The Impact of Liquidity on Banks Profitability in Nigeria

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Abstract
The study examined the impact of liquidity on banks profitability. The study sought to examine the impact of liquid assets, bank deposit, and Treasury bills on Return on Asset. Secondary source of data was employed using Central Bank of Nigeria statistical bulletin. Ordinary least square multiple regression techniques was adopted to establish the impact of independent on dependent variables. Based on the results, the following findings were made; there was a positive and insignificant impact between bank deposit and return on asset, there was a negative and insignificant impact between liquid asset and return on asset, there was a positive and insignificant impact between treasury bills and return on asset. The study recommended that appropriate measures should be taken to prevent undesirable market development that may negatively impact on bank deposit. Also, recommended that banks should engage competent and qualified personnel in order to ensure that right decisions are adopted with regard to the optimal level of liquidity.

Keywords: *Liquid Asset, Bank deposit, Treasury Bills, Return on Asset*

1.1 Introduction

.For any business to survive, the organization or firm should have the required degree of liquidity, which should be excessive. When the liquidity is excessive it means that there is accumulation of ideal funds and this may lead to lower market performance of securities and profitability whereas inadequate liquidity may result in interruptions of the business operations. For the efficient operation of the business, a proper balance between these two extremes should be attained. According to Nzotta (2004), the amount of liquidity required by a firm depends on various factors such as the nature of business or industry, operating efficiency, size of business or scale of operations; business cycle; manufacturing cycle; operating cycle and rapidity of turnover; profit margin; profit appropriation and depreciation policy; growth prospects; taxation policy; dividend policy and government regulations. It is of utmost significance to maintain a constant eye on the liquidity position of an organization since without it, it cannot survive. In order to avoid liquidity crisis, management of businesses in particular needs to have a well-defined policy and established procedures for measuring, monitoring, and managing liquidity. (Ibe, 2013).Managing liquidity is therefore a core daily process requiring managers to monitor and project cash flows to ensure that adequate liquidity is maintained at all times.(Lazaridis & Tryfonidis, 2006). The specific objectives are as follows;

1. To examine the effect of liquidity on Return on Assets of deposit money banks.
2. To determine the effect of bank deposit on Return on Assets of deposit money banks in Nigeria.
3. To examine the effect of Treasury Bills on Return on Assets of deposit money banks in Nigeria.

2.0 Theoretical framework and Literature Review

Different theories which guide banks' liquidity and its management are discernable. They include;

.1 Liquid assets theory

This theory states that banks must hold large amounts of liquid assets as reserves against possible demands for payment of depositors. The theory emphasizes the need for holding short-term asses as a prudent cushion in the face of various uncertainties in banking operations and the various needs of a bank. According to Nzotta (2004), the level of liquid assets depends on a bank's perceived need for liquidity, the volatility of its deposits, the state of the financial market and the level and direction of monetary policy of the government.

2 Commercial bills theory

This theory is also known as the real bills doctrine. It states that bank funds should principally be invested in short term, self-liquidating loans for working capital purposes, usually confined to financing the movement of goods through the successive stages of production cycle, transportation, storage, distribution and consumption. The working capital requirement of business firms is provided by banks through cash-credits and overdraft and purchase of commercial bills. It is a short term, negotiable, and self-liquidating instrument with low risk. It enhances the liability to make payment in a fixed date when goods are bought on credit

2.1 Components of liquidity management

The components of liquidity management in an organization according to Lawrence (2003) include:

i) Cash flow management:

The survival of any business depends on its ability to meet, either in the short run or in the long-run, and it obligations as they fall due and also take opportunities either in the form of prompt payment of liabilities in order to enjoying discounts and also to finance business expansion. It is important to state at this point that profitability does not always amount to liquidity as such, a critical analysis of company's inflow and expected outflow in an accounting period.

Torre (2007) defines treasury (cash) management as a set of techniques that act on the short-term liquidity of a company, and at the same time affect those factors and processes that translate immediately into cash, with the ultimate aim of increasing both the liquidity and profitability of the company. In this sense, cash management is the back bone of liquidity management as it affects corporate profitability. Cash in excess of what is required needs to be invested in short term securities pending when it is required. The major problem faced by most businesses is the ability to determine the minimum cash level required by the business. Minimum cash level assist management to maintain enough cash to meet its day-to-day operating expenses.

ii) Credit policy:

Credit policy can be viewed as written guidelines that set the terms and conditions for supplying goods on credit, customer qualification criteria, procedure for making collections, and steps to be taken in case of customer delinquency. It is also the guidelines that spell out how to decide which customers are sold on open account, the exact payment terms, the limits set on outstanding balances and how to deal with delinquent accounts. Businesses, in an attempt to meet up with sales target and competition, adopt various business strategies to maintain good relationship with their customers. One of such strategies is the selling of goods to its customers or rendering services to its clients on credit as such management need to have viable credit policies to enhance the collectability of the credit sales to boost company's liquidity and to reduce the risk of bad debt. .

iii) Cash conversion cycle (CCC):

Cash conversion cycle is another measure of corporate liquidity management. It measures the time lag between cash payments for purchase of inventories and collection of receivables from customers. The CCC is used as a comprehensive measure of working capital as it shows the time lag between expenditure for the purchase of raw materials and the collection of sales of finished goods (Padachi, 2006). The day to day management of firm's short term assets and liabilities plays an important role in the success of the firm. Firms with glowing long term prospects and healthy bottom lines do not remain solvent without good liquidity management (Jose, 2006). The cash conversion cycle is calculated thus:

CCC = Days of sale outstanding + No. of day in inventories - Days of payable outstanding (Weersainghe and Perera, 2013

2.2 Banks Profitability

Sophocles and Matthaios (2005) listed critical factors in determining the performance of the commercial banks. The scholarly analysis of these factors usually follows the CAMEL framework which stands for Capital Adequacy, Asset Quality, Management Efficiency, Earnings Ability and Liquidity (Dang, 2011).

Capital adequacy is the level of capital that banks are required to hold to enable them withstand credit, market and operational risks they are exposed to in order to absorb the potential loses and protect the bank's debtors. Asset quality simply refers to the bank's asset which includes among others current assets, credit portfolio, fixed asset and other investments. Management efficiency is usually represented by different financial ratios such as total asset growth, loan growth rate and earnings growth rate. The performance of management is habitually a narrative expression through subjective evaluation of management systems, organizational discipline, control system, quality of staff and many more. Liquidity management is also one of the most important factors that determine the level of bank performance. The concept of liquidity refers to the ability of the bank to fulfill its obligations to the depositors. The quantification of liquidity management commonly used is the customer deposit to total asset and total loan to customer deposits. Adequate level of liquidity is positively related with bank profitability.

2.3 Empirical literature

A good number of researchers have examined the impact of liquidity management on the profitability of deposit money banks (commercial banks) in various countries over the world. Adebayo, Adeyanju and Olabode (2001) examined liquidity management and commercial banks' profitability in Nigeria. Findings of this study indicate that there is significant relationship between liquidity and profitability. This means that profitability in commercial banks is significantly influenced by liquidity and vice versa.

Liquidity risk factors were tested on 22 Pakistani banks by Saleem and Rehman (2011) in order to assess the impact of the factors on the banks' profitability between 2004 and 2009. Findings of the study indicate that there exists significant impact of liquidity risk factors on the profitability of the banks, where an increase in deposits led to increase in the banks' profitability in terms of reducing dependence on the Central Bank in meeting the customers' obligations, and profitability is negatively affected by the allocation of non- performing loans and liquidity gap. The impact of liquidity on commercial banks' performance as examined by Charity (2012) using First Bank of Nigeria Plc as case study observed that there was a positive relationship between liquidity management and the existence of any banks.

Agbada and Osuji (2013) examined empirically the effect of efficient liquidity management on banking performance in Nigeria. Findings from the empirical analysis were quite robust and clearly indicate that there is significant relationship between efficient liquidity management and banking performance and that efficient liquidity management enhances the soundness of banks.

Ibe (2013) identified the most important variables which affect the capital adequacy of commercial banks of Jordan in Amman Stock Exchange for the period from 2000-2008. The study shows that there is a statistically significant positive correlation between the degree of capital adequacy in commercial banks and factors of liquidity risk and the Return on Assets, and there is an inverse relationship not statistically significant between the degree of capital adequacy in commercial banks and factors of the capital risk, credit risk and the rate of force revenue.

Almazari (2014) investigated the internal factors that have an effect on profitability in Saudi and Jordanian banks. He found that there is a positive correlation between profitability measured by Return on Assets (ROA) of Saudi and Jordanian banks with some liquidity indicators, as well as the existence of a negative correlation with other liquidity indicators between profitability measured by Return on Assets of Saudi and Jordanian banks.

Alshatti (2014) investigated the effect of liquidity management on profitability in Jordanian commercial banks during the time period of 2005-2012 using 13 banks to express on the whole Jordanian commercial banks. The empirical results showed a positive effect of the increase in the quick ratio and the investment ratio of the available funds on profitability, while there was negative effect of the capital ratio and the liquid assets ratio on the profitabilityof the Jordanian commercial banks.

Adebayo (2011) examined liquidity management and commercial firms' profitability in Nigeria. Findings of this study indicate that there is significant relationship between liquidity and profitability. That means profitability in firm is significantly influenced by liquidity and vice versa.

Saleem and Rehman (2011) sought to reveal the relationship between liquidity and profitability. The main results of the study demonstrate that each ratio (variable) has a significant effect on the financial positions of enterprises. Profitability ratios also play an important role in the financial positions of enterprises.

3.0 Research Methodology

Research design is the approach or scheme which defines the tools and strategies of the research. It is geared primarily to facilitate the attainment of the objective of the study in order to accomplish the aim of the study, the study employed expost facto design using secondary sources of data. Data were extracted from. CBN statistical Bulletin. In analyzing the data gathered for this work, multiple regression was adopted to establish the effect of independent on dependent variables. Based on this, the model below has been developed for the study.

ROA = F (BDEP, LA, TB)

Where:

ROA = Return on Asset, a proxy in measuring profitability

BDEP = Bank deposit

LA= Liquid Asset

TB = Treasury bills

$ROA = bo + b_1BDEP + b_2 LA + b_3TB + e$

Where: ROA= Dependent variable

bo = Regression constant

$b_1 – b_3$ = Regression parameters

e = Stochastic error

4.0 Analysis of data

The regression results of liquidity indicators and banks profitability

(Regression Results)

Dependent variable: LROA

Variable	Coefficient	Std error	t-stat	Prob
C	2.7648	2.6510	1.043	0.3108
LBDEP	0.168	0.123	1.368	0.1882
LLA	-0.541	0.357	-1.518	0.1464
LTB	0.472	0.841	0.561	0.5819

R^2 = 0.74981, R^2(adj) = 0.724394, SER = 1.5881 F-Start = 1.994 DW = 2.1359

The coefficient of multiple determination (R^2) is 0.7494 and an adjusted R^2 of 0.724. The later indicates that 73% of variations in the observed behavior of ROA is jointly explained by the independent variables namely: BDEP, LA, TB. This shows that the model fits the data, well and has a tight fit. Also, the f-statistics is used to test for the significance of such good or tight fit. The model reports on effectively high f-statistic value of 1.994 which when compared with the table value. This indicates that the high adjusted R^2 value is better than would have occurred by chance, therefore, the model is statistically robust. Using the criterion, therefore, BDEP is insignificant, LA is insignificant, TB is insignificant. Specifically, a one percent increase in BDEP (0.10%) and TB (0.47%) will prop up the performance more than proportionate percentage point and a decrease in liquid asset will have a negative performance on ROA. The goodness of fit of the model is indicated by the adjusted R^2 and it shows a good fit of the model. The model fits the data well; the total variation is the observed behavior of ROA, used as a measure of performance, is jointly explained by variations in Bank deposit, liquid Asset and treasury bills.

5.0 Summary of findings

The major findings of this study include;

1. There is a positive and insignificant relationship between bank deposit and Return and Asset
2. There is a negative and insignificant relationship between liquid asset and Return in Asset
3. There is a positive and insignificant relationship between treasury bill and Return on Asset.

6.0 Conclusion/Recommendations

The study empirically examined the impact of liquidity on banks profitability. For the business to survive, the organization should have the required degree of liquid, which should be excessive. The importance of liquidity has affected profitability in today's business and the survived of any business depends on its ability to meet the short and long-run. It is concluded that banks must maintain adequate amount of liquidity to meet its daily obligations. Based on the findings, the following recommendations are proffered

1. Appropriate measures should be taken to prevent undesirable market development that may negatively impact on banks' deposit.
2. Banks should engage competent and qualified personnel in order to ensure that right decision are adopted with regard to the optimal level of liquidity.
3. Management should maintain enough cash to meet its day-to-day operating expenses.

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