



EFFECT OF MARKET FORCES ON HOUSING AFFORDABILITY OF JUNIOR STAFF IN A FREE MARKET IN SOME HIGHER EDUCATIONAL INSTITUTIONS IN BAUCHI, BAUCHI STATE, NIGERIA

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ABSTRACT

The aim of this work is to evaluate the effect of market forces on housing affordability of junior staff in a free market in some higher educational institutions in Bauchi, Bauchi Nigeria, with a view of determining the market forces influencing housing affordability of the junior staff in free market. The factors that affect the market forces of demand and supply were analysed. Survey research design using quantitative approach was adopted. A sample size of 116 were selected through the stratified and systematic sampling techniques. The data collected were analysed using SPSS software statistical

Introduction

The market forces of demand and supply in a free market economy are major determinants of price, the price so determined is usually considered alongside the income of the housing consumer. This study focuses on the influence of these market forces on the ability of the junior staff to access housing with the hope of getting the in-depth perception of this group on the degree of influence of these market forces. Mostapha, Wong and Hui (1998) investigated housing provision system towards housing affordability in Shanghai, China. The study examined the provision of housing towards housing affordability and develops a conceptual model for the supply of affordable housing for the low and middle income groups using public housing provision. In their study they discovered that low and middle income groups are suffering low affordability in the socialist market economic system and recommended that government intervention in housing should be stressed on housing need rather than housing demand. This work only looked at the social housing provision towards housing affordability but did not look at the factors affecting housing affordability in a capitalist economy which is now almost the generally acceptable economic system today worldwide. Therefore, this study considered market forces of supply and demand. Aribigbola (2008) dealt with housing affordability of low income Australians. The study aimed at measuring housing affordability of low income groups. They established that the housing affordability of



tools. The level of influence effect of demand factors on housing affordability was 16.3% medium significant ($p < 0.001$). The level of influence of effect of supply factors on housing affordability was 07% weak significant ($p = 0.017$). The major determinants of the supply of housing are prevailing economic condition, access to and cost of land, cost of labour, interest rates on loan and access to adequate housing finance are the first five factors that have high influence on the supply of housing. The government at all levels especially the federal government should engage the services of the professionals (economic experts) to help improve the economy of the country as it has a multiplier effect on the citizenry especially the low income earners because the present economic condition is having a negative influence on the affordability of the low income earners.

Key words: *Market forces, junior staff, Housing Affordability, Higher Institution*

the low income Australians is falling every day. The housing affordability is a large and wide spread and a structural problem. It was also predicted that housing affordability will increase in the first half of the 21 century as a result of anticipated demographic and housing market changes. In their work, they did not examine the factors that causes the fall in the housing affordability of the low income groups. Therefore, this work built up by examining the forces of the market that influence housing affordability in a free market to establish the degree of influence of these market forces. Onyike (2007) focuses on assessing the housing affordability of basic occupier housing by public servants in Owerri, Nigeria against the backdrop of the new monetization of the fringe benefits policy for civil servants in Nigeria. In this study he analysed the new allowances and salary structure of public servants in Owerri against the market value survey of 66 bungalows and houses in the city. He concluded that average civil servant in the city cannot afford adequate housing without substantial assistance.

Ayedun and Oluwatobi (2011) dealt with "Issues and Challenges militating against the sustainability of affordable housing provision in Nigeria. The aim of the study was to appraise the contemporary housing and the role of government in the provision of housing in the country. They observed that there is a wide gap between housing supply and demand. Therefore, my work will build on their work by examining both the factors that affect the supply and demand for housing so as to come up with recommendation and recommendations that will help in bridging the gap between demand and supply of housing in order to reduce housing affordability problem. This work will only focus on the effect of demand and supply factors influencing housing affordability by low income earners in in higher educational institutions of Bauchi, Bauchi Nigeria.

Literature

Housing Supply

The supply of housing referred to the quantity of housing that is available in the market at a particular price and time. The quantity supplied of housing is related to housing price (cost) and supply curve is an upward sloping curve reflecting the fundamental law of supply which states that greater quantity is supplied at higher prices. The supply of housing is inelastic due to time lags in construction and land release and therefore, the supply curve is generally steeper than the demand curve (Piscetek, 2013). There can be change in quantity supplied as a



result of changed in the price of housing which is a movement along the old supply curve and a change in quantity supply as a result of change in other factors of supply other than the price.

Demand for Housing

The demand for housing is the quantity or number of housing units demanded by housing consumers at various levels of prices. The demand for housing is looked at as schedule which reflects the quantity of housing units demanded at various units of prices which reflects the law of demand (Ndubueze, 2009) However, there is what is called the effective demand which the demand that is backed by the purchasing power of consumers The effective demand for housing is the quantities of housing that housing consumers are willing and able to buy at a given price and time (Tawiah, 2006).

The Importance of Housing Affordability

Housing affordability is very important to the growth and development of every nation; this is due to the fact that housing is a catalyst for economic development of every nation. Housing fosters the development of other industries; the building industry produces buildings for utilities, shops and communal facilities. Therefore, its shortage is a big problem that may results in sanitation problems unhealthy living conditions and insecurity of tenure and latter manifested in the growth of slums and shanty settlements which are some of the main challenges of the urban areas today (Gichunge, 2001; Akinwale&Abiola, 2007).Central to the achievement of adequate provision and distribution of housing is the issue of managing the relationship between and capacity of household to pay for their housing (Ndubueze, 2009). It become very difficult to justify the relevance of housing affordability without being tempted to discuss the importance of housing and its centrality in our day to day life. Stone (1993) noted that “Housing is not only a necessity of life; it has a pervasive impact on all aspects of our existence. Housing, if adequate provides privacy and security against intrusions, both physical and emotional. It is the principal locus of personal and family life. It defines the community and determines access to jobs, services, stores and significant to other people in our lives. It contains not only our material possession, but other dreams and despair.

According to Swartz and Miller (2002) it is a key factor in determining a family’s access to economic and educational opportunities, exposure to violence and environmental hazards and ability to accumulate financial assets. However, the importance of housing affordability considerations goes much beyond the personal troubles experience by individual households As contented by Piscetek (2013) housing affordability has “implications not just for housing but also for employment, health, labour market, aged care, finance, community, sustainability, economic development and urban and regional development. Also Baker (2003) added that it affects our national economic well being; the rate of economic growth and our prosperity, and influences the distribution of resources between regions, individuals and generations.The importance of housing affordability can also be seen in the costs borne by the individual households experiencing high housing costs, but also because it imposes costs on the wider economy and society. Thus, an increase or decrease in housing affordability often has significant impact on a household’s budget with far reaching implications especially if there is a downward shift in affordability (Quigley & Raphael, 2004; Stone, 2006; Yate 2007)

Furthermore, at the level of household, reduced affordability could force a household down the housing ladder or indeed trap such a household in a poor housing environment indefinitely and thereby exposes them to all dangerous and undesirable (physical health emotional and



mental) consequences often associated with living in sub standard, overcrowded and derelict housing environments which may manifest in poor productivity of households in school at work place and even in their day to day activities which can limits employment career potentials and opportunities (Munonye, 2009). High housing costs in the city could frustrate and alienate young creative workers at the beginning of their careers who actually drive innovations at work places especially the low income and medium income earners.

The Theoretical Framework

The theoretical framework of this research is based on demand and supply theorem. The demand for a product, commodity or service will increase when the price decrease and the demand will decrease when price increase. The relationship between price and quantity is an inverse relationship. The supply of a commodity (product) or service increases when the prices increases and the supply decrease when price decreases the relationship between price and quantity is a direct relationship. The theoretical framework of the research is also based on price mechanism theory which says that it is the interaction of supply and demand forces that determine price (rent) and where the demand curve and supply curve intersect that is the equilibrium price and quantity where both the supplier of housing and consumer of housing are both satisfied.

Conceptual Framework

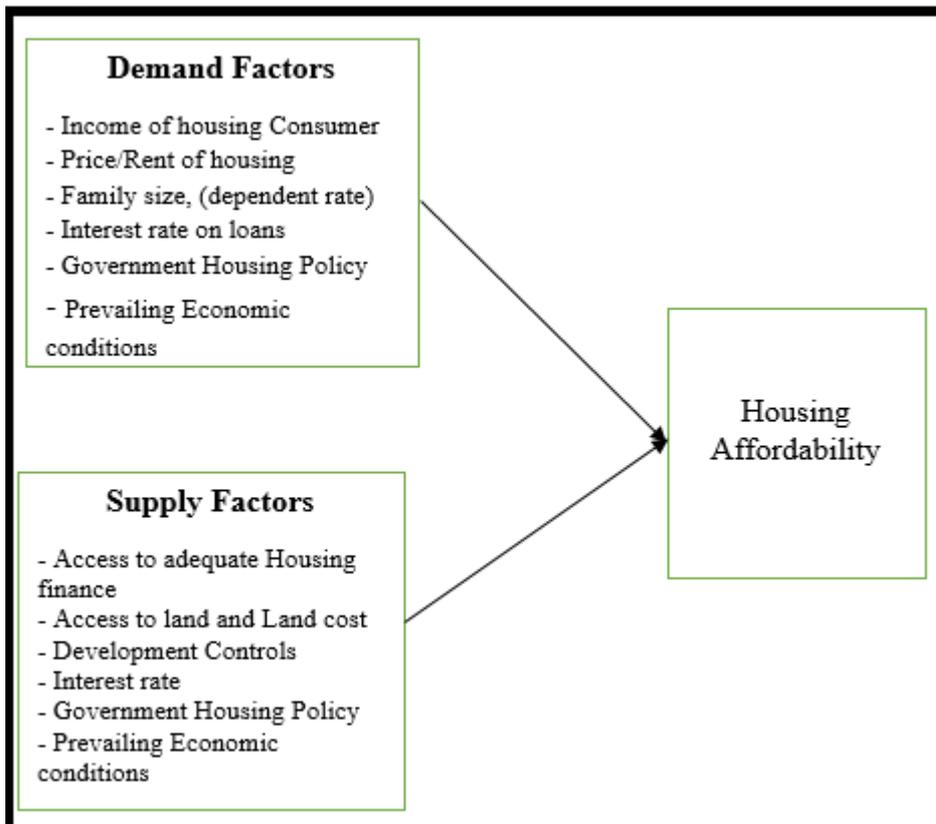


Figure 1: Conceptual Framework

Looking at the framework above, the junior staff earners housing affordability is on top of the chart which shows that it is the dependent variable, the demand and supply are the



independent variables and the determinants of demand and supply are the intervening variables. In an ideal situation, the low income earners need housing at affordable price but on their own cannot determine the price in a free market and therefore they are left at the mercy of the forces of the market to determine the price for them. It can be seen in the framework, affordability is being influenced by the forces of supply of housing and the demand for housing. The supply of housing is further influenced by the following intervening variables; access to adequate housing finance, access to and cost of land, cost of development (cost materials, labour and technology), return on alternative investment and development controls as can be seen on the framework. The demand for housing is further influenced by the following intervening variables such as income of the housing consumer, price of housing, population (family size and dependent rate), taste or preference of the housing consumer and price or prices of other essential goods and services (food, education, clothing health care etc) as can be seen in the framework. In addition, there are factors that influenced both the supply of housing and the demand for housing such as interest rates on loan, government housing policy, the prevailing economic condition, the prevailing security situation and property taxes and rates as can be seen in the framework above.

When there is ease or difficult in accessing adequate housing finance it will affect housing affordability positively or negatively respectively, high cost of land have negative influence on affordability and low or cheap land has positive effect on housing affordability. High cost of construction has negative influence and low cost of construction has positive influence, Development controls may hinder or encourage housing supply. On the demand site, high income has positive influence, and low income has negative influence, high price/rent has negative influence and low price/rent has positive influence. Preference/taste of the housing consumer has great impact on the demand and housing affordability if a consumer go for properties that in an ideal situation, it is above his/her ability, it will affect his housing affordability negatively and vice versa. When there is high population (large market size) high demand and more pressure on the available houses which may force the price to go beyond the ability of the low income groups. Prices of other essential goods and services; If the prices of food, education, clothing, healthcare etc are high, it will have negative influence on housing affordability of low income households. Interests rate affect both supply and demand for housing. High interest rate affects both supply and demand for housing negatively and vice versa. Government housing policies may affect housing supply and demand positively or negatively depending on what the government wants to achieve. The prevailing economic conditions determine the level of employment, inflation, poverty etc. When the economy is good, it will influence both the demand and supply positively and lastly the prevailing security situation. If the security situation is good people will be encourage to invest in housing and the demand for housing will increase in areas where the security situation is good and reverse will be the case when the security situation is bad.

Methodology

The research paradigm adopted for this study is positivism where ontology and epistemology are used. This study adopted a survey research approach where an inductive reasoning was adopted and data from the sample where analysed and findings were generalized. Therefore, the study population for this study consisted of all non academic staff from Consolidated Tertiary Education Salary Structure one to five (CONTEDSS 1-5) in Federal Polytechnic, Bauchi, Bauchi State College of Agriculture, Bauchi, and Abubakar Tatari Ali Polytechnic, Bauchi. The



stratified and systematic sampling techniques were adopted for this study where an appropriate sample was selected from the study population because it is very difficult to use the all eligible respondents in the study area. The Statistical Package for Social Sciences (SPSS) software was used as method of data analysis. Guy & Austin (2003) suggested that a sample size of between 10 to 20 percent of the sample frame is sufficient. Therefore, twenty percent (20%) of the sample frame was used and rounded up to the nearest the whole number as tabulated below. The rationale behind the choice of this method is because its simplicity and straight forward to use and easy for readers to understand.

Table 1: Sample frame and Sample size

Population units	Sample frame	Sample size (20% of sample frame)
Federal polytechnic, Bauchi	134	27
College of Agriculture, Bauchi	155	31
ATAP, Bauchi	290	58
Total	579	116

Source: Field Survey, 2022

Result and Discussion

Regression analysis was carried out to assess the influence of demand factors on housing affordability in the study area. The R² value in Table 2 shows how much of the variance in the dependent variable housing affordability in the study area is explained by the independent variable of demand factors.

Table 2: Effects of demand factors on housing affordability

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	df	df2	Sig.
1	.403 ^a	.162	.155	1.045	1	99	.000 ^b

Source: Field Survey, 2022

The result in Table 2 indicated the value was $R^2 = .162$, $f(1, 99) = 19.220$, $p < .001$. This means that the independent variable demand factors explained 16.2% medium significance ($p < 0.001$) effect size in housing affordability of the low income earners in study area. A Regression analysis was also carried out to assess the influence of supply factors on housing affordability in the study area. The R² value in Table 14 shows how much of the variance in the dependent variable affect housing affordability in the study area is explained by the independent variable of supply factors.

Table 3: Effects of supply factors on housing affordability

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Df	Mean Square	F	Sig.
1	.223 ^a	.070	.041	1.278	1	9.577	6.864	.017 ^b
					112	1.633		

Source: Field Survey, 2022



The results in Table 3: indicated that there is a weak significant influence of supply factors on housing affordability of the low income earners at $r^2=.070$ $F(1,112) = 6.864$, $p=0.17$, $B. 223$. This indicated 7% effect size on housing affordability of the low income earners in the study area.

Conclusion

The level of the effect of demand factors on housing affordability was 16.3% medium significant ($p<0.001$). The level of the effect of supply factors on housing affordability was 07% weak significant ($p 0.017$). The major determinants of the supply of housing are prevailing economic condition, access to and cost of land, cost of labour, interest rates on loan and access to adequate housing finance are the first five factors that have high influence on the supply of housing. The government at all levels especially the federal government should engage the services of the professionals (economic experts) to help improve the economy of the country as it has a multiplier effect on the citizenry especially the junior workers because the present economic condition is having a negative influence on the affordability of the junior workers.

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