

Determinants of Market Value of Residential Properties in Ibadan Metropolis, Nigeria

Oluseyi Joshua Adegoke^{1*} Bioye Tajudeen Aluko¹ Bolanle Felicia Adegoke²

1.Estate Management Department, Obafemi Awolowo University, Ile-Ife, Nigeria

2. Quantity Surveying Department, The Federal Polytechnic, Ede, Nigeria

Abstract

Several studies have shown that most of valuations prepared by valuers are unreliable due to valuation inaccuracy in valuation opinion which Nigeria is not excluded. As a result of Ibadan centrally placed position between the hinterland and the coast, its attracted so many traders and investors and serves as an economic centre for so many towns in the country. This study therefore examined major determinants of residential property market values in Ibadan Metropolis with a view to improving valuation accuracy in the study area. The study used random sampling to select 624 residential properties from the portfolio of 52 Estate Surveying and Valuation firms located within Ibadan metropolis, Nigeria. Data were analysed using a hedonic pricing specification. The results showed that while number of toilet (NOT), existence of burglary alarm (EOBA) and condition of the building were major factors influencing rental value of residential property in Ibadan Metropolis, number of toilet (NOT) and type of building (TOB) were the major factors influencing capital value. The study concluded that different major factors influence both rental and capital values and property valuers should recognise this in the process of carrying out residential property valuation in order to make their valuation reliable. Also, residential property investors need to take cognizance of this in decision making.

Keywords: Determinants, Inaccuracy, Residential Properties and Valuation.

Background to the Study

The most important challenges facing cities, towns and their inhabitants as acknowledged in Agenda 21 (1996) comprise but not restricted to the following: Inadequate financial resources, lack of employment opportunities, spreading homelessness and expansion of squatter settlements, increased poverty and a widening gap between the rich and poor, growing insecurity and rising crime rates, inadequate and deteriorating building stock, services and infrastructure. Other challenges include lack of health and educational facilities, improper land use, insecure land tenure, rising traffic congestion, increasing pollution, lack of green spaces, inadequate water supply and sanitation, uncoordinated urban development and an increasing vulnerability to disaster. All these, which most are basic infrastructural facilities have seriously challenged the capacity of government at all levels to realize socio- economic development and environmental protection, which are all components of sustainable development.

The rapid growth in urbanization and the rapid expansion of urban population have brought a lot of dynamic changes to the cities, though not been commensurate with the provision of these basic infrastructural facilities and amenities. This has brought in a number of problems perhaps the most important of which is that of providing adequate housing facilities for the population. Housing which is also known as residential property is one of the three basic needs of mankind and it is the most important for the physical survival of man after the provision of food (Olayiwola; Adeleye and Ogunshakin, 2005; Babalola, Umar and Sulaiman, 2013). It encompasses all the ancillary services and community facilities which are necessary to human well-being and sustainable development. It is a package of services, including land, utilities and services and access to employment and social amenities as well as the structure or shelter itself (FGN, 1981). Although housing is an integral part of human settlement that fulfils basic need, and has a profound impact on the quality of life, health, welfare as well as productivity of man; large proportion of urban residents in developing countries do not have access to decent housing at affordable cost. Residential property delivery involves series of processes by which housing resources such as land, labour, finance and building materials are combined to produce new residential property units. According to Agbola and Alabi (2000), these could also involve the upgrading of existing units as well as distribution of both new and existing housing to consumers. It is on this basis that housing policies are formulated and implemented to enhance the contribution of housing to economic development and social welfare, in view of the relationship of housing to employment, social services, recreation and other aspects of

life. Therefore, policy makers on housing and land taxation, land-owners, lenders, tax assessors, prospective buyers, government agencies, urban planners, developers and more importantly residential properties' valuers amongst others are very much interested in the various factors that determine market value of residential properties in cities which assist them shaping their decisions on the use, design, allocation of land and determination of property market value. Market value can be inform of capital value of rental value.

A review of the approaches to establishing the market value of residential properties in practice reveals that comparison is the most commonly used method in the assessment of value (Britton, Davies and Johnson, 1989; Igboko, 1992 and Adegoke, 1995). However, the finding of comparable data for residential property valuations has been an issue for Nigerian property valuers for many years. The unwillingness of estate surveyors and valuers and estate agents, to provide information and feedback on the transactions they managed were the basic causes of the lack of a uniform database. This is unlike some developed countries such as the UK who provide free documented data for residential values back from the end of World War I, which initiated the documentation of values so as to assess the damage and destruction caused by the war (GOV.UK, 2015 as cited in Giannoulakis *et al.*, 2015). According to the paper also, in the USA, there are many free databases from which different kind of data can be retrieved. Despite the widespread use of the method, criticism has been levelled that direct capital comparison, as currently applied in practice, is imprecise and ambiguous (Wiltshaw, 1991) and weak (Jenkins, 1992). This concern followed the collapse of the housing market in UK in the late 1980s which lingered well into the 90s, leading one commentator to suggest that a "chartered surveyor is no more than an estate agent in a Sunday suit" (Anon, 1996).

Moreover, Parnham and Rispin (2000) observed that in most cases, individual opinion or subjective judgment are used. In the sales comparison method of valuation that is commonly used, REINZ (1986) cautioned that due to number of factors or adjustments that must be taken into account the method diminishes rapidly in accuracy. Apart from this weakness, Britton, *et al.* (1989) pointed out that sales records are unreliable due to time factor. Most problematic is the valuer's bias in the valuation process. For instance, Havard (2001), Diaz (2002) and Adegoke (2006) reported that when faced with 'information overload', valuers use mental short cuts - heuristics - in coming to their final decisions even when they adversely influence a valuation. They observed that valuers make preliminary judgments and then seek evidence that support them. Other research works such as Gronow *et al.* (1996) concluded that both valuation practice and the structure of the market for residential valuation advice were at fault. Moreover, several studies have shown that most of valuations prepared by valuers are unreliable due to valuation inaccuracy in valuation opinion which Nigeria is not excluded.

However, a review of related literature to date has revealed a listing of several factors affecting the market value of property. Lenk, Worzala, and Silva (1997) identified eight factors affecting the market value which are number of bathrooms, number of bedrooms, age of house, lot size, basement area, total area of house, number of fire place and number of car garages. Cheshire and Sheppard, (1995) identified income, interest rates, demographic structure, housing stock, location, level of income, population, transport, policy and neighbourhood characteristics. Meen and Andrew (1998) mentioned nine factors; income, real interest rates, nominal interest rates, general level of prices, household wealth, demographic variables, tax structure, financial liberalization and housing stock. Blackley (1999) listed three; changes in tax policy, age composition of the population and rate of household formation while McCluskey, Deddis, Lamont and Borst (2000) listed only location as a factor. According to Meikle (2001), there were four main determinants of house prices, which are: the supply of housing, the supply of finance, the demand of housing, and the level of confidence of homebuilders'/homebuyers'. Han, Yu, Malone-Lee and Basuki (2002) identified another different four; land area, parks, CBD and schools. In the study of Case and Shiller (2003), the only factor that they identified was number of employment while Wong, Hui and Seabrooke (2003) only identified interest rate. Paz (2003) identified six factors which were GDP, level of income, migration, construction activity, economics activity and purchasing power. Kauko (2003) listed location, shopping centres, highway, parks, metro and neighborhood characteristics. Turner (2004) identified population growth, level of development in the node, property use, the size and condition of improvements on the site and the demand and supply in the property class within the local real estate market as the general and specific drivers of residential property values. Joslin (2005) listed location, age and size. In the findings of Mockrealty's (2005), two main groups could be fitted into the list of the factors influencing property market value. They are the specific or internal factors which refer to the nature and

condition of the property, including structural condition, quality of the finishes, building services, fixtures and fittings, and the level of major improvements needed. The other group is the general or external factors which include prevailing economic and market conditions, marketing strategies adopted and the experience of the real estate agent, as well as the motivation of the seller. This listing failed to take into cognizance local and neighbourhood factor which may be a major determinant factor in residential market value. The emphasis of Royal lePage (2003) was on location and type of mortgage debt financing which the study listed as the major factors influencing the market value of listed property. In fact, according to Babalola, *et al.* (2013) there are no two houses that are alike as a result of their heterogeneity; house differs according to a wide variety of characteristics or attributes, such as location and physical attributes.

Several factors affecting residential property values have been identified theoretically and few empirical exist in advanced economy. Also, influences of some of the individual factors have been examined by both developed and developing nations by previous researcher (Hughes and Sirmans, 1993; Correll *et al.*, 1978; Lee and Linneman, 1998; Omoogun, 2006 and Bello, 2007). There is the need to examine the major determinants of residential property market values in Ibadan Metropolis which is the trust of this paper. This is with a view to improving valuation accuracy in the study area.

A review of these literatures has revealed a listing of several factors affecting the market values of residential property. However, the study of Igbinsosa (2011) demonstrated that although several property characteristics can be identified with residential properties, only few ones have significant impact on the market values of such properties. Olujimi and Bello (2009) suggested that infrastructural facilities are probable factors that can influence rental value of residential properties in Nigeria as they are factors that strengthen the social livelihood of human being in urban areas. Ibrahim (2011) opined that the existence of facilities in a property would lead to high preference and competition for such properties which may results into high rental values. The absence of facilities may results into the opposite, that is, low patronage, and competition which lead to low rental values. Meanwhile, the issue of how the valuer would analyse the several factors affecting the market values of a property during the valuation process is still a problem. The solution to the problem could lie in the ability to understand the major determinants and their relative effects so that comparable sales and rental records could be more accurately adjusted in arriving at the asking price. Definitely, ordinary recognition of factors is good, but not so useful to the valuer. Although, Mbachu and Lenono (2005) examined the factors affecting the market values of residential properties in the Johannesburg CBD, it is somehow exceptional to the previous studies. The study made use of descriptive survey method. The survey involved both qualitative and quantitative data gathering with the use of unstructured interviews and structured questionnaire respectively. Content analyses and multi-attribute methods were employed in the analyses of the research data. The results of the study showed that location, market conditions, micro and macroeconomic dynamics and building features are the most influential factors affecting the market values of residential properties in the Johannesburg CBD. However, because of geographical difference that has impact on real estate value as relected in their results, there is the need to have a similar study in Nigeria. In Nigeria, Adegoke (2014) paper examined the major determinant factors influencing rental value of residential property in the three densities area of Ibadan Metropolis. However, Dokmeci *et al.* (2003) had used survey data set to analyse housing values and rents in Istanbul, Turkey and the study revealed that rental value and capital value respond to different factors. The aim of this study is to contribute to the investigation by examining and comparing the major determinants of rental and capital values of residential property in Ibadan Metropolis.

2.0 The Study Area

Ibadan is the study area. It is the capital of Oyo State, Nigeria. It is in the south western part of the State and in the south western Nigeria. It is located about 128 km inland northeast of Lagos and 530 km southwest Abuja, the Federal Capital. Its population is 2,550,593 people according to 2006 census results with 11 local government areas. Ibadan Metropolis which is which is former Ibadan Municipal Government has 5 local government areas which according to the 2006 census has 1,338,699 population. The growth in population is as a result of natural increase and population influx from other parts of the country. Ibadan as a major city in south western Nigeria is experiencing rapid growth urbanisation with increasing demand for real estate product. It serves as an economic centre for towns within and outside Oyo State. The urban activities demand infrastructures, including residential,

hospitals factories, offices, market/shopping complex facilities and services (electricity, water, and telephone), roads, open space for recreation (Adegoke, 2014). According to Tomori (2004) and Coker et al. (2007), Ibadan Metropolis (Figure 1.0) is divided into three major residential densities based on existing demographic considerations. This designation of residential densities would be useful for the purpose of residential classification in the analysis of results.

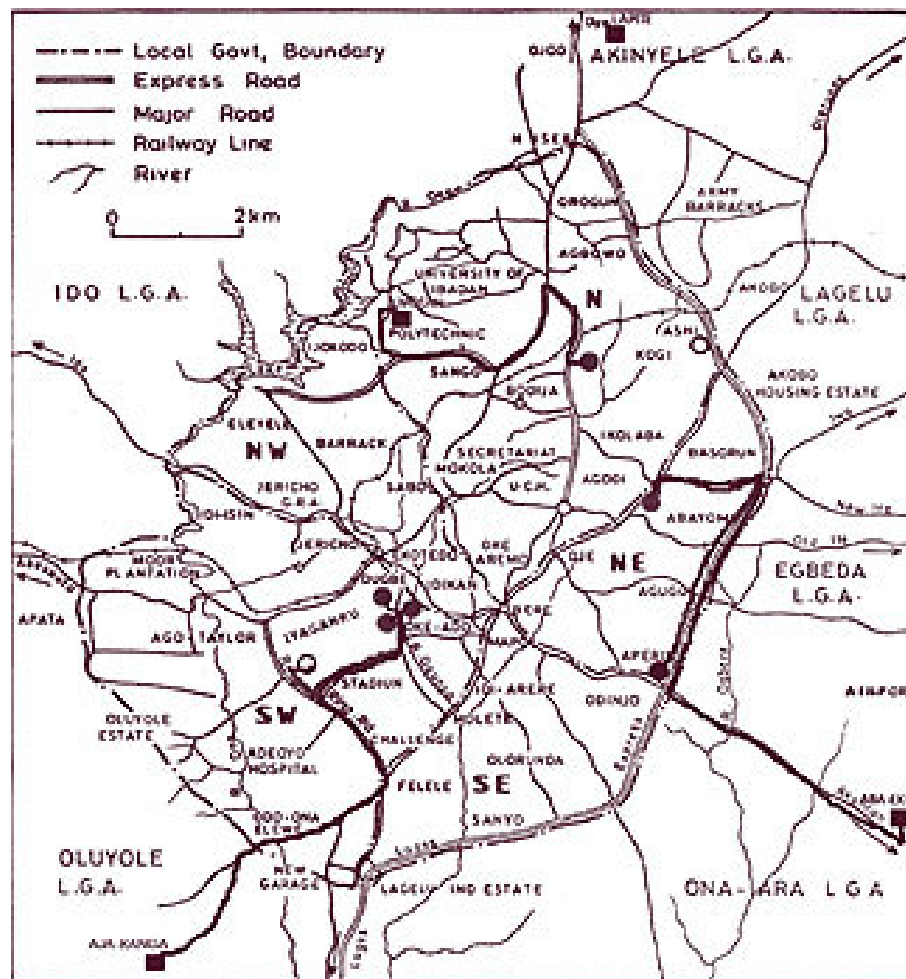


Figure 1.0
 Map of Ibadan
 showing the wards
 in the surveyed
 zones

- i) The Low Density residential market comprises the high rental areas where people with high income and taste concentrate. This is the area with less than 100 persons per hectare. Some particular areas in Ibadan Metropolis that conform to this category according to Tomori (2004) and Coker et al. (2007) are: 1) New and Old Bodija Area, 2) Iyaganku Area, 3) Onireke Area, 4) Jericho/Idi-Ishin Area, 5) Agodi Area, 6) Oluyole Area, 7) Alalubosa/Alesinloye Area
- ii) The Medium Density residential area is dominated by the middle income earners, that is, people that are not extremely rich but comfortable with their living. This area has a population of 100-300 persons per hectare. The areas that fall into this category include: 1) Ring Road/Challenge Area, 2) Eleyele Area, 3) Felele Area, 4) Total Garden Area, 5) Agbowo Area, 6) Iwo Road
- iii) High Density residential area is dominated by the low income groups with high population and buildings. The areas under this category include: 1) Foko Area, 2) Beere Area, 3) Agbeni Area, 4) Oke-Bola Area, 5) Oja-Oba Area

3.0 Research Methodology

From preliminary investigation conducted, 52 estate surveying and valuation firms are in Ibadan Metropolis,

Nigeria with an average of 60 residential properties in the portfolio of each firm. The study administered questionnaire on the 52 estate surveying and valuation firms having 3,120 residential properties in their portfolio. Twenty percent of residential properties in the portfolio of each firm were selected, totalling 624, using random sampling. Data were collected on property characteristics and rental value from tenants while capital value was collected from buyers out of which 558 were good for analysis. This study used Multi Regression Analysis (MRA) and stepwise hedonic regression method specifically, to analyse the data because of the nature of problems that are being investigated and data or information that was collected. The MRA is statistical approach of estimating unknown data, using the known and available information. The unknown data is the residential property value that the models can be used to estimate in the study area. The known data is the rental (annual rents) and capital values (sales price) and characteristics of the property let or sold. The stepwise hedonic regression method is applied for the development of models. The role of hedonic price regression framework cannot be underscore in the valuation of residential properties. This framework, according to researchers (Griliches 1961, Rosen 1974, Epple 1987) assumed that the prices each property is sold for represent the market prices, the results of the regression therefore should provide an unbiased estimate for the fair market value of each house. Akso, stepwise algorithm prevents the redundant and insignificant variables from making the model more complex. In this method, the variables are removed from the model those that are no longer significant predictors for dependant variable. The stepwise hedonic regression analysis also eliminates highly correlated independent variables (Eckert et al., 1990), which add multicollinearity problem.

The general structure of residential property valuation model can be formulated as follows:

$$V = \beta_0 + \beta_1 REL + \beta_2 TOB + \beta_3 NOR + \beta_4 NOT + \beta_5 NOB + \beta_6 NOL + \beta_7 EOF + \beta_8 EBA + \beta_9 EBP + \beta_{10} AOB + \beta_{11} COB \quad (1)$$

and

$$R = \alpha_0 + \alpha_1 REL + \alpha_2 TOB + \alpha_3 NOR + \alpha_4 NOT + \alpha_5 NOB + \alpha_6 NOL + \alpha_7 EOF + \alpha_8 EBA + \alpha_9 EBP + \alpha_{10} AOB + \alpha_{11} COB \quad (2)$$

Where **V** is the capital value of residential property, **R** is the rental value of same; both are dependent variables. β_0 and α_0 are the constant while β_1 to β_{11} and α_1 to α_{11} are the regression coefficient of independent variables. The independent variables are:

REL which is the residential location

TOB is the type of building

NOR is the number of bedrooms

NOT is the number of toilets

NOB is the number of bathrooms

NOL is the number of living rooms

EOF is existence of fence

EOBA is existence of burglar alarm

EOBP is the existence of burglar proof bars

AOB is the age of the building

COB is the condition of the building (physical deterioration and obsolescence)

For statistical analysis, SPSS 16.0 software was used. During the fieldwork residential property data were collected from buyers of residential properties and records of estate surveying and valuation firms in the study area. The models were built from the data. The location attributes were first added and later removed for different locations and the model validity was checked with different statistical tests. In stepwise regression approach, several models are produced for a set of data and the final model is accepted on the basis of the value of R^2 and standard error of estimates (SEE). The R^2 tells what proportion of variability of the property value is “explained” by the regression model and SEE is the difference between observed and predicted property value. It is always desired that the accepted model would be the higher R^2 value and lower SEE value. The adjusted R^2 is an estimate of how well the model would fit different data set from the same population and its value is always smaller than the value of R^2 (Norusis, 2000). The adjusted R^2 is commonly used as the best measure of a model’s

goodness of fit. So, when a regression is run, the first thing is to look at how well the model fits. The R^2 statistics describes the general explanatory power of a model, but error statistic describes the predictive power of a model (Linne, *et al.*, 2000). Here \hat{Y} is used as the predicted value of the property. The different models are described in the following sections.

T-statistic

This is a measure of the significance or importance of a regression variable in explaining differences in the dependent variable (Residential Property Values). It is calculated as the ratio of the regression coefficient to its standard error. When t is large, one can be confident that the variable is significant in the prediction of value. Conversely, when t is small, one cannot reject the hypothesis that regression coefficient equals 0 and that independent variable is unimportant in explaining dependent variable (Eckert, *et al.*, 1990). It should be emphasized, however, that this does not mean that variable is not correlated with residential property values.

The t -value measures the marginal contribution of a variable in predicting value when all other variables included in the equation are held constant. Because some variables duplicate information provided by others, they may be highly correlated with residential property values, but insignificant predictors as indicated by their t -values.

The significance of t -statistic can be evaluated by referencing to the t -table where degrees of freedom is equal to $n-p-1$, where n is the number of samples and p is the number of independent variables. In general, provided that sample size is large (at least fifty), a t -statistic in excess of ± 2.00 indicates that one can be 95 percent confident that regression co-efficient is not equal to zero and therefore that independent variable is significant in predicting residential property values. Similarly, a t -statistic in excess of ± 2.58 indicates that one can be 99 percent confident that independent variable is significant in prediction of residential property values.

4.0 Major Determinants of Market Values (Rental and Capital Values) and Models of Residential Properties in the Three Density Areas

The descriptive statistics details of the sample analysed is as seen in Table 1 below. The sample size for low density area is 40, medium density area is 346 and high density area is 172 while that of the whole study area is 558 (see Table 1). The sample size in the medium density was high as a result of the fact that most properties were in that category while only few were in low density. The regressions are run with field data from buyers and four models are developed, three with data from individual density area and the fourth for the whole study area.

Table 1: Type of Density

Density	Response Frequency	Percentage of Response
Low Density	40	30.8
Medium Density	346	62.0
High Density	172	7.2
Total	558	100.0

Field Survey, 2014

Table 2: Rental and Capital Values Models of Residential Properties in Three Density Areas

Factors	Rental Value Models				Capital Value Models		
	Whole Area	Low	Medium	High	Whole Area	Low	Medium
Constant	149745.63 (4.04)	46803.92 (0.75)	146193.18 (5.04)	4732.76 (0.143)	-1.13E7 (- 1.56)	-2.671E7 (- 4.08)	- 2173913.35 (0.27)
NOL	-	103144.74 (2.10)		-	-	2.442E7 (8.34)	-
NOT	49550.96 (5.90)	52971.61 (2.59)		-	3333456.30 (2.61)	-	-
TOB	-	-	-10179.66 (- 2.84)	-	5306930.73 (3.27)	3044240.37 (2.16)	5355402.03 (2.37)
NOB	-	-	25926.75 (4.36)	15404.07 (4.23)		-	
EOBA	106414.72 (3.62)	-	52938.93 (2.38)	-			
EOF	-			38542.74 (2.63)			
COB	-64324.79 (- 3.43)	-	26358.88 (- 2.19)	-23177.02 (- 2.28)			
R ²	0.276	0.190	0.276	0.539	0.194	0.762	0.120
Adjusted R ²	0.269	0.172	0.257	0.491	0.170	0.742	0.099
SEE	1.61721E5	2.39153E5	74139.81	33964.62	2.17506E7	1.04041E7	2.47E7
F	36.125	10.89	14.66	11.31		38.38	5.60

() T-test

Field Survey, 2014

The rental value model for residential properties in low density area from tenants/buyers data is:

$$\hat{Y} = 46803.918 + 52971.607 * NOT + 103144.742 * NOL$$

In Tables 2, only two variables (NOT and NOL) are included with constant in the model and other variables are excluded on the basis of R² value of 0.190 and SEE of 2.39153E5.

The capital value model in low density area from tenants/buyers data is:

$$\hat{Y} = -2.671E7 + 2.442E7 * NOL + 3044240.374 * TOB$$

Only two variables (NOL and TOB) are included with constant in the model and other variables are excluded on the basis of R² value of 0.762 and SEE of 1.04041E7 as shown in Table 2 above.

Therefore, from these analyses, it was only two major determinant factors i.e number of toilets and number of living rooms that influence rental value of low density residential properties in Ibadan whereas the two major determinant factors that influence capital value in the same density are number of living rooms and type of buildings.

For the medium density area, with R² of 0.276 and SEE of 74139.81429, four variables (NOB, TOB, EOBA and COB) are included on rental value model and the adjusted R² = 0.257. The rental value model for the medium residential density area from tenants/buyers data is:

$$\hat{Y} = 146193.183 + 25926.746 * NOB - 10179.66 * TOB + 52938.926 * EOBA - 26358.88 * COB$$

With R² of 0.120 and SEE of 2.47013E7, one variable (TOB) is included on capital value model and the adjusted R² = 0.099. The capital value model for the medium residential density area from tenants/buyers data is:

$$\hat{Y} = -2173913.349 + 5355402.030 * TOB$$

Hence, it was established from the analyses that there are four major determinant factors (number of bathrooms, type of buildings, existence of burglar alarm and condition of the building) that influence the rental value in medium density residential area of Ibadan metropolis when only one major determinant factor (type of building) influences capital value in the density area.

For the high residential density area, with R² of 0.539 and SEE of 33964.62105, three variables (EOF, NOB and COB) are included on rental value model and the adjusted R² = 0.491. The rental value model for the high residential density area from tenants/buyers data is:

$$\hat{Y} = 4732.757 + 38542.738*EOF + 15404.07*NOB - 23177.02*COB$$

However, the statistic cannot be computed for capital value model variables in high residential density. This is as a result of small number of data relating to capital value in the area and dependent variable deleted by the stepwise hedonic. This is in connection to secrecy still attached to transactions on real estate in some part of Nigeria.

In the whole study area, with R^2 of 0.276 and SEE of 1.61721E5, three variables (NOT, EOBA and COB) are included on rental value model and the adjusted $R^2 = 0.269$. The rental value model for residential building from tenants/buyers data is:

$$\hat{Y} = 149745.630 + 49550.959*NOT + 106414.721*EOBA - 64324.785*COB$$

For the whole study area, with R^2 of 0.194 and SEE of 2.17506E7, two variables (TOB and NOT) are included on capital value model and the adjusted $R^2 = 0.170$ (see Tables 2). The capital value model for residential building from tenants/buyers data is:

$$\hat{Y} = -1.128E7 + 5306930.728*TOB + 3333456.300*NOT$$

If the two models are therefore compared, it shows that the major determinant factors that influence the rental value of residential building in the study area are number of toilets, existence of burglar alarm and condition of the buildings while type of building and number of toilets are major determinant factors influencing capital value. Therefore, it can be concluded that different factors significantly influence rental and capital values of residential properties.

The three models of individual neighbourhood show that model for low density area has less explanatory power with 17.2%, model for medium density area has 25.7% and model for high density area has the largest explanatory power with 49.1%. The model for the whole study area that combined data from the three density areas has lower explanatory power with 26.9% and higher standard error of estimation than the combined data from the three density areas taking care of location factor with 33.6% explanatory power. However, model for individual density area predict property value better as it is witnessed in high density area with explanatory power of 49.1%.

5.0 Conclusion

The study concluded that different major factors influence both rental and capital values and property valuers should recognise this in the process of carrying out residential property valuation in order to make their valuation reliable. As with asset prices in the equity and bond markets, residential property valuations are vital to the processes of performance measurement, acquisition and disposal decisions of an investor. Thus, if the advice given by estate surveyors and valuers is incorrect, it will affect all the parties concerned: the investors, estate surveying and valuation profession and the economy of the nation. For example, inaccurate valuation will prevent investors from making right investment decisions. This could pose a serious threat to the credibility and integrity of valuers and even damage the public image of the estate surveying and valuation profession in the nation. This could also lead to the profession being obsolete and encourage incursion of other professionals into this core area of the Estate Management profession. Already, there is an existing attempt by professionals such as the quantity surveyors and accountants, to make in-roads into the valuation profession. If the data and necessary technology were available, it is argued that the anticipated future benefits and therefore value, of a residential house could be estimated by using a valuation model based on location and property characteristics and hedonic variables. Also, residential property investors need to take cognizance of this in decision making. This will enable them to know those features and characteristics of property and location there are required for either rentals or sales residential property investment.

Consideration should be given to the adoption of analytical techniques that allow greater degrees of cross – comparison of market data. Possible techniques include those adopted by appraisers in the United States, such as comparison grids. It is therefore considered that the Nigerian Institution of Estate Surveyors and Valuers should accept the responsibilities for the compilation and maintenance of information on the property market and the general economy. The newly established Research Committee of the Institution should set machinery in motion to ensure the compilation and maintenance of a property databank/index in Nigeria. All transactions in the property markets should be well documented by estate surveying and valuation firms and be submitted to a data bank that will be monitored by the Institution to enable each valuer to access market databank/information

easily and uniformly. Such databank/index should be subjected to frequent review and updating. This same data bank should also be available in all states branches of the Nigerian Institution of Estate Surveyors and Valuers throughout the whole federation. Individual firms too should be encouraged to keep and maintain a detailed database on their property portfolios and also accept the challenge of having a research unit in their organisations. By so doing, they would not only contribute to the production of residential property market indices, the research unit would also be able to access, easily, property information for valuation analysis.

In the area of further research, in order to give the research a national outlook, similar studies can be conducted to cut across other urban centres in Nigeria. Moreover, further research can be carried out for other types of properties such as commercial and industrial.

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