EFFECT OF DEPOSIT MONEY BANKS ON REAL ESTATE GROWTH IN NIGERIA

James, Godwin Bassey¹, Ogar, Anthony
Department of Banking and Finance, University of Calabar, Cross Rivers State, Nigeria

Abstract:
This study examined the effect of deposit money banks on real estate growth in Nigeria using bank credit to the real estate, interest rate, inflation rate and the contribution of the real estate to GDP as the study’s variables. The study adopted the ex-ante facto research design. Annual time series data were collected from the CBN statistical Bulletin using the desk survey method for the period 1985 to 2017. The data were analysed using the ordinary least square multiple regression statistical technique. Result from the analyses revealed that bank credit to the real estate subsector has a positive and significant effect on the real sector growth in Nigeria. Also, it was shown that interest rate had a positive but insignificant effect on real estate growth in Nigeria. Lastly, it was revealed that inflation has a positive but insignificant effect on real estate growth in Nigeria. Based on these findings, it was recommended that CBN and other regulatory authorities should formulate policies to encourage increased funding by banks to the real estate sector by prioritizing lending by deposit money banks to this subsector. Also, interest rate on real estate loans should be set lower than the conventional interest rates to boost the efficiency of the sector and facilitate its contribution to GDP and growth and Lastly monetary authority should target inflation rate at single digit and ensure that inflation does not increase beyond that level to boost real sector growth.

JEL: G20; G21; L85

Keywords: deposit money banks, real estate growth, Nigeria

1. Introduction

The survival or otherwise of the sector of any economy is dependent on its ability to access finance as finance is the life blood and soul of any business. No business can
succeed without finance, as it is required to purchase raw materials, capital equipment, settle outstanding obligations and modernize or/and expand business operation (Ojong, Arikpo & Ogar, 2015). The whole production process revolves around finance, for instance, finance is used to buy raw materials, employ labour and purchase capital equipment which aids the conversion of these raw materials into finished goods which must be sold to generate finance. In fact, as important as oxygen to human, so is finance to businesses. The repository of finance is the banking sector. The banking sector mobilizes finances from the surplus and idle sources and channels same (in form of loans) to the deficit but active units (real sector) through the intermediation process (Ajaude, Nkamare & James, 2015).

This is why banks are often referred to as financial intermediaries since they help to bridge the gap between borrowers and lenders by creating a market in two types of security, one for lenders and the other for borrowers (Nzotta, 2004). If banks cannot grant loans to the deficit economic units within its immediate operational environment, the real estate will not grow, deposits will not be made and the bank itself will be a loser, which may eventually result at its liquidation (Udoka, 2014). The real estate sector is a service sector and occupies a very important position in the Nigeria economy. This is so because like food, clothing, it is the sector that provides housing (shelter) for individual households, businesses and the government. Housing is a major economic asset which has profound impact on the prosperity of the country and the productivity of individual as decent houses increases workers’ health and also affects the well-being of the citizens. It is an index of measuring the standard of living of a country and a very important consumer item. It influences the input-output relationship and may result in job dissatisfaction. The focus of this research is to examine the effect of deposit money bank finance on real estate growth in Nigeria.

The Nigerian real estate sector is bedevilled with many constraints ranging from financial constraint, explained by high lending rates, high collateral requirements, lack of adequate credit, traceable mainly to the reluctance of banks to extend credit to real estate sector operators for expansion and modernization of operation (Offiong, Atsu, Ajaude & Ibor, 2016). The high level of financial illiteracy of some real estate managers, the hike in exchange rate coupled with the unfriendly and unstable policies of government have added to inability of the sector to operate efficiently as the wheel that drives economic growth. The poor state of the Nigerian infrastructure and the high taxes charged on firms have further resulted in high cost of production leading to high prices of substandard products and low patronage of locally made goods. This further reduces the output and/or productivity and the level of funds needed to finance the sector. These result in the use of crude and unsophisticated technology leading to the production of inferior goods and the patronage of foreign goods. This study is therefore designed to examine the role of banks in the development of the real sector economy in Nigeria.

The major objectives of this study will be to examine the impact of deposit money bank on the growth of the real estate in Nigeria. It is believed that this study will be of great significance to the public. It will serve as a veritable tool in the hands of
academia, students, professionals and researchers by adding to the myriad of literatures available in the subject matter and pointing the way for further researches. Real estate operators will learn the various credit facilities available to them and understand how to access these facilities for profitable investment. Deposit money banks will understand the need for making credit facilities accessible to businesses.

2. Theoretical Framework

2.1 Urban Spatial Theory
The theory underpinning this study is the urban spatial theory, propounded by DiPasquale in 1994. The theory asserts that housing stock depends on urban population, series of economic factors, cost of new construction activity and more importantly on credit availability. A greater density of population in the metropolitan area leads to a high demand for housing. Basically, an increase in cost of building activity leads to abnormal increase in house price. This is because the high cost of building materials and high labour price result in a rise in house price. The urban spatial theory emphasizes that there is a relationship between stock of housing and urban population. An increase in population positively increases the demand for housing, thereby causing the price of housing to increase.

DiPasquale identified credit availability as the most important element in housing supply although studies always failed to discover a consistent relationship between finance and housing supply, the Neo-classical economists assert in the economic theory and housing demand that finance is the core product of housing investment. Also, the amount of financial resources determines the amount invested in housing. The Neo-classists also emphasized that there are factors that increase or decrease the supply of houses such as construction cost, credit availability as well as economic factors, these are the key endogenous variables in housing supply.

2.2 Investment Base Theory
James Poterba in 1984 introduced this theory. The emphasis of this theory is based on the supply of housing as a function of series of economic factors such as real house price, cost of new construction, land and credit availability. Poterba specified three (3) basic assumptions in relation to this theory. First, that housing industry is composed of competitive firms and the industry’s output is dependent on the real price of housing construction. Second, there are limits to materials of production and third, increase in demand for housing leads to growth in equilibrium price structure of housing.

The major determinants of housing supply are credit availability and cost of construction. An increase in the price of construction of housing, initially results in a decrease in the demand for housing while a positive change in credit availability raises housing investment. Topel and Rosen in 1988 added a model to the Poterba’s theory of housing and this model encompasses of economic expectations which are interest rate, inflation rate and their lag values. However, advocates of the Poterba theory criticized urban spatial theory stating that the theory ignored land, a highly important issue
because land is a unique element of housing supply. However, the difference between investment-based theory and the urban partial theory is whether or not to consider the issue of land as an input in the supply of housing.

3. Conceptual Framework

The financial sector is the largest in the world in terms of earnings (Sutton & Jenkins, 2007). It is the most regulated due to its economic relevance and acts as a backbone for other sectors in the economy. The primary role of this sector is to move funds from the surplus units or idle users of funds to the deficit units. The financial sector transforms savings mobilised into credit. It ensures that savings are allocated optimally for investment. Aderibigbe (2004) argues that the financial sector facilitates business transactions and economic development. The financial sector comprises of the money and capital markets. The money market otherwise called the banking sector and it is an avenue to seek funds on a short-term basis. The capital market on the other hand is a market where investment securities are being traded and funds are allocated on long-term basis. Nzotta (2004) observes the banking sector in Nigeria is dominant and the most vibrant sector of the financial sector and difficulties experienced in the sector affects the economy at large.

The view of Schumpeter (1911) is that an economy would not develop if development is not experienced in the financial sector. The development of the financial sector affects growth in the real economy. An efficient financial sector minimises information asymmetry and reduces monitoring and transaction costs (McKinnon, 1973; Shaw, 1973). The real sector is a constituent of the economy which consists of individuals and corporate entities that engage in activities aimed at producing goods and services to satisfy public demand. According to Sanusi (2011), the real sector is where production of goods and services take place through the combined use of raw materials and factors of production and it is the driving force of the economy. The output of the real sector indicates the level of productivity in the economy. When the production capacity of the real sector increases, the economy experiences growth. In order to ensure that the real sector operates at its full potential, there must be an efficient financial sector to support it (Sanusi, 2011). The performance of the real sector is a gauge to compare progress between nations.

4. Areas of Focus to Grow the Real Sector

4.1 Macroeconomic Instability

The scope of the challenges facing the Nigerian economy is enormous. The economy is mono-product oil, with output and prices depending on international economic conditions. This singular nature of the economy has far reaching implications for the stability of the economy. In the main, the revenue profile of the government is a direct function of the international price of the country’s reference crude, Bonny Light. As a consequence, fiscal performance of the government depends on how favourable prices
turn. Therefore, the oscillations in the international economy dis-equilibrates demand and supply conditions in all the segments of the domestic economy – exchange rate of the naira, real activity, financial intermediation, the list is endless- bringing about persistent drifts from the trend lines of the gross domestic product. There is need to minimize macroeconomic instability that emanates especially from fiscal operations of the government. This is particularly important in order to send appropriate signals to investors in the economy.

4.2 Weak Institutions
As in other developing economies, the institutional set up in Nigeria hardly leaves room for smooth development of the real sector. Primarily, the traditional organization of production and its processes impedes development. In the agricultural sub sector, the fragmented land ownership inhibits large scale mechanization of the sector. In the industrial sub sector, poor investment climate is a major source of concern. Several reasons account for the poor investment climate. First, the legal system contains entrenched bottlenecks which delay delivery of justice so that dishonoured business contracts are not timely addressed, eroding investment confidence. Second, the perception about the political environment affects the level of investment in the real sector. There is a positive correlation between thriving democracy and the stream of foreign direct investments. It has to be pointed out that the country has made great progress in the democratic process as seen in the success of the general elections of 2011.

However, efforts must be made to ensure that the after-election violence and the current tensions in the polity are contained in order to consolidate on the gains made in growing the real sector. The various reforms in the economy present opportunities to tackle the institutional strains to the real sector development. Notably, the land reforms, the judicial reforms and the attitudinal reorientation which the government is preaching and a host of others are a testament to the desire to position the real sector on a strong footing.

4.3 Poor Economic and Social Infrastructure
The development of adequate infrastructure is indispensable for the development of the real sector. The various sub-sectors of the real economy have been hampered one way or the other by the poor state of infrastructure in the economy. The agricultural sector is affected by the absence of storage and processing facilities, which renders output, and so farmers’ income largely seasonal and prone to waste. It also perpetuates the vicious cycle of ‘harvest and sell raw’ of produce. Transportation infrastructure is also one impediment to the delivery of produce from farm gates to consumption sites.

The industrial sector is impacted by poor infrastructure in several respects. First the cost per unit of production is exorbitant; capacity utilization is low, which implies losses in output, employment and productivity of installed equipment. Consequently, output prices are non-competitive when compared with imports and the market share
of domestic manufactures has shrunk overtime, with the implication that real sector growth is slowed down.

On the positive side, let me mention that light is beginning to appear at the end of the tunnel. The road map for the development of the power sector including the initiatives by the CBN, the petroleum industries bill, the rail projects coming on stream and other isolated efforts of government present hope that in no long time the problem of infrastructure in the real sector would be addressed.

4.4 Corruption
The issue of corruption has been roundly adduced as one of the worst impediments for the development of the real sector. But how does it affect the development of the real sector. In the main, as public sector institutions should facilitate the growth of the real sector, it is expected that the bureaucracy in the relevant parastatals should be efficient. However, it is commonplace to find round pegs in square holes in the public sector. This weakens the capacity for the bureaucracy to perform its function of supporting the real sector effectively. For investments, corruption de-develops the real sector by affecting the perception of potential investors. It presents a negative image of the environment and so scares would-have-been investors in the real sector. Corruption also fuels rent-seeking tendencies in over invoicing etc.

4.5 Poor Credit Delivery
Before the liberalization of the credit market, the various priority sectors of the economy were guaranteed direct credit allocations. These provisions were relaxed with the introduction of the Structural Adjustment Programme in 1986. The implication for this was that the real sector was exposed to source credit from the open market at the ruling interest rates. However, with the myriad of difficulties- infrastructure, inclement investment climates etc- the sector appears incapable to source the requisite fund from the open market. And this is obvious when we look at the sectoral allocation of credit to the real sector over the past few years. This has necessitated the various initiatives by the CBN towards channelling credit to the sector.

4.6 Problems and Efforts in the Nigeria’s Manufacturing Sector
The main problems that have characterised the manufacturing sector of Nigeria are lack of competitiveness, import dependency, low capacity utilisation and low output. According to them, the period of the implementation of import substitution industrialisation strategy produced a manufacturing sector that is weak, non-competitive and highly import dependent. Even though some growth in value-added was recorded during this period (particularly in the oil boom period 1973-1981), manufacturing sector performance has been propelled by investment in factor accumulation rather than efficiency in factor use. They argued that the period of adjustment reforms (and beyond) has also featured low capacity utilisation resulting in low output in the manufacturing sector, non-competitiveness of exports even after the introduction of various export incentive scheme and trade liberalisation policy.
Söderbom and Teal (2002) study had as part of their findings that the most frequently cited number-one problem for firms is physical infrastructure, followed by access to credit, insufficient demand, cost of imported raw materials, and lack of skilled labour. This aggregation marks considerable differences over the size range in problem perceptions; for instance, among micro firms the most frequently cited main problem is credit access, while for medium and large/macro firms it is physical infrastructure.

The Scheme had since its inception generated 16,422 new jobs, sustained the operations of 347 projects and resuscitated 9 moribund companies. In addition, capacity utilisation and turnover of the beneficiaries increased from a pre-intervention level of 25.0 to 36.0 per cent and N2.97 billion to N5.34 billion, respectively. Under the Scheme, beneficiary companies accessed long-tenured funds, culminating in an annual interest cost-saving of N35.30 billion, while boosting the liquidity of the participating banks.

5. Review of Empirical Literature

Rasheed (2010) investigated the productivity in the Nigerian manufacturing subsector using co-integration and an error correction model. The study indicates the presence of a long-run equilibrium relationship index for manufacturing production, determinants of productivity, economic growth, interest rate spread, bank credit to the manufacturing subsector, inflation rates, foreign direct investment, exchange rate and quantity of graduate employment. This finding has research gap on the area of factors that affect manufacturing sector in Nigeria.

Ikenna (2012) has employed time series data from 1970-2009 on an autoregressive distributed lag (ARDL) – based test model to test for the long and short run impact of financial deregulation and the possibility of a credit crunch in the real sector. The results suggest that deregulating the Nigerian financial system had an adverse boomerang effect on the credits allocated to the real sectors in the long run, and in the short run financial liberalization was in all insignificant and negative. Ikenna also concludes that deposit money banks (DMBs) in Nigeria have strong discriminatory credit behaviour towards the real sector (agriculture and manufacturing) and the SMEs as credit crunch is found to be present in these sectors both in the short and long run.

Omirin (2007) examined the accessibility of mortgage finance by the low-income earners and the escalating cost of housing construction in Nigeria. The study applied the ordinary least square multiple regression approach to analyse the data sourced from the CBN publications. the study concluded that mortgage institutions are not productive in making finance accessible by the citizens especially the low-income earners. Against this backdrop, he recommended that government should introduce ways of improving housing policies which will enable the citizens to easily access mortgage finance.

The problem of financing real estate in Nigeria was examined by Ogedengbe and Adesopo (2003), through the administration of questionnaires, using descriptive analysis, which revealed that high interest rate and other requirements for loan application have bedeviled the financing of real estate properties in Nigeria. They
recommended that government should make effort to solve economic problems such as inflation, reduce interest rates in order to eliminate or minimize the problems that plague the mortgage financing of real estate development.

Oduwaye (2008) examined the demand and supply of housing in Nigeria. Using survey analysis and secondary data, highlighted that the NHF policy, the structure of the PMIs, land Use Act, high interest rates are some of the constraints to mortgage financing in Nigeria. Mailafia (2007), commented that the poor performance of the mortgage financial system in Nigeria could be attributed to low accessibility, and underdevelopment of the land tenure system. The primary mortgage institutions are not sufficient in number and there is a wide difference between the number of people who actually applied for the loan and the amount that was approved.

Warnock (2008) investigated the effects of housing market in the provision of housing finance in twelve different countries among them are Malaysia, China, Indonesia and came up with a result that efficient legal system, stable and conducive macroeconomic environment, existence of credit information systems had positive effects on mortgage finance system. Tomlinson (2007), corroborates that adverse legal, macroeconomic institutions and regulatory environment impact enormous effects in the provision of long-term finance for housing. He opined that financial innovation in the form of mortgage - backed securities has shifted focus of mortgage from the credit worthiness of potential homeowners to marketing of financial instruments which is also known as financializing of mortgage. This implies that trading mortgage instruments now becomes a driving force for source of profit rather than house itself which not only impedes the main objective of providing housing but exacerbates the risk of a financial crisis due to the spill over effects.

Iyaiya (2012) carried out a research on microfinance and mortgage financing in Nigeria. Primary source of data was used in the study and multiple regression analysis was employed to examine the impact of microfinance and mortgage finance in Nigeria. The result showed that credit facilities provided by informal microfinance was used by housing purposes by the respondents. Based on the findings, he recommended the establishment of a regulatory body that would ensure the construction of decent houses, the risk of land purchase should be eliminated, and tenure security should be ensured.

Eni and Danson (2014) examined the factors affecting private sector housing supply in Calabar, using survey and systematic sampling method to select the houses along the street of the metropolis. They found out that factors such as cost of construction, population growth, inflation rate, income per capita and cost of land contribute to housing delivery in Calabar. Secondary source of data was adopted and also, percentiles and t-test as well as Pearson product moment of correlation was employed. The test result indicated that insufficient number of mortgage institutions in Nigeria contributes to insufficient housing delivery.
6. Research Methodology

This study will adopt the ex-post facto design to gather relevant materials from textbooks, journal articles and government publications. The design will guard the extraction of data from these materials for data analyses and hypotheses testing. The choice of this design is necessitated by the secondary nature of data used in this study. The data to be used in this study will be secondary time series data for the period 1985 to 2017. The data will be sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin, Journals and the internet and other relevant publications.

The analytical and interpretational tools employed comprise simple statistical as well as comparative analyses using tables (charts) representative. The ordinary least square multiple regression analytical technique and its interpretation will be used. The adoption of this technique is justified by it feature as the best linear unbiased estimate with built-in validation criteria used in establishing relationships among variables. The functional relationship between the variables of this model could be express thus:

\[ \text{REG} = f(\text{BCRE}, \text{INT}, \text{INF}) \]  

The ordinary least square model was obtained from the above equation thus:

\[ \text{ROE} = a_0 + b_1 \text{BCRE} + b_2 \text{INT} + b_3 \text{INF} + e_t \]  

Where:
\[ \text{REG} = \text{Real Estate Growth (Contribution of the Real Sector to GDP)} \]
\[ \text{BCRE} = \text{Bank Credit to the Real Estate} \]
\[ \text{INT} = \text{Interest Rate} \]
\[ \text{INF} = \text{Inflation Rate} \]
\[ a_0 = \text{Regression Constant.} \]
\[ b_1, b_2, & \ b_3 = \text{Regression Parameters} \]
\[ e_t = \text{Stochastic Error Term.} \]

7. Result and Interpretations

The above data were keyed into E-views 9 and computed with the ordinary least squared technique. The result is presented in table 1 below:

From Table 1, bank credit to real estate has a positive or direct relationship with the growth of real estate. A one per cent increases in bank credit to real estate resulted in a 1.078 percent increase in real estate growth. This finding is in tandem with a priori expectation. The result also revealed that there is a positive relationship between interest rate and real estate growth. Here a one percent increase in interest rate resulted in a 1.61 percent increase in real estate growth. The result finally reveals that there is a positive relationship between inflation and real estate growth. A one percent increase in inflation, resulted in a 0.16 percent increase real estate growth in Nigeria.
Table 1: Regression result

<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>0.849944</td>
<td>0.500737</td>
<td>1.697384</td>
<td>0.1117</td>
</tr>
<tr>
<td>LBCRE</td>
<td>1.078137</td>
<td>0.043580</td>
<td>24.73906</td>
<td>0.0000</td>
</tr>
<tr>
<td>INR</td>
<td>0.016084</td>
<td>0.026143</td>
<td>0.615219</td>
<td>0.5483</td>
</tr>
<tr>
<td>INF</td>
<td>0.001679</td>
<td>0.007802</td>
<td>0.215231</td>
<td>0.8327</td>
</tr>
</tbody>
</table>

R-squared 0.981688
Adjusted R-squared 0.977763
F-statistic 250.1693
Durbin-Watson stat 0.696835
Prob(F-statistic) 0.000000

Source: Researcher computation from E-views 9.

The goodness of fit of the model as indicated by the $R^2$ adjusted value of 0.9777 or 97.77 percent indicates that the model fits the data well, the total variation in the observed behaviour of real estate growth as a measure of development is jointly predicted by the variations in bank credit to the real estate, interest rate and inflation up to 97.77 percent.

The overall significance of the model was also tested using the ANOVA or $F$-statistics. Here the high significance of the $F$-statistics value of 250.169 confirms that the high predictability of the model did not occur by chance; it actually confirmed that the data fit the model well. The individual significance of the parameters of the respective, independent variables were also tested. Bank credit to the real sector was statistically significant at five percent level. This is so as it calculated $t$-statistics values of 24.739 has a probability value less than and five percent. Interest rate and Inflation rate were however statistically insignificant at five percent level as their calculated $t$-statistics value of 0.615 and 0.215 have probability values greater than five percent. We also tested for the presence of autocorrelation in the residual of the model using the d-w statistics, the test revealed that the calculated d-w value of 0.6968 fell within the negative autocorrelation region of the d-w table. Based on this region, we conclude that the model is not free from autocorrelation problem and therefore must be handled with caution.

The analysis above revealed that bank credit to the real estate subsector has a positive and significant relationship with real estate growth. This means that the more credit granted to the real estate operators, the more the contribution of the real estate to GDP. In other words, bank credit to the real estate has a huge positive relationship with real estate development in Nigeria. This finding has been supported by Samsi, Yusof and Cheong (2012) who in their study found a significant but positive relationship between bank credit to the real estate and the development of the real estate subsector in Nigeria.

Another major finding of the study revealed that there is a positive but insignificant relationship between interest rate and real estate subsector to GDP in Nigeria. However, when interest rate is set so high, it deters productivity. This study shows that interest rate, if set so high, will result in increased real sector growth but at a
reducing rate. The study again reveals that there is a positive but insignificant relationship between inflation and real estate growth in Nigeria. In other words, the higher the inflation rate, the less proportionately the growth of the real estate subsector. This implies that excessive inflation is unhealthy for the growth of the real estate subsector. This finding has been supported by Agbaeze, Udeh and Onwuka (2015) who revealed that inflation limits financial intermediation role of banks and alter real sector growth in Nigeria.

8. Summary of Findings and Recommendations

This research study was carried out to evaluate the effect of deposit money banks on real estate growth in Nigeria. The Ordinary Least Square (OLS) was adopted to examine the bank credit to the real estate, interest rate and inflation rate on the contribution of real estate to GDP in Nigeria. Consequently, the following findings were made:

1) There is a significant positive relationship between bank credit to the real estate subsector and real estate subsector growth in Nigeria;
2) There is a positive but insignificant relationship between interest rate and real subsector growth in Nigeria;
3) There is a positive but insignificant relationship between inflation rate and real subsector growth in Nigeria

In the light of the above findings, the following conclusions were made. Banks credit to the real estate subsector has played a significant role in boosting the productivity in the sector, however, during a high inflationary and interest rate regime, the effect of bank credit on the sectors productivity may not be so significant. All things being equal however, bank credit to the real estate has a significant effect on the sectors growth. Based on the above finding, the following recommendations were advanced.

1) CBN and other regulatory authorities should formulate policies to encourage increased the funding by banks to the real estate sector by prioritizing lending by deposit money banks to this subsector
2) Interest rate on real estate loans should be set lower than the conventional interest rates to boost the efficiency of the sector and facilitate it contribution to GDP and growth.
3) Lastly monetary authority should target inflation rate at single digit and ensure that inflation does not increase beyond that level to boost real sector growth.

References


Lecture in honour of Late Professor Okefie Uzoaga held on July, 12 at University of Nigeria, Nsukka, Enugu State.


