Effect of Interest Rate on Commercial Bank Deposits in Nigeria (2000-2013)

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Abstract

This study is on the effect of interest rate on commercial bank deposits in Nigeria. Ordinarily, high interest rate should spur the desire for bank customers to want to deposit their fund in the bank vault. Likewise, low interest rate should naturally discourage depositors. But most oftentimes this is not the case, hence this study to examine how interest rates affects commercial bank deposits between 2000 and 2013 in Nigeria. The study made use of secondary data sourced from the Central Bank of Nigeria statistical bulletin and the National Bureau of Statistics between 2000 and 2013. The model for the study has as its dependent variable the Commercial Bank Deposits (CBD) while its explanatory variables were the interest rates and the Gross Domestic Product (GDP). Using the Ordinary Least Square (OLS) multiple regression techniques; the study revealed that there is a negative relationship between the interest rates and the commercial bank deposits suggesting that interest rates has not been responsible for customers deposits in commercial banks in Nigeria. The study, therefore recommended that adequate awareness be made by commercial banks to attract more of customers’ deposits by educating on the measure of interest that will accrue to them when they deposit their funds with the commercial banks.

Key Words: Interest rate, Commercial Bank, Deposits, Gross Domestic Product, Fund, Central Bank of Nigeria
1. Introduction

Interest rate is the price paid for the use of money. It is the opportunity cost of borrowing money from a lender to finance investment project. It can also be seen as the return being paid to the provider of financial resources, for growing fund for future consumption. Interest rates are normally expressed as a percentage rate. The volatile nature of interest is determined by many factors, which include taxes, risk of investment, inflationary expectations, liquidity preference, market imperfections in an economy etc.

Banks are given the primary responsibility of financial intermediation in order to make fund available for economic agents. Banks as financial intermediaries move fund. Surplus sectors/units of the economy to deficit sectors/units by accepting deposits and channeling them into lending activities. The extent to which this could be done depend upon the rate of interest and level of development of financial sector as well as the saving habit of the people in the country.

The financial intermediation role of banks cannot be effective and efficient without sufficient funds in their vaults. As a result banks engage in several practices in order to attract deposits from their customers. One of the instruments put to use is to raise the interest to be paid on the amount to be deposited by these customers. However, this may not necessary be a reason why customers desire to deposit their fund. In this study, the desire is to examine what effect interest rates have on commercial bank deposits in Nigeria.

1.1 Statement of the Problem

In order to curb the adverse effect of the 1980s financial repression, Nigeria government deregulated interest rate in 1987 as part of the Structural Adjustment Programme (SAP) policy package. The official position was that interest rate liberalization among other things, enhance the provision of sufficient funds for investors, especially manufacturers (a priority sector) who were considered to be prime agents, and by implication promoters, of economic growth. However, in a policy reversal, the government in January 1994 out-rightly introduced some measure of regulation into interest rate management. It was claimed that there were “wide variations and unnecessary high rate” under the complete deregulation of interest rates. Immediately, deposit rates were once again set at 12% to 15% per annum while a ceiling of 21% per annum was fixed for lending a rate. The cap on interest rate introduced in 1994 was retained in 1993 with a minor modification to allow for flexibility. The cap stayed in place until it was lifted in 1997, thus enabling the pursuit of the flexible interest rate regime in which bank deposit and lending rate were largely determined by the forces of demand and supply for funds (Omole and Falokun 1999).

Interest rates are crucial elements in the transmission of monetary policy actions to economic activities (Craig; 2000). The interest rate policy in Nigeria for example has changed
within the time frame of regulated and deregulated regimes. However, the impacts of this variable on the economic growth of Nigeria have remained controversial (Acha et al; 2011). In 1993, a new framework focused on the deregulation of interest rate; interest rate was very high and volatile. In 1994, due to the high volatility of interest rates, government decided to fix the MPR at 13.5% (CBN 1994).

The cap on interest rate adopted in 1994 was lifted in October 1996 and a flexible interest rate regime largely determined by the forces of supply and demand for funds was put in place and this has remained so, since late 1990s to date (CBN 2007). However, the problem has been that the market-based approach to interest rate management in Nigeria has always been associated with substantial interest rate volatility (CBN 2006).

In 1986, Nigeria interest rate was as low as at 2.5%, it rose to 8.9% (CBN; 1990). Auction markets for government securities were introduced; capital adequacy standards were reviewed upward and the extension of credit based on foreign exchange deposits was banned (Hussainatu; 2008). Nigeria’s interest rate fluctuates over time as the Central Bank was to regulate and supervise all interest rate re-administered. The monetary authority introduced the indirect monetary instruments in order to control the interest rate and the rate of inflation. The interest rate has doubled through the period of 1997 and 2007 attaining a peak of 24.62 (CBN; 2002).

Ordinarily, high interest rate should spur the desire for bank customers to want to deposit their fund in bank vaults. Likewise, low interest rate should naturally discourage depositors. But most oftentimes, this is not the case, hence this study seek to examine how interest rates affects commercial bank deposits between 2000 and 2013 in Nigeria. The research questions that shall guide this study are as stated thus; what effect do Interest rates have on bank deposits in Nigeria? Is there any significant relationship between interest rate and bank deposits in Nigeria?

1.2 Objectives of the Study

The main objective of this study is to examine the implications of commercial bank loans on Economic Growth in Nigeria (2000-2013). The specific objectives includes:

- To examine the effect of interest rates on commercial bank deposits in Nigeria.
- To determine if there is a significant relationship between interest rates and bank deposits in Nigeria between 2000 and 2013.

1.3 Significance of the Study

The importance of a study on interest rate on bank deposits in Nigeria cannot be played down, given the fact the as it has a long-run effect on deciding whether bank customer deposits in banks or not and all of these will have effect on the nation’s economic development. Most oftentimes banks usually crave for customers’ deposits of fund into their

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banks, part of the ways they attract deposits is by offering high interest rate to depositors; so doing a study on this area will be of great benefits to both that bank and the depositors alike. Furthermore, any study that would help to bring to the fore the impact of interest rate on bank deposits in Nigeria should be considered as apt and very significant. This is the purpose of this study.

2. Review of Related Literature

2.1 Conceptual Framework

2.1.1 Interest Rates

According to Keynes, interest rate is the reward for not hoarding but for parting with liquidity for a specific period of time. Keynes’ definition of interest rate focuses more on the lending rate. Adebisi (2002) defines interest rate as the return or yield on equity or opportunity cost of deferring current consumption into the future. Some examples of interest rate include the saving rate, lending rate, and the discount rate. Professor Lerner, in Jhingan (2003), defines interest as the price which equates the supply of ‘Credit’ or savings plus the net increase in the amount of money in the period, to the demand for credit or investment plus net ‘hoarding’ in the period. This definition implies that an interest rate is the price of credit which like other price is determined by the forces of demand and supply; in this case, the demand and supply of loanable funds.

Ibimodo (2005) defined interest rates, as the rental payment for the use of credit by borrowers and return for parting with liquidity by lenders. Like other prices interest rates perform a rationing function by allocating limited supply of credit among the many competing demands. Bernhardsen (2008) defined the interest rate as the real interest rate, at which inflation is stable and the production gap equals zero. That interest rate very often appears in monetary policy deliberations. However, Irving Fisher (1936) states that interest rates are charged for a number of reasons, but one is to ensure that the creditor lowers his or her exposure to inflation. Inflation causes a nominal amount of money in the present to have less purchasing power in the future. Expected inflation rates are an integral part of determining whether or not an interest rate is high enough for the creditor.

The real interest rate represents a fundamental valuation of temporary provision of capital (money) corresponding to a price level constant in time. It is also obvious from the above relation that if inflationary expectations change, nominal interest rates have to change aliquot at a constant real interest rate (Cottrell; 2005). The real interest rate concept is irreplaceable in the research into the mutual relations of inflation, because assuming that the creditors are rational, inflation and nominal interest rates influence each other. For similar reasons, the real interest rate is used in broader economic analyses. Expected inflation is an unobservable
quantity. In an expose analysis, it can be replaced by the actual rate of inflation in the following period, which is equivalent to assuming rational expectations (Bencik; 2009).

Theoretically less satisfactory, but easier to apply, is the assumption of adaptive expectations; this replaces expected inflation in the future by actual inflation in the present. Inflation is very important, because when there is increased inflation over a long period of time, economic agents recognize the actual value of money, stop suffering from money illusion and accept increased nominal rates. Therefore, investment as the main link between the interest rates and the real economy is considered a function of the real interest rates, as standard (Bencik; 2009).

2.2 Empirical Literature

Quite a number of empirical studies have been carried out by different scholars on the relationship between interest rate and bank deposits or savings; some of these studies are reviewed below.

Nabar (2011) assesses how interest rate affects household savings in Chinese 31 provincial level administrative units between 1996 and 2009. A strong positive correlation between household savings and interest rates was established; suggesting that Chinese save to meet a number of needs e.g. retirement consumption and durables purchases. As such high savings rates enable them to meet their target savings.

Mohan (2012) examined deposit mobilization by cooperative banks in India. The study showed that cooperative banks should rely on individual’s depositors as well as cooperative societies. Their efforts should be oriented towards the mobilization of more savings and current accounts deposits through continuous publicity, effective marketing management and providing good service to the clients.

Das & Das (2002) discuss the relationship deposit interest rates and the interest amount. They observed that the method of calculating the interest amount can substantially affect the interest paid. Depositors should take into consideration the interest rate computation over and above the quoted nominal rates. Since 89% of the customers are depositors, a high degree of transparency is needed in regard to effective rates offered to customers.

Laurenceson (2004) drawing on a panel data of 101 countries between 1994 and 2001 examined the relationship between bank franchise values and deposit mobilization. Results showed a negative relationship between franchise value and a decrease in deposits; suggesting that increased competition leads to improvements in service quality which tempts households to raise their holdings of savings deposits. In this regard it can be argued that high interest rate on deposits leads to higher deposits (ceteris paribus). But, is this so in the Zimbabwean context? It is imperative to test this hypothesis in the context of the succeeding methodology.

Mohd and Osman (1997) broadly categorized the causality into demand-following relationship and supply following relationship. The proponents of demand-following
hypothesis argued that economic growth is a causal factor for bank lending, not the reverse. Robinson (1952) maintains that economic growth propels banks to finance enterprises. Gurley & Shaw (1969) also argued that as the economy expands and grows, the increasing demand for financial services stimulates banks to provide more credit.

Similarly, Oluitan (2009) is of the opinion that policy makers should focus less on measures leading to increase in bank lending and concentrate more on legal, regulatory and policy reforms that boost the functioning of markets and banks. Muhsin & Eric (2000) in their study on Turkey concluded that economic growth lead to financial sector development. However, the proponents of supply-leading hypothesis are of the belief that bank lending is a veritable tool for attainment of economic growth and development. The hypothesis was originally credited to the works of Schumpeter (1934). Schumpeter strongly believed that efficient allocation of savings by means of identification and funding of entrepreneurs who invest such funds in innovation and production of goods and services, thus leading to economic growth. This view was supported by other scholars like McKinnon (1973), Shaw (1973), Fry (1988), and Greenwood &Jovanic (1990).

Tsuru (2000) argues that financial intermediation could affect the savings rate, and then capital formation and growth, through its impact on four different factors; (i) Idiosyncratic risks; (ii) Rate – of – return risks; (iii) Interest rates and (iv) Liquidity constraints.

A number of recent studies, however, have shown that commercial banks seem to improve banking system efficiency and thereby contribute to overall banking stability in developing countries (Levine and Loayza (1999), Barajas, et al. (2000), Classens, et al. (2000); Clarke et al, (2000), and Dages et al. (2000). On the other hand, the effect of bank credits in developing countries especially in Nigeria remains largely unexplored.

A study by Anthony (2012) investigated the determinants of bank savings in Nigeria as well as examined the impact of bank savings and bank credits on Nigeria’s economic growth from 1970-2006. The study adopted two impact models; Distributed Lag-Error Correction Model (DL-ECM) and Distributed Model. The empirical results showed a positive influence of values of GDP per capita (PCY), Financial Deepening (FSD), Interest Rate Spread (IRS) and negative influence of Real Interest Rate (RIR) and Inflation Rate (INFR) on the size of private domestic savings. Also a positive relationship exists between the lagged values of total private savings, private sector credit, public sector credit, interest rate spread, exchange rates and economic growth. The study therefore recommend, among others, that government’s effort should be geared towards improving per capita income by reducing the unemployment rate in the country in a bid to accelerate growth through enhanced savings.

Jelilov (2015) in his study on the impact of interest rate and economic growth in Nigeria from posited that the Nigerian economy faced numerous challenges which impacted on the overall economic activity and has witnessed crises with devastating consequences on the
world commodity prices as a result of global economic. This subsequently created structural imbalances occasioned by the collapse of oil prices which adversely affected the Nation’s revenue. Study examined the impact of interest rate on economic growth in Nigeria from 1990 to 2013. The result found that the interest rate has a slight impact on growth; however the growth can be improved by lower the interest rate which will increase the investment. As a result of study was found out that Nigerian authorities should set interest rate policies that will boost the economic growth. Therefore, proper measure should be taken in order to have a more rapid economic growth. Akabom-Ita, (2012) examined the impact of interest rate on net assets of multinational companies in Nigeria from 1995 - 2010. The regression analysis showed that an increase in interest rate results in reduction in net assets.

Furthermore, a study by Okoye and Richard (2013) examined the impact of bank lending rate on the performance of Nigerian Deposit Money Banks between 2000 and 2010. The study specifically determined the effects of lending rate and monetary policy rate on the performance of Nigerian Deposit Money Banks and analyzed how bank lending rate policy affects the performance of Nigerian deposit money banks. It utilized secondary data econometrics in a regression, where time-series and quantitative design were combined and estimated. The result confirmed that the lending rate and monetary policy rate has significant and positive effects on the performance of Nigerian deposit money banks. The implication of these is that lending rate and monetary policy rate are true parameter of measuring bank performance. They therefore recommend that government should adopt policies that will help Nigerian deposit money banks to improve on their performance and that there is need to strengthen bank lending rate policy through effective and efficient regulation and supervisory framework.

Similarly, a study by Enyioko (2012) also looked at the Impact of Interest Rate Policy on Performance of Deposit Money Banks in Nigerian. The study observed that the current credit crisis and the transatlantic mortgage financial turmoil have questioned the effectiveness of bank consolidation programme as a remedy for financial stability and monetary policy in correcting the defects in the financial sector for sustainable development. Many banks consolidation had taken place in Europe, America and Asia in the last two decades without any solutions in sight to bank failures and crisis. The study attempts to examine the performances of banks and macro-economic performance in Nigeria based on the interest rate policies of the banks. The study analyses published audited accounts of twenty (20) out of twenty-five (25) banks that emerged from the consolidation exercise and data from the Central Banks of Nigeria (CBN). It denoted year 2004 as the pre-consolidation and 2005 and 2006 as post-consolidation periods for our analysis. The study noticed that the interest rate policies have not improved the overall performances of banks significantly and also have contributed marginally to the growth of the economy for sustainable development.
2.3 Theoretical Literature

The interest rate determination in the economy was intensively studied by many economists. Two of the most influential theories are Irving Fisher’s classical approach, extended to loanable funds theory, and liquidity preference theory, developed by John M. Keynes. Interest rate is determined as the price paid by borrower (debtor) to a lender (creditor) for the use of resources during some interval (Fabozzi et al; 1998). There is no single measure of interest rate in the economy and yield to maturity on an asset is accepted by most economists as a measure of interest rate (Mishkin, 2001).

According to Fisher, individuals may either consume or save their incomes. Individuals save when they consider future consumption as preferable to current consumption, they consume less now to be able to consume more lately. The factors that influence saving decisions differ between individuals. First affecting factor is income. With higher income individual may save more, though the decision to save is determined not only by the level of income, but also by expectations about future income, marginal propensities to consume and save - preferences to interchange consumption and saving between time periods.

Moreover, these preferences may change after change in the level of income. Another factor affecting the level of savings is compensation obtained by individual for lending his saving to another individual, who needs additional funds and ready to pay for their use. This compensation or payment for use of funds is interest rate. The more the interest rate, the more individual’s opportunity costs of consumption, and the more he will save. The total savings in the economy is a sum of all individuals’ savings. Interest rate is positive if there is demand for the savings from the side of borrowers. Borrowers are willing to pay for saving if there are profitable opportunities to invest. The cost of funds for borrowers is interest rate. The more interest rate, the fewer borrowers will invest, so investments are a negative function of interest rate. Borrowers will be willing to invest as long as marginal benefit from investments equals marginal cost, or interest rate. Total demand for investment in the economy is determined as the sum of individual demands. Interest rate is cost of borrowing for one individual and payment for lending for others. The equilibrium interest rate equates total amounts of savings demanded and supplied. There is a distinction between nominal and real interest rates.

Fabozzi (1998) determine nominal interest rate as the number of monetary units to be paid per unit borrowed and real interest rate as the growth in the power to consume over the life of a loan. If there is no inflation in the economy, there would be no difference to individuals whether interest rate is nominal or real. Fisher was one of the first developers of the theory of interest rates and he was one of the first who introduced this distinction. During inflation nominal rate exceeds real and during deflation real rate exceeds nominal.
Fisher suggests that in the long-run real interest rate is constant and expectations about inflation affect only nominal interest rate. Fisher’s theory is very general and does not take into account many factors influencing the level of interest rates. The Loanable Funds Theory extends Fisher’s approach and incorporates into the analysis government actions, banks, bonds and cash investments. The results are similar to classical approach – interaction of total demand for funds, negatively related to interest rate, and total supply of funds, positively related to interest rate, determines the equilibrium interest rate and amount of savings or investments.

On the other hand, The Liquidity Preference Model, introduced by John Maynard Keynes, is an alternative approach to the determination of interest rate in the economy. This model analyses the behavior of interest rates as a reaction to changes in money supply and money demand, rather than changes in supply and demand for savings. The model assumes only two assets: money and bonds. The logic of the model is following: individuals hold money for current transactions and hold bonds that earn interest. Interest rate in this case is an opportunity cost of holding money, since individual may convert money into bonds and earn more. If the interest rate for bonds is low, opportunity costs are not high and individual more freely hold cash balances. If the rate is high, opportunity costs increase and people are less willing to hold money instead of profitable bonds. Thus, there is a negative relationship between money demand and interest rate in this theory. Keynes assumes that money supply is not affected by the level of interest rate and government and central bank control money supply. The change in the equilibrium interest rate may happen due to either supply or demand side changes. Main factors that affect the demand for money in the Liquidity Preference Theory are level of income and price level in the economy. Increase in income, increases the demand for money due to higher liquidity of money. The same effect has an increase in price level. People want to hold real money balances to be able to buy the same goods as before inflation, and thus increase their demand for money holding. Operations of central bank and commercial banks affect money supply.

Sachs and Larrain (1999), Mishkin (2001) state that Central bank controls monetary base (MB), which is currency in circulation and reserves, through several tools, such as open market operations - purchase and sale of bonds, discount lending to banking system, reserve requirements on deposits in the banking system and foreign currency market operations. Discount rate is especially important tool of influence on interest rates in the economy, since it not only influences the price of credit resources for the banks, but also contains information on level of interest rates in the economy, so may be followed by commercial rates. The extent to which increase in monetary base may increase money supply is affected by the level of required reservation, currency/deposit and reserves/deposit ratios, or money multiplier.

Sachs and Larrain (1999) determine the money multiplier as follows:
D = Cd + 1/ Cd + Rd

Where:
Cd and Rd are currency/deposit and reserve/deposit ratio respectively.

Money supply increase is thus money multiplier time’s increase in monetary base. The result of money supply increase on interest rate is ambiguous, since, according to Mishkin (2001), this contains different effects on the interest rate; namely liquidity effect, income effect, price level effect and expected inflation effect.

Liquidity effect theoretically reduces interest rate by shifting money supply curve to the right, and new equilibrium is with lower interest and larger money supply. This effect, though, may be followed by other effects, which would reverse the fall in interest. Income effect through influence of the expansion on aggregate demand will tend to increase demand for money and the effect is clear: it will increase interest rate. Price level effect of the increase in money supply also increases demand for money and, consequently, interest rate. This effect works in similar fashion as income effect. If economy produces at full employment, increase in money supply most likely will lead to increase in inflation, and this, recalling Fisher’s Law, will increase nominal interest rate. In practice, it is impossible to predict which effect is prevalent after money supply increase. These effects will differ in different economies or even in one economy during different stages.

2.4 Theoretical Framework

There is no gainsaying the fact that loanable funds to finance long-term projects are usually scarce relative to the demand for them. It is also true that it is often difficult to finance projects solely with own funds usually because large-scale projects require ample funds. In this study, we see the financial intermediary role as mainly the duty of commercial banks so as to provide credit for the key sectors of the economy. It is upon this theoretical base that we build our study.

This theory according to Vanish (2000) cannot be ascribed to any one single writer belonging to the classical school. Following Adam Smith, the classical writers being interested in those fundamental forces which determined the long-term interest rate, disregarded those factors of temporary and secondary nature which characterized the short-run disequilibrium situations. However it is widely accepted that the theory was propounded by Marshall (1920) and Pigou (1932) and this theory is known as the demand and supply theory of saving. The theory states that the rate of interest is determined by the supply and demand of capital. The supply of capital is governed by time preference and the demand for capital is determined by the expected productivity of capital. The time and preference are dependent on savings. According to Vanish (2000) the demand for capital consists of the demand for productive and consumptive purpose. Capital is demanded by the investors because it is productive. But the productivity of capital is subject to the law of variable
proportions (additional units of capital are not productive as their earlier units). However, the supply of capital according to Jhingan (2001) depends upon savings rather upon the will to save and the power to save of the community. Some people save irrespective of the rate. They would continue to save even if the rate of interest were zero. There are others who save because the current rate of interest induces them to save and reduce when the rates are low. The higher the rate of interest, the larger the community savings and more will be the supply of funds. The supply curve of capital or the savings curve moves upward to the right. As such, this study seeks to examine whether interest rates value has been responsible for commercial bank deposits over the period of study in Nigeria.

3. Methodology

3.1 Research Design

The study adopts a survey type of research design. There are two variables: independent and dependent. The dependent variable is commercial bank deposits in Nigeria. The independent variables are the interest rate and gross domestic product (GDP). In addition to the above, the study equally seeks to examine the relationship between interest rate and commercial bank deposits in Nigeria.

3.2 Source of Data

Based on the nature of the study, data collection will be based on secondary data. The study will source data from Statistical Bulletin of the Central Bank of Nigeria (CBN), Federal Office of Statistics (FOS) and Annual Abstract of Statistic of the National Bureau of Statistic (NBS). The source of data for the study is secondary source because it requires the time series data of the interest rate, the GDP and commercial bank deposits for the period between 1986 and 2014.

3.3 Model Specification

Given the propositions stated that interest rate plays a crucial role in determining commercial banks deposits, this could also serve as a source of credit for desiring sectors of the economy. In this study therefore, we are examining the impact of interest rate on commercial bank deposits.

As such, in specifying our model, our dependent variable shall be the Commercial bank deposits, while our explanatory variables shall be the annual time series data of interest rate and the gross domestic product (GDP). Therefore, our multiple regressions model can be specified as thus;

\[
CBD = b_0 + b_1X_1 + b_2X_2 + U
\]

Where

CBD = Commercial Bank Deposits

\(X_1 = \text{Interest Rates}\)
X₂ = Gross Domestic Product (GDP)
U = the stochastic error term
b₀, b₁ and b₂ are parameters

3.4 Technique for Analysis

We shall use the Ordinary Least Square (OLS) technique to estimate the values of the parameters B₀, B₁ and B₂. Besides, we will use the student’s t-values obtained to determine the statistical significance of the parameter estimates and the test of goodness of fit for the model using the R² technique. This will enable us to know the percentage of variations between the dependent variable and the explanatory variables.

Then, the f-statistic test to determine the overall significance of the multiple regression models and the Durbin–Watson test for the presence or absence of auto-correlation.

3.5 Description of Research Variables

The research variables employed in this study are those of interest rate since it has direct bearing and impact on commercial bank deposits in Nigeria.

3.6 Validity and Reliability of Instruments

The validity and reliability of instruments used is such that can be described as truly reliable since it involve the use of software to carry out the analysis. And also valid to the extent that the obtained results were made possible the software as well. As such, it can be relied upon for the purpose of analysis and for prediction.

4. Data Presentation and Analyses

4.1 Data Presentation

In the analysis of our model, in which Commercial Bank Deposits (CDP) served as the dependent variable while the interest rate and the Gross Domestic Product (GDP) serve as the independent or explanatory variables, we obtained the following results for the Ordinary Least Square (OLS) multiple regression models. Please note that the result presented below have their details in software form at the appendices.

4.1.1 Ordinary Least Square (OLS) results

The OLS multiple regression result is as presented below:

\[
CBD = b₀ + b₁INTR + b₂GDP
\]

\[
CBD = 40202733 - 1398136INTR + 0.51GDP
\]

\[
S.E (13634147) (719357.2) (0.28)
\]

\[
t-stat. 2.95 - 1.94 1.81
\]

R² = 0.48, F-stat = 5.14, d-w = 0.68, N = 14
4.2 Analysis of results

4.2.1 Ordinary Least Square (OLS) Multiple regression results

The study results generated from the ordinary least square multiple regressions as presented above shows that the interest rates has a negative relationship with commercial bank deposits while the GDP has a positive relationship with commercial bank deposits. In spite of being negatively signed the interest rate was also not statistically significant using the rule of thumb of 2. Furthermore, the GDP was also found not to have impacted on commercial bank deposits since its t-value was also not statistically significant. This explained the nature of relationship between commercial bank deposits and the interest rates in Nigeria.

4.3 Findings

Based on the multiple regression result, it suggested that interest rates do not affect commercial bank deposits in Nigeria. This implies that the value of the interest rate whether high or low is not a determinant of commercial bank deposits in Nigeria. That is, bank customers are not often moved by the level of the interest rates to determine their desire to deposit or not to deposit their funds in the vaults of commercial banks. As such, the interest rates level not withstanding customers may decide on their own to deposit or not bearing other factors other than interest rates level.

Intuitively therefore, it can be said that there is no significant relationship between interest rates and commercial bank deposits in Nigeria.

5. Conclusion and Recommendations

5.1 Conclusion

This research is on the impact of interest rate and Commercial Bank deposits in Nigeria (2000-2013). Our main aim is to investigate what has been the influence of interest rate on Commercial bank deposits in Nigeria. Using the interest rate and the gross domestic product as the explanatory variables; our study via the results obtained shows that there has being no corresponding impact of interest rates on commercial bank deposits in Nigeria. This suggests that the level of the interest rate notwithstanding decision to deposit funds is made by the customers with regard to other factors aside the interest rate. This is evident by the nonchalant attitude of bank customers to the level of the interest rate charged when they deposit their funds in these commercial banks. Although, this is not supposed to be; but it is the case with the Nigerian system.

5.2 Recommendations

Based on the findings of the study, the following recommendations were made; i. That more awareness be created to educate customers of the benefits that accrue from being conscious of the interest rates values.
ii. Also, the idea of marketing without emphasis on the interest rates value for customers deposits should not be encouraged by banks. As a result, bank marketers should learn to emphasise the benefits customers are going to gain when they deposit their fund in their banks.

**References**


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Table Showing Commercial Bank Deposits, The Interest Rates and The Gross Domestic Product (GDP) For The Period Between 2000 and 2013

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<th>YEARS</th>
<th>CBD</th>
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<td>2013</td>
<td>25638963</td>
<td>1785843.5</td>
<td>14.56</td>
</tr>
</tbody>
</table>

Sources: Central Bank Of Nigeria Annual Statistical Bulletin And National Bureau Of Statistics

Appendix

OLS Software results

Dependent Variable: CBD
Method: Least Squares
Date: 02/11/16   Time: 10:30
Sample: 2000 2013
Included observations: 14

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>40202733</td>
<td>13634147</td>
<td>2.948680</td>
<td>0.0132</td>
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<tr>
<td>INTR</td>
<td>-1398136.71</td>
<td>719357.2</td>
<td>-1.943591</td>
<td>0.0780</td>
</tr>
<tr>
<td>GDP</td>
<td>0.513217</td>
<td>0.283930</td>
<td>1.807549</td>
<td>0.0981</td>
</tr>
</tbody>
</table>

R-squared | 0.482916 | Mean dependent var | 16571489 |
Adjusted R-squared | 0.388901 | S.D. dependent var | 7864481 |
S.E. of regression | 6147886.41 | Akaike info criterion | 34.28852 |
Sum squared resid | 4.16E+14 | Schwarz criterion | 34.42546 |
Log likelihood | -237.0197 | F-statistic | 5.136578 |
Durbin-Watson stat | 0.676739 | Proib(F-statistic) | 0.026582 |

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