

# **Liquidity Management And Firm Value Of Listed Deposit Money Banks In Nigeria**

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## **ABSTRACT**

*This study was conducted to examine the influence of liquidity management on firm value of listed deposit money banks in Nigeria. This was premised on the fact that continuous existence of listed deposit money banks is guaranteed by the level of improvement in firm value, which may depend upon the level of liquidity management technique employed by managers. Have these techniques of liquidity management adopted by managers of listed deposit money banks in Nigeria influence firm value? Ex-post facto research design was employed for the study. Twelves (12) listed deposit money banks were sampled out of a population of fourteen (14) listed deposit money banks on the floor of the Nigerian Exchange Group (NEXG) as at December 31, 2022. The independent variables for liquidity management were measured by current ratio (CRR), Quick Ratio (QR), Cash Ratio (CR) and Loan Ratio (LR), and Firm Value (FV) was the dependent variable panel data was sourced from the published financial reports of the sampled banks and analysed using Fixed effect regression technique. Results revealed that CRR, QR and LR had positive and significance influence on FV, CR had a positive and insignificant influence. It was recommended that managers of listed deposit money banks should invest continuously on current assets for the purpose of raising liquidity and profitability which impacts on firm value*

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## **I. Introduction**

The continuous existence of any company in any economy are usually targeted towards improvement in firm value. If firm value is seen as book value, firms would be looking at increase in assets, earnings per share, dividend per share and book value of equity. If firm value is considered as market value, companies would be considering increase in market price of shares, price earnings ratio and market capitalization. Thus, firm value could be understood from the standpoint of increase in both book value and market value. Another common measure of value of companies is Tobin's Q which usually show the level of growth of companies in terms of equity and debt capital to total assets. Growth in market price of shares of companies usually influence the market value of equity of the entities positively because price is often multiplied by the outstanding shares. Thus, when market price of shares increases, the total market value of equity is certain to improve as well. Improvement in earnings per share, dividend per share, price earnings ratio and book value of equity are all indicators of growth in firm value. Specifically, for there to be improvement in these indicators, profitability is expected to be raised. This simply means that for the purpose of raising the value of companies, improvement in profitability of the entities through various attributes that are within the control of managers is fundamentally ideal. Factually, one major specific attribute that regularly show how effective the strategies and policies of managers are include liquidity or working capital, capital structure or leverage decisions, size of assets or asset growth, revenue growth and so on. Some of these factors or attributes are either long-term or short-term in nature. For instance, liquidity management or working capital management of liquidity or working capital include current ratio, quick ratio, cash ratio and net working capital ratio (NWCR) (Okoro, 2016; Nurein & Din, 2017, and Ologbenla, 2018).

Liquidity management involves the supply/ withdrawal from the market the amount of liquidity consistent with a desired level of short-term interest rates or reserve money. It relies on the daily assessment of the liquidity conditions in the banking system, to determine its liquidity needs and thus the volume of liquidity to allocate or withdraw from the market (Shekhar & Jena, 2020).

Banks are often evaluated on their liquidity, or their ability to meet cash and collateral obligations without incurring substantial losses. In either case, liquidity management describes the effort of investors or managers to reduce liquidity risk exposure.

Liquidity shortage, no matter how small, can cause unimaginable disruption to a financial institution's operations and customer's relationship (Shrestha, 2018). Every business relies on its customers to succeed, therefore managing good customer relationships is key and should be incorporated into its strategic planning process. Liquidity crisis, if not properly managed can result to reputational risk including bad press releases against the institution and could destroy customer's relationships built over the years. To avoid this, it is important the managers of businesses and financial institutions should have a well-defined business policy and established

procedures for measuring, monitoring, and managing liquidity. Managing liquidity is therefore a core daily process requiring institutions to monitor and project cash flows to ensure that adequate liquidity is always maintained to meet their obligations as they arise.

The policy of maintaining adequate liquidity always to meet customer's obligation is an essential feature of banking. Therefore, banks must ensure that adequate provision of cash and other near cash securities are made available to meet daily withdrawals /obligations and new loan demands by customers in need of liquidity. It is in this regard that banks in Nigeria are statutorily required to comply with the Cash Reserve Requirement (CRR) policy of the Central Bank of Nigeria (CBN) as well as other regulatory measures of effectively managing their liquidity positions.

### **Statement of the problem**

Since the recapitalization exercise of Nigerian Deposit Money Banks in 2005, several events have taken place that impacted on their profitability. The global financial crisis of 2008 and 2009 saw some Nigerian banks distressed and were bailed out by the Central Bank of Nigeria (CBN).

Various researchers have conducted research works on high liquidity or low liquidity and on investment (profitability). When the liquid of a firm is high, it can meet up its short and long-term obligations. When the liquidity is low, the firm will be insolvent, also when a firm invest much of its resource, they will get higher profitability. All of these cases above may lead to the closure of the firm because they are both on the extreme. The only solution to this, is a liquidity, profitability mix which has not recorded any work.

There is consensus in theoretical literature that profitability and liquidity constitute the most prominent issues in corporate finance. While it may be true that the goal for any firm is to maximize profit, too much attention on profitability may lead the firm into a pitfall by diluting its liquidity position (Mishra & Pradhan, 2019). Therefore, the need to strike a balance between the firm's desire to make profit and remain liquid cannot be over-emphasized, hence the need for effective liquidity management. It has been argued by scholars that some banks failures have been attributed to poor liquidity management. Some studies have also linked poor liquidity management as a major contributing factor to the Global Financial crisis of 2007-2008 (Malik & Aqeel, 2017; Shrestha, 2018; Shaibu & Okafor, 2020; Anandasayanan, 2020; Zidan, 2020).

Previous studies in this area of interest in Nigeria did not really dwell on the specific sectors that make up quoted manufacturing companies in Nigeria (Nurein & Din, 2017; James, 2020; Dristianti & Foeh, 2020). Also, studies that have been conducted in respect to liquidity management and firm value of listed DMBs have not really captured the key variables of liquidity management such as cash ratio and loan ratio. Moreso, studies on liquidity management of banks conducted by previous researchers are mostly on profitability of quoted companies (Ware, 2015; Grace et al., 2016, and Okoro, 2016), and most did not consider the effect of accumulating more cash on firm value of entities whereby in ideal liquidity management techniques, cash is expected to be maintained as low as possible. This study on the key variables of liquidity management on firm value of the listed deposit money banks will minimize the gap in the literature.

### **Research Questions**

The following research questions will assist in the realization of the objectives of this study:

1. Does cash ratio have effect on value of listed DMBs in Nigeria?
2. Does Loan ratio have effect on value of listed DMBs in Nigeria?
3. Does current ratio have effect on value of listed DMBs in Nigeria?
4. Does quick ratio have effect on value of listed DMBs in Nigeria?

### **Objectives of the study**

The main objective of this study is to examine the effect of liquidity management on the value listed DMBs in Nigeria. The specific objectives are examining the effect of:

1. cash ratio on value of listed DMBs in Nigeria
2. Loan ratio on value of listed DMBs in Nigeria
3. current ratio on value of listed DMBs in Nigeria
4. quick ratio on value of listed DMBs in Nigeria

### **Statement of Hypothesis**

In line with the objective of the study, the hypothesis has been formulated, thus:

- H<sub>01</sub>: Cash ratio has no significant effect on value of listed DMBs in Nigeria  
H<sub>02</sub>: Loan ratio has no significant effect on value of listed DMBs in Nigeria  
H<sub>03</sub>: Current ratio has no significant effect on value of listed DMBs in Nigeria  
H<sub>04</sub>: Quick ratio has no significant effect on value of listed DMBs in Nigeria

### **Significance of the Study**

The empirical results of the present study would be of relevance to different categories of stakeholders of the listed deposit money banks in Nigeria, as well as other researchers and consultants in accounting, finance and economic resource optimization. These stakeholders include managers, shareholders, government regulatory agencies among others. This is in the area of liquidity management policies, formulation and implementation of economic policies and tax policies. The results of the research would be available as addition to literature for future researches. The study findings shall also be of significance to regulatory agency of banks so that policy formulation and implementation can be effectively sustained. Findings and recommendations shall give guides on the right policies to formulate that shall curb bank failures. The study shall be significant to academicians and researchers in addressing existing knowledge gaps in literatures of liquidity management and firm value as well as areas of further study.

### **Scope of the study**

This study is centered on the effect of liquidity management on firm value of listed DMBs in Nigeria. The study covered the period from 2007 - 2022. The choice of the period is born out of the remarkable events in the world and Nigerian economy that impacted the banking industry. These happens are: 2007-2009, global financial crises, 2015-2016 witness economic recession in Nigeria, and 2019-2020, the world was hinted with COVID 19 pandemic which has negative impacts on DMBs.

The population of the study consist of 14 deposit money banks in Nigeria between years 2007 and 2021 and the number of samples is 12 DMBs in Nigeria between years 2007 and 2021.

### **Definition of Terms**

This part defined some key words used in this study.

#### **Liquidity Management**

Liquidity management involves the strategic supply or withdrawal from the market or circulation the amount of liquidity consistent with a desired level of short-term reserve money without distorting the profit-making ability and operations of the bank Andrew and Osuji (2013). Liquidity Management is the act of storing enough funds and raising funds quickly from the market to satisfy depositors, Loan customers and other parties with a view to maintain public confidence (Shekhar & Jena, 2020).

The term liquidity in the context of banks refers to the capability of a bank to meet its financial obligations as soon as they fall due. Management of liquidity is critical to the successful operations of all organizations, especially of the banking institutions on account of the fact that customer confidence on the banks is largely dependent on the availability of funds on time. From a commercial bank's point of view, liquidity is taken as its ability to meet its contractual obligations on due dates and include in the normal course of business, those lending and investment commitments, deposit withdrawals as well as liability maturities (Lartey, Antwi & Boadi, 2013).

#### **Liquidity**

The term "liquidity" relates to money and the availability of money, and the money that is accessible to pay for both short-term and long-term capital compensation claims comes from present activities and prior accumulations (Trang, Huu, and Haminder, 2016). A bank is said to be liquid when there is enough liquid assets and cash coupled with the ability to raise funds quickly from other sources, to meet its financial obligations on daily basis (Nzotta, 2004). Liquidity connotes the ability of business organizations to finance increase in assets and meet equally required and unforeseen cash and deposit obligations at a reasonable cost and without incurring unacceptable losses (Shaibu & Okafor, 2020).

#### **Firm Value**

Firm value represents the assets owned by an entity and describes the prosperity of the company owners. It is determined by the asset earning power (Lukayu & Mukanzi, 2015). It is the acquisition and trade value of the bank anticipated by volunteer buyers and sellers with thorough information about the entity free from any problem or encumbrance. Firm value might be measured using measures such as earnings per share (EPS), Market Value-to-book value of equity, market price of shares, market value of equity, book value of equity, price earnings (P/E) ratio and Tobin's Q (Suresh & Sengottaiyan, 2015). In this study, Tobin's Q is used to measure the value of quoted companies in Nigeria.

#### **Current ratio**

This is a measure of a company's ability to pay short-term liabilities such as payable accounts and short-term loans, which represents the ratio of current assets to current liabilities. The magnitude of this ratio expresses high liquidity of the company, thus a greater capacity to meet the short-term liabilities. (Robinson et al., 2015).

Current ratio is a liquidity ratio that measures a company's ability or capacity to meet its current obligations, typically due in one year. The formula for current ratio is Current Assets over Current Liabilities.

Quick ratio:

This ratio includes the most liquid of current assets to current liabilities. The rise in the value of this ratio expresses high liquidity of the company. This ratio excludes prepaid expenses and inventory from current assets being difficult conversion into cash (Sinha, 2012). This ratio only includes the most liquid of current assets to current liabilities. The rise in the value of this ratio expresses high liquidity of the company. This ratio excludes prepaid expenses and inventory from current assets being difficult conversion into cash (Sinha, 2018) The quick ratio measures a company's ability to pay its short-term liabilities when they come due by selling assets that can be quickly turned into cash. It's also called the acid test ratio.

Cash ratio:

This ratio of current assets depends only on short-term marketable investments plus its cash attributed to current liabilities (Gibson, 2009). Cash ratio is the ratio which measures the ability of the company to repay the short-term debts with the cash or cash equivalents and it is calculated by dividing the total cash and the cash equivalents of the company with its total current liabilities.

Loan ratio:

In a banking sector, liquidity can be measured using the Loan to Deposit Ratio (LDR). Where according to Kasmir (2014) Loan to Deposit Ratio (LDR) is a ratio used to calculate the composition of the amount of credit provided by the company compared to the amount of public funds and capital used.

## **II. Literature Review**

This section reviewed literature relating to the effect of liquidity Management on firm value of deposit money banks in Nigeria

### **The Concept of Firm Value of Deposit Money Banks in Nigeria**

According to financial theory, a company's worth is equal to the total value of all its assets. The impression of a company's success rate by investors, which is frequently correlated with stock prices, is known as firm value (Kristiani and Foeh, 2020). High stock prices increase a company's worth, and the more valuable a company is, the more prosperous its owners will be. One of the elements influencing an investor's choice of a company is the firm value. Investors frequently put their money into businesses with strong firm values because these businesses are more likely to pay out dividends and benefit shareholders. A company's brand image, or firm value, influences how the public hears its name (Trang, Huu & Haminder, 2016).

Firm value represents the assets owned by an entity and describes the prosperity of the company owners. It is determined by the asset earning power (Lukayu & Mukanzi, 2015). It is the acquisition and trade value of the company anticipated by volunteer buyers and sellers with thorough information about the entity free from any problem or encumbrance. Firm value might be measured using measures such as earnings per share (EPS), Market Value-to-book value of equity, market price of shares, market value of equity, book value of equity, price-earnings (P/E) ratio and Tobin's Q (Suresh & Sengottaiyan, 2015). In this study, Tobin's Q is used to measure the value of quoted companies in Nigeria. According to Jeroh (2020), Tobin's Q measures the relationship of the firm stock market value to the firm's resources replacement cost. It is considered as the best predictor of market condition and also explains the majority of the investment variability. It can also be applied in the financial condition analysis of a company which means that investors who acquire firm's stock can first calculate the Tobin's Q (Rabiu, 2019).

The Tobins Q ratio is the ratio between the market value of physical assets and their replacement value or cost. The Tobins Q ratio was first proposed by Nicholas Kaldor, an economist in 1966. This ratio was further popularized by James Tobin of Yale University, who the ratio was eventually named after. According to Tobins Q ratio, the value of a company is the total asset value of the company divided by its market value. Tobins Q ratio also posits that the market value of companies should equal their replacement costs. The Tobins Q ratio measures the ratio between the market value of a physical asset and its replacement cost.

The formula for calculating Tobins Q ratio is  $Tobins\ Q = \text{Total Asset Value of Firm} / \text{Total Market Value of Firm}$ , or;

$Tobins\ Q = \text{Equity Book Value} / \text{Equity Market Value}$

The Tobins Q ratio expresses the relationship between the intrinsic value of a physical asset and its market valuation. With this ratio, one can easily know whether a particular business, industry or market is overvalued or undervalued. Also, it expresses the variance between the replacement cost of a company and the market value. For instance, if the replacement costs of a company's assets are lower in value than the firm's stock, the stock is said to be overvalued. When the Tobins Q ratio of a firm or market is more than one, the market is

overvalued and when it is less than one, it is undervalued. Here are some important things to know about Tobin's Q ratio; The Q Ratio is otherwise called Tobin's Q ratio, it maintains that the market value of a company or business equals its replacement cost. The Q Ratio was first used by Nicholas Kaldor in his article published 1966 and later popularized by the Nobel Laureate, James Tobin, who the ratio was named after, this ratio estimates whether a company or market is overvalued or undervalued, by checking the difference between their market value and replacement cost or value. If the market value reflected solely the recorded assets of a company, Tobin's q would be 1.0. If Tobin's q is greater than 1.0, then the market value is greater than the value of the company's recorded assets.

### **Concept of Liquidity Management**

Liquidity management is essential for the outstanding performances of all business entities, particularly to financial institutions due to the fact that customer confidence of the banks is to a large extent dependent on the accessibility of funds in good time. Inadequacy of liquidity can destruct the proper operations of banks even as they might be unsuccessful to meet the financial demands of the customers in time. This would result to tight relationship with their customers, and so it is of vital importance to formulate policies for the efficiency of liquidity management. This is possibly in the form of suitable courses of actions for the evaluation, control and management of liquidity (Andrew & Osuji, 2013). Bhattacharyya and Sahoo (2011) opined that liquidity management includes the conservation of adequate cash balance and its corresponding balances to give satisfaction to the needs of the customers at any moment and in addition, making sure that money is also at hand to carry out the day-to-day functions of the bank. In the course of discharging these functions, the banks ought to be able to make profit for all stakeholders who are necessary for its continuous existence and running. Nevertheless, attaining profitability requires the stabilization of liquidity and how it is being managed.

The term liquidity in the context of banks refers to the capability of a bank to meet its financial obligations as soon as they fall due. Management of liquidity is critical to the successful operations of all organizations, especially of the banking institutions on account of the fact that customer confidence on the banks is largely dependent on the availability of funds on time. From a commercial bank's point of view, liquidity is taken as its ability to meet its contractual obligations on due dates and include in the normal course of business, those lending and investment commitments, deposit withdrawals as well as liability maturities (Lartey, Antwi & Boadi, 2013). Liquidity is seen as a precondition for the daily operation of banks. Liquidity is of significance to banks' both internal and external environments as it is closely related to their day-to-day operations (Edem, 2017). Deficient liquidity can damage proper functioning of banks as they may fail to meet customer demands for funds on time. This will lead to strained relationships with bank customers and is, therefore, imperative to develop a strategy for efficient liquidity management. This could be in the form of appropriate procedures for measuring, monitoring and managing liquidity (Agbada & Osuji, 2013). It is therefore, understood that liquidity and its efficient management are the main components for a robust banking system in a country.

An effective liquidity management in banks should ensure a good balance between inflows and outflows of cash and the adoption of such a practice among all banks that will lead to the creation of a stable banking sector (Dzapasi, 2020). Efficient liquidity management will guarantee successful business operations, help increase return on assets and improve earnings and capital (Businge, 2017). Banks can achieve liquidity by shortening asset maturities; lengthen liability maturities, issuance of more equity, reduction of contingent commitments etc.

Liquidity depicts the ability of a bank to fulfill its short-term obligation. Liquidity is a strong measure of banks' strength as liquid banks are able to fulfill their short-term maturing obligations and the withdrawal demand of depositors (Olang, Akenga & Mwangi, 2015). Generally, two schools of thought exist on liquidity and profitability dynamics. The first school, which is the most popular, is the one that maintains that the relationship between liquidity and profitability is tradeoff, implying that the pursuit of one will automatically take a toll on the other. Such view was supported by good number of studies (Idowu, Essien & Adegboyega, 2017; Dash & Hanuman, 2008). By contrast, another school of thought has maintained that the two objectives can be achieved simultaneously. In a nutshell, an optimum financial management strategy should be the one that balances the dilemma between liquidity and profitability. This assists in maintaining optimum level of liquidity that will translate to optimum profit by ensuring that banks do not suffer excess or low level of liquidity as the two have adverse effect on banks' profitability.

Liquidity is a crucial concern for banks, as a shortage can lead to failure (Kumar & Agarwal, 2012). Financial sector regulators view liquidity as a major concern, as banks with weak liquidity risk corporate failure and ultimately cease to exist (Ehiedu, 2014). Proper management of liquidity can significantly impact a bank's success or failure. Liquidity can be measured using the ratio of current assets to current liabilities, cash and short-term marketable securities, or cash and short-term marketable securities (Maroa & Kioko, 2016; Pandey, 2005). The ratio of current assets to current liabilities serves as a proxy for liquidity, reflecting banks' ability to meet maturing obligations.

## **Liquidity**

Liquidity, in accounting, is often seen as total current assets and current liabilities of a company at a given period of time. Liquidity may be gross or net. Gross liquidity is a skeletal description of liquidity where in an accounting period, a company do not accumulate current liabilities, which rarely occurred. Net liquidity is the difference between current assets and current liabilities of an entity in an accounting period, and may be positive or negative (Okoro, 2016). Liquidity is the ability of a firm to settle its matured obligations in an accounting period of time. It is the process of maintaining adequate liquid funds against maturing obligations or commitments (Ali & Mukhongo, 2016). A key issue in liquidity management is the need to strike a balance between liquidity position of an entity and profitability; as both are expected to influence value of companies positively and significantly. Okoro (2016) and Ware, (2015) argued that planning and controlling liquidity position of entity involves an understanding of current ratio, quick ratio, cash ratio, short-term debt ratio, operating cash flow ratio, revenue growth, working capital ratio, average collection period, average payable period, inventory holding period and cash conversion cycle; as these have functional implications on profitability and value of firms in both short and long-terms. The findings of this empirical investigation would shed light on the influence of liquidity management and firm value of listed deposit money banks in Nigeria, not losing sight of the factors that influence liquidity position of banks such as nature and size of business, loan cycle, business cycle fluctuations, government policy, turn-over of circulating capital, growth and expansion activities as well as operating efficiency (Ologbenla, 2018; James, 2020; Lukayu & Mukanzi, 2015; Nurein & Din, 2017). Also, it is noted that firm value is determined by such factors as dividend policy, leverage, company size, quality of assets/or services (Kristianti & Foeh, 2020; Lukayu & Mukanzi, 2015; Fajaria & Isnalita, 2018).

## **Types of liquidity ratios**

### **Current ratio**

Short-term liquidity is measured by the current ratio. The ability to make interest and principal payments on time is an indication of a company's financial health. Using its present assets as a benchmark, the current ratio estimates the company's solvency for the next twelve months. In small, established companies, a current ratio of 2:1 is preferred. Short-term confidence in the firm's ability to meet its short-term financial commitments is called into doubt if the current ratio is less than 2:1. A high current ratio is regarded as a sign that the company is more liquid and can pay its short-term creditors when they are due. It will be a margin of safety to the creditors, but from management perspective, it will result in poor planning since an excessive amount of funds are invested in current assets that lie idle.

**Formula, current ratio = current assets**

### **Current liabilities.**

Acid Test Ratio It's sometimes called "quick ratio" for short. The quick ratio compares a company's cash on hand to its short-term debts. It is a gauge of the company's present liquidity and position for the near future. An acid test ratio of 1:1 is ideal for a company. A low one will be an index of bad liquidity position.

**Formula = Current asset less inventories**

### **Current liabilities**

If the acid test ratio is less than 1, it means that the corporation does not have enough assets to immediately liquidate those assets.

### **Cash ratio (also called cash asset ratio)**

This is the proportion of a company's total liabilities to its cash and cash equivalent assets. Quick ratio's refinement, the cash ratio, shows how well current liabilities may be settled with currently available cash. This ratio serves as a gauge for a corporation's liquidity and how readily it can pay short-term obligations and service debt.

**Cash ratio = Cash and cash equivalent**

### **Current liabilities**

The ratio of loan and advances to deposits reflects the quantity or proportion of the customers' deposits that has been given out in form of loans and the percentage that is retained in the liquid forms. The ratio serves as a useful planning and control tool in liquidity management since banks use it as a guide in lending and investment, and to make a total evaluation of their expansion program. When the ratio rises to a relatively high level, banks are encouraged to lend and invest and vice versa, to take some benefit of profitability.

However, the limitation of the ratio is that it fails to indicate the maturity or quality of the portfolio. It is risky to characterize broad classes of statement of financial position items as more or less liquid as others. Not all assets in any particular grouping have the same degree of liquidity or maturity. Another limitation of this ratio is

that it measures only assets liquidity and excludes any measure of the ability of a bank to raise funds other than through the sale of the assets.

### **Theoretical Review**

A total of six theories were reviewed in this study. However, two theories unpinned this study are Cash Conversion Circle (CCC) theory and the Agency Theory.

#### **Cash Conversion Cycle (CCC) Theory**

This theory was developed and introduced by Verlyn Richards and Eugene Laughlin in 1980. The CCC theory integrates both current assets and current liabilities, resulting to the net working capital or liquidity. The framework was part of the working capital cycle; and explains the time interval between the cash outflows arising during production of output and the cash inflows resulting from sale of output and recovery of accounts receivables, thus boosting liquidity. Including the CCC to traditional measures gives a more thorough analysis of a firm's liquidity position that could influence value of quoted manufacturing companies in Nigeria.

#### **Agency Theory**

This theory was developed by Jensen and Meckling (1976). It describes the relationship between shareholders as principals and management as agents. In the theory, management who act as agents tends to optimize the value of the company entrusted to them as well as enhancing their own well-being, sometimes to the detriment of the shareholders (principals) in what is described on agency conflict. On the whole, the theory is concerned on how managers could raise the value of companies from strategies formulated and implemented which include liquidity management. Hence, this theory is adopted in the present study.

#### **Liquid Assets Theory**

This theory has to do with the management of assets. It states that banks must search for excess returns, lessen risk that could occur and make enough arrangements by holding liquid assets. This theory is on the side of the necessity for holding short term assets to decrease the outcome of uncertainties in the operations of banks. It is the duty of banks to lend to borrowers who are prepared to pay high interest and are not likely to back out on their loans, and also increase liquidity needed with the absence of bearing high costs. Banks are by no means solely financed by their assets but are mostly funded by collateral loans which cannot be counted on during a period of financial crisis. This refers to loans that gives the lender the order to claim specific asset and a general demand on the other assets owned by the debtor. The total of liquid assets to be held relies on the bank's clear requirement for liquidity, the stock exchange conditions and financial policies. The notion of the management of asset has some problems facing it. It places full attention on the part of assets on the statement of financial position which makes the concept badly deficient in the current stock markets. In addition, it fails to take into consideration the fact that huge returns are linked with high risks.

#### **Shiftability Theory**

The Shift-ability theory was propounded by Harold G. Moulton in 1915. The theory holds that the liquidity of a bank depends on their ability to shift its assets to another financial institution at a reasonable price. It proposed that banks, rather than relying on the liquidity of these assets in the course of distress, ought to be able to shift these assets to a more liquid bank. Banks should invest a portion of their funds in buying securities and also credit instruments which have secondary market in order for them to be converted into cash when the need arises to settle decreasing liquidity. This theory places emphasis on selling the assets of a bank as a better means for investments. It acknowledges the less relevance of temporary self-liquidating loan (Edem, 2017).

#### **Commercial Loan Theory**

The theory states that funds generated by banks are supposed to be invested in short-term self-liquidated loans for the purpose of net working capital. It is also referred to Real Bill Doctrine. It supports that the movement of goods should be funded throughout the production cycle (Edem, 2017). The theory has some limitations that affects it like lack of consistency with the need for economic development, exception of long-lasting loans, a major emphasis on the maturation of bank assets instead of profitability, the elimination of stable demand deposit which assists banks to accept long term credit, among others. The theory says that deposit money banks should promote solely the short-termed self-liquidating productive loans to business entities. Real bill doctrine is an effective way of preventing inflation (Sproul, 2018). The theory discourages banks from expanding long-term loans.

### **Liquidity preference theory**

According to Bibow (2005) liquidity preference theory states that people value money for both the transaction of current business and its use as a store of wealth. Thus, they will sacrifice the ability to earn interest on money that they want to spend in the present, and that they want to have it on hand as a precaution. When interest rates increase, they become willing to hold less money for these purposes in order to secure a profit. Also, according to Elgar (1999) one need money because one has expenditure plans to finance or is speculating on the future path of the interest rate, or, finally, because one is uncertain about what the future may have in store. So, it is advisable to hold some fraction of one's resources in the form of pure purchasing power. These motives became known as transactions-, speculative and precautionary motives to demand money. The banks' liquidity preference approach suggests that banks pursue active balance sheet policies instead of passively accommodating the demand for credit. This study adopted liquidity preference theory.

### **Review of Empirical Studies**

Liquidity management is crucial for commercial banks, as it measures their needs related to deposits and loans. A liquidity shortfall can have systemic repercussions, as it can lead to high returns on investments. A high liquidity ratio indicates a less risky and less profitable bank. However, increased liquidity can also reduce management's ability to commit credibly to investment strategies that protect investors, potentially reducing the bank's capacity to raise external finance.

Yee-Ee, Kian-Ping and Kim-Leng (2020). Re-examined the relationship between liquidity and firm value in the emerging stock market of Malaysia, exploring the issues of nonlinearity and moderating variables. Using data for all non-financial firms traded on Bursa Malaysia over the sample period of 2000–2015, the results from the baseline quadratic model suggest stocks must be traded higher than the threshold liquidity level before reaping the benefit of larger firm value. the key finding of a nonlinear relationship remains robust to alternative liquidity measures and estimation methods, as well as passing a series of endogeneity checks. Using an ideal size reduction for Malaysian stocks in May 2003 as exogenous liquidity shock, the study established the causal effect from liquidity to firm value. Further interaction analyses uncover three important moderating variables in the liquidity-firm value relationship, in which the value impact demands a more liquid market for Malaysian public firms with political connections, higher foreign nominee ownership and higher foreign institutional ownership.

Etim, Osim Etim, et al. (2022). Examined the influence of liquidity management on firm value of quoted manufacturing companies in Nigeria. Ex-post facto research design was employed for the study. Forty-two (42) quoted companies were sampled out off a population of fifty-six (56) quoted listed on the floor of the Nigerian Stock Exchange (NSE) as at December 31, 2019. The independent variables for liquidity management were measured by current ratio (CRR), Quick Ratio (QR), Cash Ratio (CR) and Net Working Capital Ratio (NWCR), and Firm Value (AV) was the dependent variable panel date was sourced from the published financial reports of the sampled companies and analysed using Fixed effect regression technique. Results revealed that CRR, QR and NWCR had positive and significance influence on FV, CR had a positive and insignificant influence. It was recommended that managers of quoted companies should invest continuously on current assets for the purpose of raising liquidity and profitability which impacts on firm value.

Confidence, J. I., and Igoniderigha, R. (2023). Examined the effect of liquidity on firm value across a few Nigerian consumer goods industries. Firm value served as the independent variable with dimensions of liquidity ratio, acid test ratio, and stock multiplier ratio, whilst business value served as the explanatory variable and was proxied by market share price. The study's methodology was ex-post-facto research design. Twenty-six consumer products businesses listed on the Nigerian Exchange Group make up the population, and five of those companies were chosen as the study's sample. The investigation used a secondary source to gather data. The audited financial statements of the chosen companies between 2015 and 2021 were used to collect data for both the dependent and independent variables. The statistical method for multiple regression was used to examine the given data. The results of the investigation's studies have unmistakably demonstrated that in Nigerian consumer goods businesses, there is a weak link between stock multiplier ratio and market share price and a strong relationship between firm liquidity ratio, acid test ratio, and market share price. Therefore, the study draws the following conclusions: consumer goods companies should maintain a reasonable level of liquidity in order to encourage demand and supply in the stock market; the acid level of the companies should be frequently checked by stakeholders to detect any potential problems; and stock multiplier ratio has immaterial influence on firm market share price in the studied organizations in the country. Because doing so helps investors understand the company's worth. In other words, the P/E ratio depicts market expectations as well as the price that must be paid per unit of either current or future profits, depending on the situation.

Trang, Huu, and Haminder (2016) broke the value of a firm down into three components in their analysis of the Australian stock market: operating income to price, leverage, and operating income to assets. Using the sudden drop in market liquidity as an external shock to disable anonymity. It shows how the shock causes a rise



in liquidity, which in turn raises the value of the firm. Their research suggests that higher stock prices, rather than better operating performance, are the primary driver of rising firm value for liquid equities.

Ofoegbu (2018) conducted research on the effect of liquidity ratios on the financial efficiency of Nigerian pharmaceutical businesses with quoted corporations on the stock exchange. She made use of the debt to receivables and sales growth ratios. A regression study revealed a strong and favorable association between the firms' profitability and liquidity ratio. Debt ratio and sales growth have a slight but beneficial influence on a company's profitability. Both a negative and insignificant influence is caused by the receivable on the businesses. From 2007 to 2016, Sarakiri (2020) looked into the impact of company liquidity and size on firm value for 34 listed companies in Nigeria. While market value is used to gauge a company's worth, current asset to current liabilities ratios is used to gauge liquidity and firm size. Despite the negative association, their findings indicate a considerable impact on company market value.

Made, O. D. P., and Gst, B., W. (2021). Examined the effect of liquidity and profitability on firm value which is mediated by dividend policy. This study was conducted at banking companies on the IDX for the 2015-2019 period. The number of samples used in this study were 11 companies and the sampling method in this study was using purposive sampling. The analysis technique used in this research is path analysis with the help of SPSS software. The results of this study indicate that liquidity has a significant negative effect on firm value, while profitability has a significant positive effect on firm value and dividend policy is unable to mediate liquidity and profitability on firm value.

Sathyamoorthi and Mashoko (2020) conducted a study on the relationship between liquidity management and firm value in commercial banks in Botswana. The study used an analytical and descriptive research design, sourcing monthly secondary data from the Bank of Botswana Financial Statistics (BFS) database. The data included aggregate data from nine commercial banks in Botswana, including African Banking Corporation of Botswana Limited, Bank Gaborone Limited, Bank of Baroda (Botswana) Limited, ABSA (Botswana), First Capital Bank Limited, First National Bank of Botswana Limited, Stanbic Bank Botswana Limited, Standard Chartered Bank Botswana Limited, and State Bank of India (Botswana) Limited. The dependent variable was measured by market share price (MSP) and Book value (NBV), while the independent variables included Cash and cash equivalents to total assets ratio, Cash to deposits ratio, Loans to deposits ratio, Liquid assets to total assets ratio, and Liquid assets to deposits ratio. Income growth and size were the control variables. Regression analysis showed significant positive relationships for Loans to total assets ratio and Liquid assets to total assets ratio with return on assets and return on equity. Loans to deposits ratio and Liquid assets to deposits ratio had significant negative relationships with return on assets and return on equity. Cash and cash equivalents to total assets ratio had insignificant positive relationships with return on assets and return on equity, while cash to deposits ratio had insignificant negative relationships. The study suggests that commercial banks should optimize liquidity variables to improve performance and that policymakers, through the Central Bank, should prescribe minimum liquidity requirements to help banks stay profitable.

Shaibu and Okafor (2020) investigated the impact of liquidity management on profitability of financial institutions in Nigeria. Current ratio, cash to total asset, cash to total deposit ratio, liquid asset to total assets ratio and loan to total deposit ratio were adopted as proxy for liquidity management. The study involved financial statement from financial institutions based in Nigeria. The study adopted an ex-post facto research design utilizing data from the period between 2006 and 2016. The secondary data collected was analyzed using correlation and regression analysis. The findings showed that cash to total asset, liquid asset to total assets ratio and loan to total deposit ratio have a positive and significant association with Return on Asset. On the other hand, the findings showed liquid asset to total assets ratio has a negative and substantial impact on Return on Asset. Also, the findings showed that the relationship between current ratio and loan to total deposit is positive but insignificant.

Tanveer et al. (2017) conducted an empirical investigation to analyze the impact of liquidity management on the financial performance proxied with profitability of Pakistani banks over eleven years. The quantitative research designed and Descriptive statistics were worked out and examined impact of liquidity on profitability. The secondary financial data obtained from audited annual financial reports were analyzed with the aid descriptive and inferential statistics. Return on assets (ROA) and return on equity (ROE) were used as measures of bank's profitability while Current Ratio (CR) advances to deposit ratio (ADR), Cash deposit ratio (CDR) and Deposit Assets Ratio (DAR) represented the measurement of liquidity management. The population of the study were thirty (30) commercial banking sector in Pakistan. Purposive sampling technique was used to accessed the data based on proximity and availability. Banks are selected whose data will be easily available. In sampling frame, banking sector of Pakistan was included resulted to sample size of 30 Pakistani banks were analyzed. The results revealed that ADR, CDR and DAR has positive and significant impact on ROA whereas negative and significant impact on ROA. CR, ADR, CDR and DAR have positive and significant impact on ROE. The study concluded that the profitability of banks was influenced by liquidity management and stated that banks should consider liquidity management practices as a major requirement for profitability determinants. The study recommended that all financial markets should have a comprehensively approved liquidity management procedures, practices

and policies mechanism and exclusively tailored for their financial institutions and management must responsible for aptly implementing these polices and strategies on priority basis. However, the study may not suitable for decision making in Nigeria due to peculiarity of the Nigerian business environment.

### **Gap in the Literature**

From the empirical literature reviewed in respect of previous researches in this area of interest, the variables of liquidity management such as current ratio, quick ratio, cash ratio, and loan ratio had not been combined in a single multiple linear regression model to examine their influence on firm value of listed deposit money banks in Nigeria at the time of this investigation to the best knowledge of the researchers. The sub-entities that made up the listed deposit money banks in this study also made the study unique from previous ones. In these regards, the researchers of the present investigation believed that the outcomes would contribute to knowledge and add to the stock of empirical literature in this area of interest.

## **III. Methodology**

### **Introduction**

This part outlined the methodology which was used in carrying out the study. Aspects covered include research design, population and sampling design, data collection methods, data analysis methods and testing of data validity and reliability. Finally, it presented the model adopted in the study to be able to analyze and discuss the solution to the research hypotheses and arrive at conclusions.

### **Research Design**

The nature of this study, which is quantitative, permitted the adoption of ex-post facto research design. The design helps the researchers to establish, appropriately, the direction of the influence of the liquidity management on firm value of listed deposit money banks in Nigeria.

### **Population of the study**

The population of this study was made up of aggregate of the listed deposit money banks in Nigeria whose shares were quoted on the floor of Nigeria Exchange Group (NXG) at 31st December, 2022. Fourteen (14) listed banks cutting across all the banking sector form the population of the study.

### **Sample Size and Sampling technique**

The population was filtered using the following criteria: all banks must be listed with the Nigerian exchange group from January 1<sup>st</sup>, 2007 to December 31<sup>st</sup>, 2022; their financial statements must be stated in the Naira currency: data must be available for these DMBs within the period of study from 2007 to 2022 and the DMBs banks must have unique determinants and related variables for measurement. After application of filtering criteria, twelve (12) DMBs was selected which represent 85.7%. Therefore, the sample size consists of 12 deposit money banks in Nigeria and the study adopted filter technique. The population as the sample size of the study as shown in the appendix.

### **Sources and method of data collection**

The source of data for this study was restricted to the sampled deposit money banks in Nigeria. Precisely, secondary data (the published financial statements of these entities) from 2007 to 2022 were used. The nature of data is panel data set whose observation is calculated as the multiple of number of the banks sampled for the study and the number of years for which data are collected.

### **Model Specification**

Empirical Specification of Models In this study, the focus was to establish the influence of independent variables on the dependent variable, and in line with hypothesis of the study, the empirical model is stated as:

$$FV_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 CR_{it} + \beta_3 CRR_{it} + \beta_4 QR_{it} + \varepsilon_{it}$$

Where:

FV represents Firm Value for bank i at time t.

LR represents Loan Ratio for bank i at time t.

CR represents Cash Ratio for bank i at time t.

CRR represents Current Ratio for bank i at time t.

QR represents Quick Ratio for bank i at time t.

$\beta_0$  = Intercept

$\beta_1$  and  $\beta_3$  = Coefficient Parameters

i = 1 to 12 banks.

t = 2007-2022.

$\varepsilon$ = Error term.

**Variables Definition and Measurement**

**Table 2**  
*Type, Variable Definition, Measurement and Sources*

Type	Variable	Abbreviation	Measurement	Source
Dependent	Firm Value	FV	Market value of equity plus book value of debts divided by total assets	(Arachchi et al., 2017)
Independent	Cash Ratio	CR	Total cash divided by current liabilities	(Grace et al., 2016)
Independent	Current Ratio	CRR	Total current assets divided by current liabilities	(Lukayu and Mukanzi, 2015)
Independent	Quick Ratio	QR	Total assets less inventories divided by current liabilities	(Okoro, 2016)
Independent	Loan Ratio	LR	Total loan to customer deposit	Wachira, Gregory and Fred (2017) Shrestha (2018)

Source: Researcher’s Compilation (2022).

**Method of Data Analysis**

The collected data were analyzed using both descriptive statistics and panel multiple linear regression. The descriptive statistics was meant to examine the nature of the sourced data in terms of minimum, maximum, mean, standard deviation, Skewness, Kurtosis and Jarque-Bera statistics. The inferential statistics used were R2, Adjusted R2, P-value, t-statistic and F-ratio. Analysis was carried out at 5% level of significance. Other econometric issues examined were multicollinearity test (Variance Inflation Factor (VIF)), stationarity test, Auto correlation test and Hausman test.

**Justification of Methodologies**

The study will adopt ex-post factor research design as it looks at the effects of liquidity management on the firm value of listed deposit money banks in Nigeria. The study will adopt judgmental technique based on existing knowledge and professional judgement. The study utilizes Secondary data source that has already been collected through primary sources such as annual report of deposit money banks in Nigeria, journals, websites etc.

**Data Presentation, Analysis and Interpretation**

The results of data analyses and the discussions are carried out in this chapter.

**Descriptive Statistics**

For the purpose of examining the nature of the sourced data for the period under investigation, the descriptive statistics for each variable of the study are presented on Table 3.

**Table 3**  
*Descriptive Statistics*

Statistics	FV	CRR	QR	CR	LR
Mean	39.9608	1.3428	0.9384	0.2759	0.0353
Median	6.8220	1.1600	0.7380	0.1420	0.0570
Maximum	6.8220	22.3720	18.4330	13.3130	0.8610
Minimum	-14.2480	0.0450	-2.4240	0.0000	-1.5060
Std. Dev.	121.7510	1.5101	1.3338	0.8110	0.2756
Skewness	0.5079	0.9898	0.8749	1.4318	-1.9516
Kurtosis	3.0490	3.2267	3.0759	2.2959	2.1894
Jarque-Bera	4.0486	4.0879	5.3728	6.3685	8.5170
Probability	0.1420	0.1340	0.1241	0.0934	0.0983
Sum	11708.5	393.4400	274.9540	80.8430	10.3470
Sum sq. Dev.	4328398	665.8740	519.4820	192.0450	22.1812
Observations	192	192	192	192	192

From Table 3, Firm Value (FV), measured by the sum of market value of equity and book value of debt divided by assets had 39.9608, 6.8220, 877.412, -14.428 and 121.751 respectively for mean, median, maximum, minimum and standard deviation. The skewness of 0.50794 and kurtosis value of 3.04904 showed that FV were positively skewed and normally distributed during the period of the study.

Current Ratio (CR), measured by current assets less inventories divided by current liabilities, had 0.93841, 0.7380, 18.4330, -2.4240 and 1.3338 respectively for mean, median, maximum, minimum and standard deviation. This indicated that QR of listed deposit money banks in Nigeria during the period of this study was moderately low. The skewness of 0.87489, kurtosis value of 3.07589 and Jarque-Bera value of 5.3728 showed the QR were positively skewed, normally distributed but below normal curve.

Cash Ratio (CR), measured by total cash divided by current liabilities, had 0.2759, 0.1420, 13.313, 0.00 and 0.81098 respectively for mean, median, maximum, minimum and standard deviation. This implies the cash ratio for these companies was lower during the study period. The skewness of 1.43181, kurtosis value of 2.2959 and Jarque-Bera value of 6.3685 showed CR were positively skewed and had attributes of normality, though below normal curve.

Loan Ratio (LR), measured by total loan divided by customer deposit, had 0.0352, 0.0353, 0.0570, 0.8610, -1.506 and 0.2756 respectively for mean, median, maximum, minimum, and standard deviation. The result show high level of fluctuation in the variables study. The skewness of -1.95158 showed vividly that the data for loan ratio were negatively skewed. Kurtosis value of 2.18939 shows data obtained were below normal curve while Jarque-Bera value of 8.5170 ( $p > 0.05$ ) showed attributes of normality over the period study for the variable Loan ratio.

**Multicollinearity Check**

Multi-collinearity usually exists where there is a significant relationship between one predictor and the other in a model. In this study, the variance Inflation Factor (VIF) was used to check the existence of multi-collinearity in all the predictors. For the fact that the model of this study has intercept (constant), the centered VIF was used to check for the existence of multicellularity. The result of the computation was presented on Table 4.

**Table 4:**  
*Variance Inflation Factor (VIF)*

Variable	Coefficient variance	Uncentered VIF	Centered VIF
FV	5023.9610	109.1828	NA
CRR	331.8578	29.2933	1.6390
QR	262.1705	15.1191	1.0102
CR	308.8434	4.9102	1.3993
LR	1082.5870	1.8104	1.7811

From the result, the centered VIF values for all the predictors were less than ten (10) benchmarks for deciding the existence of multicollinearity statistically, hence the variables did not have multi-collinearity.

**Correlation Matrix**

For the purpose of assessing the level of relationship between dependent variable and independent variables and as well as determining the relationship between pairs of independent variables to check for the possible indication of multicollinearity, correlation matrix for the variables were computed and presented on Table 5

**Table 5:**  
*Correlation Matrix*

Variable	CRR	QR	FV	CR	LR
CRR	1.0000		0.3790	0.2527	
QR	0.3379	1.0000	0.3418	0.2170	0.3050
FV	0.3790		1.0000		
CR			0.0163	1.0000	
LR	0.4967		0.3727	0.3059	1.0000
Probability	CRR	QR	FV	CR	LR
CRR				0.0230	
QR	0.0000		0.0012	0.0013	0.0000
FV	0.0029			0.7810	
CR					
LR	0.0000		0.0251	0.0000	

From the correlation analyses, it was observed that there was no indication of multicellularity existing in the pair of independent variables. This was because the correlation coefficient between one independent variable and the other was less than sixty percent (60%).

**Test of Stationarity**

Stability of panel data is very fundamental to ascertain in an empirical study. The result of the computation to check for the stability of the variables of FV, CRR, QR, CR and LR were presented on Table 6

**Table 6:**  
*Test of Stationarity*

Method	Statistic	Prob.**
ADF – Fisher chi-square	753.5140	0.0000
ADF – Chi Z-Stat	-25.0572	0.0000

\*\* Probabilities for Fisher tests are computed using an asymptotic chi-square distribution. All other tests assume asymptotic normality. Intermediate ADF test result D (UNTITLED)

Series	Prob.	Lag	Max Lag	Remark
D (CR)	0	5	15	Stationary
D (CRR)	0	2	15	Stationary
D (FV)	0	6	15	Stationary
D (LR)	0	3	15	Stationary
D (QR)	0	1	15	Stationary

From Table 6, it was observed that the relevant data collected and computed in relation to the variables had no unit root. Thus, the sourced data for the variables were said to be stable because of the fact that the probability value for ADF-fisher chi-square and ADF-Choi Z-Stat were less than the level of significance of 5% (p-value < 0.05).

**Comparison of Fixed Effect and Random Effect Models**

The comparison of the models was done by the researcher to ascertain the panel regression technique to use in this study. The comparison was done using Hausman test. The Hypotheses are: Ho: RE is good and HA: FE is good. The computed results were presented on Table 7.

**Table 7:**  
*Comparison of Fixed Effect and Random Effect Models*

Test Summary	Chi-sq. statistic	Chi-sq. D. F	Prob.
Cross-section Random	3.409026	6	0.00756

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var (Diff)	Prob
CRR	1.2079	1.9352	0.2739	0.1647
QR	0.4450	-0.3278	0.4030	0.2235
CR	2.7329	-2.8933	0.2540	0.7502
LR	5.7989	-6.8260	1.0366	0.3130

From the results presented on Table 7, it was observed that chi-square statistic computed had probability value of 0.00756 is less than 0.05 (p-value < 0.05), which indicated that the use of random effect model was insignificant. Thus, the fixed effect model was found acceptable for this study. Hence, the fixed effect models of regression were used for the regression analysis.

**Regression Analysis and Test of Hypothesis**

The hypothesis of the study stated in accordance with the objectives is tested using multiple linear regression statistical tool. The computation was done following the stated model of the study. Hypothesis of the study: Current ratio, quick ratio, cash ratio and loan ratio have no significant combined influence on firm value of

listed deposit money banks in Nigeria. The fixed effect linear regression results in relation to firm Value (FV) and Current Ratio (CRR), Quick Ratio (QR), Cash Ratio (CR) and Loan Ratio (LR) were presented on Table 8.

**Table 8:**  
*Fixed Regression Output*

Variable	Coefficient	Std. Error	t-statistic	Prob.
FV	14.4086	65.03993	0.22153	0.8249
CRR	1.20793	0.247675	4.87707	0.0073
QR	0.44498	0.154411	2.88178	0.0326
CR	2.73287	5.358556	0.51	0.6105
LR	5.79885	2.415651	2.40053	0.0058
Effect Specification				
Cross-Section Fixed (Fummy Variables)				
R-Squared			0.9667	
Adjusted R-squared			0.9603	
f-Statistics			151.4542	
Durbin-Watson Stat.			2.2553	
Prob. (F-Statistic)			0.0000	
Dependent Variable: FV				

From Table 8, R2 showed that 96.67% variation in FV during the period of this study was caused by the influence of CRR, QR, CR and LR. Adjusted R2 showed that 96.03% variation in FV during the period of this study was caused by the influence of the independent variables. From the computed value of F-statistic of 151.45 (Prob-value 0.0000 < 0.05), it was discovered that R2 was significant in explaining the influence of influence of liquidity management (CRR, QR, CR, and LR) on FV of the listed deposit money banks in Nigeria. The Durbin-Watson (DW) statistic of 2.2553 showed that there was no first order autocorrelation in the fixed effect regression model. CRR, QR and LR had positive and significant influence on FV on listed deposit money bank in Nigeria. CR had a positive and insignificant influence on FV. The constant ( $\hat{\alpha}_0$ ) of 14.40855 showed the level of FV during the period of the study as CRR, QR, CR and LR were held constant. Given the Adjusted R2 of 96.03%, F-statistic of 151.45 (Prob. Value 0.0000 < 0.05), the null hypothesis was rejected, meaning the independent variables of the study had significant influence on firm value of listed deposit money banks in Nigeria during the period of this study. The findings of this study are in line with the study of Arachchi et al., (2017) who studied the influence of working capital management on firm value; Du et al. (2016) who carried out a study on corporate liquidity and firm value: evidence from China's listed firms.

#### IV. Summary, Conclusion and Recommendations

The purpose of this study was to examine the influence of liquidity management on firm value of the quoted manufacturing companies in Nigeria. The fundamental variables of the study were Current Ratio (CRR), Quick Ratio (QR), Cash Ratio (CR) and Loan Ratio (LR). Tobin's Q was the proxy for firm value, and all tests conducted at 5% level of significance using the Stata. The result of analyses shows that:

- i. CRR indicated positive and significant influence of firm value of quoted manufacturing companies in Nigeria (p-value < 0.05).
- ii. QR showed positive and significant influence on firm value of quoted manufacturing companies in Nigeria (p-value < 0.05).
- iii. CR indicated positive and insignificant influence on firm value of quoted manufacturing companies in Nigeria (p-value < 0.05).
- iv. LR showed positive and significant influence on firm value of listed deposit money banks in Nigeria (p-value < 0.05).
- v. CRR, QR, CR and LR exerted combined significant influence on firm value of listed deposit money banks in Nigeria with Adjusted R2 of 96.03% and F-statistic of 151.45 (Prob. Value 0.0000 < 0.05)

#### Conclusion

From the results of empirical analyses, it was conducted by the researchers that liquidity management had a positive and significant influence of firm value of listed deposit money banks in Nigeria.

## Recommendations

From the findings of the study analyses, it was recommended management of listed deposit money banks in Nigeria and elsewhere should invest in current assets, ensure current liabilities are moderate, inventories are not allowed to accumulate excessively, as well as should maintain adequate cash levels of settle obligations that are due for payments to uphold reputational capital.

## Business Implications of the Findings

The outcome of the results from this study is the pointer to the fact that when investments in current assets of listed deposit money banks are made more, current ratio will improve positively and significantly as well as firm value, in consonance with moderate current liabilities, to maintain adequate liquidity to settle. Short-term obligations.

Managers of banks are advised to improve components of assets to generate more revenue, which would improve firm value positively and significantly.

## Contribution to Knowledge

The investigation findings have disclosed empirically that effective and efficient liquidity management influence firm value. Several studies conducted in this area were done on financial performance of companies from the profitability perception. In this study, the influence of liquidity management on the firm value of listed deposit money banks was determined using Tobin's Q as a measure of firm value is an added contribution to existing literature.

## Suggestion for Further Researches

The investigation in this area of interest-liquidity management and firm value of listed deposit money banks can be disaggregated on sector-by-sector basis in order to have a sectoral picture of the empirical outcomes.

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