## MONEY MARKET AND ECONOMIC GROWTH IN NIGERIA: A CAUSALITY ANALYSIS

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**Abstract**
*This study is on the role of money market on economic development of Nigeria. The study 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. Secondary data from 1990 to 2014 were obtained from Central Bank of Nigeria Statistical Bulletin. The methods of analysis included regression, unit root tests, co-integration tests, and parsimonious error correction. The results show that the money market has significant impact on the growth of the Nigerian economy. However, the impact was specifically significant with respect to bankers' acceptances and certificates of deposits. Based on the findings, the study 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.*

**Keywords:** *Money market, co-integration test, money market instruments, parsimonious error correction, economic development.*

**Background to the study**
The financial system of any country provides the catalyst through financial intermediation for productive activities to ensure economic growth and development (Olowo, 2008). The Nigerian financial sector is undoubtedly the most important in the political economic system because it provides the necessary lubricant that keeps the wheel of the economy turning and it is an engine for economic growth.
The sector provides funds for investments and also allocates these funds as efficiently as possible to those projects that offer best returns to fund owners. If the sector happens to be

weak, the economy suffers for it. This has become apparent that no economy can function or achieve any meaningful growth without a well-positioned or established financial system to meet the challenges of economic development. (Adeyemi, 2012).

The financial system can be examined widely from the financial institutions and the financial markets. The financial system is the mechanism that allows two units to engage in exchange of funds. This system usually substitutes the funds of surplus units for the deficit units security which was the major function of the money and capital markets in Nigeria. That is, the money market facilitates the raising of short term funds from the surplus sectors of the economy to the deficit sectors. The surplus unit (usually the household) must trust the financial system sufficiently enough to part with its funds and the financial system must as well be careful and follow some procedures to ensure that the funds of the deficit unit is redeemable as at when due to keep the system alive and effective. (CBN, 2010).

The major concern for this study is the money market, the money market represent the short end of the financial system which provides short-term investment having a maturity date of less than one year. Also, the money market is an intermediary for short-term financial assets that are close substitutes for money in Nigerian money market as established by the Central Bank of Nigeria primarily for mobilizing domestic savings for productive investment with funds to enable them implement programmes. (Nibeabuchi, 2004).

The Nigerian money market offers opportunities for trading in the short-term instruments which are very liquid and have negligible risk and the money market also provides the basis for implementation of monetary policy. The types of instruments traded are treasury bills, treasury certificates, commercial papers, bankers' acceptances, etc. Commercial papers are dominant players in the market while the market provides the basis of operations manipulation and execution of monetary policy (indirect instrument) with discount houses intermediary between the central bank and other banks where the former is playing the role of the lender of last resort to the market. (Jhingan, 2004).

The role of the money market in development of the economy cannot be over emphasized as the money market plays a key role in banks liquidity management and transmission of money policy by providing the appropriate instrument and partners for liquidity trading, the money market allows refinancing of short-term positions and facilitates the mitigation of business liquidity. However, a development money market has different types of near assets in number such as promissory notes, treasury bills, etc, as the number of near money asset increases, the more development money market becomes. Thus, the development of the money market smoothens the progress of financial intermediation and boost lending to the economy which in turn improves the country's economy and brings about development in its economic activities.

This study is carried out to identify the contributions of the money market towards the financial and economic development of the Nigerian economy. Money like any other commodity is bought and sold in a market called the money market. The money market provides facilities for exchange of financial claims or instrument where maturities ranges from one day to one calendar year (12 months). (Okereke et al, 2009). However, the work will be discussing in details the events and development within the money market and its impact on the economy of Nigeria.

## Statement of the problem

The Nigerian economy is based on the money market which is designed as a means of liquidity adjustment and also a potential path for development. Therefore, the money market needs to be infused with more liquidity to ensure safely for investors in order to help fund economic development. Their major and largest problems with the money market are corruption of the system that even transparency cannot fix, provision of more regulation will be appropriate. Iyiegbuniwe (2005) pointed out that although the Nigerian money market has experienced significant growth, both in breadth of securities as well as the volume of trading since the liberalization of the financial system since 1986, it still needs to be deepened.

Further to achieve the required vibrancy that is expected of a money market. This does not mean that the money market is inefficient: it goes a long way to explain that there is serious need to evaluate its performance in relation to its contributions to economic development of the country. Eniekezimene (2012) says that the Nigerian money market is lying fully tested by the general distress and crisis of confidence in the economy. It hardly comparable of providing alone the bulk of the capital required to fund development of the real sector of the economy.

The failure of the monetary and exchange rate policies to achieve the desired economic objectives under the control regime led to the adoption of the Structural Adjustment Programme (SAP) in 1986. In particular, the major elements were deregulation and liberalization of the financial sector, and the trade regime. Thus, 1986 marked the beginning of Nigeria's response to the globalizing forces of the 21st century: consistent with the policy of deregulation and globalization, the CBN adopted the policy of federal licensing of banks in order to improve the efficiency of the financial sector and enhance financial deepening in the financial markets.

The market should be deep and broad to be able to absorb large volumes of transactions without substantial effects on security prices and interest. (Okafor, 2012). The above defining feature of the market demands that there exist many active market participation such as the traction of an individual investor will have just little impact on security prices and interest rates. It also requires that there are different varieties of securities to ensure that there is always alternative (other options) investment instruments available to be able to satisfy the respective return and risk of investors. Among the biggest challenges of the Nigerian money market is the creation of a highly liquid market in which investors can buy and sell with relative ease, where large transactions are consummated without significant changes in prices. This becomes necessary given the backdrop that well informed international investors generally consider the level of market liquidity before investing in such a market.

Weak domestic payment systems have also hindered efficient liquidity management and have obstructed the development of the money market. Therefore, short-term rates have been slow to respond well to changes in liquidity conditions resulting from the monetary operations and the CBN has encountered difficulties in managing liquidity in the system. Also, the absence of efficient and cost effective system for transferring ownership of the securities traded in the secondary market or the funds to pay for them has obstructed the market development or repurchase transaction. In turn, the lack of repurchase framework has delayed the introduction of collateralized lending in the inter-bank trading, particularly when there has been limited trust between participants.

The comparison with the money markets of developed economies, the depth of the Nigerian money market still needs further restructuring. There are not enough investment outlets in the market. Given the above scenario, therefore, this study focuses on finding how the money market enhances the Nigerian economic growth so as to fill the research gap.

## Objectives of the study

The main objective of this study is to examine the role of the money market in the economic development of Nigeria. More specifically, the study seeks to achieve the following objectives:

i)     To examine the relationship between treasury certificates and economic growth in Nigeria.

ii)    To examine the relationship between treasury bills and economic growth in Nigeria.

iii)   To examine the relationship between certificates of deposit and economic growth in Nigeria.

iv)    To examine the relationship between bankers' acceptance and economic growth in Nigeria.

## Research hypotheses

The following null hypotheses were formulated in this study:

i)     There is no significant relationship between treasury certificates and economic growth in Nigeria.

ii)    There is no significant relationship between treasury bills and economic growth in Nigeria.

iii)   There is no significant relationship between certificates of deposit and economic growth in Nigeria.

iv)    There is no significant relationship between bankers' acceptance and economic growth in Nigeria.

## Organisation of the paper

This paper is organised in five sections. Section one is the introduction. Section two is the review of related literature, the third section talks about the methodology of the study, section four presents and analysis the data, and finally, section five summarises, makes recommendations and concludes the work.

## REVIEW OF RELATED LITERATURE

This section reviews related and relevant to the subject matter under conceptual framework, theoretical review and empirical review.

## Conceptual framework

The money market is the second arm of the financial market. 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. 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. Developed, active, and efficient interbank and money markets 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.

Well developed money markets exist in developed countries, particularly in the high income ones, while those in the low income countries mirror the state of their development. In the latter, the markets are narrow, poorly integrated, and in some instances, non-existent in the real sense of it. (Nwosu and Hamman, 2008). The level of development of a money market serves as a barometer for measuring the level of development of the economy. They assert that the degree and tempo of development of one reflects the spate of development of the other. The money market is one of the categorizations of the financial markets. The other category is the capital market. While the money market deals in short-term funds, the capital market deals in long-terms loanable funds. (Anyanwu, 1996). The basis of distinction between the money and capital market lies in the degree of liquidity of instruments bought and sold in each of the markets.

**Theoretical review**
The linkage between the financial sector and economic performance can be captured by the relationship between money supply and gross domestic product (MS-GDP ratio). At the turn of the Millennium, it was clear that the Nigerian banking sector was still struggling with systemic crises that left it on the verge of collapse. Soludo, (2008) posited that the beleaguered sector was characterized by negative features such as: low aggregate banking credit to the domestic economy (20 percentage of GDP); systemic crises prompting resort to central bank bailouts; inadequate capital base; oligopolistic structure of banks; poor corporate governance; low banking/population density 1:30,432; payment system that encouraged cash-based transactions, among others. The emergence of the global financial crises has however unsettled the relative stability subsisting in the Nigeria's banking sector since its consolidation in 2004. The plummeting government revenue from crude oil proceeds has reduced public sector deposits a major revenue earner for Nigerian banks (Igbatayo, 2011). Also, the global economic meltdown caused a reduction in the remittances sent to Nigeria by the nation's diaspora community.

In sum, the existence of money markets facilitate trading in short-term debt instruments to meet short-term needs of large users of funds such as governments, banks and similar institutions. Government treasury bills and similar securities, as well as company commercial bills, are examples of instruments traded in the money market. A wide range of financial institutions, including merchant banks, commercial banks, the central bank and other dealers operate in the money market. Public as well as private sector operators make use of various financial instruments to raise and invest short term funds which, if need be, can be quickly liquidated to satisfy short-term needs. (Mohamad, 2009).

Modern growth theory developed by Grossman and Helpman. (1991). Lucas, (1988) and Romer, (1986) identifies two main channels through which the financial sector might affect long-run growth in a country. They include; through catalyzing the capital accumulation (including both human and physical capital) and by increasing the rate of technological

progress. The five basic functions of an efficiently working financial sector (such as mobilizing and pooling savings; producing information ex-ante about possible investments and allocating capital; monitoring investments and exerting corporate governance; facilitating the trading, diversification and management of risks; and facilitating the exchange of goods and services) allow the above two channels to work for promoting growth by mobilizing savings for investment; facilitating and encouraging capital inflows; and allocating the capital efficiently among competing uses. (Mordi, 2010).

The link between financial sector and real economy has long been believed by economists that financial markets and institutions are important factors in supporting economic development (See Goldsmith (1969), McKinnon (1973), Schumpeter, (1934) and Shaw (1973). However, these early literature failed to give theoretical linkage between financial development and growth. Recently, many economists have developed a model that drives a formal link between financial intermediation and growth. This literature considers two interrelated issues: it analyses how financial intermediation affects economic growth, and it studies how economic growth might itself affect the evolution and growth of financial intermediation. Levine (1999) for instance agrees that financial intermediaries enhance economic efficiency and, eventually, growth by helping to allocate capital to its best uses. Several other cross-country and panel data studies such as Khan, Senhadji and Smith (2006), King and Levine (1992) and Levine (2004) showed that financial development had a positive impact on economic growth.

## Specific roles of money market in the economy
Money markets play a key role in banks' liquidity management and the transmission of monetary policy. In normal times, money markets are among the most liquid in the financial sector. By providing the appropriate instruments and partners for liquidity trading, the money market allows the refinancing of short and medium-term positions and facilitates the mitigation of your business' liquidity risk. The banking system and the money market represent the exclusive setting monetary policy operates in.

A developed, active and efficient interbank market enhances the efficiency of central bank's monetary policy, transmitting its impulses into the economy best. Thus, the development of the money market smoothes the progress of financial intermediation and boosts lending to economy, hence improving the country's economic and social welfare. Therefore, the development of the money market is in all stakeholders' interests: the banking system elf, the Central Bank and the economy on the whole.

## A. Producing information and allocating capital
The information production role of financial systems is explored by Ramakrishnan and Thakor (1984), Bhattacharya and Pfleiderer (1985), Boyd and Prescott (1986), and Allen (1990). They develop models where financial intermediaries arise to produce information and sell this information to savers. Financial intermediaries can improve the ex ante assessment of investment opportunities with positive ramifications on resource allocation by economizing on information acquisition costs. As Schumpeter (1912) argued, financial systems can enhance growth by spurring technological innovation by identifying and funding entrepreneurs with the best chance of successfully implementing innovative procedures. For sustained growth at the frontier of technology, acquiring information and

strengthening incentives for obtaining information to improve resource allocation become key issues.

**B.    Risk sharing**

One of the most important functions of a financial system is to achieve an optimal allocation of risk. There are many studies directly analyzing the interaction of the risk sharing role of financial systems and economic growth. These theoretical analyses clarify the conditions under which financial development that facilitates risk sharing promotes economic growth and welfare. Quite often in these studies, however, authors focus on either markets or intermediaries, or a comparison of the two extreme cases where every financing is conducted by either markets or intermediaries. The intermediate case in which markets and institutions co-exist is rarely analyzed in the context of growth models because the addition of markets can destroy the risk-sharing opportunities provided by intermediaries. In addition, studies focus on the role of financial systems that face diversifiable risks.

**C.    Liquidity**

Money market funds provide valuable liquidity by investing in commercial paper, municipal securities and repurchase agreements: Money market funds are significant participants in the commercial paper, municipal securities and repurchase agreement (or repo) markets. Money market funds hold almost 40% of all outstanding commercial paper, which is now the primary source for short-term funding for corporations, who issue commercial paper as a lower-cost alternative to short-term bank loans. The repo market is an important means by which the Federal Reserve conducts monetary policy and provides daily liquidity to global financial institutions.

**D.    Diversification**

For both individual and institutional investors, money market mutual funds provide a commercially attractive alternative to bank deposits. Money market funds offer greater investment diversification, are less susceptible to collapse than banks and offer investors greater disclosure on the nature of their investments and the underlying assets than traditional bank deposits. For the financial system generally, money market mutual funds reduce pressure on the FDIC, reduce systemic risk and provide essential liquidity to capital markets because of the funds' investments in commercial paper, municipal securities and repurchase agreements.

**E.    Encouragements to saving and investment**

Money market has encouraged investors to save which results in encouragement to investment in the economy. The savings and investment equilibrium of demand and supply of loanable funds helps in the allocation of resources.

**F.    Controls the price line in the economy**

Inflation is one of the severe economic problems that all the developing economies have to face every now and then. Cyclical fluctuations do influence the price level differently depending upon the demand and supply situation at the given point of time. Money market rates play a main role in controlling the price line. Higher rates in the money markets decrease the liquidity in the economy and have the effect of reducing the economic activity

in the system. Reduced rates on the other hand increase the liquidity in the market and bring down the cost of capital considerably, thereby rising the investment. This function also assists the CBN to control the general money supply in the economy.

## G. Helps in correcting the imbalances in economy.

Financial policy on the other hand, has longer term perspective and aims at correcting the imbalances in the economy. Credit policy and the financial policy both balance each other to achieve the long term goals strong-minded by the government. It not only maintains total control over the credit creation by the banks, but also keeps a close watch over it. The instruments of financial policy counting the repo rate cash reserve ratio and bank rate are used by the Central Bank of the country to give the necessary direction to the monetary policy.

## H. Regulates the flow of credit and credit rates

Money markets are one of the most significant mechanisms of any developing financial system. In its place of just ensure that the money market in India regulate the flow of credit and credit rates, this instrument has emerge as one of the significant policy tools with the government and the CBN to control the financial policy, money supply, credit creation and control, inflation rate and overall economic policy of the Country. Therefore the first and the leading function of the money market mechanism is regulatory in nature.

## I. Transmission of monetary policy

The money market forms the first and foremost link in the transmission of monetary policy impulses to the real economy. Policy interventions by the central bank along with its market operations influence the decisions of households and firms through the monetary policy transmission mechanism. The key to this mechanism is the total claim of the economy on the central bank, commonly known as the monetary base or high-powered money in the economy. Among the constituents of the monetary base, the most important constituent is bank reserves, i.e., the claims that banks hold in the form of deposits with the central bank.

## Instruments traded in the money market

In view of the rapid changes on account of financial deregulation and global financial markets integration, central banks in several countries have striven to develop and deepen the money markets by enlarging the ambit of instruments5 and participants so as to improve the transmission channels of monetary policy. The structure of money markets determines the type of instruments that are feasible for the conduct of monetary management. Evidence and experience indicate that preference for market oriented an instrument by the monetary authorities helps to promote broader market development.

The entire money market in India can be divided into two parts. They are organised money market and the unorganized money market. The unorganised money market can also be known as an unauthorized money market. Both of these components comprise several constituents.

A.  **Call money market**: It is a sub-market of the money money, also known as money at call and money at short notice or inter bank loan market. In this market money is demanded for extremely short period. The duration of such transactions is from few

hours to 14 days. These transactions help stock brokers and dealers to fulfil their financial requirements. The rate at which money is made available is called call rate. The rate is fixed by the market forces such as the demand for and supply of money.

With the rising credit demand, the CBN frequently reviews the Inter-bank participation certificates scheme to improve assets liability management and liquidity management.

B. **Commercial bill market**: This is a market for the short term, self liquidating and negotiable money market instrument. Commercial bills are used to finance the movement and storage of agriculture and industrial goods in domestic and foreign markets. The commercial bill market in India is still underdeveloped.

C. **Treasury bill market**: This is a market for sale and purchase of short term government securities. These securities are called as Treasury Bills which are promissory notes or financial bills issued by the CBN on behalf of the Federal Government of Nigeria. There are two types of treasury bills:
(i) Ordinary or Regular Treasury Bills; and
(ii) Ad Hoc Treasury Bills.

The maturity period of these securities range from as low as 14 days to as high as 364 days. They have become very popular recently due to high level of safety involved in them. Treasury Bills, one of the safest money market instruments, are short term borrowing instruments of the Central Government of the Country issued through the Central Bank. They are zero risk instruments, and hence the returns are not so attractive. It is available both in primary market as well as secondary market. It is a promise to pay a said sum after a specified period. T-bills are short-term securities that mature in one year or less from their issue date. They are issued with three-month, six-month and one-year maturity periods.

The CBN issues T- Bills at a price less than their face value (par value). They are issued with a promise to pay full face value on maturity. So, when the T-Bills mature, the government pays the holder its face value. The difference between the purchase price and the maturity value is the interest income earned by the purchaser of the instrument. T-Bills are issued through a bidding process at auctions. The bid can be prepared either competitively or non-competitively. In the second type of bidding, return required is not specified and the one determined at the auction is received on maturity. Whereas, in case of competitive bidding, the return required on maturity is specified in the bid. In case the return specified is too high then the T-Bill might not be issued to the bidder.

D. **Market for certificate of deposits (CDs)**: It is again an important segment of the Nigerian money market. The certificate of deposits is issued by the commercial banks. These are the transferable investment instrument in a money market. The government initiated a market of CDs in order to widen the range of instruments in the money market and to provide a higher flexibility to investors for investing their short term money.

E.  **Market for commercial papers (CPs)**: It is the market where the commercial papers are traded. Commercial paper (CP) is an investment instrument which can be issued by a listed company having working capital.

F.  **Short term loan market**: It is a market where the short term loan requirements of corporate are met by the Commercial banks. Banks provide short term loans to corporate in the form of cash credit or in the form of overdraft. Cash credit is given to industrialists and overdraft is given to businessmen.

G.  **Banker's acceptance:** It is a short term credit investment created by a non-financial firm and guaranteed by a bank to make payment. It is simply a bill of exchange drawn by a person and accepted by a bank. It is a buyer's promise to pay to the seller a certain specified amount at certain date. The same is guaranteed by the banker of the buyer in exchange for a claim on the goods as collateral. The person drawing the bill must have a good credit rating otherwise the Banker's Acceptance will not be tradable. The most common term for these instruments is 90 days. However, they can very from 30 days to180 days. For corporations, it acts as a negotiable time draft for financing imports, exports and other transactions in goods and is highly useful when the credit worthiness of the foreign trade party is unknown. The seller need not hold it until maturity and can sell off the same in secondary market at discount from the face value to liquidate its receivables.

**Empirical review**

Several studies have been conducted on the relationship between financial intermediation and economic growth. The financial system has long been known in the literature to play an important role in the economic development of a country. But the financial market is divided into two major markets namely capital and money markets.

Some earlier studies have examined the relationship between the capital market and economic growth in Nigeria and majority of these studies have showed that capita market promotes economic development (Atje and Jovanovic, 1993; Levine, 1996; and Obstfeld, 1995). On the other hand, not much empirical works have been done to show the impact of the money market on economic growth in Nigeria. Empirical evidences are divided as to the relationship between money market and economic growth. Greenwood and Jovanovic (1990) show that financial intermediation promotes economic growth. Similar conclusion was arrived at by Ajakaiye (2002). and Adebiyi (2005), while, Ebhodaghe (1996), Lucas (1988), Omoruyi (1991), Sobodu and Sobodu (1999), and Soyibo, Alashi and Ahmad (1997), suggest otherwise.

Goldsmith (1969), using a cross-section of 80 countries during the period 1960-1989 found that financial development promotes economic growth when other growth conditioning variable are taken into account. Also, McKinnon (1973) provides country specific evidence in a study that focuses on the economies of Argentina, Brazil, Chile, Germany, Indonesia, Korea, and Taiwan during the post-World War II period. Examining the relationship between adopted financial policies and economic growth in these countries, McKinnon concluded that better functioning financial system aid faster growth. Related cross-country

studies by King and Levine (1992) Levine and Zervos (1996), and Zingalas (2001) gave empirical evidence supporting the hypothesis that financial development enhances economic growth. With respect to African economies, Gelbard and Leite (1999) provides evidence that although there remains much to be done, financial reforms in many adjusting African countries has contributed positively to economic growth. (Saibu, Wakeel & Nwosu, 2009). In another study, Khan, Senhadji and Smith, and Bruce (2006) employed a dataset comprising 159 countries over 1960-1999 and their analysis confirm a strongly positive and statistically significant relationship between financial depth indicators covering banking system and securities market and economic growth.

Shan and Morris (2002) used a Granger causality procedure to investigate the relationship between financial development and economic growth for nine OECD countries and China by estimating a vector autoregression (VAR) model. The results of their study show that five out of ten countries have a bilateral Granger causality; three of them have reverse causality with economic growth leading to financial development while two countries do not have a causal effect at all. Schoar (2009) agrees that a competitive banking sector is necessary in facilitating firm growth and competition, and that equity markets constitute only a small portion of overall financing in developing countries. The author underscores the importance of scale for banks, and tiny banks will not garner sufficient capital to finance small businesses for expansion. In particular, the banking sector should be established and tailored to improve the real economy and, as a tool to create jobs and opportunities.

Schoar (2009) proposes a two-tier banking system where one tier consist of small banks that serve basic financial needs and the other tier should consist of larger banks that serve medium firms that can create jobs for many others and will grow to large scales. Agha, Ahmed, Mubarak, and Shah (2005) in a study of the transmission mechanism of monetary policy in Pakistan asserted that the role of bank lending is prominent because of the dominance of the banking sector. Other factors that might have enhanced the banks' role included financial reforms, market-based credit allocation and crowding-in of private sector credit due to the decline in fiscal dominance. The extant literature shows that the bank lending channel is an important medium through which monetary policy permeates the real sector of the economy. Therefore, in the pursuit of price stability by monetary authorities, the consideration of the impact of lending on monetary aggregates is a necessary condition for attaining macroeconomic stability.

To Thoma (2009), developing countries require not only small banks and microfinance institutions that support small borrowers, but could also do with relatively sophisticated financial instruments such as hedging price risks through futures markets, insuring against crop failures, purchasing farm equipment through pooling arrangements, and managing the problem brought about by seasonality. He acknowledges inadequate information on the financial history and worthiness of potential borrowers as a challenge and that small banks were better positioned to collect such information.

**METHODOLOGY**
The design of this study is investigative econometric research as it is meant to investigate and analyse the relationship between two variables, namely, money market and economic growth. The researcher has selected four instruments to represent the instruments traded in

the Nigerian money market including bankers' acceptances, certificates of deposits, treasury bills, and treasury certificates; whereas, gross domestic product (GDP) was used as the indicator of economic growth. The researcher also selected the period 1990 to 2014 for this study. Secondary data were collected from Central Bank of Nigeria statistical bulletins.

**Data analysis method**
Descriptive statistics were used to show the means, frequency distribution, variances and standard deviations which were used as a form of summarizing data tabulation. In other words, it shows a summary statistics for the series. Since this study is interested in establishing relationships between variables and possible projections, the study employed multiple regression and correlation analysis. A regression line of a variable, y on x is an equation model that expresses the relationship between y (the dependent variable) and x (the independent or explanatory variable). Symbolically, the linear regression is as follows: $Y = f(x)$, that is a function y is a function of x; $Y = b_0 + b_1x_1 + b_2x_2 + ... + b_nx_n + u$ linear form, where y = the dependent variable, economic growth; x = the independent variable, money market; $b_0$ = the intercept, that is, the value of the dependent variable y, when the explanatory variable x assumes a value of zero; $b_1 ... b_n$ = coefficients of the explanatory variable or the slope; that is, the rate at which a change in the explanatory variable affects the behaviour of the dependent variable. In order to test for stationarity and robustness, unit root and co-integration tests were performed. This enabled us examine and draw inferences based on maximum likelihood approach of Johansen (1991) 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 is also a form of vector error-correction model (VECM) where only one integrating relationship exists between the variable concerned (Hallan and Zanoli, 1993). The model further help 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.

The pair-wise granger causality test was used to ascertain the direction of cause between each of the independent variables and the dependent variables. This is also to determine whether a specific variable or group of variables play any significant role in the determination of other variables in the Vector Error Correction (VEC). It tests whether an endogenous variable can be treated as exogenous and was done by examining the statistical significance of the lagged error correction terms by applying separate t-tests on the adjustment coefficients.

Apriori expectation is that the independent variables should cause changes in the dependent variable both on the short-run and on the long-run. But in reality, the relationship could be the other way round.

**Model specification**
The above is functionally expressed as:
gdp = f(tcs, tbs, cds, bas)                    …………………… 1
Explicitly, the regression model can be specified as:
$gdp = b_0 + b_1tcs + b_2tbs + b_3cds + b_4bas + u$                 ................................. 2

where:
gdp      = gross domestic product
tcs       = treasury certificates
tbs       = treasury bills
cds       = certificates of deposits
bas       = bankers acceptances
$b_0$        = intercept
$b_1 .. b_4$   = coefficients to be estimated


## DATA PRESENTATION AND ANALYSIS
## Presentation of data

The data on table 1 below shows values for gross domestic product (GDP), bankers' acceptances (BAS), certificates of deposits (CDS), Treasury bills (TBS), and Treasury Certificates for the period 1990 to 2014.

Table 1    GDP and money market instruments from 1990 to 2014.

| obs | GDP | BAS | CDS | TBS | TCS |
|---|---|---|---|---|---|
| 1990 | 328606.06 | 953.4 | 3.6 | 25476.0 | 34214.6 |
| 1991 | 328644.54 | 1031.6 | 0.0 | 56728.3 | 34214.6 |
| 1992 | 337288.64 | 126.7 | 536.5 | 103326.5 | 35241.4 |
| 1993 | 342540.47 | 1858.2 | 90.8 | 103326.5 | 36584.3 |
| 1994 | 345228.46 | 4660.2 | 15.2 | 103326.5 | 37342.7 |
| 1995 | 352644.22 | 8102.4 | 48.0 | 103326.5 | 23596.3 |
| 1996 | 367218.09 | 12199.9 | 104.9 | 103326.5 | 0.0 |
| 1997 | 377830.80 | 11956.4 | 0.0 | 221800.5 | 0.0 |
| 1998 | 388468.12 | 17473.9 | 0.0 | 221801.5 | 0.0 |
| 1999 | 393107.17 | 11971.8 | 0.0 | 361758.4 | 0.0 |
| 2000 | 412332.01 | 31774.9 | 0.0 | 465535.8 | 0.0 |
| 2001 | 431783.18 | 30752.8 | 0.0 | 584535.8 | 0.0 |
| 2002 | 451785.67 | 32214.2 | 0.0 | 534535.8 | 0.0 |
| 2003 | 495007.17 | 33900.3 | 0.0 | 825054.5 | 0.0 |
| 2004 | 597576.03 | 24002.9 | 0.0 | 871577.0 | 0.0 |
| 2005 | 561931.39 | 41123.5 | 0.0 | 854828.0 | 0.0 |
| 2006 | 595821.61 | 45743.5 | 0.0 | 701399.8 | 0.0 |
| 2007 | 634251.14 | 81834.0 | 2497.9 | 574929.4 | 0.0 |
| 2008 | 672202.55 | 66393.7 | 0.0 | 471929.5 | 39705.9 |
| 2009 | 718977.33 | 62243.6 | 50500.0 | 797482.5 | 52577.2 |
| 2010 | 776332.21 | 79172.3 | 0.0 | 1279100.0 | 0.0 |
| 2011 | 834000.83 | 282869.7 | 0.0 | 6336765.5 | 0.0 |
| 2012 | 888893.00 | 79040.0 | 34000.0 | 6487629.5 | 0.0 |
| 2013 | 982983.23 | 52441.6 | 3554.0 | 52674.2 | 2661.1 |
| 2014 | 973436.55 | 64423.4 | 4883.8 | 43234.6 | 3225.6 |

*Source: Compiled from CBN statistical bulletins*

**Descriptive statistics**
Table 2 below shows the mean, median, maximum, and minimum values of the variables.
It also shows the skewness and the Jarque-Bera as well as the probability statistics.

Table 2  Descriptive Statistics

|  | GDP | BAS | CDS | TBS | TCS |
|---|---|---|---|---|---|
| Mean | 525643.9 | 42243.40 | 3806.871 | 926757.3 | 12339.71 |
| Median | 441784.4 | 31263.85 | 1.000000 | 468732.7 | 1.000000 |
| Maximum | 982983.2 | 282869.7 | 50500.00 | 6487630. | 52577.20 |
| Minimum | 328606.1 | 126.7000 | 1.000000 | 25476.00 | 1.000000 |
| Std. Dev. | 197989.5 | 57772.95 | 12118.29 | 1722645. | 18137.72 |
| Skewness | 0.841712 | 3.140689 | 3.200813 | 2.817239 | 0.899239 |
| Kurtosis | 2.527135 | 13.75340 | 11.75691 | 9.364958 | 2.106105 |
|  |  |  |  |  |  |
| Jarque-Bera | 3.057516 | 155.0912 | 117.6643 | 72.26003 | 4.033572 |
| Probability | 0.216805 | 0.000000 | 0.000000 | 0.000000 | 0.133083 |
|  |  |  |  |  |  |
| Sum | 12615454 | 1013841. | 91364.90 | 22242175 | 296153.1 |
| Sum Sq. Dev. | 9.02E+11 | 7.68E+10 | 3.38E+09 | 6.83E+13 | 7.57E+09 |
|  |  |  |  |  |  |
| Observations | 25 | 25 | 25 | 25 | 25 |

*Source: eviews 7.0*

Table 2 reveals the following mean values for the variables – GDP (525643.9), BAS (42243.40), CDS (3806.87), TBS (926757.3), and TCS (12339.72). The variables also have the following maximum, minimum values – GDP (982983.2, 328606.1), BAS (282869.7, 126.7000), CDS (50500.00, 1.00), TBS (6487630, 25476.00), TCS (52577.20, 1.0000). The results shows that Jarque-Bera statistic is not significant for BAS, CDS, and TBS which indicates that they are not normally distributed, skewed as indicated by their positive skewness of 3.1, 3.2 and 2.8 respectively; whereas, Jarque-Bera is statistically significant for GDP and TCS, which indicates that these two variables are normally distributed.

**Data Analysis**
Table 3 presents the results of level series regression analysis.

Dependent Variable: GDP
Method: Least Squares
Date: 05/05/16   Time: 12:20
Sample: 1990 2014
Included observations: 25

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| BAS | 2.282811 | 0.793188 | 2.878020 | 0.0096 |
| CDS | 7.959546 | 2.883459 | 2.760416 | 0.0125 |
| TBS | -0.020322 | 0.029984 | -0.677754 | 0.5061 |
| TCS | -3.075886 | 1.808896 | -1.700422 | 0.1054 |
| C | 455698.3 | 42597.22 | 10.69784 | 0.0000 |
| R-squared | 0.620910 | Mean dependent var | | 525643.9 |
| Adjusted R-squared | 0.541101 | S.D. dependent var | | 197989.5 |
| S.E. of regression | 134122.2 | Akaike info criterion | | 26.63394 |
| Sum squared resid | 3.42E+11 | Schwarz criterion | | 26.87937 |
| Log likelihood | -314.6073 | Hannan-Quinn criter. | | 26.69905 |
| F-statistic | 7.779990 | Durbin-Watson stat | | 1.393704 |
| Prob(F-statistic) | 0.000687 | | | |

*Source: eviews 7.0*

Results of the level series regression analysis on table 4.3 show a Durbin-Watson statistic of 1.39 (which is less than 2 and very close to 1), indicating the presence of serial correlation in the residuals, and that, the variables are non-stationery. The results can therefore not be used for any meaningful interpretations as they will lead to spurious and misleading conclusions.

The researcher therefore subjected the data to unit root test and Johanson Co-integration test in order to establish stationarity among the variables and to rule out serial correlation as well as autocorrelation. The results are presented below.

Table 4.4          UNIT ROOT TEST SUMMARY RESULTS

| Variable | ADF - Test statistic at first difference | Critical Values | Order of integration |
|---|---|---|---|
| GDP | -3.181747 | 1%   -3.769597<br>5%   -3.004861<br>10% -2.642242 | 1(1) |
| TCS | -2.678701 | 1%   -3.769597<br>5%   -3.004861<br>10% -2.642242 | 1(1) |
| TBS | -3.708400 | 1%   -3.857386<br>5%   -3.040391<br>10% -2.660551 | 1(1) |
| CDS | -8.690045 | 1%   -3.788030<br>5%   -3.012363<br>10% -2.646119 | 1(1) |
| BAS | -0.305137 | 1%   -3.831511<br>5%   -3.029970<br>10% -2.655194 | 1(1) |

*Source: Author's compilation – See appendix for detail eviews report.*

Table 4 above presents the summary results of the ADF unit root tests.  The results show that the null hypotheses of a unit root test for first difference series for all the variables can be rejected at all the critical values indicating that the level series which is largely time-dependent and non-stationary can be made stationary at the first difference and maximum lag of one. Thus, the reduced form model follows an integrating order of 1(1) process and is therefore a stationary process.  It also reveals that the test of stationarity in the residuals from the level series regression is significant at all lags. Furthermore, this indicates that the regression is no more spurious but real.  That is to say, all the variables are individually stationary and stable. At this level, all the t-statistic became significant at 5 percent.  Also, Durbin-Watson reported values of between 1.9 and 2.3 indicating absence of autocorrelation.

Having established the stationarity of the individual variables, it is also important to establish the stationarity of the linear combination of the variables as to whether there could be a long-run or equilibrium relationship between the dependent variables and the independent variables (that is they are co-integrated). Next, co-integration test was conducted to establish long-run stationary or stable relationship using the Johansen Co-integration test.

Following are the results of the Johansen Co-integration test.

## 4.5 Johansen Co-Integration test results

Date: 05/14/16   Time: 06:24
Sample (adjusted): 1990 2014
Included observations: 24 after adjustments
Trend assumption: Linear deterministic trend
Series: GDP BAS CDS TBS TCS
Lags interval (in first differences): 1 to 1

Unrestricted Co-integration Rank Test (Trace)

| Hypothesised No. Of CE(s) | Eigenvalue | Trace Statistic | 0.05 Critical Value | Prob.** |
|---|---|---|---|---|
| None* | 0.984852 | 168.8158 | 69.81889 | 0.0000 |
| At most 1* | 0.868313 | 76.63770 | 47.85613 | 0.0000 |
| At most 2* | 0.667803 | 32.03646 | 29.79707 | 0.0272 |
| At most 3* | 0.292754 | 7.791855 | 15.49471 | 0.4879 |
| At most 4* | 0.007768 | 0.171573 | 3.841466 | 0.6787 |

Trace test indicates 3 co-integrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis
** MacKinnon-Haug-Michelis (1999) p-value

*Source:  Compiled from eviews7.0 output.*

Table 5 above shows the summary of results of Johansen Co-integration test, to test for the long run co-integration relationship between economic growth represented by gross domestic product (gdp), and money market represented by various money market instruments including treasury certificates (tcs), treasury bills (tbs), certificates of deposits (cds), and bankers acceptances (bas). The results show three co-integrating equations each of trace test and max-eigenvalue test.

**Test of Hypotheses**
Tables 6 below shows the parsimonious error correction results to the researcher test the hypotheses.

Table 6  Parsimonous Error Correction Results

Dependent Variable: GDP
Method: Least Squares
Date: 05/14/16   Time: 06:50
Sample (adjusted): 1990 2014
Included observations: 23 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(GDP(-2)) | 1.173405 | 0.539848 | 2.173586 | 0.0524 |
| BAS | 2.153949 | 1.164485 | 1.849702 | 0.0914 |
| D(BAS(-2)) | 3.075427 | 1.398047 | 2.199802 | 0.0501 |
| D(CDS(-1)) | 3.394572 | 1.295220 | 2.620847 | 0.0238 |
| D(CDS(-2)) | -12.96242 | 4.768697 | -2.718231 | 0.0200 |
| TBS | 0.129624 | 0.085802 | 1.510739 | 0.1590 |
| D(TBS(-1)) | -0.235253 | 0.130714 | -1.799752 | 0.0994 |
| D(TBS(-2)) | -0.046900 | 0.058060 | -0.807788 | 0.4363 |
| TCS | 0.393525 | 0.843179 | 0.466716 | 0.6498 |
| C | 320964.8 | 22843.26 | 14.05075 | 0.0000 |
| ECM(-1) | -1.067533 | 0.304959 | -1.205190 | 0.0049 |

| | | | |
|---|---|---|---|
| R-squared | 0.959954 | Mean dependent var | 553376.9 |
| Adjusted R-squared | 0.927189 | S.D. dependent var | 196511.3 |
| S.E. of regression | 53025.69 | Akaike info criterion | 24.90069 |
| Sum squared resid | 3.09E+10 | Schwarz criterion | 25.39809 |
| Log likelihood | -251.4573 | Hannan-Quinn criter. | 25.00864 |
| F-statistic | 29.29817 | Durbin-Watson stat | 2.087573 |
| Prob(F-statistic) | 0.000002 | | |

*Source: eviews 7.0 results*

**Hypothesis one**
There is no significant relationship between treasury certificates and economic growth.
The parsimonious error correction results on table 6 show a positive coefficient (0.393525)
between treasury certificates and gross domestic product (gdp), t-statistic (0.66716), with
a probability of 0.6498 which is statistically insignificant at 5 percent level of significance.
This leads us to accept the null hypothesis to the effect that there is no significant
relationship between treasury certificates (tcs) and economic growth (gdp).

**Hypothesis two**
Treasury bills do not have any significant impact on economic growth. The parsimonious
error correction results on table 6 show a positive coefficient (0.129626) between treasury
bills (tbs) and gross domestic product (gdp), t-statistic (1.510739) with a probability of
0.1590, which is statistically insignificant at 5 percent level of significance. This leads us
to accept the null hypothesis to the effect that treasury bills do not have any significant
impact on economic growth (gdp). However, when it is lagged one period, the relationship
turned negative (-0.235253), a t-statistic of -1.799752 with a probability of 0.0995, which
even though, not still significant at 5 percent, but is significant at 10 percent.

**Hypothesis three**

There is no significant relationship between certificates of deposit and economic growth. The parsimonious error correction results on table 6 show a positive coefficient (3.394572) between certificates of deposit (cds) lagged one period and gross domestic product (gdp), t-statistic (2.620847) with a probability of 0.0238, which is statistically significant at 5 percent level of significance. This leads us to reject the null hypothesis and conclude that there is a significant relationship between certificates of deposit and economic growth (gdp). The result is similar when lagged two periods, except that the coefficient is negative (-12.96242).

**Hypothesis four**

Bankers' acceptances have no significant impact on economic growth. The parsimonious error correction results on table 6 show a positive coefficient (2.153949) between bankers' acceptances (bas) and gross domestic product (gdp), t-statistic (1.8497) with a probability of 0.0914, which, though, not significant at 5 percent, but statistically significant at 10 percent level of significance. This leads us to reject the null hypothesis and conclude that bankers' acceptances have a significant impact on economic growth (gdp). However, when lagged two periods, the relationship became statistically significant at 5 percent with a probability of 0.0501.

Overall, the r-squared showed 0.959954, while adjusted r-squared showed 0.927189 which indicates that about 93 percent of changes in the gross domestic product are accounted for by the combined effect of the money market variables. Also, f-statistic shows 29.29817 with a probability of 0.000002, which is statistically significant at 5 percent. The import of this is that the combined effect of the money market variables have significant impact on economic growth represented by gross domestic product.

The DW statistics is approximately 2.09, which rules out the presence of autocorrelation among the variables. Finally, the error correction mechanism has a coefficient of -1.067533, which is appropriately signed and statistically significant at 5 percent. This means that the model has a 106 percent speed of adjustment to equilibrium on the long run.

**Granger Causality Test Results**

Table 7 below shows the results of the granger causality test.

Pairwise Granger Causality Tests
Date: 07/29/16   Time: 16:05
Sample: 1990 2014
Lags: 2

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|---|---|---|---|
| GDP does not Granger Cause BAS | 23 | 10.0070 | 0.0013 |
| BAS does not Granger Cause GDP | | 0.75240 | 0.4863 |
| GDP does not Granger Cause CDS | 23 | 5.57035 | 0.0138 |
| CDS does not Granger Cause GDP | | 0.23900 | 0.7900 |
| GDP does not Granger Cause TBS | 23 | 6.46279 | 0.0082 |
| TBS does not Granger Cause GDP | | 0.31810 | 0.7318 |
| GDP does not Granger Cause TCS | 23 | 0.04516 | 0.9560 |
| TCS does not Granger Cause GDP | | 0.03657 | 0.9642 |

*Source: eviews 7.0 results*

The results of pairwise granger causality above reveal that Gross Domestic Product (GDP) causes significant changes in bankers' acceptances, whereas the changes caused on GDP by bankers' acceptances (BAS) is insignificant at 5 percent. This same results if replicated in the relationship between Gross Domestic Product (GDP) and Certificates of Deposit (CDS) as well as Gross Domestic Product (GDP) and Treasury Bills (TBS). But the case is different on the relationship between Gross Domestic Product (GDP) and Treasury Certificates (TCS) as there is no significant impact in either direction.

**Discussion of findings**
The parsimonious error correction results on table 6 further reveal an overall r-squared of 0.959954 and adjusted r-squared of 0.927189 which indicates that 92.7 percent of changes in the gross domestic product could be accounted for by the combined effect of instruments on the money market. It also confirms that the model is a good fit.
The results also show f-statistic of 29.29817 with a probability of 0.000002 which is statistically significant at 5 percent. The Durbin-Watson statistic is 2.08, which is very close to the benchmark of 2, which suggest absence of serial correlation.

This leads to the conclusion, that on the overall, the impact of the money market on economic growth is significant. This agrees with the findings of prior empirical studies. For instance, Nwosu and Hamman, 2008 found that the level of development of a money market serves as a barometer for measuring the level of development of the economy. Greenwood and Jovanvic (1990) also reveal that financial intermediation promotes

economic growth. However, Ebhodaghe (1996), Lucas (1988), Omoruyi (1991), Sobodu and Sobodu (1999), and Soyibo, Alashi and Ahmad (1997), suggest otherwise.

This study also found that on instrument basis, some instruments like treasury certificates and treasury bills do not have any significant impact on economic growth. This is in line with the finding of Zingalas (2001) who favours a more fragmented and competitive banking sector, which according to him creates a fluid transition from a pure banking system to a system that relies both on markets and banks, as economic activities expand.

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS
### Summary of findings

From the analysis and interpretation in chapter four as well as the discussion of findings, below is the summary of findings for this work. That:
a.    treasury bills do not have any significant impact on economic growth (gdp);
b.    treasury bills do not have any significant impact on economic growth (gdp);
c.    there is a significant relationship between certificates of deposit and economic growth (gdp).
d.    bankers' acceptances have a significant impact on economic growth (gdp).
e.    54 percent of changes in the gross domestic product could be accounted for by the combined effect of instruments on the money market.
f.    the impact of the money market on economic growth is significant.
g.    Direction of cause is uni-directional mainly flow from economic growth (gdp) to the money market indicators (instruments).

### Conclusions
From the foregoing discussions, this study concludes that the operations in the money can be a virile stimulant for economic growth in Nigeria. Thus, the money market can play viable complementary role to the stock market especially with the biting global economic meltdown. This can be achieved increasing the number of instruments traded in the money market and properly segmenting the market to increase its scope.

### Recommendations
Based on the findings of this study, the researcher makes the following recommendations:
1.    Treasury bills and treasury certificates should be scrutinized and revitalised in order to enhance the contribution to economic growth.
2.    More instruments and innovations should be introduced into the money market to enlarge their scope.
3.    The money market should be fragmented for expansion.

**REFERENCES**

Agha, A. I., Ahmed, N., Mubarak, Y. A. & Shah, H. (2005). "Transmission mechanism of monetary policy in Pakistan". *SBP Research Bulletin,* 1(2).

Ajakaiye, Olu (2002). Banking sector reforms and economic performance in Nigeria. In Howard Stein, Olu Ajakaiye and Peter Lewis (Ed) (2002) Deregulation and Banking Crisis in Nigeria: A Comparative Study (Palgrave, New York).

Anyanwu, J.C (1996) "Monetary Economics". Lagos, Heinemann Educational Books (Nigeria) Plc.

Dabwor, T. D. (2009). "The Nigerian banking system and the challenges of financial intermediation in the twenty first century". *Jos Journal of Economics*, Vol.4, No.1.

Ebhodaghe, J.U. (1996) "Competition and consolidation in the Nigerian banking sector: A Regulator's perspective". P*aper presented at the 1996 Budget Seminar organized by the Arthur Anderson*, Lagos.

Ehigiamusoe (2013) The link between money market and economic growth in Nigeria: Vector Error Correction Model Approach. *International Journal of Social, Education, Economics and Management Engineering*. Vol:7, No:12.

Gelbard, E, & Leite, P. S. (1999). "Measuring financial development in Sub-Saharan Africa". *IMF Working Paper*, 99(105).

Goldsmith, R. W. (1969) "Financial Structure and Development." New Haven, Conn Yale University Press.

Igbatayo, S. (2011) "The Challenges of the global economic crises and Nigeria's financial markets stability." *Journal of Emerging Trends in Economics and Management Sciences* (JETEMS) 2(6).

Ikpefan and Osabuohien (2012) "Discount houses, money market and economic growth in Nigeria (1992-2007)." *Economic Insights: views and challenges.* Vol. 1 (LXIV).

Levine, R. (2004) "Bank-based or market-based financial systems: Which is better?" *Journal of Financial Intermediation* 11 (4).

Levine, R. and Zervos, S. (1996) Financial development and economic growth views and agenda. Journal of Economic Literature 35.

Lucas, R.E (1988) "On the mechanics of economic development." *Journal of Monetary Economics*, 22.

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

Mordi C.N.O. (2010). "The Link between the financial (banking) Sector and the real economy." *Central Bank of Nigeria Economic and Financial Review*, 48(4).

Nwosu, C P and Hamman, H. M (2008). "The Nigerian money market: issues and challenges." *Bullion, Publication of the Central Bank of Nigeria*, 32(2).

Onwioduokit, E. (2007). "Financial sector development and economic growth in Nigeria." *Paper presented at the Nigerian Economic Society*.

Onwioduokit, E and Adamu, P. (2005). "Financial liberalization in Nigeria: An assessment of relative impact." *Paper presented at the Nigerian Economic Society*.

Peri (2012) "The Role of money market in context to growth of Indian economy." *International Journal of Marketing, Financial Services & Management Research.* Vol.1 Issue 9.

Shaw, E. (1973) "Financial deepening in economic development." New York, Oxford University press.

Sobodu, O. and Sobodu, A (1999) "Effects of stabilization securities policy on  Banking portfolio Behavior in Nigeria." *Development Policy Centre Research  Paper, Nigeria.*

Solow, R. M (1957). "A contribution to the theory of economic growth." *Quarterly Journal of Economics.*