

Determinants of Housing Development in Nigeria

Mboto Helen Walter¹, Nkamare Stephen Ekpo¹, Edom Edom Onyam¹ & Emefiele Charles Chike¹

¹ Department of Banking and Finance, University of Calabar, Calabar, Nigeria

Correspondence: Nkamare Stephen Ekpo, Department of Banking and Finance, University of Calabar, Calabar, Nigeria.

doi:10.56397/LE.2023.05.02

Abstract

The purpose of the study was to examine factors of mortgage that affect housing development in Nigeria. The specific objectives were to; examine the effect of interest rate, mortgage bank deposit, mortgage investment on housing development. Data for this study were sourced from secondary data and were extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin and the National Bureau of Statistics, Nigeria. Data obtained were tabulated, analyzed and tested using the ordinary least square multiple regression statistical techniques. Based on the result, the findings revealed thus; there was a significant effect of mortgage loans on housing development; there was a significant effect of interest loans on housing development; there was a significant effect of mortgage investment on housing development, and there was a significant effect of mortgage bank deposit on housing development. The study recommended mortgage institutions should develop strategies to mobilize more deposits and ensure effective allocation of housing funds particularly for the low income earners. And finally government should create enabling environments to encourage private housing sector participation in long-term housing finance by providing infrastructure, enhancing soundness and competitiveness of mortgage institutions and assuring property rights.

Keywords: mortgage loans, interest rate, mortgage bank deposit, mortgage investment, housing development

1. Introduction

Mortgage finance has been identified as a necessary requirement to the housing sector. According to Sanusi (2010), the focus on mortgage has been very pertinent because provision of housing requires huge capital outlay, which is often beyond the capacity of the average or low income earner. The success of adequate housing delivery attribute to the developed countries as a result of the enhancement of house ownership through well-structured mortgage schemes. However, the realization of a whopping housing deficits of over 17 million in Nigeria, proves that the provision of adequate housing in the country is contentious. Soludo (2006), observed that the Nigerian housing sector faces challenges that must be tackled to make the system provide the required services that would accelerate economic development, as witnessed in other emerging economies.

According to Okonjo-Iweala (2013), the nation's mortgage sector has experienced different phases in the last three decades but the sector has remained unpopular among Nigerians because it has failed to play its role of assisting Nigerians desirous of owning their own houses. Ehimatie, Effiom and Effanga (2017), opined that over eighty-five percent of the urban population in Nigeria spend fifty percent of their income on rented apartments, which is ninety percent privately owned and built through personal savings. The high cost of rent is as a result of the lack of, or inadequate mortgage financing and soaring cost of building materials.

A recent study by the World Bank on the availability of 'housing for all' in developing countries, listed the following constraints as major deterrents: Lack of affordability due to high level of unemployment and poverty, absence of information for risk assessment, lack of long term funding and non-issuance of title documents, insecurities among others (Makori, 2015). Udoka and Kpataene (2017) hinged the problem of housing delivery

in Nigeria on the absence of savings culture which is attributed to high inflation and low income, the Land tenure system policy (1978), absence of long term funds and inability of banks to obtain collateral securities which weakens their ability to grant long term loans.

According to Oladapo (2008), the availability and accessibility of housing requires sound economy and well defined housing policies, as well as a well-structured mortgage finance system. It is on this note that the federal Government of Nigeria strives to create an affordable housing finance structure to bridge the gap, through the introduction of various housing policies such as; National Housing Policy of 1991, National Housing Fund Act of 1992.

In Nigeria, the housing problem is enormous and endemic in both the rural and urban areas. From available statistics, the magnitude of housing problem in Nigeria is such that about N40trn (forty trillion naira) is required to finance the over 17 million housing deficits that is currently ravaging the country. Today, the problem of inadequate provision of housing in Nigeria stems from the inability of the national housing fund (NHF) and the deposits mobilized by the primary mortgage banks, to provide the needed funds that will resolve the acute housing shortage in the country. In spite of these, high inflation and interest rates, high cost of building materials, difficulties for borrowers to access funds, insufficient wage and income distribution, problem of land tenure system continue to ravage the efforts of the government and the private sector in the development of houses in Nigeria. The specific objectives are:

- 1) To examine the effect of mortgage loans on housing development in Nigeria.
- 2) To examine the effect of mortgage interest rate on housing development in Nigeria.
- 3) To determine the effect of mortgage bank deposit on housing development Nigeria.
- 4) To examine the effect of mortgage investment on housing development.

1.1 Theoretical Framework

The study is anchored on theory of financial Intermediation. Financial intermediation theory was developed in the 1960's beginning with the work of Gurley and Shaw. The theory is based on information asymmetry and transaction cost; in principle its existence is explained by the following factors: high cost of transaction, lack of complete information in useful time and the method of regulation. Financial intermediation involves the 'matching' of lenders with savings to borrowers who need money by a third party, which is usually a financial institution; In other words, it is the systematic channeling of funds from the lender to the borrower using financial institutions as the pivot. Mortgage banks mobilize deposits from the public for borrowers who need housing financing. Transaction cost is attributed to cost of capital borrowed which in this case is the interest on mortgage loan.

1.2 Literature Review

The concept of housing delivery is incomplete without mortgage finance as portrayed above. The provision on development of housing units is capital intensive, which most times result to the inability of the low or average income earners to own their own houses. The role of mortgage finance is to bridge the gap by providing flexible and affordable source of funds for house ownership.

However, mortgage finance as an independent variable to housing development requires the following variables to effectively provide the needed funds. These variables include; Mortgage loans, interest charged on mortgage, mortgage bank deposits and mortgage investments. Hence, the relationship between mortgage finance and housing development can be interpreted as follows; Saddled with the responsibility of providing affordable medium to long term finance for house ownership, Mortgage banks carry out their financial intermediation role by mobilizing deposits from the public and borrow these funds to intending house owners desirous of such funds for house construction or purchase.

Interest charged on these loans serve as compensation to the savings holder and the mortgage institution for the risk undertaken (transaction cost risk, information asymmetry and default risk etc.). Another avenue for mortgage institutions funds is through the issuance of mortgage backed bonds in the capital market. Investors earn coupons on their investments, as stated on the agreed terms by both parties. These funds are invested in housing development through individual housing loans or housing construction loans for the development of mass social housing. By doing so, mortgage institutions fulfill their financial Intermediation role of creating wealth for fund savers and investors, making funds available to borrowers, as well as provide funds for housing development, and in turn they receive compensation for carrying out their function from interest earned.

Housing is paramount to human existence. Its supply has always been of necessity to man (Fasakin, 2006). The provision of adequate housing in any country is vital as housing is one of the stimulants of the economy. It has profound impact on the health, social behaviour and the welfare of citizens. According to Olutuah (2006), adequate shelter has continued to attract global attention especially in developing countries like Nigeria where

urbanization process has been growing at an alarming rate. Scholars like Akeju and Nubi (2007) posit that the housing sector in Nigeria is highly untapped and underdeveloped despite numerous efforts by both government and the private sector. This is basically due to certain factors, which includes, lack of finance, Government policies and high rate of population.

1.3 Mortgage Financing

An emerging economy is an economy that has fairly efficient micro-economics accompanied by level of international competitiveness (Leo, 2002). Different countries in the emerging economies have unique features in their housing sectors, which are dictated by their housing policies. Ronald (2007) argued that policies adopted by each country could be comprehensive or institutional policy. In the comprehensive housing policy, the provision of housing rest in the hands of the private sector of the economy while government intervene as an effort to support residents that have problem in meeting their housing demand, while in the institutional housing policy the responsibility of provision of houses and the enabling environment for private sector participation in housing delivery.

Argus (2002) argued that the allocation of housing in East Asian society is basically the ability of the household to play rather than bureaucratic principle of fairness and equality. However, due to high population density in South Asian countries the government has taken over the residential housing needs and this makes housing policy institutional. African countries are experiencing faster rate of urbanization. Urbanization rate has increased in Africa rapidly exceeding 5 per cent per annum which is twice as high in the Latin America and Asia where 37 per cent of their population are residents in the urban centers as at 2003 (Auclair, 2005).

The proliferation of urbanization is accompanied by considerable growth of informal housing grooves (Egbu, 2007). In Nigeria, the urbanization growth rate as at 2016 as reported to be 4.32% with a poverty rate of 60.9%, therefore, there is need for the practice of more institutional housing policy than a comprehensive housing policy, which will serve as a caution against the devastating effect of housing shortage. In most of the emerging economies, the formal financial sector is reluctant to serve the low income earners despite increasing expectations for them to play significant role in financing the market. Yunus (2008) asserts that developing countries like Philippines, Peru and Egypt undergo an extremely tedious process to legalize their land plots and housing units, to obtain legal titles for their properties.

1.4 Empirical Literature

However, various empirical literature relating to this study is reviewed, notable among them is that of Omirin (2007). The study examined the accessibility of mortgage finance and low income earners in Nigeria, the study concluded that mortgage institutions are not productive in making finance accessible by the citizens especially the low income earners. The study recommended that government should introduce ways of improving housing policies which will enable the citizens to easily access mortgage finance.

Ogedengbe and Adesopo (2003) examined the problem of financing real estate in Nigeria. The study adopted descriptive analysis. The study however recommended that government should make effort to solve economic problems such as inflation, higher 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.

Tomlinson (2007) investigated on macroeconomic institutions and regulatory environment. The study adopted primary data, using questionnaire. The result showed that financial innovation in the form of mortgage—backed securities has shifted focus of mortgage from the credit worthiness of potential home owners to marketing of financial instruments. The study recommended that housing provision should be made available.

Iyaiya (2012) carries 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 were used for housing purposes by the respondents. In his findings, he recommended the establishment of a regulatory body that would ensure the construction of descent 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 contributes to housing delivery in Calabar. They evaluated the performance of the National Housing Fund Scheme in terms of housing provision in Nigeria with available data and opined its performance is below expectation. Secondary

source of data was adopted and also, percentiles and t-test as well as Pearson product moment of correlation was employed in the analysis. The result indicated that inadequate number of Primary Mortgage Institutions in Nigeria contributes to insufficient housing delivery.

Udoh and Uyanga (2013) carried out a study on housing conditions and health in rural area in Nigeria, using Akwa Ibom State as the case study. A cross section survey was used for analysis, the study also administered structured questionnaire and face-to-face interview. Descriptive and multiple regression model was also adopted and the housing indicators were safety/security, indoor ventilation, building construction, hygiene crowding and environmental quality. The result showed that virtually all the five indicators of housing conditions examined, suffered deficiency. The housing condition of people was found to be inadequate and failed to guarantee the health of its occupants. They recommended that World Bank rural intervention should be directed at strengthening the community's health programme, raising housing health awareness and encourage good self-help environmental sanitation among rural dwellers.

2. Methods and Materials

2.1 Research Design

The design used for this study is the ex-post facto research design. The researcher has no control over the variables under study simply because they have already been manipulated before they are applied in this study.

2.2 Sources of Data

Secondary source of data was used as the main methods of data collection. The relevant data for this study was obtained from the Central Bank of Nigeria (CBN) statistical Bulletin and the National Bureau of Statistics Nigeria.

2.3 Techniques of Data Analysis

Ordinary least square of multiple regression statistical techniques was used in establishing the effect of independent on dependent variables.

2.4 Model Specification

For the purpose of this study, the empirical models for this study are specified in their functional forms as;

$$HD = f(MOL, INT, MOI, MBD)$$

Where;

HD = Housing development; MOL = Mortgage loan; INT = Interest on loan; MOI = Mortgage investment

MBD = Mortgage bank deposit; F = Functional notation

Obtaining the ordinary least square model.

$$HD = a_0 + b_1MOL + b_2INT + b_3MOI + b_4MBD + U_t$$

Where; a_0 = Regression Constant.

b_1, b_2, b_3, b_4 = Regression parameters to be estimated

U_t = Stochastic Error Term.

2.5 Analysis of Data and Discussion

The regression result of mortgage financing and housing development (1990–2021).

Table 1. Regression result

Variable	Coefficient	Std. error	t-stat.	Prob.
C	161190.5	116005.8	1.389504	0.1740
LMOL	35.09926	7.285329	4.817801	0.0000
LINT	7.186164	1.738707	4.133050	0.0000
LMOI	33.90788	5.581069	6.075517	0.0000
LMBD	4.942708	1.300347	3.801069	0.0007

Note: Dependent variable: LHD

$$R^2 = 0.973047, R^2(\text{adj}) = 0.964062, \text{SER} = 329985.7, \text{F-stat} = 108.3038, \text{DW} = 1.7779$$

The coefficient of multiple determinations (R^2) is 0.973 and an adjusted R^2 of 0.964. The later indicates that 96

percent of variations in the observed behavior of housing development (HD) is jointly explained by the independent variables namely: MOL, INT, MOI, MBD. This shows that the model fits the data well and has a tight fit. Also, the f-statistic is used to test for the significance of such good or tight fit. The model report on effectively high f-statistic value of 108.30 which when compared with the table value, this indicated that the high-adjusted R^2 value is better than would have occurred by chance, therefore the model is statistically robust. Using this criterion, therefore, MOL, INT, MOI, MBD are significant at 1 percent level. Specifically, a 1 percent increase in MOL (35.09%), INT (7.18%), MOI (33.9%), MBD (4.94%) will prop up housing development more than proportionate percentage point.

The constant term indicates that if all variables held constant, the housing performance will be improved by 161190. The DW statistic (1.777) is used to test for the serial correlation in the residuals of the model. The decision rule is that if the calculated DW falls outside du and 4-du, then there is a serial correlation in the residuals. This shows that calculated DW falls outside and this indicates that the estimates should be taken with caution. The goodness of fit of the model as indicated by the adjusted R-squared shows a good fit of the model that the model fits the data well; the total variation in the observed behavior of housing development, is used as a measure of development, is jointly explained by variation in explanatory variables.

For the overall significant of the model, the ANOVA on the f-statistic is used. Hence, the model did not occur by chance, it actually confirms that the model fits the data well. To test for the individual statistical significant of the parameters, the t-statistic of the respective variables were considered. The a priori expectations about the signs of the parameter estimates are confirmation to economic theory.

The major findings of the study include there is a significant effect of mortgage loans on housing development; there is a significant effect of interest loans on housing development; there is a significant effect of mortgage investment on housing development and there is a significant effect of mortgage bank deposit on housing development.

3. Conclusion and Recommendations

This study empirically examined determinants of housing development in Nigeria. Basically, the role of finance in the development of housing in Nigeria is at minimal as a result of government policies on housing which have been inconsistent. Though government have sought to encourage home ownership, inadequate attention has been given on housing issues particularly the low income earners in Nigeria.

Funding of housing have been left in the hands of individuals who rely on the private housing sector for finance in development of housing. The following recommendations are considered in line with the findings of this study: Mobilizing funds from the capital market such as housing bonds, savings and loans from co-operative societies should be designed to attract investors, firms and individual in order to boost the available investible fund in the sector. The effects of interest rate on mortgage loan requires that regulatory authority should determine appropriate interest rate for housing loans that would encourage an average income earner secure housing credit.

Government should create enabling environments to encourage private housing sector participation in long-term housing finance by providing infrastructure, enhancing soundness and competitiveness of mortgage institutions and assuring property rights. Mortgage institutions should develop strategies to mobilize more deposits and ensure effective allocation of housing funds particularly for the low income earners.

References

- Akeju, D. & Nubi, P., (2007). Private sector participation in urban housing supply in Calabar, Nigeria. *American International Journal of Contemporary Research*, 3, 77-81.
- Argus, L.C., (2002). The role of private sector in housing delivery in Nigeria. A seminar paper on effective approach to housing delivery in Nigeria, organised by Nigerian Institute of Building, Ibadan.
- Auchair, A., (2005). *Fundamentals of research and applied statistics*, Calabar: Index Educational Foundation.
- Egbu, O., (2007). Factors affecting residential real estate financing in South-Western Nigeria, Unpublished Ph.D. Thesis of the Department of Estate Management, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Ehimatied, M. Effiom, W. & Effanga, F., (2017). Microfinance and mortgage financing in Nigeria: A rural experience. *International Journal of Economics and Management Sciences*, 1(10), 39-44.
- Eni, M. & Danson, C., (2014). The future of the mortgage finance system: Special Report, Moody's Analytic.
- Fasakin, J., (2016). Does banking lending affect output? Evidence from the United State of America. *Journal of Monetary Economics*, 51(2), 451-477.
- Iyaiya, R., (2013). Market-liberal homeowner societies. questions of convergence in and around an Anglo. *Housing Finance International*, 22(3), 21-34.

- Leo, J., (2002). Mortgage finance in Central and Eastern Europe. Opportunity and burden. *Policy Research, Working paper*, 5202.
- Makori, T. O., (2015). Housing provision in Nigeria: The cooperation alternative. A paper presented for publication by the Building Society, Quarterly.
- Oduwaye, B., (2008). *Housing market constraints in West African region Mediterranean Journal of Social Sciences*, 8(3), 241-251.
- Ogedengbe, P. S. Adesopo, S., (2003). Problems of financing real estate development in Nigeria. *Journal of Human Ecology*, 14(6) 425-431.
- Okonjo-Iweala M, (2013). *Shelter strategies for the urban poor*. Paper 3427, Washington DC, World Bank.
- Oladapo, A., (2008). *Housing finance under national housing fund: An appraisal paper* presented at the general meeting of the Nigeria Institute of Town Planning, Lagos, Nigeria.
- Olutuah, S., (2006). *Public sector driven housing: Achievements and problems*. Paper presented at the Faculty of Environmental Sciences annual lecture, Namdi Azikiwe University, Awka, Nigeria.
- Omirin, L., (2007). *Public Housing: The politics of poverty*. New York: Holt Rinechart and Winston Inc.
- Ronald, F., (2007). An assessment of housing condition and socio-economic lifestyles of slum dwellers in Akure, Nigeria. *Contemporary Management Research*, 6(44), 273-290.
- Sanusi, B., (2010). Housing sector performance in global perspective: A Cross City Investigation Urban Studies, 37(13), 2551-2579.
- Soludor, L., (2006). *Urbanization challenges in Sub-saharan Africa*, Kenya: United Nations Human Settlement Programme.
- Tomlinson, F., (2007). Expanding housing finance system in Africa and Asia. How far Central and Eastern European models are replicable? Paper presented at APNHR Conference in transformation in housing urban life and public policy.
- Udoka, C. O & Kpataene, M., (2017). Mortgage financing and housing development in Nigeria. *International Journal of Research*, 1(1), 182.
- Udoh, U. & Uyanga, J., (2013). Housing conditions and health in rural Nigeria: A study of Akwa Ibom State. *Research on Humanity and Social Sciences*, 3(11), 222-286.
- Warnock, B. M., (2008). Mortgage finance in emerging markets: Constraints and feasible development paths, 253-288. Chichester-West Sussex, United Kingdom.
- Yunus, O., (2008). *Real Estate Investment Trust: A veritable funding tool for housing development in an emerging market*. Paper presented at the 7th International Housing Financial workshop, Lagos.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).