

DEMAND FOR RESIDENTIAL HOUSES: THEORETICAL APPROACH

***ABUBAKAR SANUSI, **TIJJANI ALIYU, ***HASSAN UMAR MICHKA**

**National Youth Service Corps, Abuja FCT – Nigeria,*

***Department of Urban Regional Planning Federal Polytechnic, Mubi, Adamawa State – Nigeria,*

****Prof. Jibril Aminu Library, Federal Polytechnic, Mubi, Adamawa State – Nigeria*

ABSTRACT

The work titled Demand for Residential Houses: Theoretical Approach is qualitative in nature. Secondary data is basically used for the research. The research covers, the concept of house, the meaning of residential house, types of Houses, housing demand and Supply, determinants of demand for Housing, housing inflation, barriers to housing development and affordability. The study also discusses problems of housing, housing need in Nigeria, the neoclassical consumer theory of housing Demand, The theory of housing and interest rates. It finally explains Interest Rates and Rental housing, Interest Rates and Tenure Choice. Conclusion and recommendations made base on the literature reviewed.

Key words: Demand, supply, house, housing and Affordability

Introduction

Housing has been universally accepted as important component of overall human development. It is rated second to food on human scale of preference (Nubi, 2008). In spite of its importance, its provision has continued to pose problems to policy makers and stakeholders. The problems are common in most sub-Saharan Africa (SSA) countries where over 40% of the populace lives below the international poverty level of less than \$ 1 a day (Groves, 2004). Groves (2004) attributed these to factors such as poor policy formulation, difficulties in accessing funds from the financial institutions, and poverty level. As a unit of the environment, it has a profound influence on the health, efficiency, social behaviors, satisfaction and general welfare of the community (Onibokun, 1998). To most groups, housing means shelter, but to others it means more as it serves as one of the best indicators of a person's standard of living and his/her places in the society (Nubi, 2008). It is a priority for the attainment of living standard and it is important to both rural and urban areas. These attributes make demand for housing to know no bound as with relatively low income, population growth and urbanization are increase rapidly and the gap between housing demand and supply and becomes widen. Cultural factors such as preference and values or social status, taste and financial resources also influence a home physical characteristics. In a developing country like Nigeria, poor housing delivery has been attributed to inadequate mechanisms and systems for land allocation, funding mortgage institution and infrastructure (Encarta, 2007).

Despite the significance of housing, adequate supply has remained a mirage to all cadre of society in Nigeria. This situation is very worst particularly to most developing countries where population grow at exponential rate and rapid urbanization becoming a norm, therefore, discrepancy in housing demand and supply is high. The proportion of the Nigerian population living in urban countries has increased phenomenally over the years. It was discovered that only 7% of Nigerian lived in urban centers in the 1930's, and 10% in the 1950's, by 1970, 1980 and 1990, 20%, 27% and 35% lived in the cities respectively. There are over 40% varying sizes (Okupe,2002).the incidence of this population in urban center has created severe housing

problems resulting in overcrowding in inadequate dwellings, and in a situation in which 60% of Nigerians can be said to be houseless persons' (FGN,2004). A recent study of housing situation in Nigeria put existing housing stock at 23 per1000 inhabitant. Housing deficit is put at 15 million houses (Mabogunje, 2007), while #12 Trillion will be required to finance the deficit. This is about four (4) times the annual national budget of Nigeria (FHA, 2007).In Nigeria, 75% of the population is estimated to be low income group, the various civilian and military governments have made concerted efforts to provide adequate housing to this group, but recent studies have shown that the low income group has not benefitted from the government programmers (Sani, 2003).

The Concept of House

The English word house derives directly from the old English 'HUS' meaning 'dwelling, shelter, home, house, (American Heritage Dictionary, 2009). A house is a home, building or structure that functions as a habitat for humans or other creatures. It includes many kinds of dwellings ranging from rudimentary huts of nomadic tribes to complex structures composed of many systems. The social units that lived in a house are known as a household. Most commonly a household is a family unit of some kinds, though households may be social groups, organizations or individuals (Free Encyclopedia, 2009). It also means or refer to the buildings or structures that individuals and their family may live in that to meet certain federal regulations. Different housing situations vary for individuals and may depend on age, family and geographic location. For example; a recent university graduate in an urban environment in the United States may live in a rented apartment where as a middle-aged entrepreneur may live in a house with or without mortgage. However, alternatively it can be define as anything that covers, protects or supports another thing (Thomas, 2010).

House can also be define as dwelling place constructed as a home for one or more persons whether a crude hut or an elaborate mansion, and whether its degree of intrinsic architectural interest, a house provide protection from weather and adversities (Microsoft Encarta, 2008). The physical characteristics of a house depend on the surroundings environment (climate and terrain), available building materials, technological know-how and such cultural determinants as the social status and economic resource of the owner or owners. In rural areas until modern times, people and animals are often housed together; today's house frequently include storage, work and guest areas, with several separate spaces for different activities. The primary structural materials employed are; wood, stone, Brick, sod, concrete and steel increasingly used, especially for city dwelling s; many of these materials are used in combination also, choice of materials depends on prevalent style, individuals taste and income as well as availability. Whatever its size and conveniences', a house both contains and stands for the basic human social unit (Thomas, 2010).

The Meaning of Residential House

They term residential house is one which most of the buildings are houses. It involves living at the place where you are working, studying or been look after residential course / nursing home / worker (Thomas, 2010).

Types of Houses

Houses can be built in a large variety of configurations. A basic division is between free standing or single family houses and various types of attached and multi-user dwellings. Both sorts may

vary greatly in scale and amount of accommodation provided. Many of the variation listed below are purely matters of style rather than spatial arrangement or scale. Some of the types listed are only used in some parts of the English speaking world. These are as follow, (The Wikipedia, free Encyclopedia, 2013).(1) Detached single – unit dwellings, (2) Semi – detached dwellings,(3) Attached single – unit housing ,(4) Attached multi – unit housing, (5) Movable dwellings. The explanations of the above types are as discussed below.

Detached Single Unit Dwellings: These types of houses is called single – unit housing because of the appearance of the structure, namely steep roof line. It also refer to as a types of low- cost house with metal floors and cavity walls made of concrete blocks, mostly built in the united kingdom and Ireland during 1920 through 1921 to provide housing for soldiers, sailors and Airmen, who had returned home from the first world war. It includes; Aired houses, Baracoa, Bungalow, cottage, micro apartment, unity houses, villa etc. (The Wikipedia, Free Encyclopedia, 2013).

Semi-Detached Dwellings: These types of house is simply refers to two (2) separate residences, attached side by side, but the term is sometimes used to means stacked apartments on two (2) different floors (particularly in urban areas such as; New York and san Francisco). The semi-detached dwellings can appear as single town house section with two (2) different entrances, though, the occasional duplex with a shared common entrance and entry hall have been constructed. It included; duplex house, two families ‘home, two Decker, semi- detached houses etc. (The Wikipedia, Free Encyclopedia, 2013).

Attached Single- Unit Housing: these types of house are a historical house type that is very long typically for family groups or as a house barn. Examples of such houses are; connected farm, house barn, long house etc. (The Wikipedia, Free Encyclopedia, 2013).

Attached Multi-Unit Housing: These are the types of houses in which apartments must contain a kitchen, bathing facilities and a sleeping area, or else the term may not be used. It is relatively self-contained housing unit on a building which is often rented out for one person or a family, or two or more people sharing a lease in partnership for their exclusive use. Example; Apartment, Ault, Barracks, Basement apartment, condominium, tenement, terrace house etc. (The Wikipedia, Free Encyclopedia, 2013).

Movable Dwellings: This is regarded as a type of house considered as a prefabricated house that is manufactured off-site. It is usually a light weight, moveable structure; it is mostly used by Nomads in the steppes of central Asia. These include; park home, Lent, Travel Trailer or caravan, yurt or Ger., Houseboat, float houses etc. (The Wikipedia, Free Encyclopedia, 2013).

Housing Demand and Supply

There is a gap between need for housing and the capacity to acquire the desired housing type, resulting in an effective demand crisis for affordable housing in the country. While it is clear that there is a housing deficit. It is crucial to recognize that people can only acquire what they can afford. Analysis of the stock of dwelling units helps to understand affordability. As at1991, the total dwelling units in Nigeria was estimated at15.2 million and more than 70% was in tenement rooms (called force-me-I-force-you).

Housing Demand

Demand is influenced by several economic factors such as increase economic activity that has led to increase demand for labour and rural-urban migration. The result is that there are 14

million units of housing deficit in the country. This is about a hundred percent increase when compared to the deficit in 2001. There has been an intractable gap between government's supply efforts and actual achievement over the years, worsened by the population growth from about 42 million in 1960 to more than 151 million in 2010.

Nigerian population and household-2006

Population 2006 140,431,790	NO. OF HOUSEHOLDS 32,711,253	Population 2010 (Growth Rate of 3.8%) 163,025,239
--------------------------------	---------------------------------	--

Source: National Bureau of Statistic, 2007.

Pricing trends

There are several factors responsible for high house prices. These include land allocation cost, the high cost of funding, and the high cost of building materials (cement, steel) logistical challenges and the dearth of skilled artisans. House price in Nigerian are also a function of locations of the property. Both sales and rental prices are higher in urban areas than rural areas. This is why most low income housing is located in suburbs of major cities. However, as the cities expand, these suburbs soon become part of the cities.

Increased housing demand

Rapid urban population growth has led to an increase in housing demand that cannot be met by the existing housing delivery system. As the growth of the economy lags behind population growth, this has resulted in less funds being available for development and maintenance of infrastructure, increased unemployment, and in people being less able to afford basic housing and in services. This means that without interventions to improve housing supply or contain migration to the city, the housing situation in the city would considerably worsen in the coming years.

Housing Supply

Supply of housing units in Nigeria can be viewed from the formal and the informal sectors. The formal sector refers to the supply from the private sector and the various elements of the public sector. Various authorities have offered strategies for improving housing delivery in Nigeria. Fasakin (1998) suggested the cooperative housing model while Oduwaye (1998) advocated a simple land allocation system.

Determinants of demand for Housing

The market for residential housing is largely determined by the regions strong economic growth and job creation (Frank, 1999). According to Frank (1999), demand for residential houses is difficult to measure directly, the following could be considered as indicators of strong demand.

These include;

- i. Home prices
- ii. Rents and vacancy rates
- iii. Employment and population growth.

The explanations of each determinant are as follows;

- **Home Prices;** it is regarded as one of the determinants of housing demand. It is usually rise for about 10 percent a year, a greater growth rate than other metropolitan areas and most national urban centers. The Real estate research council of northern California conducts a semi-annual home price survey of representatives' home in an area found that the prices of single-family detached home and condominiums are raised.
- **Rents and Vacancy Rates:** Rent is just like home price. It is raised to record highs in the last two (2) years and vacancy rates have declined. Typically vacancy rates and rents move in opposite directions when the supply of available unit falls below regions optimal vacancy rates, rents begin to rise and household mobility slows in the tight market.
- **Employment and Population Growth:** These are also important components of demand for residential house. Increasing population would increase housing demand. It can be increased to the extent that housing costs remains out of reach for its workforce, household will make longer commutes from less expensive areas and will work more to maintain the affordability of their housing payments.

Generally, household demand for space is determined by household income, its demographic, and the cost of that spaces relatives to the cost of consuming non-housing commodities. The demand for owner occupied housing is also influenced by the mortgage interest rates. For instance, given rising incomes in San Francisco and historically low interest rates, it is not surprising that the demand for housing (both rental and owner occupied) has grown faster than market supply.

Housing affordability

Housing affordability has no uniform definition; a widely accepted implicit definition states that monthly housing costs for adequate housing should be not more than 30 percent of household income. As such, housing affordability can be measured as a ratio of housing payments to household income, adjusted for household size.

Housing inflation

Housing inflation compares the prices of housing relative to the price of a bundle of goods measured in the consumer price index. From 1982-1998, Bay area housing prices increased by 126 percent faster than prices of services, and traded commodities.

Rising home prices and rents most adversely affect lower income households by increasing the portion of income spent on housing payments, forcing households to consume lower quality or less housing or displacing residents altogether from their communities. Housing prices that rise faster than incomes will also adversely affect younger households attempting to enter the labour force.

Barriers to housing development and affordability

According to Frank (1999), there are many factors that inhibit the production of rental and ownership housing in San Francisco and reduce the affordability units. Though not an exhaustive account, the barriers addressed in this section are designed to give the reader an overview of some of the challenges to housing development in San Francisco. New developments will be less constrained and affordability levels will be enhanced as barriers are mitigated or eliminated. The barriers are outlined in this section include;

(1) Price and availability of land. (2) Small size and infrastructure of available land parcels. (3) Land regulations that restrict the development and use of available parcels. (4) Lengthy and uncertain entitlement process (5) Organized neighborhood opposition to additional developments. (6) Lack of state and federal financing for housing development. (7) Federal housing policy assumption that incompatible with San Francisco's market conditions. (8) Lack of enforcement of California Housing element law.

The discussions of each barrier are as given below;

- (a) **Price and availability of land:** San Francisco land cost are among the highest in the country due to the limited supply of available parcels. Heightened activity in the residential property market has recently driven up land prices for apartments. Many of the sites that remain available for development in San Francisco are small in scale and require infill developments.
- (b) **Land regulations:** According to San Francisco planning and urban research association (SPUR), a large portion of San Francisco's vacant land available for development is zoned for industrial uses or commercial uses. Parking requirement that attempt to capture the excess social costs of owning an automobile in the private housing transaction also add substantially to the cost of residential development.
- (c) **Entitlement Process and Neighborhood opposition:** The entitlement process in San Francisco is often subject to lengthy and uncertain review by the planning commission which holds the power of discretionary review. This process adds risk, uncertainty and cost to the land acquisition and development process and discourages development that would occur in the absence of such uncertain review.
- (d) **Construction Defect Litigation:** Due to state laws governing construction defect litigation cost of land, attached unit dwellings. Due to the high majority units in San Francisco and provide the most affordable opportunities for home ownership in response to litigation, many large developers have exited these market, further reducing the supply of units.
- (e) **State and Federal Financing Vehicles for Housing Production:** Public financing vehicles have the ability to influence the supply of housing, particularly the production of rental units with affordability restriction. With the devolution of housing policy from the federal government to local government, this has not been a concomitant provision of resources at the state level with which to leverage local dollars.
- (f) **Financing of Higher Density Housing:** the development of higher density housing presents opportunities to increase the supply and affordability of housing in San Francisco, the financing structure of higher density housing increases the cost of capital for sale units.
- (g) **Housing policy:** Federal housing policy that is designed to provide national assistance to tenants and home owners is premised upon assumptions that are often incompatible with San Francisco's tight market conditions. However, San Francisco has a large supply of upper income tenants who are able to outbid each other in the pursuits of desirable units, thereby binding up rents of scarce available units.

A final impediment to increased housing production is found in the lack of enforceability of California's housing element law. While state laws require each local jurisdiction to create policies and programs that enable it to meet its fair share of regional housing need for all income levels, there are no mechanisms to guarantee that its provision are implemented.

Solutions to the barriers of housing affordability and development

Solutions are identified to the extent that potential or existing efforts are under way to address the respective barriers. These are as follows;

- i. The city can assist in the development of residential property by providing the infrastructure improvements necessary for residential development.
- ii. With existing zoning controls on these parcels, the supply of land available for more conventional residential construction will be limited and only loft units will be built.
- iii. The housing committee actively works with developers and neighborhoods prior to the project development process to ensure that concerns are adequately addressed.
- iv. The legislation revised the alternative dispute resolution process for construction defects disputes for condominiums and town houses in the state.
- v. The low income housing tax credit (LIHTC) is a primary financing vehicle for affordable rental housing production in the United States. The tax credit provides a federal guarantee of a 10 year stream of tax credit (direct deductions from tax liability) for investment in a property that meets the housing requirement. The programme raised substantial amount or private funds for the production of affordable rental units.

Based on the above solution, however, the housing element law requires procedural rather than substantive compliance and does not ensure that local affordable housing is actually built.

The problems of Housing

Housing is a critical component in the social and economic fabric of all nations. No country is yet satisfied that adequate housing has been delivered to the various economic groups that make up its populace. Thus, most nations, in one form or another, continue to claim housing problem (Encarta, 2009).

The problems of housing in Nigeria

Housing generally has not ranked high on the scale of priorities of social spending, state governments have tended to rely upon local authorities to meet the problem. Despite the creation of the federal mortgage bank of Nigeria in 1977, and shanty towns and slums are common in urban areas. Overcrowding in urban housing is a serious problem. It has been estimated that about 85% of the urban population live in single rooms, often with eight to twelve persons per room, living conditions are poor. In 1996, only about 27% of urban dwellers had access to piped water. Less than 10% of urban dwellers had an indoor toilet. The total number of housing units in 1992 was 25, 661,000.

The rapid expansion of urban population has brought with many problems associated with the difficulties of providing basic infrastructure such as; electricity, inter-urban and intra-urban transportation and communication services and the problem of providing medical, educational and recreation facilities. Perhaps the most outstanding of all the problems is that of providing adequate housing facilities for the increasing urban population.

Housing need in Nigeria

There is a great shortage of adequate housing need in Nigerian towns. Housing in Nigerian Urban Center has been made greater and housing problems exacerbated by a combination of the following factors. These are;

- (a) There is a fact that the bulk of the traditional housing available in our urban centers is mainly in a dilapidated condition and unsuitable for habitation.
- (b) More houses are needed to receive existing over Crowding in many areas of the Nigerian urban towns.
- (c) Natural increase within the urban centers themselves demands additional dwelling units to house the increasing population.
- (d) Rural-urban migration which has assumed great proportion during the last two decades has aggravated the housing needs of urban centers in Nigeria.

Review of Empirical Studies

In review of empirical studies, many researchers have carried out studies on the analysis of housing demand and other related topics, thus, numerous works that have been done on housing demand by various researchers at the national and international level can be reviewed here.

Delauney, Burton and Talpade (2010), carried out a research on supply and demand analysis of single-family residential units in Carroll country, Georgia, America. The method of analysis used by the authors to analyse the data is multiple regression analysis. In this research, they posited that real estate housing market crisis is considered as one of the major factors leading to America's most recent economic recession. An integral part of resolving the issues within the real estate market is an accurate analysis of supply and demand. The analysis required the gathering of data on single family residential units and vacant land lords within the country, Georgia. Of these, only those located in sub-divisions were analyzed. Approximately 70% of the single family homes and land lords were estimated to be located within sub-divisions based on sample information retrieved from Georgia multiple listing services (GAMLS). The results of the study revealed that there existed a significant over supply of single-family units and residential land lords in carol country which would take an estimated to nine (9) years to absorb if supply was halted. They also went further and narrated that these finding do not provide a very optimistic outlook for the real estate market in this country, and to some extent could be indicative of the housing sector in similar countries within the state of Georgia.

Philip (2006) conducted a study on empirical determinants of the demand for residential housing in Kaduna metropolis, capital of Kaduna state, Nigeria. The primary objective was to examine the structures and determinants of demand for housing in Kaduna metropolis. The determinants were estimated using regression analysis and it was found that demand was determined by income, price of housing and demographics variables such as; household size and number of rooms in the dwelling. The estimated parameters associated with the price of housing had a negative sign statistically significant at the 5 percent level. The estimated parameters for income had a positive sign. He might concluded that the demand for housing as a consumer good as against the demand as an investment good, is income inelastic; and that its elasticity with respect to other demographic variables was also less than unity.

Theoretical Framework

The neoclassical consumer theory of Housing Demand

The fully developed economic theory of the housing market for analyzing housing decisions is the neoclassical consumer theory of housing demand. Several partial model and modification of

these models have been introduced to deal with the housing market. Search models, mobility models and housing trait models. It is further posited that there is currently no single model that incorporate all of the modifications attempted in these partial models (Megbolugbe, 1991). In fact it may be impossible to operationalize and incorporates of all of the modifications of the neoclassical model into a single model. According to this theory, the most feasible and conceptually correct strategy is to advance our understanding of housing consumptions decisions and to analyze the impact of demographic and social processes on housing consumption decisions. There is a need to research how to include demographic and sociological constructs that capture the attitudes, preference and perception of the consumer into the neoclassical economic model of housing demand (Megbolugbe, 1991).

In a primer on us housing markets and Housing policy (2000), Richard K. Green, and Stephen Malpezzi of the university of Wisconsin reviewed housing policy from the perspective of economists to relate economic concepts' in such a manner that they could be useful to non-economists, and to provide answers to question such as;

1. Do regulations drive up the cost housing?
2. What will happen to house prices in the future?
3. Is home ownership becoming unattainable?
4. What's happening to the bottom of the rental market?
5. Does the housing market work for minorities?
6. Is homelessness a housing problem?

The theory attempted to provide a sense of how economists look at housing market, and why that perspective is valuable. The aim of the theory is to help non-special economists better understand the housing market. The implementation of the neoclassical consumer theory has been shown to be very sensitive to the type of data used to estimate the systems. Both a time series aggregate data set and multiple cross-section data sets for the same commodities were estimated, yielding different results about consistency with the neoclassical theory and estimated price and income elasticity's. The aggregate data are in constant with the theory whereas the cross-section data is not.

The theory of housing and interest rates

James and Donald (1980) conducted the studies on the relationship between real interest rate and housing using a microeconomic approach. The primary impact of interest rates is on the demand side. The partial equilibrium, comparative static model of demand behaviors presented is based on inter temporal preference maximization subject to a multi period income constraint. The model is always in terms of real prices and interest rates and operates in discrete time. Consumer preferences are represented by a smooth utility function which depends on two kinds of goods such as housing and other non-durables. This model is couched in a neoclassical framework with all markets assumed perfect unless otherwise specified. With these approaches, the theory of housing and interest rates becomes part of standard consumer theory, rather than being based on in appropriate present value considerations.

Interest Rates and Rental Housing

The theory examine the case of rentals then housing purchases to ascertain that the negative interest rate effect continuous to hold. We will assume that the renters demand varies over time, since it is generally a great deal more mobile than home owners (James and Donald 1980).

Interest Rates and Tenure Choice

The distinction that owner-occupied housing investment has no direct interest effect whereas rental investment does is more apparent than real. This becomes clear when one realizes that if consumers are in different between owning and renting, then the price 'p' of a house must equal the discounted value of the stream of rental payment. We may regard consumers as being of two groups; one relatively risk-avoiding and the other relatively risk-taking. Though expecting interest rates to stay fixed, will prefer to purchase housing at a fixed mortgage rate (James and Donald 1980). The theoretical framework restricted itself to the theories that are related to the topic of study, that is, traditional theory of demand. Theoretically, a number of variables are specified as explanatory variables of the demand for housing. These are the price of the commodity, income of consumers, availability of substitutes, demographic characteristics of consumers, Taste preferences and expectations of future events. We expect the normal price-quantity relationship postulated in economic theory to hold for housing. The demand curve for housing is downward sloping, that is less people will demand for houses when prices are high while demand will rise when prices are low. The relationship between the real income of the consumer and housing demand is expected to be positive. In economics where the ability to be a home owner through mortgage financing is income determined, the amount of mortgage finance that is available to a household is usually a multiple of annual gross earnings. This implies that one would expect an increase in home ownership as real income increases. Home ownership is assumed to be a normal good and people with high incomes are likely to consider rented accommodation an inferior good and would therefore switch to owner-occupiers (Warren, 1993).

Conclusion

It is concluded that, there is a lot of literature written and documented by countless scholars across the globe. The scholarly documents covered wide range of topics and area of interests regarding to housing which the methodologies and approaches may slightly differs from one geographical location to the other but all tend to proffer immediate or future solution to the realted discovered or anticipated housing predicaments. It is therefore concluded that housing is one of the most significant and essential need of man as it is ranked the second hierarchies of man's needs. Despite the global efforts of various nations or countries, housing maintains its position as one of the prime problem facing most countries of the world especially the developing nation like Nigeria.

References

- American Heritage ® Dictionary (2009), of the English Language, 4th Edition. Boston Publisher, Houghton. <http://www.americanheritage.yourdictionary.com>
- Delauney, N. Bourton, Y. and Talpade S. (2010) *Supply and Demand Analysis of Single-Family Residential Units in Carrol County, Georgia*. Retrieved on 21st December, 2012 from <http://www.carrolcounty.com>
- Fasakin, Y. O. (2009). "Affordable Housing in Nigeria: Perspective and Prospects." Paper Delivered at Hybrid Workshop on Housing and Urban Development Issues in Ondo State, Akure, 28 -29 October, 2009. Retrieved on 21st December, 2012 from <http://www.palgrave-journals.com>
- Federal Government of Nigeria (FGN, 2004): National Housing Policy Draft, Abuja.
- Frank, D. (2000): "*Housing San Francisco's Workforce Strategies for Increasing the Supply and Affordability of Housing.*" *Richard and Rhoda Goldman School of Public Policy,*

- University of California, Berkeley. Retrieved on 21st December, 2012 from <http://www.urbanpolicy.berkeley.edu>
- Groves, L. (2004): “Sustainable Housing Delivery-Survey of the National Housing Stock for Effective Planning.” Paper Presented at National Conference of Chief Architects of the Federation 12th – 17th July, pp. 71 – 72. Retrieved on 21st December, 2012 from <http://www.info.com/housing+sustainable>
- Mabogunje, A. (2002): *Housing Delivery Problems in Nigeria*. Punch, Wednesday, May 2002.
- Microsoft ® Encarta ®, 2007 (DVD). “Housing delivery in a developing country” Redmond, WA: Microsoft Corporation, 2006.”
- Microsoft ® Encarta ®, 2008 (DVD). “House financing” Redmond, WA: Microsoft Corporation, 2007.
- Microsoft ® Encarta ®, 2009 (DVD). “The problem of housing in Nigeria “Redmond, WA: Microsoft Corporation, 2008.
- National Bureau of Statistics, (2007), “the Middle Class in Nigeria – Analysis of Profile, Determinants and Characteristics (1980 – 2007).” Retrieved on 21st December, 2012 from <http://www.sz.amazonaws.com/zanran.../com>
- Nubi, G. T. (2008): *Affordable Housing Delivery in Nigeria*. The South African Foundation International Conference and Exhibition. Cape Town, October, pp. 1 – 18. Retrieved on 21st December, 2012 from <http://www.env.unilag.edu.ng/index.php/2/136>
- Oduwaye, A. O. (1998): *Beyond Structural Adjustment Programme: Strategic Options for Increasing Stock in Nigeria*. Retrieved on 21st December, 2012 from <http://www.unilag.edu.ng/opensoc>
- Okupe, O. (2002): *Problem of Real Estate Developers in Nigeria: A Paper presented at a Workshop Organized by the Nigerian Institute of Quantity Surveyors, Abuja*. Retrieved on 21st December, 2012 from <http://www.oahure.com>
- Onibokun, R. (1990): *Urban Housing in Nigeria (NISER, Ibadan)*. Retrieved on 21st December, 2012 from [http://www.idosi.org/hssgs3/\(2\)08-17](http://www.idosi.org/hssgs3/(2)08-17)
- Philip, B. (2006): “Empirical Determinants of the Demand for Residential Housing in Kaduna”. *The Nigerian Journal of Economic and Social Studies*, 48 (2), p. 117 – 129. Retrieved on 15th July, 2013 from <http://www.info.com/2006+estate>
- Warren, M. C. (1993): *Economics for the Built Environment*. Butterworth, Heinemann, Oxford. Pp. 44 – 65. Retrieved on 15th July, 2013 from <http://www.info.com>
- Wikipedia, the Free Encyclopedia. “List of House Types” Lastlymodified on 14th march, 2013. Retrieved on 15th May 2013 from <http://www.gnocdc.org/tertiary/shotgun.htm>