

Impact of Discount House Operations on Bank Liquidity and Liquidity Management in Nigeria

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Abstract

Background: The study examined the impact of Discount house operations on Banks Liquidity and Liquidity Management in Nigeria. The study was on a population of five (5) discount houses, Five(5) merchant banks and Twenty-two(22) commercial banks with sample size of a consolidated assets and liabilities of discount houses and commercial bank balance sheet. The expo-facto research design with time series data obtained from the central Bank of Nigeria (CBN) statistical bulletin from 1993-2019. The study employed both inferential and descriptive statistics. The STATA 10 statistical package was used for data analysis to test the two hypotheses as well as tables.

The study reveals that there exist a positive and significant relationship between total operations of discount houses and liquidity of banks and a positive and significant relationship between total operations of discount houses and liquidity management in Nigeria. The study further recommends that the central monetary authority (CBN), should enlist the discount houses to perform the finance abridge function even though it's practiced by other banking and non-banking financial institutions as practiced in advanced economies. The discount houses should be recapitalized and made to spread its branches as well as make its services available to retail customers as it will create awareness of its activities besides the corporate financial sector. It further recommends that banks should be further recapitalized and their lending rate should be reduced to the barest minimum to attract good credit risk customers. In consonance with the shiftability and liabilities management theories banks should strike a balance between loans and advances and holdings of short-term securities to suffice for its liquidity shortfall to avoid liquidity crisis and enhance efficiency in funding the real economic sector of the economy. In consonance with the shiftability and liabilities management theories banks should hold short-term securities to suffice for its liquidity shortfall to avoid liquidity crisis and enhance efficiency in funding the real economic sector of the economy.

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I. Introduction

Between 1929 -1952 when indigenous banks commenced operations in Nigeria under the colonial rule, almost all these banks did go insolvent. The Banks established from 1948 to date and yet in operation are the Agbonmegbe Bank then, now known and called Wema Bank Plc, the likes of First Bank Plc and United Bank for Africa where appendages of the British, Africa and French establishments.

The inability of the failed banks to meet the obligations of their customers with respect to their deposit liabilities is being the reason for the insolvency of all these banks and the establishment of the bankers ordinance of 1952 was to serve as guidelines for the management and operations to forestall the occurrence of these insolvency that has always occurred as a result of liquidity crisis. Further steps and measures taken to improve on liquidity management was the establishment of discount houses in 1992 who were licensed to provide and abridge finance function (indirect finance) amongst other financial intermediaries in the money market. In furtherance to solving the liquidity crisis was the reconsolidation of commercial banks to a capital base of twenty-five billion (N25b)Naira which gave rise to merger and outright acquisitions but yet the persistence in liquidity crisis as further merger and outright acquisitions are yet occurring to date. This may reflect that some bank didn't attain the exact recapitalization base of twenty five billion (N25b) or they exist partial or non-compliance to the CBN'S regulation.

The introduction of the treasury single account again eliminated the float in the banking sector as the liquidity base of the banks were highly boosted by the deposit liabilities of government through the revenue generated by its ministries, Departments and agencies (MDA'S). It was estimated that the Banks in the first quarter of 2015 held about N2.2 trillion Naira of public idle funds serving as liquidity at its disposal (Adeolum, 2015). The withdrawal of such a value from the banking system is the reason for the sudden liquidity problem and its persistence there in as the elimination or withdrawal of this 2.2 trillion Naira did lead to the

sudden retrenchment of Bank staffs, merger of the systematically important banks, change in commercial banks loan portfolio and its contribution to the capital formation in the various sectors of the economy was impeded in the year of its implementation with a desire fall in the gross domestic product (GDP) of the country revealing the low liquidity level of banks who have hitherto financed the working capital requirements of the various economic sectors as the equity of many corporations is inadequate in funding them through their financial year (Oru,2019).

CBN(2018),directed banks in Nigeria particularly the settlement banks are by CBN regulation on January 1,2018 expected to have fifteen billion Naira (₦15bn) treasuring bills and as such with the central bank of Nigeria(CBN) to enable them appear on the floor of the clearing session as clearing banks otherwise come as clients to other banks who possess this requisite to enable them clear their transactions with other banks with a condition of not being indemnified by the clearing bank in the case of any loss and the discount houses are there to provide this financial abridge function for the central bank of Nigeria to discount such bills and make funds available for the discounted banks besides the treasury bills, banks hold short term instruments which consist of but not limited to commercial papers, Banks Acceptances, Treasury Certificates , Development Stocks, Debentures etc. and as such liquidity crisis shouldn't rock up every now and then except the banks have tailored securities on record or these financial intermediaries do not have the required capital to discount and re-discount the bills and securities offered by the banks and hence the ever lingering liquidity crisis in the Nigerian Banking industry. Thus it is important to determine the correlation between discount houses and their contribution to banks liquidity and liquidity formation in the Nigerian economy. Banks here refer to commercial and merchant banks as the introduction of universal banking in Nigeria have their figures merged.

Key words: Liquidity, Discount Houses, Money market, Liquidity management.

Statement of the problem

The persistent liquidity crisis experienced in the Nigeria banks system predominantly in the commercial banking system irrespective of the mixed banking system practiced from 2004 by the central bank of Nigeria necessitates a quest for solution. The commercial banks are as a matter of pre-requisite require money market instrument which are set for liquidity management. The banks possess internal lending authorities and holistically, their lending policies of course don't borrow short-term to lend long-term is a liquidity control means but yet we have one major acquisition, not because of comparative advantages but because an ad is envisaged. The money market instruments are available, the discount houses licenses to undertake the function of liquidity management and other key consortiums in the financial intermediation process and investing in money market instruments. Why are the banks yet in liquidity crisis year after another? The economic growth of and nation revolve around the ability to own a credible and adequately funded real economic sector (private sector).This private sector own a capital structure consisting of debt and equity, and this debt funds are from the banking system as loan, advances (overdraft) to enhance their working capital and a banking system that is always in liquidity crisis is unable to foster the needed development of such firms and boost economic growth. Though contrasts exist between liquidity and profitability but the highest gross domestic product (GDP) between 1960 to 2016 was 2015 where banks were very afloat. Do banks then possess the requirement to attain liquidity from the market or are the financial intermediaries in a short fall of the liquidity requisition? These questions call for answers and a cause for this study.

Objectives of the study

The main objective of this study is to examine the impact of discount houses on the liquidity of banks in Nigeria. This objective is however anchored on two subsisting objectives to determine its reliability. These are;

1. To determine the relationship between discount house operations and liquidity of banks.
2. To determine the relationship between discount house operations and liquidity management.

Research questions

1. To what extent do discount houses contribute to the liquidity of banks?
2. To what extent do discount houses contribute to liquidity management?

Research hypothesis

Ho₁: There is no significant relationship between discount house operations and liquidity of banks.

Ho₂: There is no significant relationship between discount house operations and liquidity management in Nigeria.

II. Theoretical Framework

1. Information Asymmetry Theory

Information asymmetry theory was first applied to market for used cars by Akerlof (1970). Information asymmetry theory states that it may be complex to differentiate between good and bad borrowers and this may result into adverse selection and moral hazard problems. The theory of asymmetric information assumes that financial markets are not perfect and financial intermediaries primarily exist to reduce information and transaction costs arise from market imperfection between borrowers and lenders. Information asymmetry arises because borrowers (private sector business) generally know more about their investment projects and the willingness to repay than the lenders (banks). Information asymmetry also arises if the banks are not certain in terms of integrity of the borrowers and the expected return of the projects that they have financed. Many potential private sector borrowers who are honest good credit risk customers fail to access credit because the banks cannot objectively establish credit history of borrowers because of information asymmetry. Some bad credit risk borrowers have exploited the information asymmetry problems to create multiple bad loans in Nigeria banking industry. Information asymmetry problems create higher interest rate and as interest rate rises above the rate honest borrowers could pay; some honest borrowers will decide not to borrow and this increases the proportion of loans extended to dishonest borrowers who do not act likely to repay thus leading to increase loan default rate. As loan default (non-performing loan) increases, the bank further raises the interest spread to offset the rising financial intermediation costs and this situation adversely affects bank credit delivery to the private sector.

2. The Shiftability Theory

The shiftability theory of bank liquidity was propounded by H.G. Moulton who asserted that if the commercial banks maintain a substantial amount of assets that can be shifted on to the other banks for cash without material loss in case of necessity, then there is no need to rely on maturities. In this view, an asset to be perfectly shiftable must be immediately transferable without capital loss when the need for liquidity arises. This is particularly applicable to short term market investment, such as treasury bills and bills of exchange which can be immediately sold whenever it is necessary to raise funds by banks. But in a general crisis when all banks are in need of liquidity, the shiftability theory requires that all banks should possess such asset which can be shifted on to the central bank which is the lender of last resort. This theory has certain elements of truth. Banks now accept sound assets which can be shifted on to other banks. Shares and debentures of large companies are accepted as liquid assets along with treasury bills and bills of exchange. This has encouraged term lending by banks.

This theory was developed in the 1960s. The theory revolves on the premise that there is no need for banks to grant self-liquidating loans and keep liquid assets because they can borrow reserve money in the money market in case of need. A bank can acquire reserves by creating additional liabilities against it from different sources. These sources include the issuing of time certificates of deposit, borrowing from other commercial banks, borrowing from the central bank, raising of capital funds by issuing shares, and by ploughing back of profits. We discuss these sources of bank funds briefly.

3. Liabilities Management Theory

The liabilities management theory propounded by M.L. Jhingan in 1960 states that banks have no need to grant self-liquidating loans and keep liquid assets because they can borrow reserve money in the money market in case of a pending liquidity level. That a bank can acquire reserves by creating additional liabilities against itself from different sources. This source includes the issuance of time certificates of deposits, borrowing from other commercial banks, borrowing from the central bank, raising of capital funds by issuing shares and by ploughing back of profits.

Conceptual Framework

Discount Houses and liquidity management

Fadeyi (1992) defines a discount house as any financial institution in Nigeria which transacts any business which consists of trading-in and holding of Treasury bills, Treasury certificates, bonds, debentures, shares and common stocks, bills of exchange, commercial bills and other securities and whose operations are in the opinion of the central bank of Nigeria (CBN). Khan (1992) described the discount house as a specialized financial institution whose activities involve the acceptance of money at call from commercial, merchant, investment and development banks, building societies and other financial institutions who invest these funds and making a market for short-term financial securities. Moreover, only local banks, financial institutions and insurance companies with or without the participation of international finance institutions acceptable by the central bank of Nigeria (CBN) subscribe for the shares of a discount house and the maximum permissible equity

holding for a single investor shall be 40% to avoid any single investor becoming a holding company in a discount house to ensure sound and objectivity in liquidity management.

The establishment of discount houses coincided with introduction of open market operation (OMO) as a tool for direct controls and liquidity management. DHs were mainly facilitated the issuance and sales of the short-term government debt instruments and also accommodate short-term commercial bank financial needs. The initial law establishing them granted them exclusivity of operations as the only player with full advantage of the arbitrage opportunities arising from a partial monopoly of the market. Their first few years consequent upon their peculiarities use full of progress in line with the take-off of the, OMO as a tool. The trend in the quantum arising from increasing operating surpluses replicated in the growth of the transfer to statutory reserves as well as the need to comply with section G(i) of the revised prudential guidelines; which states that transfer to statutory reserve a minimum of 15 percent of profit after tax if the reserve fund is less than the paid-up capital and minimum of 10% if the reserve is equal or more than the paid-up capital reflects the curativeness of the sub-sector during this period.

This review offers good insight into the rationale and philosophy of adopting the discount house system in Nigeria. The problems of discount houses followed a short boom between 1993 and 1994, were traced to a number of factors after it started to existence liquidity and viability problem in 1995. The problems were traced to a number of factors. First, these accelerated deregulation of the money market since 1995 which removed direct control and resulting in distortions on which the discount houses thrived. The pursuit of tight monetary policy by monetary authorities moderated liquidity whose management in the past provided substantial profit to discount houses. Thirdly, the improved distress resolutions attracted some of the businesses done by the discount houses. Finally, the enhanced efficiency and stability in the foreign exchange market reduced the need to keep overnight funds with discount houses in order to make purchases at the hitherto volatile foreign exchange market. The paper examined the options for resolving the observed problems. The first seeks a protected discount house system in which banks would be excluded, the second implores a situation in which discount houses and banks would participate jointly in both discount house and banking business with considerations for the second approach as appropriate (Ezeuduji Babalola and Adegbite, 1998).

Table 1: Discount Houses transfer to statutory Reserves

DISCOUNT HOUSES TRANSFER TO STATUTORY RESERVES																		
Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Transfer to statutory reserve (TRS)(₦ Million)	0.5	18.5	51.0	127.8	141.2	220.0	329.9	363.0	1,000.0	1,457.2	1,274.1	2,289.7	2,275.8	3,631.3	4,217.4	5,828.8	7,873.9	8,553.2

Source: CBN Statistical Bulletin

Obviously, there was an observed reduction in the magnitude of growth between 1995/1996 because of the introduction of the autonomous foreign exchange market but their transfer to statutory reserves grew and was maintained. The growth was however at a minimal rate partially as a result of the increasing activities of commercial banks in the money market which partially weakens the regime of the monopoly by the money market operations and this influenced the clamor for the review of the operating guidelines of the houses.

The introduction of universal banking in 1999 marked the laud the turning point in the history of discount houses in Nigeria banking to the commercial banks were to provide other services such as merchant banking, insurance, factoring housing finance, stock broking, custodian service and trusteeship in hire with the Banking decree of 1969, the bank were able to extend their primary functions in their other allied services. However, this policy, while creating a number of financial super markets had negative effect on the discount Houses. The commercial bank were however, bigger in size and possessed the competitive strength arising from mergers, acquisitions and recapitalization, thus over the traditional functions of the discounts houses.

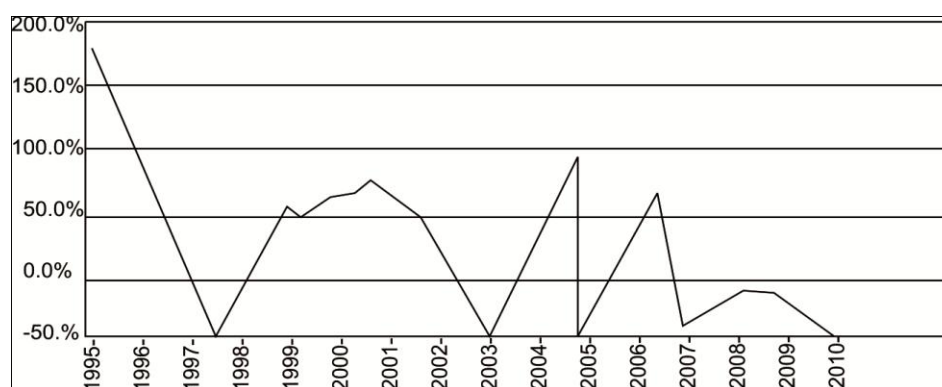


Fig. 1.2: Discount Houses Transfers to statutory reserves (percent)

Source: CBN statistical Bulletin.

Consequent upon the value of the aggregate capital base of discount Houses in Nigeria standing at ₦ 3466 billion as at September 2012 from ₦ 436 Million in 1993 comparatively to a single commercial bank with ₦ 25 billion in aggregation of ₦654 billion for the 23 commercial bank in Nigeria, how possible can the DHs effectively integrate against the liquidity challenges of commercial bank yet with banks as participants in the short-term security market. This is thus imminent for the study of the highly proliferated insurance companies with huge value premium and investments to evaluate its role as a leading Non-bank intermediary with estimated huge funds for the intermediation process. Discount Houses clearly deal on Treasury bills, treasury certificate, Negotiable instruments of Deposit (NCD'S), Banker acceptances, commercial paper (eligible) Assets-based securities (Not more than three years to maturity), Federal government stock(development stocks not exceeding five years), eligible state bonds (not more five years maturity) promissory notes issued by state government amongst other securities that may be approved by the CBN from time to time.

Table 2: Composition of aggregate assets (%)

Composition of aggregate asset	1993	1997	2002	2007	2011	2012
Cash and balance with bank	0.14	1043	1.29	0.21	0.75	1.08
Claims on Federal government	94.43	21.59	57.21	59.87	69.61	57.60
Claims on state government	—	0.00	0.00	0.00	1.62	2.03
Claims on Banks	3.11	44 .18	22.99	29.02	3.37	3.78
Claims on other financial institutions	—	0.00	—	0.60	0.00	6.87
Claims on other	0.00	25.48	8.79	7.08	10.93	18.17
Other assets	2.32	4.81	8.94	3.03	13.23	9.91
Fixed assets	—	0.25	0.77	0.19	0.49	0.56

Source: CBN statistical Bulletin and Annual reports 2016

Bank Liquidity

The liquidity crisis experienced by banks today is as old as the establishment of indigenous banks in 1929. This crisis refers to the inability of banks to meet the obligation of their customers either in terms of deposit liabilities or in providing other financial services such as loans and advances or overdraft to finance their productive activities and personal needs because of the short supply of funds available to the bank at that material time. This condition where the bank is unable to meet its obligation to its customers is said to be a shortfall in liquidity supply and the persistence of this condition from one bank to the other is termed liquidity crisis. The liquidity crisis experienced by banks in Nigeria today is as a result of volume and the value of default risk (risk as a result of borrower not paying capital and interest as at when due) and or market risk (risk as a result of changes in the speculation on securities or financial instruments) in consonance with commercial or operational errors in some cases lead to bad debts with prolonged periods of recovery and the loan review system keeps commercial banks in perpetual struggle between liquidity, profitability and safety. This struggle has adverse effect on the financing capacity in terms of loan portfolio and loan composition of banks as well as the average cost of funds for private corporations with analysis on their returns on investments is mitigated against by liquidity crisis as an equilibrium point cannot be attained with respect to supply for funds and demand for loanable funds thus the reason for higher lending rate in Nigeria.

Gurley and shaw(1960), regards a substantive volume of liquid assets held by financial intermediaries and the liabilities of non-bank financial intermediaries as close substitutes for money. As such banks were

supposed to invest their funds in these liquid assets and in turn discount them through the discount window of the discount houses in the event of any shortfall in her liquidity requirements and thus avoid the round-tripping of liquidity crisis within the sector and of course also trade on them.

Okaro(2016), posits that instead of keeping excessive liquidity as a provision of unexpected deposit withdrawals from the customers, the DMB's should find it reasonable to adopt other measures of meeting such requirements which can include borrowing from discounting bills and also that there is a need to invest excess of liquidity available at an available investment with various degrees of liquidity in order to increase banks profitability and get benefits from the time value of the available money.

CBN(2018), in her circular stated that for any bank to appear on the clearing session and thus suffice as a settlement bank, such bank must possess at least fifteen billion (15,000,000,000.00) Naira worth of treasury bills and banks who do not own such short term assets will only appear through the settlement banks who will act as their agent and incidentally these categories of banks exist. This suffices the truism that some banks are not prepared nor qualified for the practice thus even with the liquidity management practices made by the regulatory authorities, liquidity crisis will persist until the system purges itself of undercapitalized and inefficient banks in the Nigerian financial system.

Thus, the issue of liquidity of banks has a cumulative resultant effect on the rate of interest rate charged on the loanable funds and this affects the number of operational activities the real economic sector can get engaged in and an unbearable impact on the gross domestic product of the nation, thus inhabiting on the nations growth.

The critical role played by Central Bank of Nigeria and DMB's in fashioning out appropriate framework for liquidity management and identified the challenges inhibiting effective performance of this role. That deposit liabilities constitute a major source of funding liquidity by DMB's in Nigeria, having current ratio greater unity.

Also, DMB's are cautions, investing more in short-term securities to protect their liquidity positions. But money market instruments played a diminishing role as a source of liquidity funding by DMBs. Among the major liquidity of the monetary authorities to determine appropriate mix of policy instrument that would exert minimum cost while achieving monetary policy targets. Price level is considered as nominal anchor of monetary policy and the alignment of movements in dynamic liquidity with the announced target of monetary policy stance of the CBN. The liquidity position of banks would strengthen their credit risk assessment mechanism so as to increase their credit exposure to the private sector. DMB's should establish a robust liquidity risk management framework that is well increased into bank wide management process and ensure that competitive pressures do not compromise the integrity of their liquidity risk management framework, control functions, limit systems and liquidity cushions.

Empirical Review

Ikpefan(2012), conducted an investigation into the interactions of discount houses, money market and economic growth in Nigeria. The employed time series data obtained from central bank of Nigeria and employed co-integration and vector error correction technique for data analysis. The population the study and sample size is made up five discount houses in Nigeria. the study revealed amongst others, that a long run relationship exist between discount houses operation and economic growth on one hand and money market instrument on the other hand. This implies that discount houses serve as veritable stimulant in Nigeria especially in this era of global economic melt-down and money market JEL classification.

Ezirim (2005), investigated the relationship subsisting between the operations of discount houses and the performance of the money market and the general economy. Data was sourced from CBN statistical bulletin using the panel research design. Data analysis was conducted using estimation of regression models and subsequent analysis using conventional statistic. The study revealed a positive and significant relationship exist between the indicators of discount houses and those of money market and the economy considerably and recommends that insurance company should subscribe to the share of a discount house business.

Okaro(2016), Examine the effect of liquidity management on performance of deposit money banks (DMB's) in Nigeria. The data was sourced secondarily and analyzed using the regression analysis with other aid of the E-view statistical package 8.0. The result showed that there is a negative and significant relationship between liquidity ratio and DMB's profitability and there is a positive and significant relationship between cash to deposit ratio and profitability of banks. The study recommended that instead of keeping excessive liquidity as a provision of unexpected deposit withdrawals from the customers, the DMB's should find it reasonable to adopt other measures of meeting such requirements which can include borrowing from discounting bills and also that there is a need to invest excess of liquidity available at an available investment with various degrees of liquidity in order to increase banks profitability and get benefits from the time value of the available money.

Bassey(2018),examined liquidity management in Nigerian Deposit Money Bank; issues, challenges and prognosis. The study adopted a descriptive approach using published data from the balance sheet of DMB's. it examined the critical role played by Central Bank of Nigeria and DMB's in fashioning out appropriate framework for liquidity management and identified the challenges inhibiting effective performance of this role. The study revealed that deposit liabilities constitute a major source of funding liquidity by DMB's in Nigeria of safe over saliency having current ratio greater than unity. Also, DMB's are cautions, investing more in short-term securities to protect their liquidity positions. But money market instruments played a diminishing role as a source of liquidity funding by DMBs. Among the major liquidity of the monetary authorities to determine appropriate mix of policy instrument that would exist minimum cost while achieving monetary policy targets. The study recommends the adoption of price level as nominal anchor of monetary policy and the alignment of movements in dynamic liquidity with the announced target of monetary policy stance of the CBN. Furthermore, banks should strengthen their credit risk assessment mechanism so as to increase their credit exposure to the private sector. Finally, the paper concludes that DMB's should establish a robust liquidity risk management framework that is well increased into bank wide management process and ensure that competitive pressures do not compromise the integrity of their liquidity risk management framework, control functions, limit systems and liquidity cushions.

III. Research Methodology

The study employed the use of the Expo-facto research design on time series data obtained from the central bank of Nigeria (CBN) statistical bulletin on the total of banks takings from the discount houses and banks liquidity from 1993 to 2019 as well as total operations of discount houses and the money market value from 1993 to 2015.Data analysis was conducted using the STATA 10 statistical package for analysis.

Model Specification

$$LQD=f(MMIB+TBDH).....1$$

Where;

LQD=Liquidity of banks

TBDH=Takings of banks from discount houses

MMIB=Money market instrument of banks

$$LQD=B_o+B_1(TBDH)+ut.....2$$

$$LQD=B_o+B_{1r}(TBDH)+ut.....3$$

Where: B_o =constant term

B_{1r} =Coefficient of correlation of total takings of banks from discount houses

ut=unexplained variables

$$MMV=f(TODH).....4$$

Where:

MMV=money market value

TODH=Total operation of discount houses

$$MMV=f(B_o+B_1)ut.....5$$

$$MMV=f(B_o+B_{1r}(TODH)+ut).....6$$

Table 3: Descriptive Statistics

	TBDH	LQD	TODH	MMV
Mean	8.612630	75.08407	119056.1	3687.974
Median	2.500000	29.01000	57282.90	1342.350
Maximum	78.00000	450.1100	417154.6	13245.86
Minimum	0.000000	0.000000	3431.850	126.6200
Std. Dev.	16.49930	118.0126	136848.4	4386.507
Skewness	3.110755	2.093242	1.039093	1.048397
Kurtosis	12.93427	6.420924	2.582276	2.640261
Jarque-Bera	154.5715	32.88303	4.306126	5.091698
Probability	0.000000	0.000000	0.116128	0.078406
Observations	27	27	23	27

Abbrev: TBDH = Takings of bank from discount houses, LQD = Bank liquidity, TODH = Total operations of discount houses, MMV = Money market value, DH = Discount houses, GDP = Gross domestic product.

Table 4: Relationship between discount house operations and liquidity of banks

Variable	TBDH		
Pearson Moment Correlations	R	t-stats	p-value
LQD	0.69	4.77	0.00
Granger Causality Test		F-stats	p-value
LQD does not Granger Cause TBDH (Lag1)		4.31	0.04
LQD does not Granger Cause TBDH (Lag2)		24.59	0.00

Abbrev: LQD = bank liquidity, TBDH = bank takings from discount houses

Table 5: Relationship between discount house operations and Money market value

Variable	MMV		
Pearson Moment Correlations	R	t-stats	p-value
LQD	0.52	2.82	0.01
Granger Causality Test		F-stats	p-value
TODH does not Granger Cause MMV (Lag 1)		10.39	0.00
TODH does not Granger Cause MMV (Lag 2)		5.07	0.02
MMV does not Granger Cause TODH (Lag 2)		6.18	0.01

Abbrev: MMV = money market value, TODH = total operations of discount houses

IV. Discussion

The Pearson moment correlations that test the existence of relationship between bank takings from discount houses and bank liquidity reveals a positive and significant relationship of 0.69. Thus, there is a 69 percent relationship between bank takings from discount houses and bank liquidity. The granger causality tests at lag1 (F=4.31, p=0.04) and lag2 (F=24.59, p=0.00) reveal that the relationship between LQD and TBDH is a unidirectional one, flowing from LQD to TBDH. Thus, LQD granger causes TBDH, meaning that as LQD increases, TBDH also increases.

The t-statistics (4.77) and p-value (0.00) from the correlation's analysis revealed that the relationship between LQD and TBDH is statistically significant at the 1%, 5% and 10% levels of significance. Thus, Ho₁ null is rejected. The alternative H₁ is accepted that there is a significant relationship between discount house operations and liquidity of banks.

The Pearson moment correlations tested the existence of a relationship between total discount houses operations and money market value reveals a positive and significant relationship of 0.52. Thus, there is a 52

percent relationship between total discount houses operations and money market value. The granger causality tests at lag1 ($F=10.39$, $p=0.00$) reveals a unidirectional causality flowing from total discount houses operations to money market value. The granger causality tests at lag2 [$F=5.07$, $p=0.02$) and ($F=6.18$, $p=0.01$)] reveal that there is a bidirectional relationship between MMV and TODH, indicating that both MMV and TODH trigger the relationship between each other.

The t-statistics (2.82) and p-value (0.01) from the correlation's analysis revealed that the relationship between MMV and TODH is statistically significant at the 5% and 10% levels of significance. Thus, H_0 is rejected. The alternative hypothesis is accepted that there is a significant relationship between total discount house operations and money market value. This is in consonance with the findings of Ikpefan(2012), who investigated the interactions of discount houses, Money markets and economic growth in Nigeria. This also agrees with the findings of Ezirim(2005), who investigated the operations of discount houses on money market and general economic growth in Nigeria. The finding is in consonance with Okaro (2015) as he opined that is a negative and significant relationship between liquidity ratio and deposit money banks profitability as their liquidity is basically a function of deposit liabilities. This study reveals that the ability of a bank to meet liquidity requirement through borrowing from discounting bill and also that there is need to invest excess liquidity on investment with various degree of liquidity in order to increase bank profit and get benefit from time value of money. The findings is in consonance with Bassey(2018), who opined that the money market played a diminishing role to liquidity but that the DMB's are investing more in money market instruments(short term securities) to protect their liquidity positions.

V. Conclusion

The study reveals that there is a significant and positive relationship between discount houses liquidity management function and the banks liquidity level and as such liquidity crisis are fundamentally not a function of inadequacies in the financial system but a function of either inefficiency in the banks liquidity-profitability management, or as a result of commercial and operation errors that have impeded on the returns of their asset and finally their poor liability management approach as they fail to maintain a reasonable volume of their assets as securities. The liquidity management function of the discount houses is also inadequate as it reveals a positive and significant relationship between discount house operations and the value of the Nigerian money market. This is further emphasized by the granger causality test that the more the volume of discounting of bills by the discount houses, the higher the Value of the money market and vice-versa. Thus, the relationship between discount houses and money market is a mutual relationship. Therefore, the liquidity crisis experience by the Nigerian banking sector is a display of their inability to possess the right volume and value of short-term investment (credit money) as both the abridge finance function performed by the discount houses and the money market are never deficient.

VI. Recommendation

The study recommends that the central monetary authority (CBN), should enlist the discount houses to perform the finance abridge function even though its practiced by other banking and non-banking financial institutions as experienced in advanced economies. The discount houses should be recapitalized and made to spread its branches as well as make its services available to retail customers as it will create awareness of its activities besides the corporate financial sector and stimulate liquidity formation. It further recommends that banks should be further recapitalized and their lending rate should be reduced to the barest minimum to attract good credit risk customers as postulated by the information asymmetry theory. In consonance with the shiftability and liabilities management theories banks should hold short-term securities to suffice for its liquidity shortfall to avoid liquidity crisis and enhance efficiency in the money market thus increasing the funding propensity of the real economic sector of the economy.

References

- [1]. Taiwo (2015): What does the New Treasury Single Account (TSA) hold for tax? EWC Nigeria.
- [2]. Adeodun I. A. (2016) Understanding Treasury Single Account(TSA) System. Things you should know Business and Economy, Market development.
- [3]. Bassey(2018),
- [4]. Oru A. O and Odumusor(2019), Impact of Treasury Single Account on Banks Liquidity and Effective Control of Government Cash resources. International Journal of Economics and Finance(IOSR) Vol.10 (1)February.pp:49-59.
- [5]. CBN (2018), Circular on Monetary, credit, foreign trade and exchange, settlement banks for clearing and settlement.
- [6]. F.U.Ezeuduji, J. Abayomi and M.A. Adegbite(1998), CBN Economic and Financial review. VOL 36(2)
- [7]. NBS (2015), Gross Domestic Product for Nigeria from 1980-2015
- [8]. M.L. Jhingan (2011): Monetary Economics, Delhi, Nisha Enterprises
- [9]. CBN (2016), Central Bank of Nigeria Statistical bulletin; composition of aggregate assets of discount houses. Lagos: CBN Press.
- [10]. Gurley and Shaw (1960): Theoretical definition of money, monetary economics, 2011.
- [11]. O.A. Ikpefan(2012), Interactions of discount houses, money market and economic growth in Nigeria.

- [12]. C.B. Ezirim and F.E. Enefa(2005), Relationship subsisting between the operations of discount houses and performance of the money market and the Nigerian Economy. <http://jsd-africa.com>>jsda
- [13]. CBN (2019), Central Bank of Nigeria statistical bulletin. Lagos: CBN Press.
- [14]. G.E. Bassey and U.N Ekpo (2018), liquidity management in Nigerian deposit money banks: challenges and prognosis, international journal of Economics, Commerce and management, Vol 6 (5) May, pp. 556-580