money banks in Nigeria. Non-performing loans have a significant negative impact on the assets of deposit money banks , low level of cash deposits has a significant negative impact on the total capital of the deposit money banks, there is a significant relationship between non-compliance with cash reserve requirement on cash balance and the profitability of deposit money banks in Nigeria and the study found that inadequate liquidity management has a significant negative impact on the dividend payment in deposit money banks in Nigeria. Even though profitability is the primary objective of every banking business, more attention is directed towards other performance measures in order to maintain sustainable performance. However, it only by adequate liquidity management can a bank minimize risk assets and liquidity risks, grow assets, maintain profit, pay dividends to the owners, and meet other stakeholders' objectives.

Recommendations

Based on the findings of the study, the following recommendations are very imperative for the sustainability of the performance of the banking institutions in Nigeria.

1. The regulatory authorities should ensure tight monitoring of the activities of the banks in their mix and diversification of loan portfolios and customer base.
2. The regulatory authorities should ensure tight monitoring of the activities of the banks to avoid financial distress.
3. All banks should comply with cash reserve requirements, which help them to avoid insolvency and maintain sustainability profitability.
4. This will also guarantee transparency in their financial reporting to the stakeholders in the banking industry.

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