Impact Of Money Market Reforms On Economic Growth Of Nigeria 1990 – 2017

Peter C. Uruakpa, Ph.D
Department of Banking & Finance,
Abia State University, Uturu-Nigeria

ABSTRACT

This study examined the impact of money market reforms on economic growth of Nigeria. The objectives were to find out how reform of the market since 1990 has impacted on Nigeria's GDP through money market transactions, treasury bill rate and treasury bill outstanding. Quasi experimental design was adopted. Data were collected through CBN Statistical Bulletin covering the period 1990-2017. Statistical tools adopted include unit root test, OLS, cointegration and variance decomposition. Findings showed that the variables are non-stationary but integrated in order 1 level. The cointegration result showed that all the variables are co-integrated. The OLS result suggests that money market value has positive and significant effect on GDP while treasury bill outstanding has positive but insignificant effect on GDP. However, treasury bill rate has negative and significant effect on GDP. The F-statistics suggests that all the money market proxies jointly impacted of GDP, an implication that money market is a viable financial market in Nigeria. Moreover, the variance decomposition 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. In conclusion, it was observed that money market reform has helped boost the effect of the market on Nigeria's economic growth. The study recommends constant reform of the market. It urges the authorities of the market to deepen the market with more trading instruments.

INTRODUCTION

Financial markets play important role in the mobilization of financial resources for long term investment. Well functioning financial markets are very crucial for the promotion of global integration and economic growth and development. An efficiently functioning domestic financial market can better position a country's competitiveness in the market for global capital growth (Jalloh, 2009). A growing body of literature finds that the development of financial markets has a positive impact on growth. Financial markets in Nigeria consist of mainly capital and money market. According to Ogbulu (2009), the capital market is a network of special institutions that in various ways bring together suppliers and users of capital. The capital market is therefore, the long-term end of financial market, which is made up of market, and institutions, which facilitate the issuance, and secondary trading of long-term financial instruments. On the other hand, the money market is a market for short term debt instruments. Surplus funds are lent out to the market for varying periods, from over night, a full day, and a fortnight to three months (Onoh, 2002). In the some cases the tenor may be longer. Trading in the money markets involves <u>Treasury bills</u>, <u>commercial paper</u>, <u>bankers' acceptances</u>, certificates of deposit, federal funds, and short-lived <u>mortgage-</u> and <u>asset-backed securities</u>. It provides <u>liquidity</u> funding for the <u>global financial system</u>. Raja and Mahalakshmi (2015) opined that the money market is used by participants as a means for borrowing and lending in the short term, from several days to just under a year. Money market securities consist of negotiable certificates of deposit (CDs), banker's acceptances, Treasury bills, commercial paper, municipal notes, federal funds and repurchase agreements (repos).

Investment that promotes liquidity and gives immediate income requires short-term funding and varies from few hours and one year (Ikpefan & Osabuohien, 2012). Ehigiamusoe (2012) posit that the existence of money market facilitates trading in short-term debt instruments to meet short term needs of large users of funds such as governments, banks, and similar institutions. He stressed further that money market plays a key role in bank's liquidity management and the transmission of monetary policy and by providing the appropriate instruments and partner for liquidity trading, the money market allows the refinancing of short and medium term positions and facilitates the mitigation of business liquidity risks. The banking system and the money market represent the exclusive setting in which monetary policy operates. A developed, active, and efficient interbank market and the money market enhance the efficiency of central bank's monetary policy and the transmission of its impulses into the economy. Thus, the development of the money market smoothen the progress of the financial intermediation and boost lending to the economy, and improves the country's economic and social welfare. Money market serves as the first step of the transmission of monetary actions to the economy (Ugolini, 2001). Accordingly, money market rates serve as a useful indicator of expectations regarding future monetary actions. It promotes financial stability and facilitates the development of a liquid bond market. Well developed money markets exist in developed countries, particularly in the high income ones, while those in low-income countries mirror the state of their development. Here, the market are narrow, poorly integrated, and in some instances, non-existent in the real sense of it (Nwosu & Hamman, 2008).

Reform has been defined as the improvement or amendment of what is wrong and unsatisfactory or to improve by removing or correcting faults and problems. In order to improve on the unsatisfactory performance of the money market as well to correct some of the associated problems with the money market, the CBN embarked on various reforms within 1986 to 2015 (Solomon, 2015). Until 1987, the standard instruments, the treasury bills and treasury certificates dominated the market (Onoh, 2002). However, in 1986, reform policies were formulated to enhance development of the money market. In the post-reform as noted by lsibor, Ikpefan, Okafor, & 'Ojeka (2016), the tempo of activities in the money market has increased markedly since 1986 within the context of financial deregulation as the money market operated in an atmosphere of relative freedom under an improved institutional environment. These authors stressed further that up to 1993, the market interest rates continue to be determined by the market forces of demand and supply. Ceilings were however placed on interest rate in 1994 with the aim of inducing the recovery of the productive sectors of the economy. CBN (2015) statistics has shown improved performance within the period of reforms as the money market value increased from ₦24, 183.70m in 1986 to over ₦6853900.00 in 2014. Despite the various crisis witnessed in the capital market, the money market seems to have grown stronger and stronger. This research is therefore aimed at unearthing those reform potentials on the money market and economic growth of Nigeria from 1990-2015.

Statement of the Problem
Although the money market in Nigeria has witnessed some expansion in recent times owing to the various reform policies, there are observed problems which the market has to contend with. The overall performance of the market since inception has been mixed. In particular, as propellers of economic growth and development, studies have argued that the money market has performed below its potential. The market is shallow when compared with some advanced and emerging countries, but fairly satisfactory relative to Sub-Sahara African countries. Some of the challenges facing the Nigerian money market include; preponderance of government instruments, paucity of private sector instruments, uncertainty and lack of confidence in the

market, wide margins between lending and deposits rates, etc. The market lacks the breadth, resilience and depth needed to effectively discharge its functions, particularly the intermediation function. The effect of these reforms on the growth of the money market raises the question whether the money market influence economic growth in the Nigeria in the face of these problems.

THEORETICAL FRAMEWORK

Modern growth theory identifies two specific channels through which the financial sector might affect long-term growth: through its impact on capital accumulation (including human as well as physical capital) and through the rate of technological progress. These effects, nevertheless, occur from the intermediation role of the financial institutions, which enable the financial sector to mobilize savings for investment, facilitate and promote inflows of foreign capital such as foreign direct investment (FDI), portfolio investment and bonds, and remittances, and optimize the allocation of capital between contending issues by ensuring that capital goes to its most productive use (Kolawole, 2012). The current rekindling of interest in the nexus between financial intermediation and economic growth is the offshoot of new development in the theory of growth, especially the new endogenous growth theory, in which growth was characterized to be self-sustaining and amply influenced by initial conditions. Thus, the market is said to have both level and rate effects (Levine, 1991). However, theoretical literature offers conflicting prediction about the role of financial markets, and by extension the money market in promoting economic growth. Policymakers are divided also as to whether the Nigerian money market contributes to or hinders economic growth and development in the country. Advocates of money market-induced economic growth believe that the money market promotes economic growth by facilitating trading in short-term debt instruments to meet short term needs of large users of funds such as governments, banks, and similar institutions (Jalloh, 2009).

Schumpeter (1934) states that the development of the financial institution is a necessary precondition for economic development. He argues that for an economy to develop, both the financial institutions and entrepreneurs must be available in sufficient number. This view was corroborated by Haley and Schall (1973) when they asserted that the banking sector enhances economic activities and promotes economic growth by providing reliable payments system, mobilization of saving, allocating credit, and diversifying risks. Similar conclusions have been reached by Adam (1998); Goldsmith (1969); King & Levine (1992); Levine (1996); & Nwosu and Hamman (2008). Adam (1998) argues that financial deregulation can be associated with increased deposit or higher credit availability and economic growth. This is because increased credit availability results in more credit allocations which lead to higher investment and growth. Other proponents of money market promotes economic growth, argues that money market plays a key role in bank's liquidity management and the transmission of monetary policy. By providing the appropriate instruments and partner for liquidity trading, the money market allows the refinancing of short and medium term positions and facilitates the mitigation of business liquidity risks. The banking system and the money market represent the exclusive setting in which monetary policy operates. The advocates went further to assert that a developed, active, and efficient interbank market and the money market enhance the efficiency of central bank's monetary policy and the transmission of its impulses into the economy. Thus, the development of the money market smoothen the progress of the financial intermediation and boost lending to the economy, and improves the country's economic and social welfare (Nwosu & Hamman, 2008).

However, opponents of the above deposition claim that the Nigerian money market is faced with myriads of challenges that could hinder economic growth rather than promote it. Olofin and Udoma (2011) discovered an indirect relationship between financial markets and economic growth through banking sector domestic credit to the economy. They found out that the impact of financial structure which captures both capital market-based and bank-based financial development indicators shows an indirect effect on aggregate domestic investment and economic growth. Other studies also show that the Nigerian money market is shallow when compared with the money markets in some advanced and emerging countries (Ehigiamusoe, 2012; & Onoh, 2002). They asserted that several challenges confront the Nigerian Money market which prevents it from contributing to the growth and development of the country. Also, as a principal component of index of economic freedom, open markets (OM) influences economic growth just as Powell (2003) is of the view that growth is driven by increase in economic freedom. A transparent and open financial system ensures fairness in access to financing and promotes entrepreneurship which in turn enhances economic growth.

Reform of the Money Market in Nigeria
The importance of the money market to the growth and development of the Nigerian economy in general cannot be over-emphasized. This is because the market acts as intermediation to channel funds from the surplus side to the deficit side of the Nigerian population for short term investments mainly in trade and commerce. Thus, the development of the money market smoothens the progress of financial intermediation and boosts lending to economy (Ikpefan & Osabuohien, 2012).Money markets play a key role in banks' liquidity management and the transmission of monetary policy, control of money supply and demand-pull inflation, determination of short-run interest rate (Ekmekcioglu, 2013). The Nigeria's money market is relatively shallow and oligopolistic compared with its peers in emerging market economies (Report of the Financial Sector National Technical Working Group, Vision 20:2020, 2009). Although the money market has witnessed some expansion in the review period, there are observed problems which the market has to contend with. The overall performance of the market since inception has been mixed. In particular, as a propeller of economic growth and development, the money market in Nigeria has performed below its potential (Nwosu & Hamman, 2008). Prior to the establishment of the CBN in 1959, there was no formal or organized domestic money market in Nigeria, what existed then was an integral part of the London Money Market. The market operated by moving funds from the London money market to Nigeria for the purpose of financing export produce. With the establishment of the CBN and the subsequent attainment of political independence in 1960, the CBN became involved in the active development of Nigeria's money market. The Nigerian money market now constitutes a very important segment of the Nigeria's financial system and has assumed a more prominent role in the conduct of monetary policy. The market comprises the inter-bank funds market and short-term securities market. The basic functions of the Nigeria money market according to Nwosu and Hamman (2008) is to facilitate the raising of short-term funds from the surplus sector to the deficit sector of the economy. The money market allows money available for short periods to be directed to those who can use them. In addition to facilitating the liquidity management of the economic actors, money markets fulfill a number of additional economic functions; Facilitates the conduct of monetary policy through market-based instruments; Provides anchor for the short end of the yield curve; Support the development of the foreign exchange market; Provide the authorities with better signals of market expectations.; Allows banks and their customers to better manage their liquidity; Strengthens competition in financial intermediation; Help to promote private issuance of negotiable certificates of deposits, promissory notes and commercial papers and short term instruments and support the development of longer term corporate bonds markets; Allows institutions to hold a proportion of their funds in liquid assets that will enable them realize cash quickly should the

need arise; and the money market is used to take care of imbalances in the supply of money between the financial system as a whole and the government.

Ehigiamusoe (2012) concludes in his study that the performance of Nigeria money market and its impact on economic growth is the resultant effect of the level of development of the market itself. And a lot of key issues are facing the Nigerian money market which hinders it development. These challenges include; dearth of instruments and lack of market breadth and depth; inadequate skilled manpower; the oligopolistic structure of the market; dependence on government and slow growth of the secondary market; information gap and asymmetry; inadequate risk management and corporate governance framework; regulatory challenges; absence of efficient and cost effective systems for transferring ownership of the securities traded in the secondary market, etc. In comparison with money markets of developed economies, the depth of the Nigerian money market still needs restructuring. There are not enough investment outlets in the market. Ikpefan and Osabuohien (2012) in their contribution see the activities in the money market to have been influenced by the monetary conditions and the various policy actions by the CBN, including the adjustment of its policy and prudential rates. With the exception of the Negotiable treasury certificates segment, activities increased in all other segments, evidenced by the higher value and volume of transactions and an increase in the outstanding assets. Open Market Operations (OMO) are conducted on a daily basis with the aim of effectively managing liquidity in the system. The instruments used for the conduct of OMO s were the Negotiable Treasury Bonds (NTBs), Treasury Bonds, CBN bills and the recently approved non- rediscountable special NTBs which helped to bridge the supply shortages that were experienced following the dearth of NTBs.

The Structural Adjustment Programme was launched on July, 1986 by the federal government to alter and restructure the consumption and production patterns of the economy from high import dependency and over-reliance on export of crude oil as well as eliminating price distortions that emanate from over-valued naira exchange rate (Isibor, Ikpefan, & Okafor, 2015). The tempo of activities in the money market has increased markedly since 1986 within the context of financial deregulation as the money market operated in an atmosphere of relative freedom under an improved institutional environment. Up to 1993 while the market interest rates continue to be determined by the market forces of demand and supply. Ceilings were however placed on interest rate in 1994 with the aim of inducing the recovery of the productive sectors of the economy as observed by the authors. Isibor, Ikpefan and Okafor (2015) were worried that the capital market crash that happened in 2008 which made many of the quoted stocks illiquid as their holders were unable to convert them to cash to meet their domestic and other investment needs and this affected the money market as new investors were scared of jumping into a vehicle that seems not to have a brake should they wish to disembark. There were also other issues like distress borrowing by ailing banks that use the money market, huge fiscal deficits financed by the banking system, and rising inflation and interest rates.

Owing to the many problems observed after the global financial crises that also affected the money market, the CBN embarked on another round of reform to make the markets more efficient and stand the test of time. To this affect, Ajibade (2016) reveals that there was a positive side to the Central Bank of Nigeria (CBN) reforms going by applause from some experts. The experts according to Ajibade said the reforms have sparked interest in money market instruments. Ajibade notes thus "The reforms, they said, had not only brought about safer, healthier and a more conducive investment climate, but have buoyed confidence in the industry. They said firms that could not wait for the recovery of the capital market are looking

at money market instruments for growth. They do this by approaching banks for Bankers Acceptance (BAs), Commercial Papers (CP) and fixed deposits, among others " (2016, p.2).

Empirical Review

Few studies have examined the impact of money market on economic development. Ehigiamusoe (2012) assessed the challenges of money market development and its impact on economic growth in Nigeria. The study adopts Ordinary Least Square method and evidence suggests that the Nigerian money market is significantly but negatively related to economic growth due to several challenges. Ikpefan and Osabuohien (2012) in their own study focused on the interactions between discount houses, money market instruments and economic growth in Nigeria. Employing cointegration and vector error correction techniques on time series data obtained from Central Bank of Nigeria, it established that a long-run relationship exists between discount houses operations and economic growth on one hand and money market instruments, on the other. In another study Ehigiamusoe (2013) examined the impact of money market on economic growth in Nigeria using data for the period 1980-2012. Econometrics techniques such as Ordinary Least Squares Method, Johanson's Co-integration Test and Vector Error Correction Model were used to examine both the long-run and short-run relationship. Evidence from the study suggest that though a long-run relationship exists between money market and economic growth, but the present state of the Nigerian money market is significantly and negatively related to economic growth. The link between the money market and the real sector of the economy remains very weak which implies that the market is not yet developed enough to produce the needed growth that will propel the Nigerian economy because of several challenges. Ibrahim, Ogunde and Shaeed (2014) investigated the impact of money market operation on economic growth of Nigeria. Using data was collected from the CBN statistical Bulletin for the period between 1981 – 2013 and the ordinary least square techniques with the aid of SPSS 16.0 software package, their findings indicate that money market interest rate and ratio of loan to deposit in Nigeria within the period under study have a negative relationship with the GDP. Solomon (2015) on his part assessed the role of discount houses in the development of the Nigerian money market. It revealed that discount houses were financial institutions devoted to trading in money market securities in the secondary market established to serve as financial intermediaries between the Central bank of Nigeria (CBN), licensed banks and other financial institutions. DHs mobilize funds for investments in securities by providing discounting/rediscounting facilities in government short-term securities. The emergence of discount houses as major operators in the money markets of some economies was as a result of the need for institutional support to foster the growth of an active money market, deepen money market transactions and promote active trading in private sector financial instruments. Review carried out shows that despite the short period of their establishment they have performed creditably in the money market but were faced with numerous challenges which includes high liquidity in hands of the commercial banks and fiscal indiscipline in the government's activities. The gap in literature on the effect of money market on economic growth of Nigeria has necessitated this study using current data as sourced from CBN Statistical Bulletin from 1990-2017.

METHOD

This study adopts quasi-experimental design. This is used because the study intends to investigate the strength of relationship between two or more economic factors. The secondary data was mainly used in this study sourced from CBN Statistical Bulletin from 1990-2017.

Specification of Model

The model specification involves identifying the independent (x) and dependent (y) variables and the economic relationship between the variables. Using the linear regression model, the

independent variables in this study are Treasury Bills Rate, Treasury Bills Issues, Money Market Value while the dependent variable is gross domestic product which is a measure of Nigeria's economic growth. The model looks thus: Y= f (x)

GDP= F (Treasury Bills Rate, Treasury Bills Issues, Money Market Value)

Mathematically, this can be re-presented as

$$GDP_t = \beta_0 + \beta_1 TBRATE_t + \beta_2 TRBO_t + \beta_3 MONVL_t + U_{t \,......} (2)$$

Where:
β_1, β_2 and β_3, are parameter estimates for TBRATE, TRBO and MONVL respectively.
U_{1t} = Error terms
β_0 = intercept of GDP_t model
t = number of years

Where: Treasury Bills Rate, Treasury Bills Issues, Money Market Value are expected to have positive and significant relationship with GDP. The growth rate of each of the variables under examination will occur if the coefficient of the time variable (t) which is β_1 is positively significant. The negative but significant value of the coefficient of the squared time variable (β_1) will imply deceleration in growth rate of the variables while stagnation in growth rate of the variables will occur if the coefficient of the time variable (t) is no significant.

Method of Data Analysis
This study will adopt the unit root test, ordinary least square, co-integration and variance decomposition techniques to estimate the models. GDP TBRATE TRBO MONVL

ANALYSIS AND RESULT
Data were subjected to Eviews 9 for analysis.

Table 1: Descriptive Statistics

	GDP	TBRATE	TRBO	MONVL
Mean	32780.59	13.43396	1015.721	2852.948
Median	15311.43	12.72500	642.9678	1015.030
Maximum	113711.6	26.90000	3579.799	12382.05
Minimum	499.6769	6.130000	25.47600	66.90740
Std. Dev.	36084.33	4.727404	1076.821	3586.183
Observations	28	28	28	28

The result in table 1 showing the descriptive statistics for the variables shows that the minimum and maximum value for GDP is 499.6769 and 113711.6 respectively with a mean of 32780.59 as an average for the 28 years period under review. It also showed that TBRATE has a minimum and maximum value of 6.13 and 26.900 respectively and a mean of 13.43396 suggesting that treasury bill rate has been on the high side to encourage participation in the purchase of government bills. The minimum and maximum value of MONVL are 66.907 and 12382 respectively with a mean value of 2852.948 suggesting that the market has witnessed increased growth in the past 28 years as indicated by the money market value. TRBO has a minimum and maximum value of 25.476 and 3579.799 and a mean of 1015.721 for the 28 years under review suggesting also that the money market treasury bill outstanding has grown significantly.

Table 2: Correlation Matrix

	GDP	TBRATE	TRBO	MONVL
GDP	1.000000	-0.169307	0.968402	0.987076
TBRATE	-0.169307	1.000000	-0.040220	-0.074320
TRBO	0.968402	-0.040220	1.000000	0.974448
MONVL	0.987076	-0.074320	0.974448	1.000000

Table 2 shows the collinearity between the independent variables which suggests that Treasury bill rate has a negative correlation with the remaining Treasury bill outstanding and money market value. However, Treasury bill outstanding has positive correlation with money market value suggesting that as more treasury bills are subscribed to, the money market value increases.

Table 3: Stationarity Test for Variables

Variables	ADF Test		Phillips Perron		
	At Level 1(0)	First Difference 1(1)	At Level 1(0)	First Difference 1(1)	Order of Integration
GDP	-2.519966	-0.662529	5.867726	-0.201918	1 (1)
TBRATE	-3.314552	-7.117717	-3.314552	-8.518924	1 (1)
TRBO	0.833229	-2.365767	1.934101	-2.365767	1 (1)
MONVL	9.774425	-0.948929	9.774425	-0.667093	1 (1)
Critical values: **1**%	-3.699871	-3.711457	-3.699871	3.711457	1 (1)
5%	-2.976263	-2.981038	-2.976263	-2.981038	1 (1)
10%	-2.627420	-2.629906	-2.627420	-2.629906	1 (1)

The results of the unit root tests using Augmented Dickey-Fuller test and Philip Perron unit root test to determine whether they are stationary or non-stationary series. The result show that the non stationary in all variables at level. The results shows that all the variables do not have unit roots (that is, are stationary) at 5% in their first differences. Thus, variables are said to be integrated in the order of 1(1). Moreover, having observed that all the variables for the study are not stationary, we, therefore, proceed to test for actual number of co-integration equations that exist among the series.

Table 4 Summary of Johansen Co-integration Test

Trend assumption: Linear deterministic trend				
Series: GDP TBRATE TRBO MONVL				
Lags interval (in first differences): 1 to 1				
Unrestricted Cointegration Rank Test (Trace)				
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.543525	51.50321	47.85613	0.0001
At most 1 *	0.465136	31.11347	29.79707	0.0001
At most 2	0.350429	14.84416	15.49471	0.0001
At most 3	0.130195	3.626649	3.841466	0.5000
Trace test indicates 4 cointegrating eqn(s) at the 0.05 level				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.543525	20.38975	27.58434	0.0001
At most 1	0.465136	16.26930	21.13162	0.0001
At most 2	0.350429	11.21751	14.26460	0.0001
At most 3	0.130195	3.626649	3.841466	0.5000
Max-eigenvalue test indicates 4 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

The Johansen co-integration was used to test the number of variables integrated in the equation. Result in table 4 shows the Trace Unrestricted Co-integration Rank Test indicates 4 cointegration equations which suggest that GDP is co-integrated with all the independent variables. The Maximum Eigenvalue also confirms that there are four co-integrating equations among the variables in the model. This confirms that there is long run relationship between money market proxies and economic growth in Nigeria.

Table 5: Results of OLS

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14021.53	2832.074	4.950977	0.0000
TBRATE	-784.7271	190.3526	-4.122491	0.0004
TRBO	6.547926	3.710216	1.764837	0.0903
MONVL	7.939223	1.116250	7.112404	0.0000

R-squared	0.985463
Adjusted R-squared	0.983646
Durbin-Watson stat	0.857677
F-statistic	542.3353
Prob(F-statistic)	0.000000

The model estimate is linear and presented as follows:

$$GDP=14021.5340-784.7271*TBRATE+6.5479*TRBO+ 7.9392*MONVL$$

Money market value (7.9392) and Treasury bill outstanding (6.5479) have positive effect on GDP, which means that the higher the money market value and treasury bill outstanding, the higher the gross domestic product which conforms to apriori expectation. Treasury bill rate (-784.7271) has inverse relationship with GDP, that is, a negative relationship exists between the two. The t-statistics shows that TBRATE has a prob value of 0.0004 which implies a negative and significant relationship between Treasury bill rate and GDP. TRBO has a prob value of 0.0903 which also implies that Treasury bill outstanding has positive but insignificant relationship with GDP. Again, MONVL has a prob value of 0.000 which implies that there is positive and significant relationship between money market value and GDP. The Coefficient of Determination (R^2) was found to be 98.54% which implies that the regression fitted. The adjusted R^{-2} estimated as 98.36% implying that 98.36 percent of the total variation found in GDP is explained by the presence of Money market value, Treasury bill rate and Treasury bill outstanding. In addition, the F-statistics shows a value of 542.3353 with a prob value of 0.0000 implying that the overall regression is significant. This implies that we accept the alternative which shows that money market indicator has significant impact on Nigeria's economic growth.

Table 6: Variance Decomposition: Cholesky Ordering: GDP TBRATE TRBO MONVL

Variance Decomposition of GDP					
Period	S.E.	GDP	TBRATE	TRBO	MONVL
1	1038.143	100.0000	0.000000	0.000000	0.000000
2	2372.148	85.16067	0.045165	14.37997	0.414195
3	3257.120	88.35677	0.360362	9.878134	1.404735
4	5768.753	71.79435	1.766159	12.67459	13.76490
5	7346.780	65.92849	1.102980	10.87344	22.09509
6	9957.048	64.01077	0.914343	10.80901	24.26587
7	11874.75	66.58388	0.665767	10.13082	22.61953
8	14441.33	70.43066	0.913880	9.677339	18.97812
9	16974.86	72.79149	1.172066	9.501215	16.53523
10	19749.75	73.91184	1.458036	9.284837	15.34529
Variance Decomposition of TBRATE:					
Period	S.E.	GDP	TBRATE	TRBO	MONVL
1	4.487632	24.86522	75.13478	0.000000	0.000000
2	4.682238	24.20844	70.01234	0.000737	5.778481
3	4.911280	23.50246	64.08611	0.002156	12.40927
4	5.342256	19.98032	54.33187	0.365417	25.32239
5	6.186011	15.38632	40.53989	0.272793	43.80099
6	7.184590	11.52630	30.06351	0.466461	57.94373
7	7.586191	10.47567	27.07409	0.511090	61.93915
8	7.856604	13.54374	25.69475	0.478262	60.28325
9	8.071868	16.96130	25.28776	0.502510	57.24843
10	8.499168	21.83605	25.37124	0.495824	52.29688
Variance Decomposition of TRBO:					
Period	S.E.	GDP	TBRATE	TRBO	MONVL
1	101.4182	32.04358	3.211119	64.74530	0.000000
2	129.9636	19.55406	9.364122	70.12152	0.960297
3	251.0835	8.110635	2.852314	56.15452	32.88253
4	450.6741	2.942352	4.526668	30.54076	61.99022
5	709.9222	1.186145	4.581631	20.29651	73.93571
6	920.1697	0.727714	6.049929	16.66028	76.56208
7	1063.084	1.461034	6.769301	15.62898	76.14069
8	1169.618	4.252342	6.454735	15.89640	73.39652
9	1266.163	8.418445	5.757880	16.12146	69.70222
10	1387.136	13.47895	4.805148	16.49693	65.21897
Variance Decomposition of MONVL:					
Period	S.E.	GDP	TBRATE	TRBO	MONVL
1	305.4199	15.14666	1.589241	20.30460	62.95950
2	577.5259	6.821644	0.627395	14.89899	77.65197
3	910.8987	6.487576	0.637810	12.55685	80.31777
4	1214.488	7.894241	1.008403	12.07171	79.02565
5	1480.415	11.73562	1.086468	11.65393	75.52399
6	1761.816	17.91297	0.794295	11.87648	69.41626
7	2040.044	23.69534	0.592424	11.71620	63.99603
8	2368.418	29.51973	0.519251	11.76855	58.19246
9	2694.338	33.96037	0.470942	11.68032	53.88837
10	3054.512	38.02543	0.503199	11.67766	49.79371

Table 6a shows the Variance Decomposition for 10 period. It can be deduced that the standard error for GDP increased from 1038.143 in period 1 to 19749.75 in period 10. However, the variance of GDP showed a decreasing value from 100 in period 1 to 73.91184 in period 10. Variance decomposition of TBRATE showed standard error rising from 4.487632 in period 1 to 8.499168 in period 10 while the variance fell from 75.13478 in period 1 to 25.37124 in period 10. Variance decomposition of TRBO showed standard error rising from 101.4182 in period 1 to 1387.136 in period 10 while the variance reduced in value from 64.74530 in period 1 to

16.49693. Also Variance decomposition of MONVL showed standard error rising from 305.4199 in period 1 to 3054.512 in period 10 while the variance fell from 62.95950 in period 1 to 49.79371 in period. However, MONVL and TBRATE had an increasing variance to GDP of 0.045165, and 0.414195 value respectively in period 1 which all rose to 1.458036 and 15.34529. on the other hand, TRBO has a decreasing variance with GDP as it showed a value of 14.37997 in period which fell to 9.284837. It can therefore be deduced that GDP does not move in direction of Treasury Bill Outstanding.

Table 6b: Variance Decomposition Impulse

Response to Cholesky One S.D. Innovations
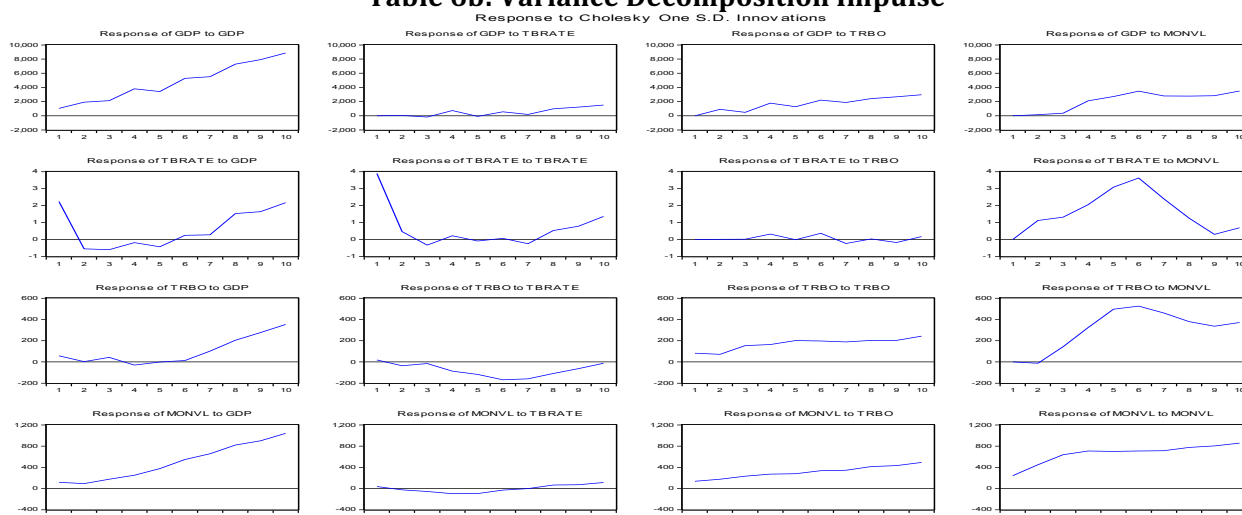
The variance impulse shows that GDP responds greatly to TBRATE and fairly to MONVL but shows no response to the movement of TRBO. This therefore provides definite answer that treasury bill rate and money market value have effect on GDP in Nigeria for the period under review.

CONCLUSION AND RECOMMENDATIONS

The Nigeria money market has over the years grown into a market with significant force for mobilizing funds for investment in Nigeria. The development of the market led to increase in the confidence reposed on the market by both local and foreign companies as well as investors. The money market is a key component of the financial system as it is the fulcrum of monetary operations conducted by the central bank in its pursuit of monetary policy objectives. It is a market for short-term funds with maturity ranging from overnight to one year and includes financial instruments that are deemed to be close substitutes of money. Findings in this study have shown that money market value has positive and significant effect on GDP. It also revealed that Treasury bill rate has negative but significant effect on GDP. Furthermore, Treasury bill outstanding has positive but insignificant effect on GDP . In conclusion, the money market in Nigeria is an important part of the economy and as a financial market constant reform is necessary to make it more efficient in order for GDP to respond to its activities. It is recommended that the current reforms in the money market should be sustained given that the Nigeria money market has a significant role to play in channelling resources for investment and productive purposes. The Nigerian money market should be packaged in line with the current globalization trend. The internationalization of the Nigerian money market will allow a flow of foreign investment into the economy and that way enhancing the industrialization process. The money market authorities should increase the number of tradable instruments in the market.

References

Adam, J. A (1998). Financial intermediation and economic growth: Evidence from Nigeria. *Journal of Economic Management*.

Central Bank of Nigeria (2015). CBN Annual Report and Statement of Account *www.cenbank.org*

Ehigiamusoe, U. K. (2012). The challenges of money market development and its impact on economic growth in low-income countries: Evidence from Nigeria. Retrieved from *www.academia.edu*

Ehigiamusoe, U. K. (2013). The link between money market and economic growth in Nigeria: Vector error correction model approach. *International Journal of Social, Behavioral, Educational, Economic and Management Engineering,* 7(12), pp.1799-1807.

Ekmekcioglu, E. (2013). Role of financial markets in a global economy and the concept of uncertainty. *International Journal of Academic Research in Economics and Management Sciences*, 2 (4), 199-206.

Goldsmith, R. W. (1969). *Financial structure and development*. New Haven: Conn Yale University Press

Haley, C.W. & Schall, L. D. (1973). *Theory of financial decisions*. McGraw-Hill Companies.

Ibrahim, S.J., Ogunde, O.O. & Shaeed, B. (2014). The impact of money market operations on the economic growth of Nigeria (1981 – 2013). Retrieved from *http://www.africanscholarpublications.com*

Ikpefan, O.A. & Osabuohien, E. (2012). Discount houses, money market and economic growth in Nigeria (1992-2007). *Economic Insights – Trends and Challenges.* I (3), 19 – 30.

Isibor, A. A., Ikpefan, O. A. & Okafor, T. C. (2015). Impact of money market on the liquidity of some selected quoted banks in Nigeria. Retrieved from *http://m.covenantuniversity.edu.ng*

Jalloh, M. (2009). *The role of financial markets in economic growth*. Accra: MEL Publishers.

Kakawa Discount House Limited (2005). Discount Houses in Nigeria. Retrieved from *www.google.com*

King, R.G. & Levine, R. (1992). Finance and growth, Schumpeter might be right. *Quarterly Journal of Economics*

Kolawole, B. O. (2012). Open markets, financial sector development and economic growth in Nigeria. *European Scientific Journal,* 8(28), pp.283-300.

Levine, R. (1991). Law, finance, and economic growth. *Journal of Financial Intermediation*, 8 (1-2), 8-35.

Levine, R. (1996). Financial development and economic growth: Views and agenda. *Journal of Economic Literature*, 35, 688-726.

Lucas, R.E. (1988). On the mechanics of economic development. *Journal of monetary Economics*

McKinnon, R. I. (1973). *Money and capital in economic development*. Washington D.C: The Bookings institution.

Nwakanma, P.C. & Nnamdi, I.S. (2012). Corporate sectoral investments and economic growth in Nigeria: Evidence from the capital market. *Journal of Business Administration Research*, 1(2), pp.99-109.

Nwosu, C. P. & Hamman, H. M. (2008). The Nigerian money market: Issues and challenges. Central Bank of Nigeria Bullion, (32).

Ogbulu, O. M. (2009). Market portfolio and capital asset prices: Conceptual issues and methodological enquiry. *African Journal of Applied & Theoretical Economics, (AJATE),* 8(1), 57-74.

Olofin, S. O. & Udoma, J. A. (2011). *Financial structure and economic growth in Nigeria: A macroeconometric Approach*: Ibadan.

Olowe, R.A. (1977). *Financial management: concepts analysis and capital investments*, Lagos: Brierly Jones.

Onoh, J.K (2002). *Dynamics of money, banking and finance in Nigerian; An Emerging Market.* Aba: Astra Meridian Publishers.

Powell, B. (2003). Economic freedom and growth: The case of the celtic tiger. *Cato Journal.* 22(3), 431-448.

Raja, P. & Mahalakshmi, M. (2015). Impact of money market in Indian economic development in present scenario. *International Journal of Advanced Scientific Research & Development (IJASRD),* 02(01), 108 – 117.

Schumpeter, J.A. (1934). *The theory of economic development*. Cambridge M.A, Harvard University Press.

Solomon, O. (2015). The role of discount houses in money market development in Nigeria. *www.independent.academia.edu*

Uruakpa, P. C. (2019). Impact Of Money Market Reforms On Economic Growth Of Nigeria 1990 – 2017. *Archives of Business Research, 7(SP),* 122-134.

Ugolini, P. (2001). *National Bank of Poland: The Road to Indirect Instruments.* Occasional Paper No. 144, Washington: International Monetary Fund.

APPENDIX

	GDP	TBRATE	TRBO	MONVL
1990	499.6769	17.50000	25.47600	66.90740
1991	596.0447	15.00000	56.72830	97.30290
1992	909.8033	21.00000	103.3175	144.7673
1993	1259.070	26.90000	103.3265	148.9630
1994	1762.813	12.50000	103.3265	153.9471
1995	2895.201	12.50000	103.3265	148.2781
1996	3779.133	12.25000	103.3265	126.6150
1997	4111.641	12.00000	221.8005	249.7490
1998	4588.990	12.95083	221.8015	249.2076
1999	5307.362	17.00000	361.7584	396.6466
2000	6897.482	12.00000	465.5358	518.4232
2001	8134.142	12.95000	584.5358	652.4661
2002	11332.25	18.88000	733.7620	804.5859
2003	13301.56	15.02000	825.0545	980.5538
2004	17321.30	14.21000	871.5770	1049.505
2005	22269.98	7.000000	854.8280	1342.353
2006	28662.47	8.800000	701.3998	1585.315
2007	32995.38	6.910000	574.9294	2209.411
2008	39157.88	6.910000	471.9295	2846.855
2009	44285.56	6.130000	797.4825	3394.755
2010	54612.26	10.25000	1277.100	4447.309
2011	62980.40	16.57000	1727.910	5545.528
2012	71713.94	11.89000	2122.927	6247.890
2013	80092.56	12.17000	2581.551	6853.883
2014	89043.62	14.89000	2815.520	7677.338
2015	94144.96	7.690000	2772.867	8691.423
2016	101489.5	18.68000	3277.279	10870.51
2017	113711.6	15.60000	3579.799	12382.05

Source: Central Bank of Nigeria Statistical Bulletin 2017.