



## MONEY MARKET AND ECONOMIC GROWTH IN NIGERIA

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**Abstract:** Money market is a component of the financial system, which is for trading in short-term financial instruments. The major objective of this study is to analyze the effect of selected money market instruments on economic growth in Nigeria from 1986-2019. The independent variables employed in the study include Commercial Bank deposits (CBD), Commercial Bank Credit to the Private Sector (CPS), Commercial Papers (CP), Treasury Bills (TB), Banker's Acceptance (BA) and Certificate of Deposit (CD). Growth Rate of Gross Domestic Product (RGDP) was used to proxy economic growth. Data were obtained from Central Bank of Nigeria Statistical Bulletin 2019, and analyzed using the Autoregressive Distributed Lag (ARDL) and Vector Error Correction Model (VECM) Regression techniques. The findings revealed that money market instruments such as Bankers Acceptance had an insignificant positive effect on economic growth. Commercial Bank Deposit, Commercial Papers, Credit to the Private Sector, Treasury bills and Certificate of Deposit had insignificant negative effects on economic growth in Nigeria. It was therefore, recommended that policies that will reduce the cost of credit, harmonize the formal and informal sectors of the money market and enable the activities of the money market to stimulate economic growth be designed and implemented in Nigeria.

**Keywords:** Money market, Credit to the Private Sector, Economic growth, Autoregressive Distributed Lag (ARDL)

### Introduction

The Nigerian money market is dualistic as it is divided into two sectors: The organized or formal sector and the unorganized or informal sector. The organized sector includes; The Central Bank of Nigeria (CBN), the commercial banks, microfinance banks etc. It is formal because, the various savings and credit flows between economic agents are recognized, controlled and legally backed by the laws of the country. While, the unorganized sector includes; indigenous money lenders, "Esusu" clubs, traders, co-operative societies, friends and relatives. Flow of savings and credit through this sector is unrecognized and uncontrolled with no legal backing. Its size in Nigeria is large and has inhibited developments in the sector (Udoma, 2012). Therefore, the existence of, and popularity of the Informal sector limits the effectiveness of money market instruments as transmission vehicles for monetary policy and slows down economic growth.

Increase in the value of production in any economy is predicated on the activities and operations of the financial system. Money market as part of the financial system, is made visible and active in Nigeria via the predominant activities of banks, as asserted by Okpala, Ezeanolue and Edoko (2018) that, in Nigeria, the most robust section of the financial system is the banking system, which consists mainly of commercial banking activities. Furthermore, Nzotta (2004) advanced that, the banking sector is the foremost sector in the Nigerian financial service industry. He also labelled it as the most vibrant constituent and whatever snags it passes through, to affect the entire economy.

Fundamentally, activities of the deposit money banks affects the soundness and stability of the financial system hence the special attention given them by the regulatory authorities (Umoh, 2005). Commercial banks, as financial intermediaries in Nigeria, play an all-important role in serving citizens and migrants and in guaranteeing viable

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economic growth in the country. Hence, the attempt to qualify and quantify the effect of money market securities on economic growth. The study by Odunga and Ayoyi (2016) mentioned that, the influence of financial markets on the economy can be traced to Schumpeter (1934), who highlighted the positive role of financial markets development in economic growth process. Issues that relates to whether operations in the money market leads to faster economic growth have been empirically discussed and examined at various fora and opportunities; see for example (Igbiosa & Aigbovo, 2015; Agbada & Odejimi, 2015).

Reviewed literatures on the effect of selected money market instruments, has shown mixed findings/results. The works of (Okafor, Ezeaku & Ugwuegbe, 2016), established a unidirectional link between money market instruments and economic growth. Studies such as (Ayanwun, Anawunde & Okoye 2017; Akarara & Eniekezimene, 2019) showed a bidirectional flow between the dependent variable (economic growth) and the money market variables. Still, some works like (Etale & Ayunku, 2017) showed no directional causal relationship between money market instruments and economic growth. There are also some disagreements in the level of significance of these relationships.

This study investigates the effect of selected money market instruments on economic growth in Nigeria, with bank based variables such as, bank deposit and commercial bank credit along-side some traditional money market instruments, issued by both public and private sectors as independent variables and economic growth as dependent variable. This is to enable us determine the effect of money market activities on economic growth, in an emerging and dualistic economy like Nigeria. With a view to finding out, if the operations of the money market generates the conditions favourable for increasing economic growth in Nigeria or otherwise

## **LITERATURE REVIEW**

### **The Concept of Money Market**

According to Randall (2012) money markets are markets that provide a means for surplus savers and deficit savers to satisfy their short-term financial needs. These markets are known as “money markets” because the securities that are traded are short term—with tenor ranging from one month to twelve months—and normally are liquid, that is, easily convertible into currency. Money markets comprise markets for such financial assets such as bank accounts, including periodic certificates of deposit; interbank loans i.e. loans between bank; money market mutual funds; commercial paper; Treasury bills; and securities lending and repurchase agreements (repos).

Faure (2013) asserted that the usual description of the money market is inadequate because the market is much more than the market for short-term transferable debt instrument. The outstanding value of short-term trade debt instrument is small compared with the outstanding value of short term non-trade debt instruments such as short-term bank loan, overdraft facilities and so on. These are also debt instruments and bank assets issued by the ultimate borrower as in commercial papers and treasury bills, operated in the money market. Money markets refers to a collection or group of financial institutions or exchange system set up for dealing in short term credit instruments of high quality, such as treasury bills treasury certificates, call money, commercial papers, bankers unit fund, ways and means as well as dealing in gold and foreign exchange (Anyanwu, 1993).

Accordingly, money market acts as a medium to channel short term financial assets from agents with surplus to those in deficit. Economic agents procure money market securities that rewards the holders with interests that are marked to periodic terms of maturities. The instruments are such that they are convertible to cash with minimum delay and loss and low risk. Over the years, various instruments have been created and used to provide liquidity funding for the world financial system. securities such as Treasury bills, deposits, bankers' acceptances, commercial paper,



bills of exchange, certificates of deposit, repurchase agreements, and asset-backed securities were introduced bearing different maturity periods, currencies, credit risks, and structure. The money market is vital for the efficient spreading of liquidity in the financial system, allocation of capital as well as the mitigation of short-term risks (Chuku 2009). Money market include such financial instruments as debt securities with the maturity less than one year including government securities, negotiable certificates of deposit, commercial paper, and bankers' acceptances. The instruments allow market players to handle and settle short term obligations. Thus, boosting working capital of firm and generate profit within the economy and ultimately, increase productivity and growth.

### **The Concept of Economic Growth**

The term economic growth means the increase in the overall productivity that is measured by the growth rate of Gross Domestic Product (RGDP). Productivity means the predisposition of a state to produce tangible and intangible products from its own inputs. Any increase in the productivity leads to increase in the economic growth. Economic growth is measured as: Real economic growth or Nominal economic growth. According to Haller (2012) economic growth is the course of growing the size of national economies, the macro-economic indications, especially the GDP per capita, in an ascendant but not necessarily linear direction, with positive effects on the economic-social sector. Economic growth is, in a narrow sense, an increase of the national income per capita. It involves the increase of the GDP, GNP and NI, therefore of the national wealth, including the production capacity, expressed in both absolute and relative size, per capita, covering also the structural modifications of economy. In the works of Mladen (2015), he posited that economic growth is the continuous increase in the production capacity of a country, or a rise in gross domestic product as the main measurable indicator of production annually. Economic growth include changes in material production, during a comparative short period of time, usually one year.

### **Theoretical Review**

The theory of finance and growth as introduced by Schumpeter (1934, as cited in Alin, 2008) and Harrod-Domar growth model (Harrod 1939; Domar 1947), asserted that financial intermediation via money market institution plays central role in economic growth, progress and development. According to the theory, investment is directly related to real interest rate, which leads to increase in savings and it is this increased savings that stimulates investments. While, increase in investment further enhances economic growth. The effect is through financial midwifery, increasing productivity, technical progress. Thus, improving economic growth.

Accordingly, Harrod-Domar growth model posited that, for economies to grow they must save and invest a certain percentage of their income. Failure to develop is caused by the refusal to save, and aggregate capital. For growth to happen, savings must be accumulated, [Rate of growth (Y) = Savings(s) / Capital output ratio (k)]. Harrod-Domar growth model would support the proposition of unidirectional connection from money market operation to economic growth (supply-leading occurrence). The major savings institutions in Nigeria are in the banking sector, which is the most vibrant section of the Nigerian money market. Therefore, the money market in Nigeria is expected to have effect on the movements of gross domestic product as the main quantitative indicator of economic growth.

Commercial banks and other money market players, perform the intermediary role that brings savers and investors together, directing investment funds to the assets/investments that yield the highest rate of return, increasing specialization and division of labor and ultimately, increasing economic growth (Todaro & Stephen, 2003). The relationship between finance and growth has been widely debated and explored over the last two centuries. Those who contend that finance is a strong contributor to growth are; Baghehot (1873, as cited in Mostafa & Mohammad, 2019; Kigabo, Okello & Mutuyimana, (2015).



### **Empirical Review**

The study by Iwedi and Dumini (2015) examined the nexus of money market activities on economic growth in Nigeria. The assessment used secondary sourced from the Central bank of Nigeria Statistical Bulletin. For the period of thirty three years (1980-2013). The findings among other things, showed that there is a direct and significant short-run and long-run relationships between money market operations and economic growth in Nigeria. Specifically, the inference is that, there exists a positive significant short-run relationship between the Nigeria economic growth and money market variables of commercial papers and banker acceptance.

Additional study by Orogun, Saliu & Ajayi (2020) analyzed the impact of selected money market instrument on economic growth in Nigeria for the period 1981- 2019. The study used econometric and statistical methods like ADF, Unit Root Test, OLS, multiple-regression, and Granger Causality Test to analyze data collected from the central Bank of Nigeria statistical Bulletin. The study observed that Bank acceptance and Commercial Paper granger cause gross domestic product. Commercial papers have a positive relationship with GDP, but its effect is insignificant in the long run. But Bank acceptance has a positive and significant effect on GDP in the long run.

The research conducted by Mustapha, Luka and Rabiu (2017) analyzed the impact of money market as an inducement for economic growth in Nigeria covering 1999 to 2017. The aims of the study are; appraising the contribution of the money market to the economic growth of the country. Findings reveal that the money market contributes to the economic growth and development in Nigeria. It was however noticed that there is positive relationship between the gross domestic product and all the money market instruments considered in the analysis except for commercial papers.

Another work by Eze and Mansi (2017) researched on money market and economic growth in Nigeria for the period 1990-2014, using annual data from the Central Bank of Nigeria statistical Bulletin. The study adopted the

Ordinary Least square regression technique. Study revealed that the effect of bankers' acceptances on economic growth was specifically significant amongst other variables. Thus, recommended among others, that, more instruments and innovations should be introduced into the money market to enlarge the scope of the market, and that the money market should be fragmented for expansion.

The study by Agbada and Odejimi (2015) explored developments in Money market operations and Economic viability in Nigeria from 1981 to 2017. The finding of the study showed that Treasury Bills, Commercial papers and Banker Acceptances passed the test of significance at 5% significant level showing that they are relevant in formulating policies that affect GDP. The Analysis of data was carried out using Multiple Regression technique parameters. The analysis recognized that a long run relationship subsists between the Money market securities of Treasury bills and bankers' acceptance and Economic growth in Nigeria.

In the works of Igbinosa and Aigbovo (2015), they empirically assessed the impact of money market development on Nigerian economic development between 1986 and 2013. The findings of the study are that banker acceptances significantly influences economic development in both the short run and long-run. Furthermore, the value of treasury bills and commercial papers as well as the monetary policy rate have significant impact on economic development only in the long run.

The study by Ehigiamusoe (2013) analysed the impact of money market on economic growth in Nigeria for the period 1980-2012. The Ordinary Least Squares technique was adopted for the study. The study revealed that, the present state of the Nigerian money market has a significantly and negatively effect on economic growth. The linkage between the money market and the real sector of the economy was very weak. The implication is that, the Nigerian money market is yet to produce the needed growth that will propel the Nigerian economy. The study recommended that, government should create the



appropriate macroeconomic policies, legal framework and sustain reforms aimed at developing the money market so as to promote productive activities, investments, and ultimately economic growth.

#### Sources of Data

The data for the study were secondary data, obtained from the Central Bank of Nigeria (CBN) statistical bulletin for the period 1986-2019.

#### Model Specification.

#### Money Market Instruments and Economic Growth

Based on the literature reviewed and on the awareness from the theoretical literatures. The model for the study is as follows;

RGDP = f (CBD, CPS, TB, CP, BA, CD).....Model

The econometric form of the model was stated thus;

$RGDP = a_0 + a_1CBD + a_2CPS + a_3TB + a_4CP + a_5BA + a_6CD + U_t$ ...Equation

$a_0$  = intercept,

$a_1, a_2, a_3, a_4, a_5, a_6$  = coefficients of independent variables

$U_t$  = stochastic error term

$a_1, a_2, a_4, a_5, a_6 > 0$   $a_3 < 0$  (a priori expectation).

#### Method of Analysis

The method of data analysis used for this research include the Descriptive Statistics, after which ADF Unit Root Test was carried out on the data. It was revealed by the unit root test that all the data for the study were stationary both at levels I(0) and at first difference I(1). Thus, Autoregressive Distributed Lag (ARDL) was employed for the analysis of the data.

This techniques was used to analyze the effect of the independent variables on the dependent variable. The model was tested for the presence of Serial Correlation and Heteroscedasticity and the stability of the regression coefficients was tested using the cumulative sum (CUSUM) and the cumulative sum of square (CUSUMSQ) of the recursive residual test for structural stability.

#### Analysis of Results

Table 4.1: Descriptive Statistics (see appendix)

	RGDP	TB	CPS	CP	CD	CBD	BA	OBS
Mean	4.770882	997.9260	26.44412	82.70847	12.39729	3779.874	23.77895	34
Median	4.760000	579.7326	20.90500	9.573484	0.097850	605.8757	14.83690	34
Maximum	14.60000	3579.799	90.76000	822.7009	75.70283	16794.15	81.83400	34
Minimum	-	-	-	-	-	-	-	34
Std. Dev.	1.580000	16.97600	3.810000	0.259000	0.000000	11.48770	0.008600	34
Skewness	3.786089	1112.664	21.82561	174.1362	23.29790	5164.079	24.47646	34
Kurtosis	0.502520	1.016373	1.496410	2.910861	1.575825	1.154972	1.059148	34
Jarque-Bera	2.769018	2.579575	5.251650	11.56443	3.822632	2.940186	3.100370	34
Probability	1.506564	6.104154	19.87143	151.9260	15.03029	7.564176	6.371106	34
Sum	0.470819	0.047261	0.000048	0.000000	0.000545	0.022775	0.041355	34
Sum Sq. Dev.	162.2100	33929.48	899.1000	2812.088	421.5080	128515.7	808.4844	34
	473.0375	40854716	15719.79	1000673.	17912.14	8.80E+08	19770.21	34

Source: Computation from Eview 9



The descriptive statistics results in Table 4.1 reveal the following mean values for the variables RGDP (4.770882), TB (997.29260), CPS (26.4412) CP (82.70847), CD (12.39729), CBD (3779.574) and BA (23.77895). The result provide an insight into the nature of data used in the study. It is observed that the maximum and minimum values of the dependent variable stood at 14.60000 and -1.58 respectively. Thus, there exist a wide difference

between the minimum and maximum values of Economic growth. The resulting Jarque - Bera statistics as shown in table 4.1 reveals the normality of the data.

In view of the information in table 4.1, the series may be exhibiting a random walk. But, to ascertain the true data generating process, the Augmented Dickey – Fuller unit root test is estimated.

*Source: Computation from E-view 9*

**Table 4.5a: Augmented Dickey Fuller Unit Root Test for model 5**

Variables	With constants and trend		Without constants and trend	
	Levels	1 <sup>st</sup> difference	Levels	1 <sup>st</sup> difference
LRGDP	-2.9625 <sup>n</sup>	4.5874***	-1.7248*	-7.8210***
LBA	-1.6424 <sup>n</sup>	-6.5246***	-1.2918 <sup>n</sup>	6.5408***
LCBD	0.3926 <sup>n</sup>	-6.8036***	5.6127 <sup>n</sup>	0.6492 <sup>n</sup>
LCD	2.2120 <sup>n</sup>	-7.1615***	5.1425 <sup>n</sup>	1.4804 <sup>n</sup>
LCP	-2.0418 <sup>n</sup>	-5.1045***	-1.8923*	-5.2509***
LCPS	-4.6828 <sup>n</sup>	-9.3481***	-2.5167**	-9.6391***
LTB	3.4022*	--4.2470**	3.6018	-2.2833**

Note: (\*\*) Significant at the 5%; (\*\*\*) Significant at the 1% (n) not significant

Table 4.5a shows that one (1) of the seven variables in model 1 was stationary at levels (CPS 5%) and others stationary after 1<sup>st</sup> differencing, with specification that has constant and trend as well as with specification without constant and trend. Thus, the ARDL bound testing was adopted for the analysis.

**Table 4.5b: ARDL Bound Test**

Test statistics	Value	K
F- statistics	3.876980	6
Critical value bound		
Significant		
10%	2.12	3.23
5%	2.45	3.61
2.5%	2.75	3.99
1%	3.15	4.43

Note: null hypothesis: no long run relationship exist

From the table above, the null hypothesis of no cointegration is rejected as the F- statistics is greater than the critical bound value at 5% and 10% respectively. Thus, the dependent variables (commercial bank deposit, commercial bank credit to the private sector, treasury bills, commercial papers, banker's acceptance and certificate of deposit) has long run effect on economic growth. But at the 2.5% and 1%, the result in table 4.4b is inconclusive about the long-run effect between the independent variables and economic growth in Nigeria, since the F-statistic (3.876980) is less than the upper bound critical value ( 3.99 and 4.89) at 1 % and 2.5% respectively. But, greater than the lower bound critical value (2.75 and 3.15) at 1% and 2.5% respectively. However, the estimated long run coefficients that indicate the long run effects the Error correction term that measures the speed of adjustment are presented below.

**Table 4.5c: Estimated Long Run Coefficient Using ARDL Approach**

ARDL (1, 0, 0, 0, 0, 1, 0) Selected based on Akaike Info Criterion

Dependent Variable: RGDP

Variable	Coefficient	Standard Error	t-statistics	p-values
LRGDP(-1)	0.274291	0.184090	1.489980	0.1493
LTB	0.000493	0.001870	0.263674	0.7943
LRCPS	-0.040680	0.032995	-1.232913	0.2295
LCP	-0.002485	0.006457	-0.384885	0.7037
LCD	0.042354	0.045426	0.932379	0.3604
LCBD	0.001073	0.001030	1.042429	0.3076
LCBD(-1)	-0.001756	0.001116	-1.572842	0.1288



LBA	0.078045	0.044613	1.749406	0.0930
C	3.616281	1.586362	2.279607	0.0318

R-squared	0.471989	Mean dependent var	4.857879
Adjusted R-squared	0.295985	S.D. dependent var	3.810125
S.E. of regression	3.196908	Akaike info criterion	5.389246
Sum squared resid	245.2853	Schwarz criterion	5.797384
Log likelihood	-79.92256	Hannan-Quinn criter.	5.526572
F-statistic	2.681699	Durbin-Watson stat	2.210758
Prob(F-statistic)	0.029262		

## Diagnostic Tests

### Test Statistics

LM

### Version Prob.

A Serial Correlation  $X^2 = 2.882322$  0.2367

B Functional Form (Ramsey Reset)  $X^2 = 0.583517$   
0.4527

C Heteroscedasticity  $X^2 = 9.656247$  0.2900

Source: Computation from E-view 9

The results presented above shows the estimated long run model of the selected money market instruments on economic growth. Commercial bank credit to the private sector, commercial papers and lag one of commercial bank deposit have negative effect on the dependent variable (economic growth). While certificate of deposit and bankers acceptance have positive effect on economic growth.

The coefficient of determination ( $R^2$ ) shows that 47% of variation in economic growth is explained by the independent variables. The F-statistics 2.681699 (0.029262) confirms the fitness and significance of the variables in the model.

The outcome of the result was confirmed using diagnostic test such as Breusch-Godfrey serial correlation LM test, Ramsey's Reset test and heteroscedasticity test. The result of these tests as presented in table 4.2c above shows that, the model passes all the diagnostic tests. The diagnostic test applied to the model shows that there is no evidence of serial correlation and heteroscedasticity. Besides the reset test implies the correctly specified ARDL model.

Table 4.5d: ARDL Cointegrating and Long-run Form

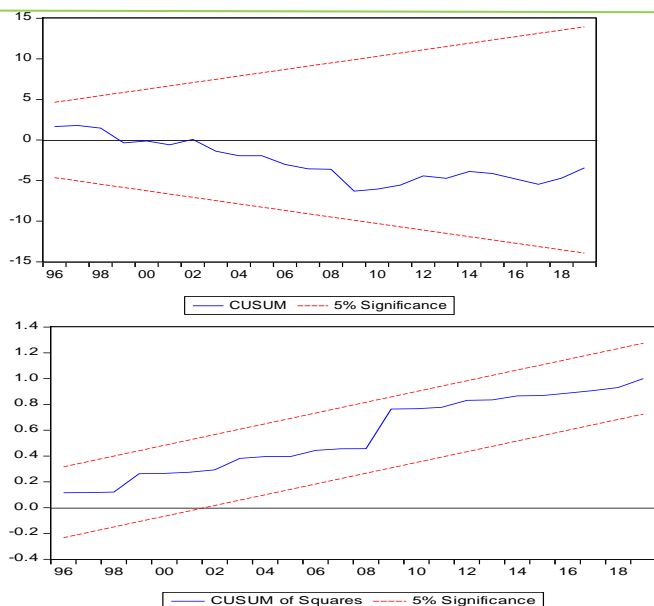
Variable	Coefficient	Standard Error	t-statistics	p-values
CointEq(-1)	-0.725709	0.184090	-3.942142	0.0006
D(LCBD)	0.001073	0.001030	1.042429	0.3076
D(LRCPS)	-0.040680	0.032995	-1.232913	0.2295
D(LTB)	0.000493	0.001870	0.263674	0.7943
D(LCP)	-0.002485	0.006457	-0.384885	0.7037
D(LBA)	0.078045	0.044613	1.749406	0.0930
D(LCD)	0.042354	0.045426	0.932379	0.3604
<b>Long Run Coefficients</b>				
LCBD	-0.000940	0.000632	-1.488133	0.1497
LCPS	-0.056056	0.043548	-1.287217	0.2103
LTB	0.000679	0.002554	0.265950	0.7925
LCP	-0.003424	0.009005	-0.380264	0.7071
LBA	0.107544	0.059366	1.811524	0.0826
LCD	0.058362	0.064221	0.908761	0.3725
C	4.983098	1.845749	2.699770	0.0125

Source: Computation from E-view 9

Table 4.5c above shows that, the speed of adjustment of short term error back to the long run path is 73% as the ECM term is correctly signed (-0.725709). The long run coefficients revealed that commercial bank deposit, commercial bank credit to the private sector and commercial papers has negative and insignificant effects on economic growth during the period of analysis. While, Treasury bill, bankers' acceptance and certificate of deposit has positive effect on economic growth. However only bankers' acceptance has a marginal significant effect at 10%.

Fig. 1

CUSUM and CUSUMSQ Test for Stability (Model 5)



Plots of the CUSUM and CUSUMSQR for model 5 above, shows that the regression equation seems stable given that, neither the CUSUM nor the CUSUMSQR test statistics go beyond the bounds of the 5% level of significance.

## DISCUSSION OF RESULTS

The value of the coefficient of commercial bank deposit indicates that the effect on economic growth is negative. This may be caused by the high price of consumer goods which makes it difficult for consumers to accumulate savings for a long period. The negative effect within the period, may also be caused by the level of entrepreneurial and industrial development in Nigeria, as according to (Shendre and Beng, 2004), it is enterprise that leads finance. Thus, the underdevelopment of the Nigerian economy is traceable to the low level of saving by individuals and corporate bodies and in line with Harod and Dormar Model of economic growth, that failure to save is failure to grow.

Commercial bank credit to the private sector has a negative effect on economic growth against a priori expectation. This is in agreement with study done by (Ehigiamusoe, 2013). It may be attributed to the unattractiveness of loans to investors and entrepreneurs in Nigeria. It may also be caused by lack of confidence in the banking sector, due to series of bank failures that happened within the period of analysis. This negative effect may also be due to the high cost of bank credit in Nigeria, as noted recently in the Nigerian senate as a matter of urgent public importance

that, “Nigeria’s current lending rate is one of the highest in the world and choking the private sector that should stimulate growth in the Nigerian economy”(Vanguard,2020). May be it is the efficient apportionment of available financial resources, that is the missing link in Nigeria in the period covered by this study.

Short-term government securities like the Treasury bills affected economic growth negatively in the period, and the effect is also insignificant. The insignificant effect was corroborated in the studies done by (Pavtar, 2016 & Uruakpa, 2019). This may be because the issuance of treasury bills in Nigeria is mainly used as a mop-up instrument and funds derived not channel to productive investment. While, the works of Akarara and Enekezimene (2019) reveals that, Treasury Bills issuance has a significant short run effect of economic growth. But, insignificant effect in the long run in Nigeria. Conversely, the study by Bofei (2020), reveals the Treasury Bills term spread has the ability to predict the rate of growth in economic activities in the United State of America (USA). Accordingly, the study by Alphons and Lise (2013) shown that, the South Africa (S.A.) term spread accurately predicted all the S.A recessions since 1980; Chinese term spread correctly predicted the 1996 and 2008 S.A



recessions; U.S. term spread foretold some recessions; while German term spread predictions were counter-cyclical.

Short-term private sector securities like Bankers Acceptance and Commercial Papers also has insignificant effect on economic growth in the period of analysis. However, Bankers Acceptance has a positive effect. While, Commercial Papers has a negative effect on economic growth in Nigeria. Etale and Ayunku, (2017) also found that Bankers' Acceptance has an insignificant positive effect of Economic growth in Nigeria. Orogun, Saliu and Ajayi (2020) revealed via the findings of their study that commercial papers has insignificant effect on Gross Domestic Product (GDP). While, Bankers acceptance has a moderately significant effect on GDP in Nigeria. This position was corroborated in by the works of Mustapha, Luka and Rabi (2017), that commercial papers has no significant effect on economic growth in Nigeria. The insignificant effect as shown by the above works, may be due to the fact that, these instrument are still emerging and patronized by only blue chip companies in Nigeria. Additionally, it may have been triggered by tight regulations as analysts opined in (Vanguard, 2019), that the contrasting performance of banks' investment in BAs and CPs, reflects the impact of strict condition enforced by the CBN on BAs and the impact of sluggish economic growth on businesses. However, Iwedi, Gbanibo and Dumini (2016); Eze and Mansi (2017) in their studies revealed that, Commercial papers and Bankers Acceptance has significant effect on economic growth in Nigeria.

### **CONCLUSION**

Generally, money market instruments has insignificant effect on economic growth in Nigeria within the period of study. This may be due to the dualistic nature of the money market in Nigeria. As most economic agents, especially individual, micro, small and medium scale enterprise, that constitute the bulk of businesses in Nigeria are still patronizing the informal (unorganized) sector of the money market. Thus, their contribution to the economy may not

have been captured in the measurement of economic growth in Nigeria.

The analyzed data revealed that Money market instruments in Nigeria, no significant influence on economic growth. The instruments employed in this study, revealed the unique nature of the Nigerian situation, where, the banking sector anchored by the commercial bank is the most active and patronized sub-sector of the Nigerian money market. Thus the inclusion of commercial bank deposit and commercial bank credit alongside treasury bills, commercial papers, Bankers Acceptance and Certificate of deposit, to reflect the public sector and the private sector money market instruments respectively.

The insignificant effects of money market instruments on economic growth, of the Nigerian economy is a pointer to the fact that the Nigerian business community is yet to embrace money market instruments to the level of influencing the growth of the economy. Commercial bank deposit is a major way of harnessing savings and capital for the growth of a developing economy like Nigeria. Thus, the positive effect is in order. However, such deposit needed to be channeled through commercial bank credit to stimulate growth in the economy. The result of this analysis showed that, the influence of commercial bank credit in the Nigerian economy is negative, this may not be unconnected to the high cost (interest rate and other charges) associated with credit acquisition in Nigeria.

Overall, the state of the Nigerian money market within the period of this study, is affecting economic growth insignificantly. The link between the money market and the real sector of the economy is still very weak. This suggests that the money market is not yet developed, enough to produce the needed growth that will propel the growth of the Nigerian economy.

### **RECOMMENDATIONS**

Based on the findings, the following recommendations were made:

1 To stimulate more deposit in the Nigerian economy, government should insist that transactions above certain amount must be made through the banking system. This



will encourage more citizens to deposit money in the banks and use the banking system payment infrastructure.

2 To ensure that the negative effect of commercial bank credit is reversed. Policies that will help to reduce the cost of acquiring credit in Nigeria should be designed.

3 The central bank of Nigeria should devise means to enable commercial banks grant more credit that will be enough to stimulate the economy on the path of growth.

4 The informal sector of the Nigerian financial system should be linked with the formal sector. This could be done by empowering the microfinance banks in the economy to be more responsive to grassroots demand for banking services, and engage in correspondent banking with commercial banks.

5 The issuance of treasury bills should not just be to address inflationary and deflationary shocks. But, should also be tailored towards enhancing investment potentials in the economy. This can be done by supervising the subscription procedure or by assigning certain quota to individuals and corporate investors that are not commercial banks.

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**APPENDIX**

ARDL Bounds Test

Date: 27/02/21 Time: 11:39

Sample: 1987 2019

Included observations: 33

Null Hypothesis: No long-run relationships exist

Test Statistic	Value	k
F-statistic	3.876980	6

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.12	3.23
5%	2.45	3.61
2.5%	2.75	3.99
1%	3.15	4.43

Test Equation:

Dependent Variable: D(LRGDP)

Method: Least Squares

Date: 27/02/21 Time: 11:39

Sample: 1987 2019

Included observations: 33

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CBD)	0.000233	0.001009	0.230936	0.8193
C	2.737945	1.685991	1.623938	0.1175
TB(-1)	0.002636	0.002439	1.080612	0.2906
CPS(-1)	-0.007994	0.035288	-0.226522	0.8227
CP(-1)	0.006981	0.006753	1.033806	0.3115
CD(-1)	0.009050	0.050192	0.180310	0.8584
CBD(-1)	-0.000836	0.000620	-1.348313	0.1901
BA(-1)	0.008309	0.045917	0.180963	0.8579
RGDP(-1)	-0.659323	0.201030	-3.279728	0.0032
R-squared	0.354580	Mean dependent var		0.011212



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Adjusted R-squared	0.139441	S.D. dependent var	3.646832
S.E. of regression	3.383033	Akaike info criterion	5.502423
Sum squared resid	274.6779	Schwarz criterion	5.910562
Log likelihood	-81.78998	Hannan-Quinn criter.	5.639749
F-statistic	1.648139	Durbin-Watson stat	2.159604
Prob(F-statistic)	0.163492		

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VAR Lag Order Selection Criteria

Endogenous variables: LRGDP LTB LCPS LCP LCD

LCBD LBA

Exogenous variables: C

Date: 27/02/21 Time: 11:51

Sample: 1986 2019

Included observations: 32

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Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1237.776	NA	1.45e+25	77.79848	78.11911	77.90476
1	-1088.187	224.3836	2.90e+22	71.51166	74.07670	72.36190
2	-983.1528	111.5984*	1.41e+21*	68.00955*	72.81899*	69.60374*

---

\* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

Dependent Variable: LRGDP

Method: ARDL

Date: 27/02/21 Time: 11:38

Sample (adjusted): 1987 2019

Included observations: 33 after adjustments

Maximum dependent lags: 2 (Automatic selection)

Model selection method: Akaike info criterion (AIC)

Dynamic regressors (2 lags, automatic): LTB LCPS LCP LCD LCBD

LBA

Fixed regressors: C



Number of models evaluated: 1458

Selected Model: ARDL(1, 0, 0, 0, 0, 1, 0)

Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LRGDP(-1)	0.274291	0.184090	1.489980	0.1493
LTB	0.000493	0.001870	0.263674	0.7943
LCPS	-0.040680	0.032995	-1.232913	0.2295
LCP	-0.002485	0.006457	-0.384885	0.7037
LCD	0.042354	0.045426	0.932379	0.3604
LCBD	0.001073	0.001030	1.042429	0.3076
LCBD(-1)	-0.001756	0.001116	-1.572842	0.1288
LBA	0.078045	0.044613	1.749406	0.0930
C	3.616281	1.586362	2.279607	0.0318

R-squared	0.471989	Mean dependent var	4.857879
Adjusted R-squared	0.295985	S.D. dependent var	3.810125
S.E. of regression	3.196908	Akaike info criterion	5.389246
Sum squared resid	245.2853	Schwarz criterion	5.797384
Log likelihood	-79.92256	Hannan-Quinn criter.	5.526572
F-statistic	2.681699	Durbin-Watson stat	2.210758
Prob(F-statistic)	0.029262		

\*Note: p-values and any subsequent tests do not account for model selection.

ARDL Cointegrating And Long Run Form

Dependent Variable: LRGDP

Selected Model: ARDL(1, 0, 0, 0, 0, 1, 0)

Date: 27/02/21 Time: 11:42

Sample: 1986 2019

Included observations: 33

Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LTB)	0.000493	0.001870	0.263674	0.7943
D(LCPS)	-0.040680	0.032995	-1.232913	0.2295
D(LCP)	-0.002485	0.006457	-0.384885	0.7037
D(LCD)	0.042354	0.045426	0.932379	0.3604



D(LCBD)	0.001073	0.001030	1.042429	0.3076
D(LBA)	0.078045	0.044613	1.749406	0.0930
CointEq(-1)	-0.725709	0.184090	-3.942142	0.0006

$$\text{Cointeq} = \text{LRGDP} - (0.0007 * \text{LTB} - 0.0561 * \text{LCPS} - 0.0034 * \text{LCP} + 0.0584 * \text{LCD} - 0.0009 * \text{LCBD} + 0.1075 * \text{LBA} + 4.9831)$$

#### Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LTB	0.000679	0.002554	0.265950	0.7925
LCPS	-0.056056	0.043548	-1.287217	0.2103
LCP	-0.003424	0.009005	-0.380264	0.7071
LCD	0.058362	0.064221	0.908761	0.3725
LCBD	-0.000940	0.000632	-1.488133	0.1497
LBA	0.107544	0.059366	1.811524	0.0826
C	4.983098	1.845749	2.699770	0.0125

#### Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.052722	Prob. F(2,22)	0.3659
	2.882322	Prob. Chi-Square(2)	0.2367

#### Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.240963	Prob. F(8,24)	0.3188
Obs*R-squared	9.656247	Prob. Chi-Square(8)	0.2900
Scaled explained SS	8.003624	Prob. Chi-Square(8)	0.4331

#### Ramsey RESET Test

Equation: UNTITLED

Specification: LRGDP LRGDP(-1) LTB LCPS LCP LCD LCBD

LCBD(-1) LBA C

Omitted Variables: Squares of fitted values

Value	df	Probability
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t-statistic	0.763883	23	0.4527
F-statistic	0.583517	(1, 23)	0.4527

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F-test summary:

	Sum of Sq.	df	Mean Squares
Test SSR	6.068992	1	6.068992
Restricted SSR	245.2853	24	10.22022
Unrestricted SSR	239.2163	23	10.40071

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