

Assessment of the Impact of Primary Mortgage Institutions' Loans on Real Estate Development in Nigeria

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ABSTRACT

The study assessed the impact of primary mortgage institutions on development of real estate in Nigeria (1993 to 2016). The study made use of secondary sources of data collection. The data was analyzed through the use of inferential statistics i.e. ordinary least square method (OLS). In this study real estate was proxy by three variables, namely mortgage loan (MOL), cost of building (COB) and Interest rate on mortgage loan (INT). The result of the analysis revealed that all the independent variables except mortgage loans (MOL) have significant impact on the development of real estate in Nigeria while (COB) and (INT) were negatively related to the development of real estate in Nigeria. Hence, it was concluded that primary mortgage institutions does not have significant impact on real estate development in Nigeria. It was recommended that government should strive to make housing affordable to the people by giving encouragement to primary mortgage institutions to grant credits at a low rate of interest and also promulgate laws to sanction herring estate developers so that the cost of building could be affordable to the citizenry.

Keywords

Real Estate, Primary Mortgage Institutions, Mortgage Loans, Mortgage Banking, Loan Interest, Cost of Building

INTRODUCTION

Primary mortgage institutions are banks licensed to carryout mortgage lending business in Nigeria, such businesses includes granting of loans and advances to any person for building, improvement or extension of a dwelling and or commercial homes, and or the purchase of commercial properties among others. This institution is a lender of money to potential home owners who use such loan to purchase a home, repayment of such credits are made usually on monthly basis to the mortgage institution. The mortgage business had been managed for quite a long

time by the government until the industry was restructured for private investors to come and invest in the sector. Despite efforts of government to ensure the provisioning of affordable shelter for the Nigerian populace, the impact made by the industry has been minimal because of the low level of awareness of infrastructures especially in the less develop areas of the country. A major disincentive hindering the supply of mortgage to the people is the high interest rate charged by domestic financial institutions where such loans are taken; servicing them becomes financially burdensome and unbearable for the borrowers.

The relatively low capacity of Nigerian workers could not afford them to purchase properties on a "cash and carry" basis as it is the case with property sale in Nigeria. Evidence from Federal Capital Territory in Abuja revealed that rental payment for a two bed room residential apartment are in the range of #400,000-#500,000 in the suburbs and #1,000,000- #1,500,000 in the city and this make it impossible for the average worker to be considered for a commercial bank mortgage loan. The same challenge is faced by businesses and potential business owners in Nigeria.

Furthermore, the difficulty of obtaining and perfecting and transferring title documents is very costly. According to a 2008 World Bank report, the cost of registering a mortgage and transferring title documents in Nigeria is estimated at 19 percent of the property value compared to .04 and 0.08 percent in Canada and New Zealand respectively. The primary mortgage institution operates under the primary mortgage institution act of 1993 as revised in 1996 and in 2006. The Federal Mortgage Bank of Nigeria who doubles as the apex regulatory institution in the housing Industry plays a major role in regulating and promoting the operation of primary mortgage institutions in Nigeria. The primary mortgage institution are authorized to raise funds through borrowing from the Federal Mortgage Bank of Nigeria, which should not exceed fifty percent (50%) of its shareholders funds, such

loan must be secured by a block of existing mortgage previously granted by the mortgage institution.

Real estate development is multi-dimensional in nature and ranges range from construction of residential homes for personal use and or commercial purpose, renovation of existing properties, purchase of land, developing of such lands, sales of such land and including outright purchase of properties among others. .

Granting of primary mortgage institutions loans to real estate financing is very important in housing investment and in most cases it is the key for making transaction feasible and profitable to investors in the industry. In Nigeria today, investigation into the level of development in the industry show that little progress have been made, however, the expectation of the sector in the nearest future is that huge transformation will be experienced in the housing sector such that potential home owners will be happy.

According to Mbaa (2002) Real estate assets are continually bought, sold, developed and redeveloped. This makes real estate investment one of the nations most active and important business activities.

STATEMENT OF THE PROBLEM

The pressure on urban land has heightened the cost of homes and caused kiosks in the housing markets. It is expected that the housing market in Nigeria will become functional such that an average household can transform their demand for housing into reality and at a price where demand and supply for housing will be at equilibrium. However, there are significant market failures, especially noticeable at the bottom end of housing market. On the supplier side, investment are relatively risky due to the irreversible nature of housing, inherent uncertainties and the long gestation period involved in its production due to daunt of insurance market to take over these risks. The mismatch created by the demand and supply for real estate properties by investors to promote the growth of the economy through primary mortgage institutions is a cause for concern. Hence, this study assesses the impact of primary mortgage institutions loans on real estate development in Nigeria.

RESEARCH HYPOTHESES

1. **H₀**: Primary Mortgage Institutions loans do not have significant impact on real estate development in Nigeria.
2. **H₀**: Cost of building construction has no significant effect on real estate development in Nigeria.
3. **H₀**: Interest on mortgage loan does not have significant effect on real estate development in Nigeria.

LITERATURE REVIEW

The Longman dictionary of contemporary English (2005) defines mortgage as a legal arrangement by which someone borrows money from a bank or similar organization in order to buy a house and payback the money over a stipulated period of time.

Mortgage is defined as the conveyance of property as a security for an advance. The Land Use Act, 1978 defines mortgage as encompassing a second and subsequent mortgage and equitable mortgage. Mortgage finance is defined as the provision of funds for the purpose of construction, renovation, repair or outright purchase of owners occupiers property (ies) secured by a collateral security (Tijani, 2007).

For the provision of few housing units constructed by the people in Nigeria, the challenges noted in home delivery to the people is mortgage finance is a major input in housing delivery. Therefore, the level of financing is directly related to the level of real estate development in a nation with high population and economically active individuals with little or no resources to finance her population housing needs. (Marcus and Goddard 2012). In Nigeria, homes are traditionally financed from personal savings of the people. Many home owners build their homes through borrowings from cooperatives, Esusu etc. Mortgage finance has now provided an alternative channels for financing shelters in Nigeria.

Okonkwo (1997) asserted that mortgage financing has contributed immensely to the development of housing sector by ensuring sustainable availability, affordability and accessibility of homes despite increase in urbanization. Mortgage finance facilitates faster growth in the housing sector by catering for the need of the increasing populations which is central to the realization of home ownership and investment objective of the nation. Disasquate and Wheaton (1994) in their urban spatial theory asserted that housing stock depend on urban

population, series of economic factors such as cost of new construction activity land tenure problem and more importantly access to facility and credit availability is a cause for serious concern. A greater concentration of the population in the metropolitan area leads to a corresponding high increase in demand for housing basically, high cost of building materials and labour results in a high rise in the prices of homes.

Omirin, (2007) examined the accessibility to mortgage finance by the low income earners and the escalating cost of housing construction in Nigeria. Error correction model was used to analyze the data; the study concluded that mortgage institutions are not productive in making finance accessible to the people especially the low income earners. He recommended that government should promulgate housing policies that will create enabling environment for the citizenry to easily access mortgage finance.

Adesope, (2003), examined the impact of mortgage loan on real estate properties through the administration of questionnaires using descriptive analysis which revealed that high interest rate and other requirement for loan application have bedeviled the financing of real estate in Nigeria. He recommended that government should make effort to solve economic problems such as inflation, reduce interest rate in order to minimize the challenges plaguing the housing industry.

Mailafia (2007) Assessed mortgage financing on housing delivery through the administration of questionnaires and found out that the poor performance of the mortgage financing system in Nigeria could be attributed to low accessibility and under-development 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 loan and the amount that was approved.

Becket.al (2010) employed household survey and panel approach to examine the determinant of access to mortgage finance in Central and Eastern Europe as well as consequences of household mortgage indebtedness in the event of a financial crisis. They found out that mortgage holders were less financially vulnerable during periods of high income growth in the countries examined.

In the United States of America, there are signs of a recovery in the housing sector mainly due to large volume of financing activities, low interest rate environment supportive government programs and continued recovery

of the United States of America economy in the post 2007 global financial crisis world. (Sharma (2012)

Iyaiya (2012) assessed mortgage finance and housing delivery in Nigeria. Primary source of data was used in the study and multiple regression analysis was employed to examine the impact of mortgage finance on housing delivery in Nigeria. The result showed that the informal sources of finance are attributed to reasonable quantities of homes constructed in Nigeria. The study recommended the establishment of a regulatory body that would ensure the construction of decent homes and eliminate the risk of purchase of homes in Nigeria.

Oduwaye (2008) observed that out of sixty five (65) primary mortgage institutions in Lagos, forty three (43) were owned privately evidencing that large numbers of the primary mortgage institutions are owned by the private sector. In addition, the Federal Mortgage Bank of Nigeria charge fees for services rendered in granting loans well as administration charges are paid to the Federal mortgage bank of Nigeria. Real estate development is a business process encompassing activities that ranges from the renovation and purchase of existing buildings purchase of land and sale of developed landed properties.

METHODOLOGY

Research Design

The study employed ex-post- facto research method by analytical examination of the dependent and independent variable. Independent variable such as banks mortgage, interest on banks' loan and cost of buildings are examined to discover the relationship existing between the independent the dependent variable which is real gross domestic product on real estate.

Methods of Data Collection

Secondary data were used in this study. Data were extracted from the publication of the Central Bank of Nigeria statistical bulletin, the National Bureau of Statistics and Ministry of land and housing Nigeria. Desk survey method was employed to sourced relevant data from the published materials, journals, articles, libraries and internet. The study covers a period of 1993-2016.

Model Specification

The study assesses the impact of primary mortgage institutions loans on real estate Development in Nigeria.

The real gross domestic product on real estate being the dependent variable and other factor that affect it such a mortgage loan, cost of building, interest rate on loan are the explanatory variables.

The models are specified below:

$$RGDPRE = f(MOL, COB, INT)$$

$$RGDPRE = \beta_0 + \beta_1MOL + \beta_2COB + \beta_3INT$$

$$RGDPRE = \beta_0 + \beta_1MOL + \beta_2COB + \beta_3INT + Ut$$

Where,

RGDPRE = Real gross domestic product on real estate.

HOS = Housing Stock

MOL = Bank Mortgage Loan

COB = Cost of Building

INT = Interest on Loan

Ut = Error term

Technique of Data Analysis

The technique of data analysis adopted for the research was ordinary least square method.

DATA PRESENTATION

	RGDPRE	MOL	COB	INT
1993	1,346.31	198.4	809000	29
1994	1,386.53	208.9	615000	29.8
1995	1,430.72	334.7	620000	36.1
1996	1,445.02	560.3	695500	21
1997	1,536.91	394.9	705000	19.7
1998	1,628.65	754.8	770000	19.7
1999	1,690.33	738	788000	13.5
2000	1,756.08	785.9	812500	18.3
2001	1,843.82	924.2	915090	21.3
2002	1,899.13	855.1	950000	18
2003	1,956.11	1025.7	100500	18.3
2004	2,168.33	6600.6	121000	24.4
2005	2,408.82	1289.6	143000	20.4
2006	2,690.07	6000	150000	19.2
2007	3,005.42	2100	159000	17.9
2008	3,359.76	7560	167500	17.3
2009	3,727.34	407.59	377900	16.9
2010	4,127.99	108532	190500	15.1
2011	4,145.87	118586	200000	18.9
2012	4,379.94	132876	200000	17.6
2013	4,904.64	122812	201500	16
2014	5,155.73	122910	213000	16.7
2015	5,264.70	232000	232000	16.8
2016	4,903.60	145501	2400000	16.8

DATA ANALYSIS AND DISCUSSION OF FINDINGS

Table 1. OLS Regression Results

Dependent Variable: LRGDPRE				
Method: Least Squares				
Date: 06/07/18 Time: 20:49				
Sample: 1993 2016				
Included observations: 24				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.604523	0.786031	9.674584	0.0000
LMOL	0.150769	0.020552	7.336012	0.0000
LCOB	-0.052794	0.052557	-1.004493	0.3271
INT	-0.017075	0.009438	-1.809139	0.0855
R-squared	0.849201	Mean dependent var		7.838966
Adjusted R-squared	0.826581	S.D. dependent var		0.483646
S.E. of regression	0.201408	Akaike info criterion		-0.215961
Sum squared resid	0.811300	Schwarz criterion		-0.019618
Log likelihood	6.591529	Hannan-Quinn criter.		-0.163871
F-statistic	37.54231	Durbin-Watson stat		1.672543
Prob (F-statistic)	0.000000			

Source: Author's computation using E-view 9.0 version

From the above regression output, the Durbin-Watson Statistics of 1.672543 shows the presence of positive serial correlation which renders the estimated model result biased and hence, no meaningful economic and standard inference can really be made. The standard as popularly

contained in the literature is that the D.W statistics must be 2. A great advantage of the D.W statistic is that it is based on the estimated residuals, which are routinely computed in regression analysis. The auto-correlation-corrected versions of the estimates are depicted in table 2.0 below:

Table 2. Newey-West HAC-corrected OLS Estimates

Dependent Variable: LRGDPRE				
Method: Least Squares				
Date: 06/07/18 Time: 20:55				
Sample: 1993 2016				
Included observations: 24				
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 3.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.604523	0.918641	8.278017	0.0000
LMOL	0.150769	0.031867	4.731209	0.0001
LCOB	-0.052794	0.050225	-1.051144	0.3057
INT	-0.017075	0.012285	-1.389904	0.1798
R-squared	0.849201	Mean dependent var		7.838966
Adjusted R-squared	0.826581	S.D. dependent var		0.483646
S.E. of regression	0.201408	Akaike info criterion		-0.215961
Sum squared resid	0.811300	Schwarz criterion		-0.019618
Log likelihood	6.591529	Hannan-Quinn criter.		-0.163871
F-statistic	37.54231	Durbin-Watson stat		1.672543
Prob(F-statistic)	0.000000	Wald F-statistic		124.2645
Prob(Wald F-statistic)	0.000000			

Source: Author's computation using E-view 9.0 version

Though the model estimated result as shown in table 1.0 shows the presence of positive serial correlation, the auto-correlation had been corrected in the results depicted in table 2.0 above using Newey-West HAC covariance estimator as indicated on table 2.0 by Wald F-stat of 124.2645. Hence, the results are good for interpretation. From the above multiple linear regression results, the regression equation predicting the linear relationship between the Real gross domestic product of real estate sector (RGDPRE), Mortgage loan (MOL), cost of building (COS) and Interest rate on mortgage loan (INT) can be stated as:

$$\log \text{RGDPRE} = 7.6045 + 0.1508 \log \text{MOL} - 0.0528 \log \text{COB} - 0.0171 \text{INT} + \text{Et}$$

S.E: (0.9186) (0.0319) (0.0502) (0.0123)

T.ratios (8.2780) (7.7312) (-1.0511) (-1.3899)

Prob. (0.0000) (0.0001) (0.3057) (0.1798)

The figures in the first set of parentheses are the estimated standard errors of the regression coefficients, the figures

in the second set are estimated t-ratios, and the figures in the third set of parenthesis are the estimated p-values.

From the estimated regression model above, it can be deduced that two of the independent variables i.e. Cost of building and interest rate on mortgage loan maintain negative relationship with the Real gross domestic product of real estate sector (RGDPRE) while Mortgage loan (MOL), on the other hand maintains positive relationship. Furthermore, since MOL, COB and INT maintain negative relationships with RGDPRE, it follows that 1% increase or decrease in COB will resort to about 5% decrease or increase in the average or mean value of real gross domestic product of real estate sector. Similarly, 1% increase in INT will bring about 1.7% decrease in the average or mean value of Real gross domestic product of real estate sector and vice versa; meanwhile, 1% increase in mortgage loan (MOL) will culminate in about 15% decrease in RGDPRE. Thus, MOL shows up with a priori expected relationship with development of real estate; also, the relationship displayed by cost of building (COS) and interest rate on mortgage loan (INT) comply with the a priori expectation. The intercept of the model which is 7.604523 represents the value of the dependent variable

(RGDPRE) should the explanatory variables be held constant.

The multiple correlation co-efficient (R) which is the square root of R^2 is 0.92 indicates a strong linear positive relationship between the independent variables (MOL, COB and INT) and the dependent variable which is Real gross domestic product of real estate sector (RGDPRE) since the value approaches 1. Also, the coefficient of determination (R^2) of 0.85 indicates that about 85% of the variation in the dependent variable (RGDPRE) can be accounted for by the independent variables while the remaining 15% is explained by other factors not captured in the model but represented by stochastic term. This figure increases the goodness of fit of the fitted regression model to the set of time series data. The R^2 as adjusted for the degree of freedom (n-k) associated with the sums of squares entering into the specified model is 0.83 and this means that the model is unaffected by the addition or subtraction of Variables from the model. Furthermore, the standard error of 0.201408 is the standard deviation of the sampling distribution of the estimator which measures the precision of the estimates of the model and is relatively low as expected when compared with absolute value of the imputed data some of which are in billions of naira.

T-ratios measure how large the coefficients will vary if carried out on repeated sampling. MOL has t-ratio of 4.7312 compare to COB and INT of (-1.0511) and (-1.3899) respectively. It therefore means that MOL will have very little variation in repeated sampling than COB and INT. F-stat of 37.5423 with probability of 0.000 as depicted on table 2.0 reveals that jointly, the included independent variables consistently explain variation in the dependent variable; that is, the percentage of variation in the dependent variable, accounted for by the explanatory variables is never due to chance or error.

TEST OF HYPOTHESES

The decision rule for testing hypothesis is that Null Hypothesis (H_0) should be rejected and Alternate Hypothesis (H_1) accepted if P-value is less than 0.05 and vice versa.

1. **H_{01} :** Mortgage loan has no significant impact on the development of real estate in Nigeria.

H_{11} : Mortgage loan has significant impact on the development of real estate in Nigeria

Since P-value of 0.0001 is less than critical value of 0.05, we do not have enough reason to accept H_{01} which means

that Mortgage loan has significant impact on the development of real estate in Nigeria. The economic significance of the forgoing is that since MOL is positively related to the development of real estate, it means increase in the Mortgage loan translate to significant positive growth in housing sector as proxy by the real gross domestic product of real estate sector; This is because it is expected that mortgage loan should be positively related to the development of real estate unless such loans are not being used for the purpose for which they are granted.

2. **H_{02} :** Cost of building has no significant impact on the development of real estate in Nigeria;

H_{12} : Cost of building has significant impact on the development of real estate in Nigeria;

Also, P-value of 0.3057 is more than the critical value of 0.05; thus, we do not have enough reason to reject the H_{02} which means that total cost of building has no significant impact on the development of real estate in Nigeria. Of course, the forgoing is in conformity with a priori expectation and it connotes that if the of cost of building housing units is high, it will discouraged both individual and corporate investors from investing in the sector and the consequence is decrease in the housing sector.

3. **H_{03} :** Interest rate on mortgage loan has no significant impact on the development of real estate in Nigeria;

H_{13} : Interest rate on mortgage loan has significant impact on the development of real estate in Nigeria;

Also in this case, interest rate on mortgage loan has P-value of 0.1798 which is certainly more than the critical value of 0.05; thus, we do not have enough reason to reject the H_{03} which means that interest rate on mortgage loan has no significant positive impact on the development of real estate. Although, this is the same with the a priori expectation of negative relationship with development of real estate, it connotes that interest rate on mortgage loan is too high and hence scaring away both actual and potential investors in the housing sector from accessing mortgage loans, to the detriment of the development of real estate in Nigeria.

CONCLUSION AND RECOMMENDATION

The study assesses the impact of primary mortgage institutions loans on real estate development in Nigeria. Real sector is an important sector within an economy being the sector that provides shelter to millions of

Nigerians. In this study, real estate sector is proxied by these variables- mortgage loan (MOL), Cost of building (COB) and interest rate on mortgage loans of primary mortgage institutions in Nigeria.. The regression analysis was carried out using least square method. Hypotheses were tested using the regression estimates; based on the test, it was revealed that all the variables except Mortgage Loan were negatively related to the development of real estate in Nigeria. Although cost of building and interest rate showed expected relationship while mortgage loan showed contrary relationship, also going by analysis that all the variables except MOL mortgage loan has p-values is less than 0.05, and that null hypotheses were accepted in other two cases, it can be concluded that mortgage finance does not exert significant impact on the development of real estate in Nigeria.

The study therefore recommended that-

- Primary Mortgage institutions should monitor their borrowings to ensure that they are not diverted to other uses to the detriment of the housing sector;
- Government should urgently promulgate laws that will bring down the prices of building materials so as to increase the quantity of housing units in the country.
- Interest rate on borrowings by primary mortgage institutions is still high in Nigeria and negatively affecting the growth of the mortgage sector in Nigeria. Therefore, monetary authority should wade into the interest rate regulation and control in order to make housing loans affordable to investors in Nigeria.

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