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The Effective and Efficient operation of Money market in Nigeria and its Resultant effects on Economic growth in Nigeria

Akinbola Olawale & Ezeala Obinna

Abstract

The optimal performance of the money market is crucial for a nation's economic stability and growth. This research examines the relationship between Nigeria's money market operations and economic growth from 1998 to 2012. Using Ordinary Least Squares (OLS), the study analyzes a dataset with variables including the logarithm of GDP, exchange rates (EXCH), inflation (INF), interest rates (INT), and logarithm of money supply (LOG(MS)). Results offer insights into this connection. Notably, LOG(MS) significantly influences economic growth (T-statistic = 8.829752, p-value = 0.0000), emphasizing the role of a functional money market. Exchange rates (EXCH), inflation (INF), and interest rates (INT) aren't significantly linked to growth, implying other factors at play. A robust model with R-squared at 0.971080 explains much GDP variation, validated by F-statistic of 83.94508, p-value = 0.000000. The study highlights a well-managed money market, especially LOG(MS), driving Nigeria's growth. Policymakers should prioritize effective monetary policy, monitoring money supply, controlling inflation, and aligning market with economic goals.

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1.0 Introduction

1.1 General Description of the Study

The money market serves as a platform for the trading of money or its equivalents, synonymous with liquidity. It encompasses financial institutions and credit dealers seeking to generate liquidity. It is notably utilized by major institutions and governments to address short-term cash requirements. This involves short-term borrowing and lending by these entities, contributing to the enhancement of liquidity (Smith, 2020). Given Nigeria's escalating significance in the African economy and its growth trajectory, it becomes essential to provide investors with a comprehensive overview of the evolutionary challenges, accomplishments, and operational practices of the monetary control system, which has a monopoly over the country's means of payment and purchasing power (Ogunleye et al., 2017). Remarkably, advanced nations allocate substantial attention to the money market due to its pivotal role in channeling savings into short-term investments for productive outcomes (Krugman & Obstfeld, 2018). Nigeria, as a rapidly growing economy with a population of approximately 173.6 million as of 2013, as reported by the World Bank, is projected to achieve economic growth of 7.3% in 2014, an improvement from 6.4% in 2013, according to the International Monetary Fund (IMF). The growth prospects for the country's economy rely heavily on the prudent allocation of its capital resources across various competing sectors (IMF, 2014). The money market stands as an integral component of Nigeria's financial system, encompassing conventional assets such as treasury bills, treasury certificates, and commercial papers, along with various institutions. The Central Bank of Nigeria (CBN) acts as the overseer of this system, ensuring its proper functioning. Various institutions, including commercial and merchant banks, insurance companies, contribute to the mobilization and allocation of surplus savings towards sectors facing deficits (CBN, 2021). The efficiency of these roles influences the direction and growth rate of the economy.

The money market, representing the short-term aspect of Nigeria's financial system, plays a significant role in providing short-term loans, fixed and working capital for industries, and financing medium-term needs of governments. Ojo (2000) characterizes the money market as a distinct financial market designated for trading financial securities like shares, stocks, and bonds on a short-term basis (Ojo, 2000). Over the years, the Nigerian money market has substantially contributed to sustainable economic growth, fostering stability and development [Akpan and Atan, 2019]. The effectiveness of the money market's activities has been enhanced by the adept execution of monetary policies aimed at regulating the circulation of money to attain overarching macroeconomic objectives. As an imperative element of the financial system, the money market facilitates the transfer of funds from surplus to deficit units of the economy, leveraging mechanisms of financial intermediation (Akinsola & Okoh, 2018).

1.2 Statement of the Problem

The money market encompasses both a segment based on securities and another based on non-securities. The fundamental objective of the money market is to facilitate the efficient allocation of funds from surplus units to deficit units in the economy for productive investments, particularly in short-term projects. However, it is worth noting that various challenges have hindered the growth and functionality of the market in Nigeria. Initially, the operation of the money market has been adversely affected by inconsistent and unfavorable macroeconomic policies and regulatory frameworks. The absence of a highly developed and efficient market has contributed to a lack of transparency in economic management. Additionally, the insufficient technological expertise, scarcity of trained professionals, and limited public awareness about the advantages of participating in money market operations have compounded these issues. Edo and Ikelegbe (2014) underscore that the substantial expansion of Nigeria's financial sector, driven by liberalization policies from 1986, was marked by a weak regulatory structure and an inefficient money market characterized by inadequate capitalization.

This highlights the failure of the government to establish appropriate prudential guidelines and effective supervision mechanisms for the Nigeria money market. Consequently, there has been a lack of progress in establishing a comprehensive savings and investment system within the economy. Moreover, the inadequate infrastructural facilities within the market have acted as hindrances to its efficient operation and growth. Despite investments in the sub-sector, the money market has been marginalized due to the ineffective formulation of monetary policies within the financial market. By definition, monetary policy comprises a set of coordinated measures aimed at regulating the quantity and value of money in circulation to achieve broader macroeconomic goals. The erratic regulatory framework and an unfavorable policy environment have led to a lack of regulation in the quantity of money. Consequently, this has hindered the enhancement and development of Nigeria's money market, preventing it from competing favorably with its international counterparts.

1.3 Purpose and Objective of the Study

The broad objective of this study is to analyze the effective and efficient operation of money market in Nigeria and its resultant effects on economic growth in Nigeria. The study aims to analyze the important and the performance of the Central Bank of Nigeria (CBN) on the growth of the money market in Nigeria. However, the specific objective of the study includes the following among others.

(i) To discuss the profile of money market operation in the Nigeria financial institution, (ii) To examine the growth rate of Nigeria money market in the Nigeria financial market. (iii) To discuss various measures or policies needed to achieve effective and efficient operation of money market in Nigeria, & (iv) To analyze the significant relationship that exist between Nigeria money market and economic growth in Nigeria.

1.4 Research Question

In the course of this research work, it is pertinent to note the under listed research questions which are to be answered below.

i. What is money market operation in Nigeria?
ii. Does money market operation have significant impact on economic growthin Nigeria?
iii. What are the factors responsible for the development of money market inNigeria?
iv. Of what significant is money market operation in the development of Nation's economy.

1.5 Significance of the Study

The primary objective of this research endeavor is to provide comprehensive insight to the general public regarding the functioning of the Central Bank of Nigeria (CBN), while also fostering a collaborative spirit among Nigerians to contribute to the advancement of the domestic money market. As per the Annual Report of the Central Bank of Nigeria (CBN) in 2011, the development of the money market constituted approximately 24.7 percent of the total Gross Domestic Product (GDP) and played a pivotal role in driving economic growth and developmental processes within the country. Consequently, the rationale for conducting this study stems from its focus on delineating a spectrum of measures and policies imperative for optimizing the efficacy and efficiency of the Nigerian money market. By doing so, it seeks to establish a stable trajectory for the economic stability and developmental trajectory of Nigeria.

An additional contribution of this research is its exploration of contemporary issues within the Nigerian financial landscape, particularly in relation to the Central Bank of Nigeria. This effort is directed at bridging the existing gap between the operation of the money market and the overarching economic growth in Nigeria. Furthermore, the objective of this study is to extend and refine the groundwork laid by preceding scholars, thereby further dissecting the significant influence exerted by money market operations on the economic growth of Nigeria.

1.6 Scope and Limitation of the Study

The scope of this study is limited to the Central Bank of Nigeria in analyzing the operation of Nigeria Money Market and the economic growth in Nigeria. However, the estimation period will cover 1990 through 2014. This time frame is chosen in other to estimate the functional relationship between the observed variables. Also, the study will operate within the confines of some limitations which may falsify our result estimate. Firstly, the challenge of a relative scarcity of data is evident. The cumbersome procedures and bottlenecks within government establishments hinder the free and unrestricted flow of information. Secondly, the unreliability of data acquired from secondary sources compounds the issue. This is primarily due to the manipulation of data to align with political exigencies. Furthermore, a concern regarding potential overlap and repetition arises due to the diversity of contributors. Addressing another dimension, the problem of financial constraints among many Nigerians emerges as a significant obstacle. Many interested groups struggle with an inability to generate the necessary funds. Lastly, a related problem centers around hindrances to individual strategic investment planning. This issue affects a considerable number of individuals who seek to plan effectively for their investments.

2.0 Literature Review

2.1 Conceptual Review

The term "money market" has been defined diversely by scholars from diverse fields, including economics. To a layperson, the money market might be perceived as a platform tailored for short-term loans. In a broader perspective, however, the money market is a segment within the financial market responsible for mobilizing short-term investment funds. Within the financial landscape, different markets exist to facilitate fund intermediation within economies. The financial market can be categorized into two main segments: the money market, concerned with short-term funds, and the capital market, devoted to long-term engagements in loanable funds (Abolade, 2014; Layi, 2013; Ukochi, 2010).

The distinction between the money market and the capital market lies in the liquidity level of the instruments transacted within each. This difference is further divided into the primary and secondary markets (Smith et al, 2020). The primary market focuses on raising new funds, while the secondary market deals with the sale and acquisition of pre-existing securities, allowing investors who previously acquired securities during periods of surplus to liquidate them when in need of funds. Sulaimon (2016) adds that the money market serves to transfer short-term surplus funds from economic agents, such as individuals, corporations, and government units, to those with short-term financial requirements.

Financial intermediation and finance have consistently contributed 8 to 10 percent to the nation's GDP in recent times. Furthermore, the money market is regarded as a specialized arena for mobilizing short-term loans. It operates within the financial market's sphere, involving financial institutions established to provide short and medium-term loans to individuals and entities in need. This market mobilizes and allocates short-term resources to foster financial system development. In contrast, the capital market encompasses both primary and secondary markets, regardless of whether securities are issued in an organized market or not. According to Webster's Comprehensive Dictionary, the money market involves the trading of money as a commodity; it is the domain of financial transactions (Layi, 2013).

In the context of Nigeria, participants in the money market encompass the Central Bank of Nigeria, discount houses, development banks, investment banks, stockbroking firms, insurance and pension organizations, government entities, and individuals. Their activities are overseen by appropriate monetary authorities such as the Central Bank of Nigeria and the Federal Ministry of Finance. The Central Bank of Nigeria functions as the supreme monetary authority within the country. It manages the Nigerian naira, maintains foreign currency reserves, and is entrusted with upholding monetary stability. It also serves as a lender of last resort for local banks. As stipulated by the CBN Act of 1958, the bank's regulatory objectives encompass maintaining the nation's external reserves, promoting monetary stability and a robust financial environment, and serving as a financial adviser and last-resort lender to the federal government.

The Central Bank of Nigeria is the apex regulatory entity in the financial realm, entrusted with the day-to-day management of the economy to ensure a sound financial system. In addition, successive governments have diligently strived to enhance the operation of the money market in Nigeria through various policies and reforms. These efforts are aimed at fostering the growth and progress of the money market within the Nigerian financial landscape. This includes the implementation of effective monetary policies to achieve monetary stability and a sound financial system.

Nigerian Money Market

The money market has been characterized as an establishment specifically structured to facilitate the origination and exchange of short-term financial instruments. In the Nigerian context, the money market comprises universal banks and select developmental finance institutions, with the Central Bank of Nigeria holding the pivotal role of the apex regulatory authority. It serves as a mechanism for the conduct of liquid and brief-term lending and borrowing activities. Among the financial instruments engendered and traded within this arena are Nigerian Treasury Bills, Nigerian Treasury Certificates, Commercial Papers, Bankers' Acceptances, and other Central Bank of Nigeria Bills.

The concept of the Financial Market Dealers Quotations (FMDQ) over-the-counter (OTC) was introduced in 2009 by the Financial Markets Dealers Association (FMDA), and it was endorsed in 2010 by the Bankers' Committee (Ukochi, 2010). This committee is led by the Central Bank of Nigeria (CBN) and includes the Nigeria Deposit Insurance Corporation (NDIC), as well as all banks and discount houses operating within Nigeria. The Committee decided to consolidate all interbank market activities concerning fixed income and currencies under the governance of a self-regulatory organization registered with the Securities and Exchange Commission (SEC). To fulfill this objective, FMDQ was established on January 6, 2011, with an initial capital contribution of N100 million from the CBN and equal contributions of N15 million from each of the 25 banks and 5 discount houses (Akinsola & Okoh, 2018). Having satisfied all requisite criteria, FMDQ was officially registered by the SEC as an OTC securities exchange and self-regulatory organization on November 6, 2012. The company was formally inaugurated into the landscape of the Nigerian financial market on November 7, 2013. As of May 21, 2014, there were 26 FMDQ-licensed Dealing Members actively participating within this framework.

2.1.1 Functions of Money Market in Nigeria

A well-developed money market constitutes an indispensable component of a contemporary economy. Although its historical evolution is tied to industrial and commercial advancement, its significance extends to fostering industrialization and overall economic progress within a nation. The money market plays a pivotal role in managing banks' liquidity and facilitating the transmission of monetary policy (Onyido, 2014), influencing money supply control and averting demand-pull inflation, as well as determining short-term interest rates (Layi, 2013).

Under ordinary circumstances, money markets rank among the most liquid sectors in finance. By furnishing suitable instruments and partners for liquidity trade, the money market permits the refinancing of brief and intermediate positions, thereby mitigating the liquidity risk inherent in business operations. The monetary policy operates exclusively within the confines of the banking system and the money market. A vibrant, operational, and effective interbank market heightens the efficiency of the central bank's monetary policy, thereby channeling its directives into the broader economy optimally (Onyido, 2010). Consequently, the role of the financial market in bolstering the development of the real sector and the overall economy assumes a significance that cannot be overstated (Ogunleye et al, 2017). The vital role of a well-developed money market and its assorted functions are elaborated as follows:

Trade Financing: The money market occupies a pivotal role in financing both domestic and international trade. Trade participants access commercial finance through the discounting of bills of exchange, a practice facilitated by the bill market. Furthermore, acceptance houses and discount markets facilitate financing for foreign trade.

Industrial Financing: The money market contributes to industrial growth through dual avenues:

(a) Facilitating industries in procuring short-term loans to meet their working capital requisites via instruments like finance bills and commercial papers.

(b) Influencing the capital market's dynamics, as industries often require long-term loans. The short-term interest rates prevalent in the money market hold sway over the long-term interest rates prevalent in the capital market. Consequently, the money market indirectly impacts industries through its interconnectedness with and influence on the long-term capital market.

Lucrative Investments: The money market empowers commercial banks to strategically invest their surplus reserves in profitable ventures. Commercial banks, driven by the twin objectives of generating income from reserves and maintaining liquidity to meet depositor demands, invest their excess reserves in near-money assets, such as short-term bills of exchange. These assets are highly liquid and swiftly convertible into cash, allowing banks to achieve profitability without compromising liquidity.

Commercial Bank Autonomy: A developed money market engenders self-sufficiency among commercial banks. During times of exigency, when funds become scarce for commercial banks, they are not compelled to seek recourse to the central bank at elevated interest rates. Instead, they can meet their demands by recalling existing short-term loans from the money market.

Support to Central Bank: Although the central bank can function and exert influence over the banking system without a money market, the existence of a well-established money market streamlines operations and amplifies the central bank's effectiveness. The money market aids the central bank in two distinct ways: First, the short-term interest rates prevailing within the money market serve as indicators of the monetary and banking conditions, guiding the central bank toward adopting pertinent banking policies, and second, the intricate and responsive money market empowers the central bank to exert prompt and extensive influence over sub-markets, thereby facilitating the effective implementation of its policies. In essence, the money market furnishes the requisite machinery for fulfilling governmental short-term financing requisites and establishes the groundwork for the successful execution of an efficacious monetary policy.

2.3 Monetary Policies in Nigeria

The term "monetary policies" carries varied interpretations across different individuals and contexts. Among economists and scholars from diverse disciplines, the term has acquired multifarious connotations. To those less versed in the intricacies of economics, monetary policy signifies a policy framework devised to solely oversee the extent of money or liquidity circulating within an economy.

In a more comprehensive sense, monetary policies encompass an amalgamation of measures undertaken by the pertinent monetary authorities, aiming to oversee and regulate the quantity and value of money and credit within circulation. The overarching objective is to realize broad macroeconomic goals, including but not limited to achieving full employment, ensuring price stability, sustaining balance of payment viability, optimizing resource allocation, and promoting equitable wealth distribution. In essence, monetary policy embodies a deliberate endeavor by monetary authorities to steer and govern the magnitude of liquidity and credit within the entire financial system, with the aim of attaining desirable macroeconomic objectives. In this context, the relevant monetary authorities could encompass entities like the Central Bank of Nigeria (CBN) or the Federal Ministry of Finance.

In the Nigerian context, monetary policy has consistently remained a potent instrument for influencing economic growth rates. This is achieved through the skillful and effective management of the volume and value of money circulating within the domestic economy. As posited by Abolade (2014), monetary policy stands as a facet of economic policies designed to oversee the magnitude and valuation of monetary aggregates and credit within a given economy. Its overarching objectives are to establish a robust and sound financial system and to uphold monetary stability. Consequently, monetary authorities work to ensure an optimal volume of liquidity in circulation. Ogunleye et al (2017) further contend that monetary policies facilitate the effective regulation, control, and moderation of both the quantity and value of money, alongside credit control, in the economic circulation.

2.7 Theoretical Framework Relevant to the Area of Study

Numerous studies emphasize that the Central Bank of Nigeria (CBN) holds the statutory responsibility for regulating and overseeing the financial sector within the economy. This regulatory role is primarily geared towards managing monetary aggregates with the intention of stimulating economic growth and development. An additional significant objective of the Central Bank of Nigeria is to establish and administer policies that facilitate the orderly participation of actors in the money market, ultimately contributing to economic growth. Nevertheless, the research undertaking would remain incomplete without shedding light on pertinent theories underpinning effective monetary supply management, particularly concerning operational measurement aimed at preempting the escalation of inflation.

2.7.1 The Classical Theory of Money Supply and Interest Rate

The classical theory of money supply and interest rate asserts that the rate of interest is governed by the interplay of money supply and demand. Central Bank exerts influence over money supply to align with the time preference, while its demand is expected to aid productive activities. Time preference and productive capital/money are both contingent upon the act of waiting or saving. Hence, this theory is often referred to as the supply and demand theory of saving and waiting.

Demand Side: The demand for money encompasses both productive and consumption-related purposes, with the former emphasizing its utility as a productive measure. Money, in this context, serves to provide liquidity, facilitating investments and enabling portfolio diversification, thereby contributing to sustainable economic growth.

Supply Side: The supply of money hinges on saving, determined by the community's inclination and capacity to save. Certain individuals save irrespective of prevailing interest rates; even a zero-interest rate would not deter them. Simultaneously, others save due to interest rates that sufficiently motivate them. A direct relationship exists between the rate of interest and community savings; higher interest rates correspond to larger savings and a greater supply of funds. This translates to an upward rightward shift of the money supply curve.

2.7.2 Keynesian Perspective on Monetary Policy

Keynes's view on monetary policy postulates that the demand for money decreases as the rate of interest rises, and vice versa. The inverse correlation between the demand for money and the interest rate establishes a link between alterations in money supply and the overall economic activity level. The fundamental objective of monetary policy is to govern and manage the circulation of money supply within the economy. Keynes's theory of monetary policy underscores the necessity of a comprehensive economic strategy involving the coupling of monetary policy with fiscal policy, orchestrated by the Central Bank to achieve desired macroeconomic goals and objectives. Keynesian theory underscores the utility of employing a policy mix, entailing the integration of both monetary and fiscal policy within the economy to influence economic activities and the volume of money circulating within the economy.

3.0 Research Methodology

The methodology employed in conducting this research encompasses a diverse array of techniques utilized to elucidate the analysis of money market operations and their impact on economic growth in Nigeria. The study aims to discern how money market operations have contributed to the augmentation of the economy's growth rates.

3.1 Research Design

The fundamental research designs were exclusively drawn from secondary data sources. The investigation incorporated econometric procedures to estimate the functional relationships within the system. The Ordinary Least Squares (OLS) techniques were employed to derive numerical estimates for the coefficients of distinct equations. These estimates are crucial in facilitating an exploration of the analysis of money market operations' influence on economic growth and developmental processes within Nigeria's financial system.

3.2 Sources of Data

The data for this study were exclusively procured from secondary sources, with a primary reliance on publications from the Central Bank of Nigeria (CBN). These sources encompass the Economic and Financial Review, Bullion, Monthly Report, Central Bank of Nigeria Annual Reports, and Statements of Account for various years. Additionally, relevant journals and textbooks focusing on the Nigerian money market and economic growth were consulted.

3.3 Method of Data Analysis

Throughout the course of this research, data analysis will revolve around the examination of Nigeria's money market operations and economic growth from 1998 to 2012. The analysis is structured to comprehend the operational aspects of the money market and its correlation with economic growth, investigating the variables that underlie these changes. Furthermore, the study evaluates the responsiveness of aggregate investment within the money market to fluctuations in specific macroeconomic variables. A spectrum of statistical methods is employed for analysis, including significance tests, F-statistics, distribution assessments, R-squared analysis, and evaluation of auto-correlation.

3.5 Model Specification

In this study, the model to be used is specified below.

Model

GDP = F(r, PX, ms, EX.r)

GDP = $\alpha0 + \alpha1r + \alpha3ms + \alpha4Ex.r + u$

Where

GDP	=	gross domestic product
r	=	interest rate
PX	=	inflation rate
Ms	=	money supply
Ex.r	=	exchange rate
$\alpha0$	=	intercept
$\alpha1\alpha2\alpha3\alpha4$	=	slope of the equation
u	=	error term

Hence, in the model above, GDP is regarded as dependent variables while otherobserved are regarded as independent variables.

Economic A-Prior Expectation

This refers to as the sign of magnitude of the parameter of economic relationship.It is determined by the principles of economic theory. In the A-apriori expectation, we expect the following relationship.

Given the above model, the A-apriori expectation holds as follows;

GDP = $\alpha0 + \alpha1r + \alpha2PX + \alpha3ms + \alpha4Ex + ц$

$$\frac{DGDP}{DR} > 0$$

$$\frac{DGDP}{DR} < 0$$

$$\frac{DGDP}{DR} > 0$$

$$\frac{DGDP}{DR} > 0$$

3.6 Coefficient of Determination

The coefficient of determination, denoted as R-squared (R2), serves to assess the extent to which variations in dependent variables can be elucidated by fluctuations in explanatory variables. The R2 value invariably falls within the range of 0 to 1, where it is greater than zero but less than one, i.e., $0 < R2 < 1$. A higher R2 value indicates a more robust explanation of independent variable variations. It is important to note that R2 cannot assume values of zero or one. Instead, it delineates the causal relationship between dependent and independent variables. The inclusion of the error term (Џ), which denotes stochastic or unaccounted factors, in the model accommodates the influence of other determinants on GDP and other explanatory variables, alongside potential measurement errors.

3.6.1 Standard Error

The standard error pertains to the spread of a statistic's sampling distribution. In the context of parameter estimates, the standard error value should ideally be less than half of the estimated coefficient's value for the estimates to hold statistical significance.

3.6.2 F-Statistic

The F-statistic is harnessed to gauge the overall significance of estimates. It serves as a tool to comparison between the calculated and tabulated values.

3.6.3 T-Test

For testing the significance of estimates, the T-test proves particularly useful, especially when the number of observations is less than 30 ($n < 30$).

3.6.4 Durbin Watson

The Durbin-Watson (DW) statistic's significance lies in its revelation of auto-correlation among the observed economic variables.

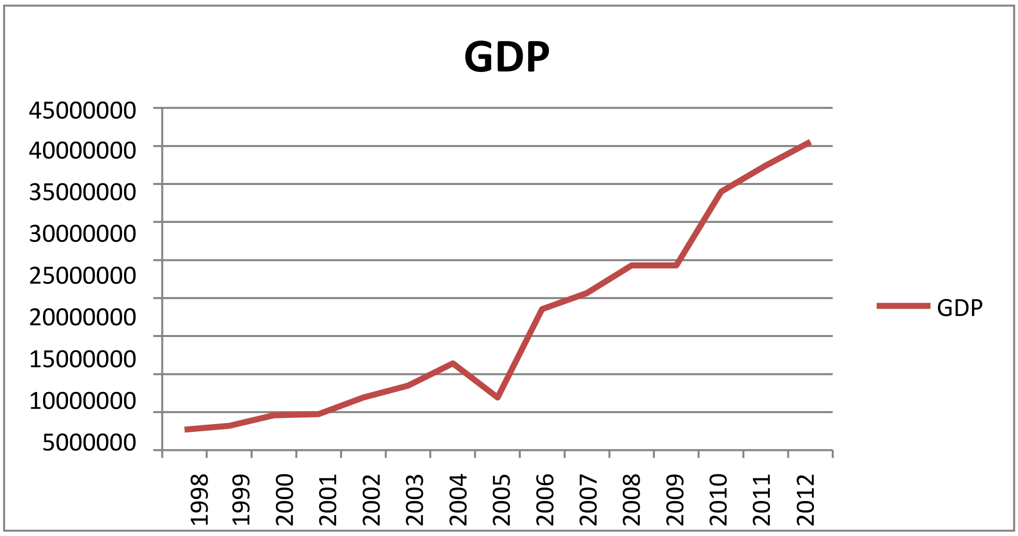
3.7 Research Constraints

Throughout the course of this research, certain factors may potentially compromise the accuracy of our findings, akin to what is commonly referred to as study limitations. Firstly, inadequacy of comprehensive data stemming from cumbersome government procedures and bottlenecks, hindering the smooth and unimpeded flow of information. Additionally, the unreliability of data derived from secondary sources due to the manipulation of data to align with political expediency. Also, the possibility of overlap and repetition arising from the diverse contributors to the study. Moreover, financial constraints prevalent among many Nigerians, impeding the capacity of interested parties to generate necessary funds. Finally, temporal constraints that impede strategic planning towards investment for numerous individuals.

4.0 Data Presentation and Analysis

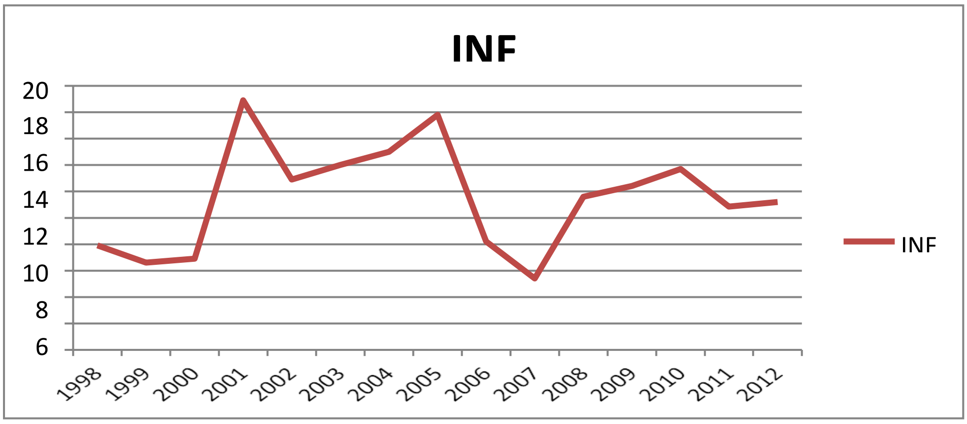
This section provides an extensive exposition and examination of the data concerning the impact of money market operations on Nigeria's economic growth. The analysis employs both descriptive and inferential techniques, followed by comprehensive interpretation and discourse of the results.

4.1 Presentation of Data
4.1.1 Descriptive Analysis



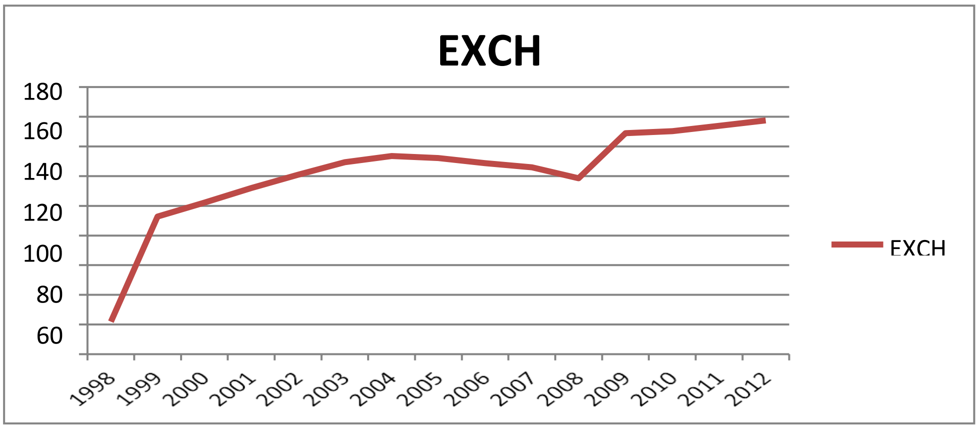
Source: Author's Own computation

The trajectory of economic expansion exhibits an upward trajectory during the majority of the examined timeframe. The initial five-year period reflects an average value of N22,122,040 million. Additionally, owing to the recent acceleration in growth rates, the Nigerian economy experienced even higher growth rates, with the subsequent five-year mean ascending to an average of N66,032,393. This rapid pace of growth was consistently maintained over the concluding five years, with an average of N160,531,373.



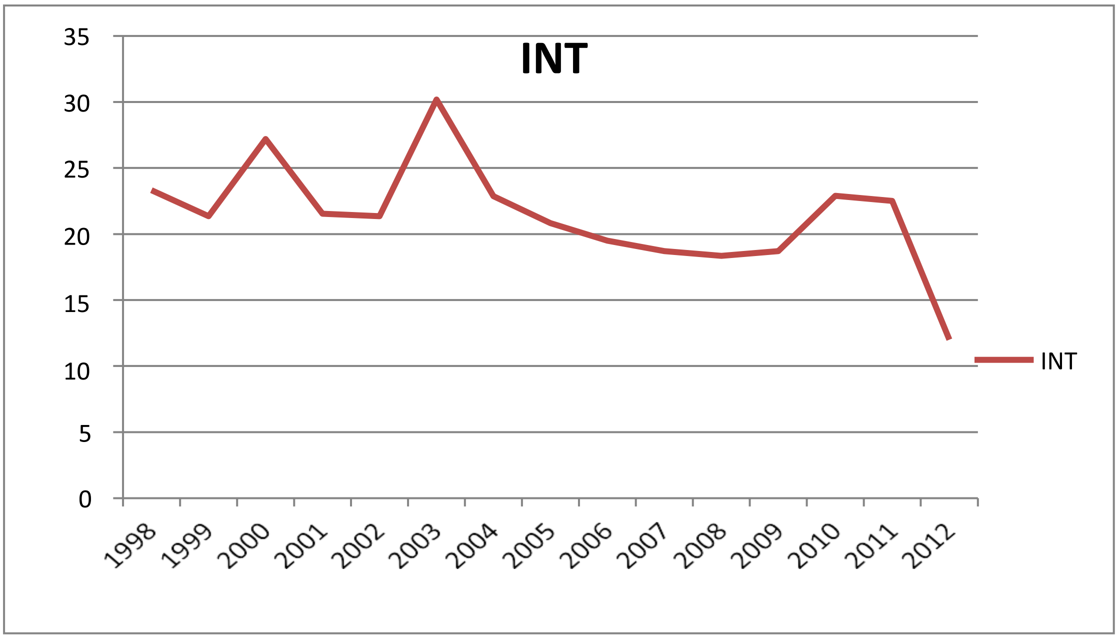
Source: Author's Own computation

The inflation rate has consistently posed a significant challenge to Nigeria's economic progress throughout much of its history. The graph provided illustrates the fluctuating trajectory of inflation rates within Nigeria. The mean growth rate between 1998 and 2002 was calculated at 53.2%. Subsequently, due to further inflationary pressures, the subsequent five-year average surged to 60.4%. Nevertheless, the Central Bank of Nigeria's recent implementation of stringent monetary policies, primarily aimed at curbing inflation, has led to a reduction in the average inflation rate for the period 2008 to 2012, which now stands at 59.74%.



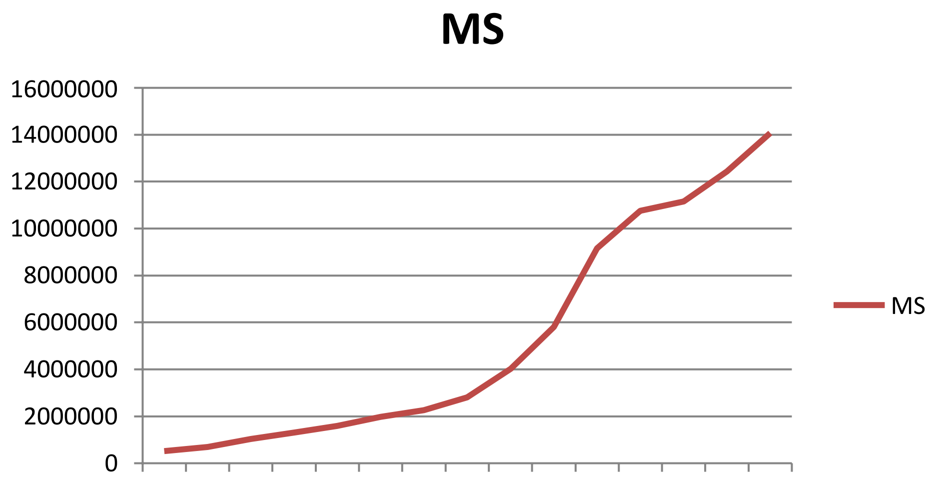
Source: Author's Own computation

The mean exchange rate for the period spanning from 1998 to 2002 exhibited a value of 449.595%, signifying a notable escalation. This trend of increase persisted in the subsequent five years, evidenced by the average exchange rate soaring to 649.4881%. Similarly, during the timeframe of 2008 to 2012, the exchange rate experienced significant growth, with an average value of 729.1656%. This pattern underscores the heightened devaluation of the Naira in recent years.



Source: Author's Own computation

The diagram depicting interest rates also illustrates a pattern of variability across the years. During the initial five-year span, the mean interest rate within Nigeria registered at 114.74%. Nevertheless, this average value experienced a decrease in the subsequent five years, marking a decline to 112.08%. This trend of decreasing average values persisted through the period of 2008 to 2012, with a further reduction to 94.47%.



Source: Author's Own computation

The progression observed within the monetary domain indicates a substantial augmentation in money supply, as evidenced by the ascending trajectory of broad money over time. From 1998 to 2002, the recorded money supply was documented at N5,176,815 million. This upward trajectory continued in the subsequent five-year period, with an average value of N16,901,354 million. With a further expansion in money supply, this average surged to three times its preceding value, reaching N57,608,224 million during the 2008-2012 timeframe. The marked proliferation in money supply can be attributed to the expansionary fiscal endeavors of the three tiers of government. Notably, factors such as the swift utilization of the federal government deposit with the CBN, the conversion of $1.5 billion external reserves during the last quarter of the year, and a substantial escalation in bank credit extended to the domestic economy, have collectively contributed to the recent surge in money supply.

4.1.2 Inferential Analysis

Table 1: Summary of the Regression Result

Variables	Coefficient	Standard Error	T-statistic	Prob.
C	4.220708	1.316108	3.206961	0.0094
EXCH	0.002058	0.002824	0.728558	0.4830
INF	-0.024051	0.013755	-1.748510	0.1109
INT	0.008841	0.014674	0.602468	0.5603
LOG(MS)	0.793079	0.089819	8.829752	0.0000
R-squared	0.971080		F-statistic	83.94508
Adju R^2	0.959512		Prob(F-statistic)	0.000000
		Durbin-Watson stat 2.708169		

Source: Author's Computation
Dependent Variable: LOG(GDP))

4.2 Discussion of Results

The regression outcomes depicted above unveiled that only one among the independent variables achieved statistical significance at the 5% level; namely, money supply. This signifies that solely money supply among the four independent variables or regressors met the criteria of our test. Furthermore, adhering to the "a priori" expectations, all coefficients of the four independent variables were consistent. The coefficients of these variables elucidated that a 1% upsurge in money supply would yield a 79% escalation in economic growth. Although the coefficients associated with exchange rate, interest rate, and inflation rate exhibited both positive and negative relationships with economic growth, their impacts, however, lacked statistical significance. The obtained results indicate a mixed impact of money market operations on Nigeria's economic growth. These findings imply that money supply serves as an efficacious expansionary monetary policy instrument employed by the Central Bank of Nigeria (CBN). The upswing in money supply was attributed to factors such as the swift conversion of oil inflows, adjustments in minimum wage, and government fiscal deficit financing through the banking system.

Moreover, the negative yet statistically insignificant influence of inflation rate on the Nigerian economy can be attributed to the CBN's recent stringent monetary policy geared towards curbing inflation. This demonstrates the effectiveness of the policy, as it has managed to reduce the adverse impact of inflation rate to an insignificant level. The coefficient of determination (R2) reveals that 97% of the total variance in the dependent variable (GDP) is accounted for by the independent or explanatory variables. After adjusting for degrees of freedom, this drops to 95%, still retaining its significance. With a Durbin-Watson statistic of approximately 2.71, there is no evidence of negative serial autocorrelation, indicating the independence of observations in the error terms.

The F-statistic, presented in the lower section of the table, gauges the model's goodness of fit. With an F-statistic of around 83.95 and a Probability value of 0.0000, the notable significance indicates that the data utilized in the estimation align well with the regression equation. Consequently, the model adequately explicates the impact of money market operations on Nigeria's economic growth.

5.0 Summary, Conclusions and Recommendations

This section primarily aims to bring the research to a coherent conclusion. It encompasses a summary of findings, conclusions drawn from these findings, and recommendations for policy implementation based on the research outcomes.

5.1 Summary

The central focus of this study was the investigation of how money market operations impact the economic growth of Nigeria. Monetary policy entails the discretionary control of money supply by monetary authorities to achieve economic goals. It was evident that monetary policy involves governmental actions designed to influence the behavior of the monetary sector of an economy. Furthermore, two perspectives on the effectiveness of monetary policy were highlighted: the monetarist and Keynesian views. The Keynesian view advocates directing monetary policy towards interest rates, prioritizing them over money supply, and making monetary policy secondary to fiscal policy. The monetarist view asserts that controlling money supply should be the primary concern of monetary authorities. It's noteworthy that monetary policy plays a pivotal role in macroeconomic management due to the strong link between monetary aggregates and economic activity. The primary goal of the money market is to efficiently allocate funds from surplus to deficit units of the economy for productive investments, particularly short-term projects. Therefore, the study is justified by its exploration of measures and policies to enhance the efficiency of Nigeria's money market and contribute to the country's stability and development.

Additionally, the study enriched its value by discussing contemporary issues within Nigeria's financial system concerning the Central Bank of Nigeria (CBN) to bridge the gap between money market operations and economic growth. This endeavor was also complemented by a review of past relevant works. The research methodology involved descriptive analysis and inferential statistics, employing the Ordinary Least Square (OLS) technique to examine the influence of various monetary variables on Nigeria's economic growth. These variables included Gross Domestic Product (GDP), money supply, inflation rate, interest rate, and exchange rate. Secondary data from the CBN statistical bulletin (2013) were utilized for the period spanning 1998-2012.

The results obtained for the specified period indicate that money supply exerts a positive and significant impact on Nigeria's economic growth. A discernible upward trend in money supply was observed throughout the study duration. The excessive growth in money supply was attributed to expansive fiscal operations across all levels of government. Specifically, the rapid release of federal government deposits with the CBN, the monetization of $1.5 billion external reserves, and a substantial increase in bank credit to the domestic economy contributed to the recent surge in money supply. Moreover, the empirical findings revealed that while inflation rate exhibited a negative influence, this effect was statistically insignificant concerning Nigeria's economic growth. This observation could be attributed to the CBN's overarching monetary policy objective of curtailing inflation, successfully mitigating its negative impact to an insignificant level.

5.2 Conclusions

The overarching conclusion derived from this study is that the monetary policies implemented within the reviewed period presented mixed outcomes. The results suggest that while the CBN effectively controlled the volume of money supply for investment spending and managed to diminish the negative impact of inflation rate to insignificance, the influence of other monetary instruments such as interest rates and exchange rates appeared to lack significant impact on Nigeria's economic growth. Hence, it is imperative that the following recommendations are taken into account by the CBN to enhance the efficacy of money market operations in Nigeria.

5.3 Recommendations

i. The relevant monetary authority should consistently manage the volatility of exchange rates within the economy, considering its transient shocks' effects on macroeconomic prices in Nigeria.
ii. The monetary authority should implement direct policies to regulate price stability in the economy by managing money supply to mitigate the upward trend in inflation rates.
iii. Furthermore, it is imperative for the apex institution, the Central Bank of Nigeria, to maintain the benchmark interest rate at an optimal level. This strategy aims to encourage investment, while simultaneously guarding against the potential risk of investment crowding-out due to currency deterioration.
iv. Strategic macroeconomic strategies should be established to stabilize the exchange rate of the Nigerian naira in relation to the U.S. dollar. This stabilization effort holds the potential to enhance Nigeria's terms of trade and foster economic growth.
v. The relevant monetary authority should enact direct policies aimed at regulating price stability within the economy through effective control of money supply. This step is crucial for bolstering economic growth.
vi. The Central Bank of Nigeria (CBN)'s stringent monetary policies, devised to absorb excess money supply within the financial system, require prompt reassessment by the apex bank. Such a review is essential to prevent unintended repercussions on the economy.

vii. The financial sector, particularly the money market, should be fortified in terms of activities and operations. This strengthening endeavor, focused on mobilizing domestic savings and resources for reinvestment purposes, holds significance.
viii. It is imperative for the government to establish a robust infrastructure that facilitates seamless money market operations and entices foreign investors to make substantial investments in the money market and other promising sectors. This concerted effort is pivotal for ensuring sustainable growth and development.
ix. Prioritizing transparency and accountability across all aspects of management is of utmost importance. The Central Bank should intensify its efforts to curb insider abuses and scrutinize practices within market operations.
x. Given the notable influence of the logarithm of money supply [LOG(MS)] on economic growth, policymakers should concentrate on upholding a robust monetary policy framework. This entails vigilant monitoring of money supply dynamics, effective inflation control, and alignment of money market operations with overarching economic objectives.

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APPENDIX

Dependent Variable: LOG(GDP)
Date: 12/18/14 Time: 21:36
Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.220708	1.316108	3.206961	0.0094
EXCH	0.002058	0.002824	0.728558	0.4830
INF	-0.024051	0.013755	-1.748510	0.1109
INT	0.008841	0.014674	0.602468	0.5603
LOG(MS)	0.793079	0.089819	8.829752	0.0000
R-squared	0.971080	Mean dependent var		16.27235
Adjusted R-squared	0.959512	S.D. dependent var		0.918925
S.E. of regression	0.184903	Akaike info criterion		-0.276770
Sum squared resid	0.341891	Schwarz criterion		-0.040753
Log likelihood	7.075773	Hannan-Quinn criter.		-0.279284
F-statistic	83.94508	Durbin-Watson stat		2.708169
Prob(F-statistic)	0.000000			

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