Measuring the Impact of Loan-to-Deposit Ratio (LDR) on Banks' Liquidity in Nigeria

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Abstract

The study measures the impact of loan to deposit ratio (LDR) on Banks' liquidity in Nigeria between 2000Q1 and 2019Q3. The paper applied the Factor-Augmented Vector Autoregressive (FAVAR-X) methodology for estimation and forecasting. The result suggests that an LDR of 70.0 per cent, which reduces Banks' liquidity from N187.95 billion in 2019Q4, through N153.09 billion in 2020Q2 to close at N135.15 billion in 2020Q4, may require cautious acceptance. Thus, increasing LDR beyond 70.0 per cent may impact Banks' liquidity negatively. Furthermore, a direct relationship is established between LDR and inflation. The findings conform to a priori expectations as higher LDRs translate to increases in lending by Banks' which could boost output and ultimately cause a spike in inflation. The study emphasises the importance of caution by not increasing the LDR above 70.0 per cent, as this could cause excessive credit growth, increased inflation, and erosion of Banks' liquidity.

Keywords: Loan-to-deposit ratio, Bank liquidity, Inflation

JEL Classification: C01, E5, E31

I. Introduction

Economic management has always been one of the critical areas of policy focus, especially when the level of economic activity has significantly deviated from its long-term trajectory. In periods of excessive economic activities, policies tend to focus on moderating the breaks (contractionary policy stance); while during slowdowns, they tend to be loose (expansionary). This balancing act is essentially aimed at keeping economic activities close to its long-term trend to avoid the destabilising effect of boom and bust. This is often achieved through the implementation of fiscal, monetary and exchange rate policies.

The Nigerian economy has undergone three economic phases in recent times: Downturn (2013Q1 to 2015Q3); Recession (2016Q1 to 2017Q1); and Recovery (2018Q1 to 2019Q4). In these periods, fiscal, monetary and exchange rate policies, among others, have focused on stimulating the economy, while ensuring price and exchange rate stability. The banks and other financial institutions are the main stakeholders at implementing monetary and exchange rate policies. In a complex system, policy can sometimes lead to undesirable outcomes, as such its impact needs to be assessed and monitored to provide

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feedback for policy adjustment, if need be.

In an effort to stimulate the economy, the Central Bank of Nigeria (CBN), on July 3, 2019, mandated banks to keep a minimum loan-to-deposit ratio (LDR) (defined as loan to funding ratio) of 60.0 per cent and was later reviewed upward to 65.0 per cent on September 30, 2019 to encourage banks increase consumer, mortgage, and corporate credits thereby stimulating aggregate demand, output growth and employment.

In addition to growth outcomes, the LDR policy has both liquidity and solvency implications in the short to medium, and medium to long-term horizons. This underscores the need to measure the impact of LDR on banks' liquidity to ensure the achievement of the mandate of the Bank – to promote a sound financial system in Nigeria – without compromising the health of domestic banks.

The justification for the LDR policy is to encourage banks to enhance credit delivery to the real sector of the economy. After five consecutive quarters of contraction in Gross Domestic Product (GDP), Nigeria exited her last recession in 2017Q2 and since then, the CBN has demonstrated efforts towards increasing access to credit and stimulation of business activities to boost output growth in the economy. Consequently, Nigeria recorded a GDP growth rate of 0.8, 1.9 and 2.3 per cent in 2017, 2018 and 2019, respectively, from a decline of 1.6 per cent in 2016. The economy was on the upward trajectory from 2017 to 2019 due to the increased funding to the real sector. According to the monetary survey of the CBN, credit to other sectors grew by 20.0 per cent between 2016 and 2019.

The asset quality of banks, proxied by non-performing loans (NPL), also played a pivotal role in the rationale of the LDR policy, as the NPL ratio of the banking industry declined to 10.8 per cent in 2019, from 14.8 per cent in 2017, an improvement of 27.0 per cent, further strengthening the fulfilment of debt obligations in the real sector, in the wake of improved growth in the economy. Hence, the need for the LDR policy to require banks to lend more to the real sector of the economy.

Increasing lending contingent on the increase in LDR has implications on price stability, as an increase in LDR would increase credit and thus, culminate increase in the general level of prices in the economy. Consequently, this paper aims to measure the impact of LDR on Banks' liquidity and inflation. Other banking sector and macroeconomic variables serve as control variables to capture the direct and indirect effects on LDR on the macro economy. This would offer a mechanism for monitoring the impact and providing feedback for policy consideration on periodic basis as the policy runs through its cycle.

The rest of the paper is structured as follows: Section 2 discusses some conceptual issues and empirical literature. Stylised facts on the selected variables are presented in section 3 and the methodology, estimation techniques, and analysis of findings are explained in section 4. Section 5 highlights policy implications, while section 6 concludes the paper.

II. Concepts and Literature Review

II.1 Conceptual Issues

Liquidity management is a key function of lending institutions. The importance of liquidity management is underscored by its direct link with the profitability and general health of the banking system and its indirect link with the macro economy.

II.1.1 Bank Liquidity

Liquidity refers to the overall monetary conditions, indicating the extent of mismatch between demand and supply of monetary resources (Reserve Bank of India, 2002). It could also be defined as the availability of funds, or assurance that funds would be available, to honour all cash outflow commitments (both on- and off-balance sheet) as they fall due (Bank of Jamaica, 2005). From the central banking perspective, liquidity refers to the liabilities of the central bank (especially currency and banking system reserves) otherwise called the monetary base (Gray, 2007) of which it is the sole supplier (Reserve Bank of India, 2002). To deposit money banks, however, liquidity refers to the ability to meet its day-to-day obligations, which includes the availability of cash on demand. Liquidity could be in form of cash holdings, funds in the account with other banks, and the central bank, amongst others. It could also take the form of securities holding with short-term maturities such as government securities which could easily be traded with low transaction costs (Elliott, 2014).

The maintenance of adequate liquidity levels by banks is vital for financial stability, since banks would have to meet their customers' obligations to avoid bank runs. One of the major lessons from the GFC of 2007/2008 was that bank liquidity should be treated as important as capital. While it is important to maintain capital adequacy as a safety buffer against significant losses, liquidity is also crucial as it has the potential to trigger and/or worsen a bank run. A bank may have enough assets to cover its liabilities but end up having issues because of the illiquidity of its assets (Elliott, 2014).

Banks typically operate to make profit while ensuring an adequate level of liquidity is maintained to meet depositors demands as well as other financial

obligations (Ajao, 2018). In a bid to strike the balance between profitability and liquidity, Banks are often confronted with a plethora of threats including liquidity and credit risks. Liquidity risk is the probability that a bank would be unable to meet its financial obligations as and when due. This risk often materialises when a bank experiences large and unexpected withdrawal, credit disbursements and market fluctuations (Kumar, 2008). Credit risk, on the other hand, is described as the possibility of default on a loan by a bank customer. This often results in disruptions in the flow of funds and exacerbates liquidity issues. The combination of liquidity and credit risks could increase a bank's probability of default and give rise to systemic risk, overall financial instability as well as worsening economic conditions (Imbierowicz and Rauch, 2014).

Several indicators or variables could be used to ascertain the level of liquidity in the banking system. These include movements in interest rate, closing balances of the banks, and the volume and value of transactions in the lending facility window. This paper captures banks' liquidity utilising the total value of closing balances of the banks because this gives the true reflection of their liquidity positions.

II.1.2 Loan to Deposit Ratio (LDR)

The LDR refers to the interaction between total loans and total deposits, expressed as a percentage. The LDR gives an insight into the proportion of assets a bank can create from its liabilities. It also indicates the amount of income/profit a bank can generate (Rengasamy, 2014). It is expected that the larger the deposits (liabilities), the larger the amount of assets (loans) it creates. This is, however, dependent on a few key financial variables and the economy.

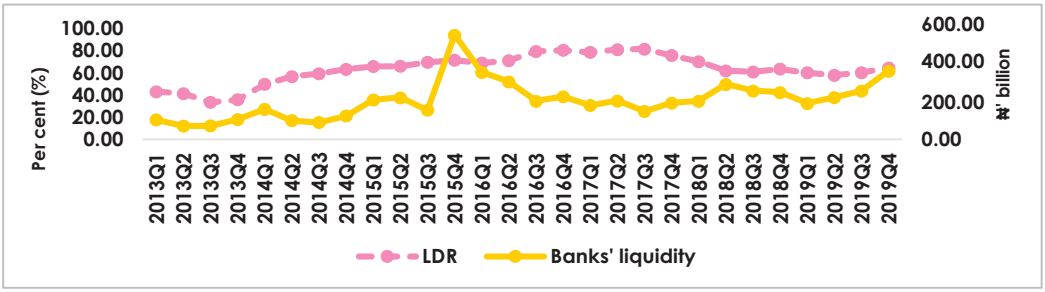
The LDR is a useful tool for assessing the funding profile of banks. It is used mainly to determine the level of liquidity of a bank and provides insight on banks' risk level, fund utilisation, and intermediation activities, (Rengasamy, 2014). The LDR is the total value of loan facilities issued divided by the aggregate value of deposits mobilised, (Kurotamunobaraomi et. al., 2017).

A guide to when a bank relies on its own deposits as borrowing or otherwise is explained as follows;

- When the ratio of LDR is lower than one, this implies that the bank relied on its own deposits to grant loans to its customers (without any outside borrowing);
- While a ratio greater than one, implies that the bank borrowed money, which it reloaned at higher rates, rather than relying entirely on its own deposits.

In this paper, the definition of LDR is expanded to include deposit and non-deposit funding sources. It is calculated as:

Figure 1: Relationship between LDR and Banks' liquidity



Source: CBN Statistics Database, 2020.

A clear inverse relationship was established, as seen in figure 1, between LDR and bank liquidity from 2016Q1 to 2018Q2. These could be attributed to a combination of factors such as the disbursement of FAAC, among others. However, this trend was reversed in 2018Q4 when the relationship became positive. This outcome could have been triggered by the subsequent recovery due to the expansionary fiscal operations of the Government. At end-July 2019, the total industry LDR stood at 51.7 per cent, which was still below the target advised by the CBN and thus banks were encouraged to increase loans to their customers further.

III.1 LDR and Cash Reserve Ratio

Cash reserve ratio (CRR) is a tool used by monetary authorities to regulate money supply. To increase money supply in the economy, the central bank lowers the reserve ratio, which gives banks access to higher funds with which to disburse as loans, thereby increasing the money supply in an economy. On the other hand, to control inflation, the CRR is increased, thereby decreasing the lending power of banks. This in turn reduces the money supply in an economy. Hence, LDR and CRR are expected to move in opposite directions.

In the case of Nigeria, there exists no clear relationship between the LDR and the CRR and thus, the LDR could be adjudged to move independently of the CRR (See figure 10.2). This reveals that the Nigerian economy could be driven largely by the activities of the fiscal sector such as the release of federal allocations, among others.

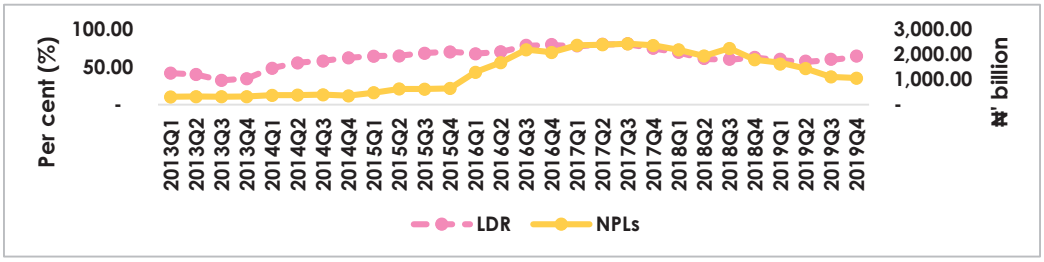
Figure 2: LDR and Cash Reserve Ratio

Source: CBN Statistics Database, 2020.

III.2 LDR and Asset Quality

The LDR and non-performing loans (NPL) plots showed a positive relationship – both mimicking each other. This is an a-priori relationship with a feedback mechanism. As observed from figure 3, as LDR increases, NPLs tend to rise to a point where it is no longer profitable/rational to grant more credit (2016Q2). This fed into the banks credit administration and banks began to slow down on giving out credit, and NPL subsequently began to decline from 2017Q1 through 2019Q2. This was largely, driven, by economic phenomenon, corresponding to the period of slowed growth and recession in Nigeria (Figure 3).

Figure 3: LDR and NPLs

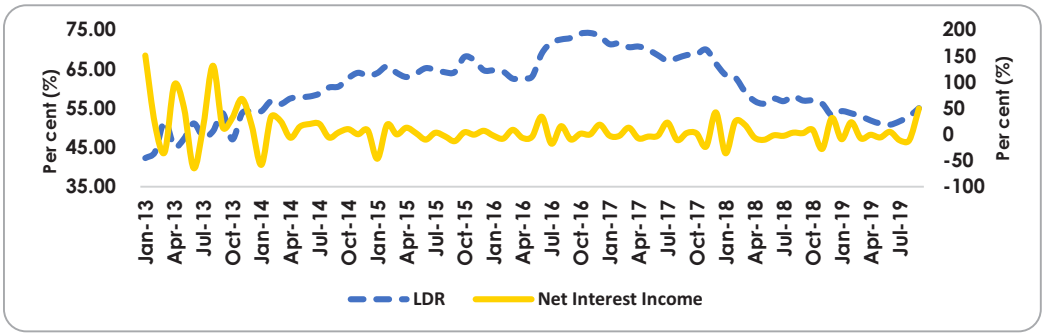


Source: CBN Statistics Database, 2020.

III.3 LDR and Net Interest Income

LDR and net interest income showed a varied trend. It is expected that movement in LDR should largely drive interest income. However, the chart showed that LDR may not be a major driver in the behaviour of banks' interest income as it exhibited higher volatility than that of LDR. This trend could be attributed to banks' huge holdings of other interest earning assets such as fixed income, money market instruments in their portfolios in relation to their total assets (Figure 4).

Figure 4: LDR and Net Interest Income

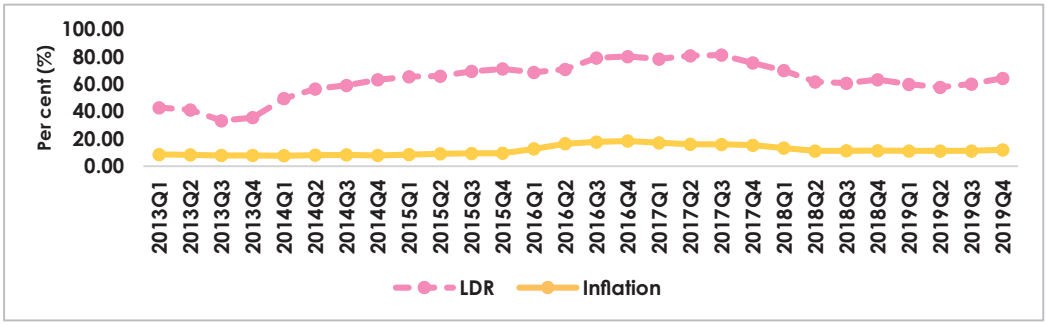


Source: CBN Statistics Database, 2020.

III.4 LDR and Inflation

An increase in the amount of loans, ceteris paribus, is expected to increase economic activity and inflation in the long run (Groen, 2001). Thus, we expect a positive relationship between LDR and inflation. This was observed in Nigeria as shown in figure 5. Though inflation remained stable between 2013Q3 and 2014Q4, the quantity of loans increased, reflecting the increased interest of citizens to engage in economic activities. This trend was sustained until 2017Q3, where the volume of loans declined. The rate of inflation, however, rose to double digit in 2016Q1 due, largely, to a combination of the impact of lingering foreign exchange issues, which drove importation costs, scarcity of premium motor spirit (PMS), as well as, knock-on effects of the hike in electricity tariff in February 2016. Consequently, transportation costs and the impact of the scarcity of foreign exchange were major drivers, especially on imported foods and cereals. This new reign of double-digit inflation has remained consistent till 2019Q4.

Figure 5: LDR and Inflation

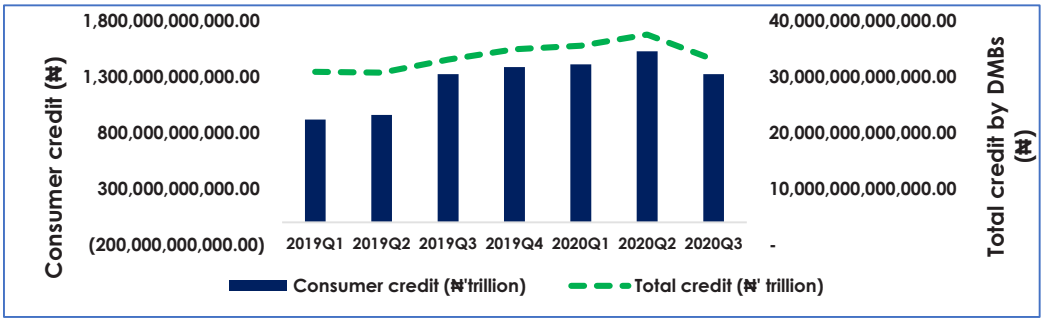


Source: CBN Statistics Database, 2020.

III.6 Consumer Credit and Total Credit

In 2019Q1 and 2019Q2, consumer credit in Nigeria was below ₦1 trillion. The LDR policy by the CBN made a significant impact on consumer credit, growing it by 38.0 per cent to ₦1.32 trillion from 2019Q2 to 2019Q3. Banks significantly boosted credit to sectors that were identified by the CBN, which were, SMEs, Retail, Mortgage and Consumer lending. These credits grew consistently and reached a peak of ₦1.39 trillion In 2019Q4.

Figure 6: Consumer Credit and Total Credit



Source: CBN Statistics Database, 2020.

IV. Methodology

IV.1 Estimation Technique and Data Requirements

In assessing the impact of LDR on Banks' liquidity and inflation, a factor augmented vector autoregression (FAVAR-X) is adopted for the estimation and forecasting. Based on the composition of the variables in the study, a model-type analysis is used based on the VAR framework. The FAVAR is selected as the preferred VAR method as it is based on a data-reduction step using factor estimation. Also, FAVAR allows the computation of the impulse response functions of all the variables included in the dataset while resolving the curse of dimensionality, a problem associated with standard VAR models (Blake & Alan 2015).

The study employs the database of the CBN 2014 FAVAR model (CBN, 2014). LDR and closing banks' balances, which is used to capture banks' liquidity, are included in the dataset. The FAVAR model was extended to a FAVAR-X model to allow for the inclusion of the LDR as an exogenous variable. This technique compartmentalises large information sets using principal components analysis, which helps to reduce the dimensionality and the over-parameterisation of the model, thereby ultimately allowing for better and efficient estimates in policy analysis (Stock and Watson, 2002). The scope of the study is from 2000Q1 to

2019Q3.

The FAVAR-X model employed in this study is as presented in equation 2.

$$\begin{bmatrix} F_t \\ Y_t \end{bmatrix} = \Phi(L) \begin{bmatrix} F_{t-1} \\ Y_{t-1} \end{bmatrix} + \nu_t \quad (2)$$

Here, Y_t is an M ×1 vector of all observed economic indicators assumed to influence the underlying changes in banks' liquidity and inflation and F_t is a vector of underlying factors. The FAVAR-X method improves the traditional VAR models, with the addition of the vector of unobserved factors, F_t, as these unobserved factors are considered to reflect varied economic variables beyond one or two indicators. It also includes exogenous variables with pre-determined time paths to be used for forecasts and simulations.

To evaluate the impact of LDR on banks' liquidity and inflation, the study employs twelve (12) different scenarios of the FAVAR-X model. The first six scenarios focus on the impact of the various changes to LDR on banks' liquidity, while the next six assess the relationship between changes in LDR and inflation. The structure of the model is such that respective LDR variables feed into each model exogenously with a contemporaneous weighted function, while the principal components (Pcs), and the economic indicators, taken each at a time, appear in the VAR model as endogenous variables with autoregressive lags (see Appendix).

Generally, the models are of the form:

$$y_t = \sum_{i=1}^{m} \lambda_i y_{t-1} + \sum_{i=1}^{n} \mu_i x_t + u_i \quad (3)$$

Here, y_t is a j vector of endogenous variable, which includes principal components and other endogenous variables. x_t is a vector of endogenous variables. λ_i and μ_i are matrixes of coefficient to be estimated and μ_i is a j vector of error terms, known as impulses.

The model is modified as follows:

$$DMBL_t = \sum_{i=1}^{m} \lambda_i DMBL_{t-1} + \sum_{i=1}^{n} \mu_i LDR_t + u_i \quad (4)$$

Here, $DMBL_t$ is a j vector of endogenous variables, which includes banks' liquidity and all the five Pcs. LDR_t is a vector of LDR, representing the only exogenous variable in the models, λ_i and μ_i are matrices of coefficients to be estimated and is a j vector of endogenous variables, which includes inflation and all the five PCs. All other variables are as explained above.

$$INF_t = \sum_{i=1}^{m} \lambda_i yINF_{t-1} + \sum_{i=1}^{n} \mu_i LDR_t + u_i \quad (5)$$

IV.2 Scenarios

The banks' liquidity and inflation-focused simulations are based on the following assumptions: in scenario 1, LDR for the forecast period 2019Q4 to 2020Q4 is 50.0 per cent and rises to 60.0 per cent in scenario 2. In scenario 3, LDR is assumed to be 65.0 per cent all through the forecast horizon and in scenario 4, it increases to 70.0 per cent. Scenarios 5 and 6 record LDR values of 80.0 and 90.0 per cent, respectively, for the period 2019Q4 to 2020Q4.

IV.3 Analysis of Findings

Tables 1 and 2 present the results of the estimate.

Table 1: Impact of LDR on Banks' Liquidity

	LDR 50	LDR 60	LDR 65	LDR 70	LDR 80	LDR 90
	DMBL_F1	DMBL_F2	DMBL_F3	DMBL_F4	DMBL_F5	DMBL_F6
2019Q1	196.65	196.65	196.65	196.65	196.65	196.65
2019Q2	228.46	228.46	228.46	228.46	228.46	228.46
2019Q3	200.11	200.11	200.11	200.11	200.11	200.11
2019Q4	187.95	187.95	187.95	187.95	187.95	187.95
2020Q1	185.81	179.24	176.05	172.91	166.80	160.90
2020Q2	189.67	170.40	161.51	153.09	137.54	123.56
2020Q3	180.69	159.81	150.29	141.34	125.00	110.56
2020Q4	165.95	149.76	142.27	135.15	121.97	110.07

Source: E-views version 10.

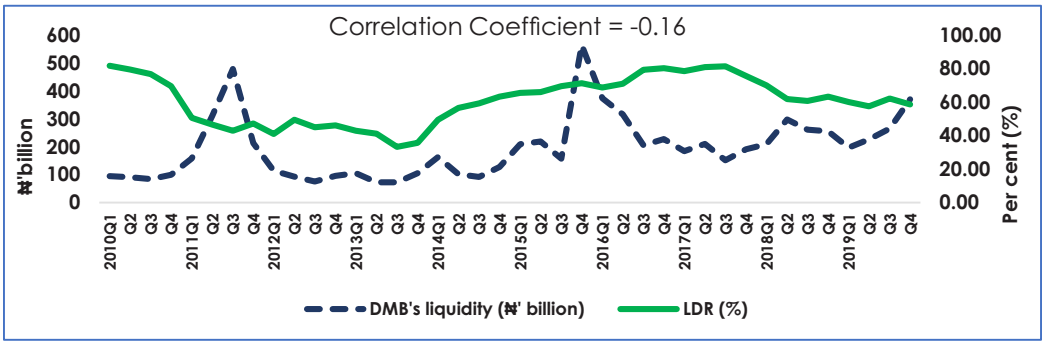
Table 2: Impact of LDR on Inflation (Low and Stable Inflation) Inflation

	LDR 50	LDR 60	LDR 65	LDR 70	LDR 80	LDR 90
	DLHCPI_F1	DLHCPI_F2	DLHCPI_F3	DLHCPI_F4	DLHCPI_F5	DLHCPI_F6
2019Q1	11.25	11.25	11.25	11.25	11.25	11.25
2019Q2	11.22	11.22	11.22	11.22	11.22	11.22
2019Q3	11.34	11.34	11.34	11.34	11.34	11.34
2019Q4	11.53	11.53	11.53	11.53	11.53	11.53
2020Q1	11.22	11.65	11.87	12.08	12.51	12.93
2020Q2	10.80	11.71	12.17	12.62	13.53	14.44
2020Q3	10.44	11.74	12.38	13.03	14.33	15.63
2020Q4	10.16	11.74	12.53	13.32	14.90	16.47

Source: E-views version 10.

Figure 7 shows the correlation between the LDR and banks' liquidity. It reveals that an increase in LDR is associated with a fall in deposit money banks' liquidity with a correlation coefficient of -0.16.

Figure 7: Loan-to-Deposit Ratio and DMBs Liquidity.



Sources: CBN and Authors' Computation.

Theoretically, the relationship between LDR and banks' liquidity is inverse. From Table 1, an increase in LDR from 50.0 per cent to 90.0 per cent reduces banks' liquidity by 30.1 per cent, from an average of ₦180.53 billion to ₦126.27 billion in 2020. Also, the decline in banks' liquidity, given a 10.0 per cent increase in LDR, occurs at a reducing rate, that is, as LDR rises from 60.0 per cent, through 70.0 per cent and 80.0 per cent to 90.0 per cent, banks' liquidity declines by 7.9, 7.1 and 6.4 per cent, respectively in 2020. Furthermore, the results suggest that an LDR of 70.0 per cent, which reduces banks' liquidity from N187.95 billion in 2019Q4, through N153.09 billion in 2020Q2 to close at N135.15 billion in 2020Q4 may be preferred. Thus, increasing LDR beyond 70.0 per cent would affect banks' liquidity drastically (Table 1).

The study also reveals a direct relationship between LDR and inflation. At an LDR of 90.0 per cent, inflation increases by 5.0 percentage points from 11.5 per cent in 2019Q4 to 16.5 per cent in 2020Q4. Inflation rises by 1.0 percentage point from 11.5 per cent in 2019Q4 to 12.5 per cent in 2020Q4 when LDR is set at 65.0 per cent. Furthermore, an increase in LDR from 50.0 per cent to 90.0 per cent raises inflation by 4.2 percentage points, from an average of 10.7 per cent to 14.9 per cent in 2020 (Table 2).

On the contrary, an LDR of 50.0 per cent decreases inflation by 1.3 percentage points from 11.5 per cent in 2019Q4 to 10.2 per cent in 2020Q4. This may be the case if the rate of output growth surpasses the rate at which money is created, as well as the total loans available to the real sector is insignificant to cause a push in inflation.

V. Conclusion

The paper discussed some conceptual issues and examined some contemporary empirical literature to benefit from past efforts of scholars. It

highlights stylised facts on selected variables, relying on graphical representations of historical and recent information to further support the analysis. The paper applies FAVAR-X methodology for the estimation and forecasting because the FAVAR allows for the implementation of an analysis with a large dataset without losing the economic significance of any of the variables employed in the study. Closing balances are used to capture banks' liquidity and the data covers 2000Q1 to 2019Q3. The impact of LDR on banks' liquidity and inflation was analysed using six scenarios. The result suggests that an LDR of 70.0 per cent, which reduces banks' liquidity from N187.95 billion in 2019Q4, through N153.09 billion in 2020Q2 to close at N135.15 billion in 2020Q4 may be accepted with a lot of caution. Thus, increasing LDR beyond 70.0 per cent may impact banks' liquidity negatively. This requires caution to ensure sustainable banking system stability in Nigeria.

Furthermore, a direct relationship was found between LDR and inflation. The findings conform to a priori expectations as higher LDRs translate to increase in lending by DMBs, which could boost output and ultimately cause a spike in inflation. This is because the volume of loans available to the real sector is significant enough to push inflation upwards in the Nigerian economy. Although, if the loan is productively utilised and able to pay itself within the tenor set at the conception, the effect on inflation may not be as high as envisaged.

VI. Policy Recommendations

Following from the analysis of the findings, the following recommendations are proffered:

- Though an increase in LDR could boost economic activity, caution must be emphasised by not increasing the ratio above 70.0 per cent to all other sectors but the real sector, as this could cause excessive credit growth (overheating of the system), more inflation, and lead to bank runs (as banks' liquidity would be eroded). These could result in financial instability;
- Since the volume of loans available to the real sector is significant enough to push inflation upwards in the Nigerian economy, the Bank may wish to set LDR at 50.0 per cent for loans available strictly to the real sector. This would reduce the impact on inflation while still ensuring stability in the banking system; and
- In view of the potential impact of the LDR policy on monetary, financial and fiscal policies objectives, there is a need for enhanced fiscal, monetary and financial policy coordination.

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Appendix

S/N	Series Acronym	Series Name	Weight	Unit
1	**HCPI**	All Items	**1000.00**	(Nov. 2009 = 100)
2	**C1CPI**	All Items less Farm Produce.	**513.10**	(Nov. 2009 = 100)
3	**C2CPI**	All Items less Farm Produce. and Energy	**405.55**	(Nov. 2009 = 100)
4	**IFCPI**	Imported Food	**132.88**	(Nov. 2009 = 100)
5	**FCPI**	Food	**507.06**	(Nov. 2009 = 100)
6	**FNCPI**	Food & Non Alcoholic Bev.	**518.00**	(Nov. 2009 = 100)
7	**ABCPI**	Alcoholic Beverage. Tobacco and Kola	**10.87**	(Nov. 2009 = 100)
8	**CFCPI**	Clothing and Footwear	**76.50**	(Nov. 2009 = 100)
9	**HWCPI**	Housing Water, Electricity. Gas and Other Fuel	**167.34**	(Nov. 2009 = 100)
10	**FHCPI**	Furnishings & Household Equipment Maintenance.	**50.30**	(Nov. 2009 = 100)
11	**HHCPI**	Health.	**30.04**	(Nov. 2009 = 100)
12	**TCPI**	Transport	**65.08**	(Nov. 2009 = 100)
13	**CCPI**	Communication	**6.80**	(Nov. 2009 = 100)
14	**RCCPI**	Recreation & Culture.	**6.87**	(Nov. 2009 = 100)
15	**ECPI**	Education	**39.44**	(Nov. 2009 = 100)
16	**RHCPI**	Restaurant & Hotels	**12.12**	(Nov. 2009 = 100)
17	**MCPI**	Miscellaneous Goods & Services	**16.63**	(Nov. 2009 = 100)
18	**URCPI**	Urban CPI	**1000.0**	(Nov. 2009 = 100)
19	**RUCPI**	Rural CPI	**1000.0**	(Nov. 2009 = 100)
20	**SDR**	Savings Rate		(%)
21	**1MDR**	1-Month Deposit Rate		(%)
22	**3MDR**	3-Month Deposit Rate		(%)
23	**6MDR**	6-Month Deposit Rate		(%)
24	**12MDR**	12-Month Deposit Rate		(%)
25	**PLR**	Prime Lending Rate		(%)
26	**MLR**	Maximum Lending Rate		(%)
27	**MPR**	Monetary Policy Rate		(%)
28	**IBCR**	Interbank Call Rate		(%)
29	**TBR**	91-Day Treasury Bill Rate		(%)
30	**OBB**	Open Buy Back Rate		(%)
31	**CRR**	Cash Reserves Ratio		(%)
32	**USD**	Naira to US-Dollar Rate		(N/US$1.00)
33	**GBP**	Naira to Pounds Rate		(N/£1.00)
34	**EUR**	Naira to Euro Rate		(N/€1.00)
35	**ASI**	All Share Index		(1984 = 100)
36	**CPD**	Crude Production		Million Barrels/Day
37	**COP**	Crude Oil Price		US Dollars/Barrel
38	**M3**	Broader Money Stock		Million Naira

S/N	Series Acronym	Series Name	Weight	Unit
39	**M2**	Broad Money Stock		Million Naira
40	**M1**	Narrow Money Stock		Million Naira
41	**QM**	Quasi Money		Million Naira
42	**CG**	Credit to Government		Million Naira
43	**CPS**	Credit to Private Sector		Million Naira
44	**CCPS**	Credit to Core Private Sector		Million Naira
45	**COS**	Credit to Other Sectors		Million Naira
46	**SD**	Saving Deposit of Banks		Million Naira
47	**TD**	Total Deposit of Banks		Million Naira
48	**RR**	Required Reserves		Million Naira
49	**ER**	Excess Reserves		Million Naira
50	**NFA**	Net Foreign Assets		Million Naira
51	**NDC**	Net Domestic Credit		Million Naira
52	**EXR**	External Reserves		Million Dollars
53	**GRV**	Govt Revenue		Million Naira
54	**GXP**	Govt Expenditure		Million Naira
55	**NY**	Total NGDP		Million Naira
56	**RINV**	Real Investment		Million Naira
57	**NINV**	Nominal Investment		Million Naira
58	**RPC**	Real Personal Consumption Expenditure		Naira
59	**NPC**	Nominal Personal Consumption Expenditure		Naira
60	**RPDI**	Real Personal Disposable Income		Naira
61	**NPDI**	Nominal Personal Disposable Income		Naira
62	**IMAP**	Index of Manufacturing Production		(1990 = 100)
63	**IMIP**	Index of Mining Production		(1990 = 100)
64	**IEP**	Index of Electricity Production		(1990 = 100)
65	**IIP**	Index of Industrial Production		(1990 = 100)
66	**BLPS**	Bank Loan: Preferred Sectors		Million Naira
67	**BLAG**	Bank Loan: Agriculture		Million Naira
68	**BLSM**	Bank Loan: Solid Minerals		Million Naira
69	**BLXP**	Bank Loan: Exports		Million Naira
70	**BLMF**	Bank Loan: Manufacturing		Million Naira
71	**BLUS**	Bank Loan: Less Preferred Sectors		Million Naira
72	**BLOG**	Bank Loan: Others-General		Million Naira
73	**BLTL**	Bank Loan: Total		Million Naira
74	**UMPR**	Unemployment Rate		(%)
75	**NPL**	Non-Performing Loan		Million Naira
76	**LTDR**	Loan-To-Deposit Ratio		(%)
77	**LR**	Liquidity Ratio		(%)
78	**NPLL**	NPL-to-Total Loan Ratio		(%)

S/N	Series Acronym	Series Name	Weight	Unit
79	**FPI**	Foreign Portfoilio Investment		Million US Dollars
80	**SLF**	Standing Lending Facility		(%)
81	**SDF**	Standing Deposit Facility		(%)
82	**EDS**	External Debt Service		Million US Dollars

Sources: CBN and NBS.