

Empirical Analysis of the Role of Money Market Instruments on Economic Growth in Nigeria: 1994-2018

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Abstract

This study investigate the role of money market on economic growth in Nigeria, from 1994 to 2018. It employed the Autoregressive Distributive Lag (ARDL) Bound Testing approach and the result shows that there is long-run relationship among the money market instruments. It also revealed that the money market variables have negative but significant impact on economic growth both in the long-run and in the short-run, except for commercial paper which has positive impact on economic growth, though not significant. This study therefore recommended that since treasury certificate has proven to have the most influential impact on economic growth, central bank should give priority to it. Furthermore, the players, which are the savers and the investors should be encouraged to invest more on the treasury certificate by making it more attractive through appropriate and relevant incentives. The monetary authority should introduce innovative policies into the Money market for it to contribute positively and significantly to economic growth. In addition, interest rate as a major determinant in Money market operations should be well positioned in order for it not to tilt in favour of one of the players in the market thereby discouraging other players from investing in the instruments.

Keywords: Money Market, Economic Growth, Interest Rate, ARDL

JEL Classification: E43, E51, F43

1. Introduction

Financial markets are vital components of the financial system that play important role in the mobilization of financial resources for long term investment. A well functioning financial market will be critical for the promotion of global integration and economic growth and development. The Money market as the other financial market in the financial system is a market for short term debt instruments. Money market primarily exist as a means of liquidity adjustment, in other words, it provides the mechanism for short-term funds of less than one year. Surplus funds are lent out to the market for varying periods, from over night, to a full day, and a fortnight to three months (Okoroafor, Magaji & Eze, 2018).

However, the focus of this study is on Money market. From the foregoing, Money market forms an integral part of the financial market where security and financial assets with high liquidity and short-term maturity periods are transacted. Money as a means of exchange, becomes a conduit for borrowing and lending very liquid assets; and the Money market becomes the best place to invest liquid assets in every economy including Nigeria. Magaji, Micheal & Anthony (2018) explained that Money markets play a crucial role in banks' liquidity management and the transmission of monetary policy, control of money supply and demand-pull inflation, and determination of short-run interest rates. Ikpefan and Osabuohien, (2012) also posited that the event of the Money market smoothens the progress of monetary intermediation and boosts lending to the economy. Money market instruments include Treasury bills, Commercial papers, Banks' acceptances, Deposits, Certificates of Deposit, Bills of Exchange, and Repurchase Agreements. These money market instruments are seen as cash equivalent because they are highly liquid short-term debt securities and they can be easily sold in the market at a low cost. Treasury bills offer private investors zero or minimal credit risk and the interest earned is not subject to any form of withholding tax. However, Magaji (2000) advocates for zero interest charges to achieve economic growth and development by African countries. According to Magaji & Adamu (2009) there is a need for uniform African single currency for money market to impact on economic growth and development. We have seen that Money market, provides ample opportunities for investors and corporate financial managers with surplus funds to lend at short term, thereby meeting the demands of borrowers who are in need of temporary finance for liquidity and can offer an acceptance claim to money (Omelomo, 2001). The question remains; how has all the transactions in Money market impacted positively on the Economic growth of Nigeria? Has the Money market operation translated into the growth of output of goods and service? How has the Money market instruments traded by investors and corporate financial managers, impacted on the Economic growth of the country? Despite the vast opportunities that are in the Money market and the operations of the money market instruments, there is still gap in the reality of its impact in the economy.

Several studies have been done which try to look at the relationship between Money market instruments and Economic growth in Nigeria such as Eze and Mansi (2017); Okoro, Ogoma and Ume (2018); Uruakpa (2019); Orugun, Saliu and Ajayi (2020) and Eze and Krokeme (2021) as well as the study of Andrew and Deborah, (2015). Mohammed (2014) suggested that further improvement in the industry is needed as it is characterized with operational inefficiency, low capital base, the absence of efficient and cost effective system for transferring ownership of securities in a repurchase transaction of the secondary Money market (where investors buy and sell securities they already own; they exchange with each other than with issuing entity; it is also known as stock market); also the delay of payment to owners of securities in the same market. The problem of interest in this study is on how to provide empirical analysis on the role of money market instrument on economic growth in Nigeria during the period 1994-2018

This study is significant in the sense that following the recommendation made by Eze and Mansi (2017) in their study in which they suggested the increase in the number of instruments traded in the Money market; it therefore seeks to make an addition in the number of instruments used in their study to see how it will affect the outcome of the impact of Money market on the economic growth in Nigeria. Furthermore, the study is expanding its scope from 1994 to 2018 and also adding interest rate as a control variable. The number of years used is considerably larger than the previous studies in scope. The study is also expected to serve as a stepping stone to other researchers who may want to acquire more fact on how Money market and its instruments impact economic growth. The study shall help corporate bodies, firms, companies, households and investors to know the huge investment opportunities that are in the Money market. It will help them know the financial instruments that are available in Money market and which one they can invest in. It will also afford the borrower of funds to know how vibrate the Money market of the country is. It can also be a source of information for policy makers on how to direct and make policies to improve the nation's Money market.

Therefore, this research work by extending its scope of coverage seeks to empirically analyse the impact of the current Money Market on the economic growth in Nigeria. And by extension, the impact of Money market instruments traded in the Nigerian Money market on economic growth in Nigeria. It is therefore, the objective of this article to find out how Commercial Papers, Bankers' Acceptances, Treasury Bills, Certificate of Deposit, and Treasury Certificates impacted on economic growth in Nigeria. The study also seeks to fill in the gap discovered in previous studies done particularly by Eze and Mansi (2017) and Andrew and Deborah (2015) with the inclusion of interest rate as a control variable. The study decides to include interest rate because it discovered that Money market instruments were majorly used as independent variables without considering the role of interest rate which is a major determinant of how these instruments are traded. Therefore, it seeks to find out how interest rate affects the volume of transaction of Money market instruments as different from the previous work done by Andrew and Deborah (2015).

2. Literature Review

We present here briefly, some early economic theories or thoughts as they relate to the topic being researched. The most common and widely used theories are as follows

Theoretical Framework

The "Efficient Market Theory" (EMT) states that the prices of securities in financial markets reflect all information that is available to the investors. An early contribution to EMT is an article by Alexander in a book on the random character of stock prices (Alexander, 1964). Fama has written a famous survey article on tests for market efficiency (Fama, 1970). EMT is important in the context of investment advice and portfolio management like Money market security management. EMT also implies that the use of technical analysis to predict future stock prices is a waste of time. EMT is also important in the context of disclosure requirements for listed companies and rules concerning insider trading. EMT

assumes that investors are rational. This implies that they currently follow the flow of information, which is relevant to the pricing of the securities they hold. It implies also that they currently adjust the composition of their portfolios, when new relevant information is disclosed. Every day, investors and their advisors are confronted with an enormous amount of new information, which may or may not have an influence on the pricing of the financial assets they own or have the opportunity to buy. It is also important to evaluate the realism of the EMT in the light of transaction costs.

Financial intermediation theory is one of the theories that postulate that financial market has an impact on real sector of the economy. The theory was first formalized in the works of Goldsmith (1969), McKinnon (1973), and Shaw (1973) that see financial markets as playing a pivotal role in economic development, attributing the differences in economic growth across countries to the quantity and quality of services provided by financial institutions. Furthermore, Shaw (1973) proposed a debt intermediation hypothesis, whereby expanded financial intermediation between the savers and investors resulting from financial liberalization (higher real interest rates) and development increase the incentive to save and invest, stimulates investments due to an increase in supply of credit, and raises the average efficiency of investment.

This study therefore adopts the financial intermediation theory because it tries to link the financial market with economic growth. And it best explains what this study is out to achieve.

Empirical Literature

Several other relevant related empirical literatures have looked at impact of Money market on economic growth in Nigeria. Among such studies is the study done by Isibor, Ikpefan and Okafor, (2015) which examined the impact of the Nigeria Money market instruments on the liquidity of ten selected quoted banks from 2005 to 2014. Secondary data were used and the multiple regression econometric technique was used to analyze the data. The study found that firms' working capital and profitability have a significant impact on the money market instrument. They recommended that adequate monitoring and surveillance of the activities of the market participants should be improved on and also that, new and flexible financial instruments be introduced.

Andrew and Deborah, (2015) undertook a study on Developments in Money Market Operations and Economic Viability in Nigeria. The data used for empirical estimation covered the period 1981 to 2011 and were sourced from CBN statistical Bulletin, 2011. Analysis of data was carried out using Multiple Regression technique parameters. Research findings were robust. The variation in the growth trends of GDP and the explanatory variables appear to cast doubts on whether Money market operations made significant contributions to GDP in the period under review. However, the results from Pearson correlation coefficient matrix substantially attest to strong linear relationship the explained and explanatory variables. Iwedi and Igbani (2015), in their study, empirically examine the nexus of Money market operations on economic growth in Nigeria. The study made use of secondary data which were obtained from the Central bank of Nigeria Statistical

Bulletin (2018). The data were collected for a period of thirty-three years (1980-2013). The descriptive statistical tools and sophisticated econometric tools of the vector auto-regressions (VAR), Johansen Co-integration, and Granger causality tests was employed in the analysis of the data. It was found among other things that there is a positive significant short-run and long-run relationship between money market operations and economic growth in Nigeria. The result shows that causality flows from economic growth proxy by GDP to money market operations but not vice versa. Based on the empirical analysis, it is concluded that money market operations deliver short term growth tendencies and can help to ensure long run impressive and steady growth rates in Nigeria as it is a key component of the financial system, a fulcrum of monetary operations conducted by the central bank in its pursuit of monetary policy objectives. They therefore recommended that, the government should both in short and long-run prioritized policies geared towards increasing/developing money markets operations in Nigeria in order to make the economy more stable.

Eze and Mansi (2017) carried out a study on the role of money market on economic development of Nigeria. They sought to examine the relationship between different Money market instruments and the economic development of Nigeria. Four money market instruments (Treasury Bills, Treasury Certificates, Certificates of Deposits, and Bankers' Acceptances) were chosen to regress against the Gross Domestic Product (representing economic growth), on the basis of which four research objectives and four hypotheses were formulated. Their scope of study was from 1990 to 2014. The method of analysis they used include regression, unit root tests, co-integration tests, and parsimonious error correction. They found that money market instruments positively impacted on economic growth. They recommended among others, base on their findings, 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. Okoro, Ogoma and Ume (2018), investigated the influence of interest rate on outstanding money market instruments in Nigeria. They adopted the quasi-experimental and analytical method using secondary data drawn from the Central Bank of Nigeria Statistical Bulletin covering the period 1981 to 2014. OLS econometrics tool was used as its major tool for estimation. It was found out that interest rate positively and significantly impact on the investment in both public Money market instrument (Treasury bill) and corporate Money market instrument (Commercial Papers) in Nigeria. However, Magaji & Aliyu (2006) argued that interest charges inversely affect economic growth and development. Uruakpa (2019) examined the impact of money market reforms on economic growth of Nigeria. And he sought to find out as his objective how reform of the market since 1990 has impacted on Nigeria's GDP through money market transactions, Treasury bill rate and Treasury bill outstanding. The result however, showed that Treasury bill rate has negative but significant effect on GDP. The F-statistics suggests that all the money market proxies jointly impacted on GDP, an implication that money market is a viable financial market in Nigeria. Moreover, the variance decomposition from the study showed that GDP has a decreasing variance with money market value and Treasury bill rate but an increasing variance with Treasury bill outstanding. The variance impulse showed that GDP responds to the activities or movement in money

market value and Treasury bill rate. He concluded by saying that, money market reform has helped boost the effect of the market on Nigeria's economic growth.

Orugun, Saliu and Ajayi (2020) in their study, examined the impact of selected Money Market Instruments on Economic growth based on time series data sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin (2020). They employed econometric and statistical techniques such as ADF, Unit Root Test, OLS, multiple-regression, and Granger Causality Test to analyze data collected for the study which covers the period 1989 –2019. Based on their findings, they recommended that Nigerian money market should be reformed in line with the current globalization trend and internationalization of the money market to allow a flow of foreign investment into the economy in order to increase the number of tradable instruments in the market. Eze and Krokeme (2021) examined in their study, the effect of Money market instruments on capital market performance in Nigeria using time series data over a period, 1981-2018. Secondary data were sourced from the central bank of Nigeria statistical bulletin 2018. Descriptive statistics, covariance Analysis, Johansen co-integration and vector error correction model were used in the study. They found a varying degree of relationship with economic growth but interest rate impacted negatively. From the results of their study, the following recommendations were made by them: Firstly, there should be adequate market information to investor on stocks to enable them transform their stock from money market to capital market depending on the market outlook. Secondly, both markets (money and capital market) should ensure that they work harmoniously because investors holding one stock can cause adverse negative effect on the other.

From the various empirical literature studied so far it was discovered that most of them in their findings show that there is positive impact of money market on the economy particularly the studies of Andrew and Deborah (2015) and Iwedi and Igbani (2015), which established a positive impact of money market on the economy. However, this study sought to ascertain by increasing the number of money market instruments used, if the Money market still has a significant impact on the economy in this present time, due to the fact that so many things have happened in the Nigerian economy with the emergence of a new government which has introduced its own economic policies.

3. Methodology

Econometrics methodology is therefore employed as the analytical tool for the examination of the impact of Money market on economic growth in Nigeria. Five instruments were selected to represent the instruments traded in the Nigerian Money market which include Commercial paper, Bankers' acceptances, Treasury bills, Certificates of deposits, and Treasury certificates; whereas, Gross Domestic Product (GDP) was used as a proxy for economic growth. The model states that economic growth is a function of Commercial Papers, Bankers' Acceptances, Treasury Bills, Certificate of Deposits and Treasury Certificates. The secondary data used for this study covering the period 1994-2018 were obtained from the Central Bank of Nigeria Statistical Bulletin, 2018 edition and National Bureau of Statistics. This study utilizes ex-post facto research design, which uses secondary data to establish the relationship between the dependent variable and independent

variables. The ex-post facto research design is appropriate for this study because of the nature of the study, which shows the following characteristics: the study covers more than one-year period, and also the data used are already in existence which cannot be manipulated by the researcher. The Variables include in this study are measured in Naira (₦' Billion). GDP as Gross Domestic Product (Output) is used as a proxy to measure Economic Growth. CP is the Commercial Paper and a money market instrument used in the model. BA refers to Banker's Acceptance, TB entails Treasury Bills which are money market instruments used in the model measured in denominations. CD represent certificate of Deposit which are issued in money terms. TC stands for Treasury Certificate is another money market instruments used in the model which comes in denominations or money terms. INTR refers to interest rate measured in percentage.

Descriptive analysis is done to capture the nature and structure of the data, while an Autoregressive Distributed Lag model (ARDL) is employed to show the nexus that exist between dependent and independent variables. The econometrics technique of Multiple Regression analysis was used to obtain the estimates. The mathematical expression of the regression model is given as:

$$Y = f(X_1, X_2, X_3, X_4, X_5, X_6) \dots\dots\dots 1$$

Where Y is the dependent variable and X_s are independent variables

The econometric Model of this study is expressed as follows:

$$GDP = \beta_0 + \beta_1 CP + \beta_2 BA + \beta_3 TB + \beta_4 CD + \beta_5 TC + \beta_6 INTR + \mu \dots\dots\dots 2$$

Such that GDP is the dependent variable and CP, BA, TB, CD, TC, INTR are independent variables with β_0 as the intercept (the expected value of Y when all the explanatory variables assume zero as value) and the remaining β_s as the parameters of the independent variables of the model or slope coefficients. μ stand for disturbance or error term (a random or stochastic variable). In order to test for stationarity and robustness, unit root and co-integration tests are performed. This enables us examine and draw inferences based on maximum likelihood which identifies long-run associations that exist among integrated time series data. The Johansen co-integration test is based on the maximum Eigen-value of the stochastic matrix. The model further helps us to check for the presence of co-integrating relationships among the variables and also to identify the number of stationary long-run relationships that exist among the integrating variables. If the series are further co-integrated, then it will be most efficiently represented by an error correction method, which is used to tie short run behaviour of the variables to its long-run values. Engel and Granger (1987) stipulated that the ECM will correct disequilibrium error

The Error Correction Model is given as:

$$\Delta GDP_{t+1} = b_0 + b_1 \Delta CP_t + b_2 \Delta BA_t + b_3 \Delta TB_t + b_4 \Delta CD_t + b_5 \Delta TC_t + b_6 INTR_t + \delta ECM_t + \mu_t \dots\dots\dots 3$$

Where Δ is the first difference operator, δ measures the speed of adjustment of disequilibrium in short-run to obtain the long-run equilibrium, and ECM is the error correction term

4. Result

The individual graphical characterization of the series is visually examined here to determine the presence of a trend factor. An observance of a directional movement of data in the respective graphs of the variables will indicate stationarity or not (presence of unit root) in figure 1;

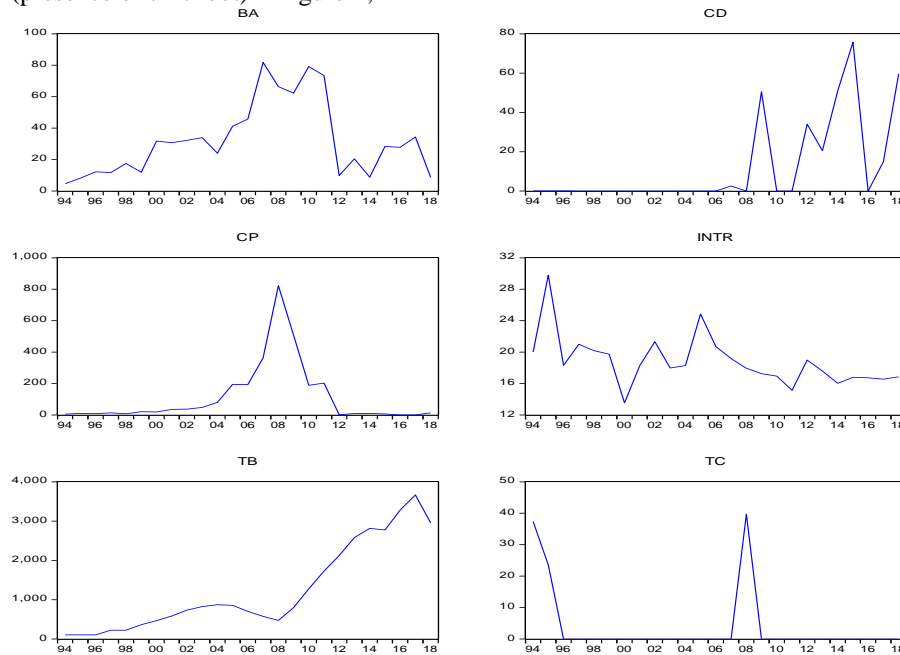


Figure 1 Trend Analyses of Macroeconomic Variables

The descriptive statistics as derived through E-Views 9.0 shows the Mean, Median, Maximum, Minimum, Standard Deviation, Skewness, Kurtosis, Jarque-Bera and Probability of each of the variables as presented below:

Table 1: Descriptive Analysis of Data

Statistics	BA	CD	CP	INTR	TB	TC
Mean	32.2823	12.3497	112.0159	18.8004	1247.635	4.0257
Median	28.4178	0.0000	19.0025	18.2900	797.4825	0.0000
Maximum	81.8340	75.7028	822.7009	29.8000	3665.250	39.7059
Minimum	4.6602	0.0000	0.4904	13.5400	103.3265	0.0000
Std. Dev.	23.5731	22.7426	195.7462	3.2425	1129.172	11.4065
Skewness	0.8461	1.6276	2.3987	1.6536	0.843249	2.5349
Kurtosis	2.5720	4.2239	8.4502	6.7385	2.249503	7.7052
Jarque-Bera	3.1742	12.5988	54.9182	25.9530	3.549499	49.8353
Probability	0.2045	0.0018	0.0000	0.00002	0.169526	0.0000
Sum	807.0580	308.7428	2800.398	470.0100	31190.88	100.6449
Sum Sq. Dev.	13336.63	12413.52	919597.4	252.3375	30600699	3122.645
Observations	25	25	25	25	25	25

Sources: Authors' Computation

Table 1 shows the descriptive statistics of BA, CD, CP, INTR, TB and TC. It can be shown that the variables contained 25 observations with TB having the highest mean value followed by CP, BA, INTR, CD and TC respectively. The table also revealed that BA and TB are platykurtic as the value of their kurtosis are less than three, while CD, CP, INTR and TC are mesokurtic in nature as the value of their kurtosis are greater than three. Furthermore, with reference to the Jarque-Bera estimates and probability value that BA and TB are normally distributed due to their high probability values of 0.204510 and 0.169526 which are higher than the probability value of 0.05. On the other hand it was observed that the probability value for CD, CP, INTR, and TC are not normally distributed due to their low probability value of 0.001837, 0.000000, 0.000002 and 0.000000 respectively which are lower than the probability of 0.05.

Table 2: ADF Unit Root Tests Results

Variables	ADF Statistics	Critical Value	Stationary Status
BA	-5.577786	-2.669359(1%)	I(1)
		-1.956406(5%)	
		-1.608495(10%)	
TB	-4.525217	-2.679735(1%)	I(2)
		-1.958088 (5%)	
		-1.607830 (10%)	
CP	-4.422674	-2.6693599(1%)	I(1)
		-1.956406(5%)	
		-1.608495(10%)	
CD	-4.937584	-2.708094(1%)	I(2)
		-1.962813(5%)	
		-1.606129(10%)	
TC	-4.880011	-3.737853(1%)	I(0)
		-2.991878(5%)	
		-2.635542(10%)	
INTR	-3.847799	-3.737853(1%)	I(0)
		-2.991878(5%)	
		-2.635542(10%)	

The critical values for rejection of hypothesis of unit root were from MacKinnon (1991) as reported in e-views 9.0.

Sources: Authors' Computation

The six variables (BA, TB, CP, CD, TC, and INTR) underwent unit root test using the Augmented Dickey-Fuller (ADF) test. As is the case most times, most of the variables were found to be non-stationary at level except (TC and INTR) which was stationary at levels. While (BA and CP) were stationary at first difference but (TB and CD) were found to be stationary at second difference.

ARDL Bound Test Approach to Co-integration

The bound test approach to co-integration seeks to confirm if there is long run relationship among the variables in the model. This is done by testing if their coefficients are equal to zero in our estimated model or not. The F-Statistic value from the bound test and the critical value bounds as revealed by the regression result using E-views 9 is presented in the Table 3;

Table 3: ARDL Bound test of Co-integration

Null Hypothesis: No long-run relationships exist		
Test Statistic	Value	K
F-statistic	11.935357	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

Sources: Authors' Computation

The Co-integration test was done using the ARDL Bound test. This became necessary to avoid a spurious regression result. Using the ARDL Bound test with critical value, the variables were co-integrated at 1per cent level of significance since the Wald F- statistics is greater than the critical lower and upper bound (see Table 3).

Table 4: Error Correction Mechanism

Variable	Co-integrating Form			
	Coefficient	Std. Error	t-Statistic	Prob.
D(BA)	-0.0502	0.1278	-0.3934	0.6992
D(CD)	-0.0271	0.0951	-0.2857	0.7788
D(CP)	0.0046	0.0210	0.2192	0.8292
D(INTR)	-0.8014	0.7012	-1.1429	0.2699
D(TB)	-0.0017	0.0020	-0.8184	0.4251
D(TC)	-0.0577	0.3183	-0.1814	0.8583
Co-int.Eq. (-1)	-0.7223	0.2933	-2.4625	0.0255

Sources: Authors' Computation

Since the variables were found to be co-integrated implying that they have long run equilibrium relationship, it is necessary to test for short run relationship. From table 4, the lag length is determined automatically using akaike info criterion. ECM parameter is negative (-) but significant which is -0.722310, this shows that 72 percent disequilibrium in the previous period is being corrected to restore equilibrium in the current period.

It has been established; the variables are co-integrated and also have short run relationship established from the ECM.

From the ARDL result, a unit increase in Bank Acceptances will lead to 0.050286 decrease in economic growth. A unit increase in Certificates of Deposit will lead to 0.027187 decrease in economic growth. A unit increase in Commercial Papers will lead to 0.004615 increase in economic growth. A unit increase in Interest Rate will lead to 0.801471 decrease in economic growth. A unit increase in Treasury Bills will lead to 0.001705 decrease in economic growth. Finally, a unit increase in Treasury Certificate will lead to 0.057750 decrease in economic growth. The *R-Square* shows that the model has a good fit with 0.825411 (82%) change in economic growth is accounted for by change in the independent variables. This

Table 5: ARDL Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
GDPGR(-1)	0.2776	0.2933	0.9467	0.3579
BA	-0.0502	0.0278	-2.3934	0.0190
CD	-0.0271	0.0151	-1.8857	0.0231
CP	0.0046	0.0010	4.2192	0.0000
INTR	-0.8014	0.2112	-4.1429	0.0000
TB	-0.0017	0.0010	-0.8184	0.4251
TC	-0.0577	0.0183	-4.1814	0.0000
C	22.8532	14.4493	1.5816	0.1333
R-squared	0.8254	Mean dependent var		5.4916
Adjusted R-squared	0.7509	S.D. dependent var		6.6565
S.E. of regression	7.2158	Akaike info criterion		7.0516
Sum squared resid	833.0878	Schwarz criterion		7.4443
Log likelihood	-76.6195	Hannan-Quinn criter.		7.1558
F-statistic	9.5104	Durbin-Watson stat		2.0076
Prob(F-statistic)	0.0000			

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

Sources: Authors' Computation

implies that 82% of the change in economic growth was explained by changes in the independent variables. The *Adjusted R²* is given as 0.750981 (75%). This means that precisely 75% of the variations in the economic growth in Nigeria were accounted for by the included variables (Bank Acceptance, Certificate of Deposit, Commercial Paper, Interest rate, Treasury Bills and Treasury Certificate), after the co-efficient of determination (R^2) has been adjusted to make it insensitive to the number of included variables. The Durbin-Watson (D-W) Statistics is 2.007687 approximately 2 indicating the absence of autocorrelation in the model.

Table 6: Long run Coefficients
Dependent Variable: GDPGR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BA	-0.0696	0.0177	-6.3915	0.0000
CD	-0.0376	0.0106	-3.2880	0.0070
CP	0.0063	0.0081	0.2266	0.8236
INTR	-1.1095	0.2747	-5.8704	0.0000
TB	-0.0023	0.0032	-0.7251	0.4789
TC	-0.0799	0.0264	-3.1874	0.0036
C	31.6390	28.2108	1.1215	0.2786

Sources: Authors' Computation

From the result of the long-run analysis, a percentage increase in Bank Acceptance will lead to 0.069618 percentage decrease in economic growth. In addition to this, the impact is statistically significant at 1% level of significance. This result fulfils a priori expectation. A percentage increase in certificates of Deposit will lead to 0.037638 percent decrease in economic growth. The increase is statistically significant at 1% level of significant. This result implies that increase in Certificate of Deposit will lead to decrease in economic growth. Also, a percentage increase in Commercial papers will lead to 0.006390 increase in economic growth. The increase is statistically insignificant as indicated by the probability value of the t statistic. This result conforms to a priori expectation. An increase in Interest rate

will lead to a decrease in economic growth by percent. 1.109595. This decrease is statistically significant at 1 percent level of significance. An increase in treasury bills will lead to 0.002361 decrease in economic growth in addition, this decrease is statistically insignificant. Finally, an increase in treasury certificate will lead to 0.079952 decrease in economic growth. In addition, this decrease is statistically significant at 1 percent level of significance.

The findings obtained from the study, show that Bankers' Acceptance, Certificate of Deposit, Treasury Bill, Treasury Certificate all have negative but significant impact on Economic growth. It is only Commercial Paper that has a positive impact; but the impact as the analysis shows, is statistically insignificant. Interest Rate too has a negative but significant impact on Economic growth. The R^2 of 0.825411 and adjusted R^2 of 0.750981 show that the model used has a good fit. The F-statistic of 9.510406 indicates that Money market through the variables in the overall has a negative but statistically significant impact on Economic growth. Durbin-Watson (D-W) Statistics of approximately 2 indicates absence of autocorrelation in the model. The result from this study revealed that Money market through its traded instruments and interest rates have in the overall, negative and significant impact on economic growth. This result is in contrast with particularly the studies of Andrew and Deborah (2015) and Iwedi and Igbani (2015), which established a positive impact of money market on the economy. However, the result of this study shows that Certificate of Deposit (CD) has a negative but significant impact on economic growth which is in line with the findings of Magaji et al (2018). From their finding, it was established that Certificate of Deposit has inverse relationship with economic growth.

5. Conclusion and Recommendations

Considering the above information and estimation; it has clearly shown that Treasury Bills, Treasury Certificate, Commercial Papers, Certificates of Deposit and Bankers' Acceptance and Interest rate are Money market instruments used as independent variables. And these variables have shown collective impact on economic growth. The result from this study revealed that Money market through its traded instruments and interest rates have in the overall, negative but significant impact on economic growth. This result is in contrast with the studies of Andrew and Deborah (2015) and Iwedi and Igbani (2015), which established a positive impact of money market on the economy. However, the result of this study shows that Certificate of Deposit (CD) has a negative but significant impact on economic growth. But from their finding, it was established that Certificate of Deposit has inverse relationship with economic growth.

We therefore recommend that treasury Bills and Commercial Papers as instruments in Money market be given adequate attention and also revitalization in order to enhance their contributions to economic growth. Government should see money market as one of the avenues for boosting the economy and encouraging businesses most especially SMEs to thrive. The Central Bank of Nigeria should introduce innovative policies that will strengthen the money market operations for it to contribute positively and significantly to economic growth. Interest rate as a major determinant of how the money market instruments are traded in the market should

be well adjusted to the lowest level to make it contribute positively to economic growth. Also, new, flexible and versatile money market instruments suited to the prevailing economic conditions of the country should be introduced into the market by the monetary authority to boost its operations and contribution to economic growth. We observed that Treasury certificate has proven to have the most influential impact on economic growth. The addition of interest rate as control variable makes this study unique. Furthermore, the tests conducted did not only identify problems and solutions but also pointed out the synergy or relationship that existed between money market and economic growth. We recommend that further research should be made on the relationship between interest rate and economic growth covering longer period of time.

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