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THE EXPERT VALUERS VIEWS ON THE CRITICAL VARIABLES INFLUENCING RESIDENTIAL PROPERTY VALUES IN PORT HARCOURT METROPOLIS

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ABSTRACT

Real property is of paramount importance to the socio-economic development of a nation and it is made up of various features which influence its value. It is as a result of this that the study aims at seeking the views of the expert valuers on ascertaining the variables that affect the value of residential properties in Port Harcourt metropolis. After a review of the literature, 23 variables which presented to be directly relevant to the study area were used. Questionnaires were administered to the 119 firms registered with the Nigerian Institution of Estate Surveyors and Valuers (NIESV) Rivers State branch asking them to in their view as experts rank the variables on their levels of influence using a 5 point Likert scale. The data were analyzed using tables, frequencies, percentages and relative importance index to ascertain the most influential variables by ranking them. The results of the study revealed that size of the building, number of bedrooms, the presence of good road network, non- flooding area, nearness to healthcare facilities, electricity connection, security and nearness to CBD were the most influential variables to residential property values in Port Harcourt metropolis. The results of the study will assist investors and other stakeholders in the real property sector to know the critical variables that influence the value of their property thereby know the true worth of their investment.

This study is the original and first-hand study of the interaction among the various variables that influence property values in Port Harcourt metropolis.

***KEYWORDS**: Expert Valuer, Market Value, Property Values, Real Property, Residential Property*

INTRODUCTION

Real property is made up of land and building which are seen as a source of wealth and power as such humans acquire them. It involves several dimensions with different numbers and nature of factors that influence its price. Anaspect of the valuation process is amongst other things the determination of the factors that affect the value of real estate as opined by Ge and Du (2007) that property value is an essential aspect of property markets worldwide and is determined by a variety of factors. The process of establishing those factors is a significant part of property valuation. Property market and prices of property are affected by a lot of macro-economic variables, neighborhood amenities, structure of the property, the environment, house or room size and number. It is pertinent for valuers to establish the relationships between residential property values and these variables. A lot of other researchers like McCluskey, Deddis, Lamont and Borst (2000)**,** Selim

(2008) and Ajibola, Ebikefe and Awodiran (2014) amongst othershave carried out researches on the relationship between real property values and its characteristics. However, all these studies have been conducted in different locations and geographical zones with none been conducted in Port Harcourt. The impacts of real property variables on prices of residential property investment may be different in different geographical zones as posited by Sirmans, Macpherson and Zietz (2005). The study conducted by Olayiwole, Adeleye and Oduwaye (2005) asserts that there is a need for market specific assessment of factors that influence real property due to variations in the cultural, legal, economic and financial disposition of a country and this is corroborated by a later study by Abidoye, Chan and Oshodi (2016) which observed that the factors that affect property values are specific to location as such the study proposes a segmented study of the property markets. This study will be beneficial to the financial institution since real properties are used as collateral for mortgage transactions. This study will also help estate valuers and other professionals in the real estate sector in Port Harcourt to develop a grid of the different housing attributes that impact on the value of the property.

STUDY AREA

Port Harcourt is the capital city of oil-rich Rivers State located in the South-Southern Nigerian ($6^0$59' 54"E longitude, $4^0$47' 21"N, latitude and 10m altitude above sea level) Niger Delta region, Nigeria. Port Harcourt lies along the Bonny River and it has an area of 369km2 (142sqm). Ogbonna, Amangabara and Ekere (2007) in their study opined that Port Harcourt metropolis is made up of Port Harcourt local government area and Obio - Akpor local government area.

Port Harcourt features a tropical wet climate with long, heavy rainy seasons and short dry seasons. It is host to several oil prospecting and allied companies with a high influx of people which makes the property market very active.

Figure 1 indicates map of Nigeria showing Rivers State, the map of Rivers State showing Port Harcourt metropolis and the map of Port Harcourt metropolis.
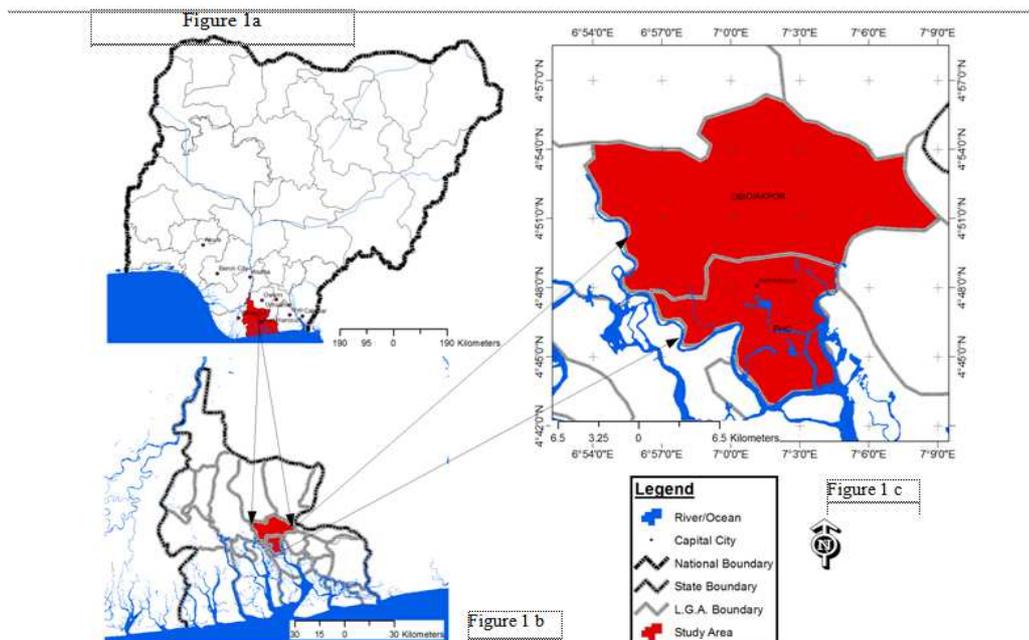
Source: URP GIS LAB RSU, 2018.

Figure 1: Map of Nigeria Showing Rivers State (Figure 1a), Map of Rivers State Showing Port Harcourt Metropolis (1 b) and Map of Port Harcourt Metropolis (1 c)

LITERATURE REVIEW

Definition of Value

Value can have different meanings for different persons or professions. When the value is mentioned in the real estate profession, it is the market value that is meant. There are many definitions given to market value by different stake holders like that by the Uniform Standards of Professional Appraisal Practices (USPAP) (2010-2011) which defined Market Value as "a type of value, stated as an opinion, that presumes the transfer of a property (i.e a right of ownership, or a bundle of such rights), as of a certain date, under specific conditions set forth in the definition of the term identified by the appraiser as applicable in an appraisal" and The Appraisal of Real Estate (2008) defined Market Value as "The most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest and assuming that neither is under undue duress". The International Valuation Standards Committee (2003) defined Market Value as "The estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion".

Variables that Influence Real Property Values

The need to assess the attributes that influence values of real property has led to many researches like those conducted by Kiel and Zabel (2008), Owusu-Ansah (2012), Babawale and Adewunmi (2011), Tse and Love (2000) amongst others. The study was done by Tse and Love (2000) identified four groups of attributes that determines real property values and they are structural, physical, neighborhood characteristics and environment. Most of the researches carried out observed different attributes that influence real property values in different study areas and notable amongst them are locational, structural and neighborhood characteristics. Other factor such as registration of title document was considered.

Locational Characteristics: This characteristic may be viewed as Ratcliff(1976) defined location as "the sum total of all the topographical, transport and other factors on land use that characterize a particular neighborhood". These locational characteristics include nearness to CBD, nearness to workplace, nearness to church /mosque, population density etc. Several researchers locally and internationally like McClusky*et al (*2000), Ge and Du (2007), Kiel and Zabel (2008), Marco (2008), Aluko (2011), Abidoye et al (2016), Owusu-Ansah (2012) and Amenya and Fletcher (2013) to mention a few have asserted that location is a key determinant of property values and ranked location highly significant in the determination of residential property values.

Zheng, Xie, Xia and Zhang (2012) opined that in Beijing, China, green space impacted positively on property values. Kemiki, Oyetunde and Ayoola (2014) revealed that the noise and dust from Lafarge cement factory in Ewekoro town impacted negatively on rental values of tenement buildings near it. Nearness to church has been identified by Babawale and Adewunmi (2011) as having negative impacts on property values.

Structural Characteristics: Cebula (2009) observed that in the city of Owusu-Ansah (2012) describes structural attributes of a building to include the size of a building, structural improvements, age and condition of the building. Studies of Selim (2008), Olayinka, Funsho and Ayotunde (2013) and Ajibola, Ebikefe and Awodiran (2014) to mention a few have revealed that the structure of a building and its neighborhood is of paramount importance to the determination of property

values. The study carried out by Selim (2008) found out that the type of house, number of rooms, size of the building, age of building and others were the most important variables that influenced property values. of Savanah in Georgia, number of bathrooms, fireplaces, number of bedrooms and others influence property values. While the study of Olayinka, *et al*(2013) using the Magodo area in Lagos revealed that proximity to high ways, number and size of bedrooms, number of conveniences, good roads and drainages all influences rental values in the estate.

Neighborhood Characteristics: Several researchers like Hammer, Booth and Love (2000) and Johnson, Davies and Shapiro (2005) observed that good neighborhood infrastructure affects property values, Ajibola, Awodiran & Salu-Kosoko(2013) revealed that infrastructure such as water and roads ranked most important factors that affects rental property values in Unity estate Lagos.

Anyanwu and Erhijakpor (2010) in their study posited that road infrastructure helps reduce poverty in Africa by reducing the cost of transportation and improving property values in those areas where the roads are good.

The security of an area influences the rental or capital values of the property situated in such areas. This assertion is confirmed by studies conducted by Ajibola, *et al* (2014) concerning the effects of militant's activities on rental values in Port Harcourt. The study revealed that militant's activities impacted negatively on rental values in the areas where these activities occurred. Orekan (2014) used Kano as a case study and discovered that the activities of the Islamic militant group Boko Haram caused a decline in rental values. These assertions were supported by the earlier studies carried out by Bello (2011), Ceccato and Wilhelmsson (2011) that crime negatively impacted on property values. This implies that residents are concerned about their safety so would prefer to pay higher for property in a safe neighborhood than in a location known for criminal activities.

Other Factors

The registration of title document is observed by some researchers like Udechukwu (2006)and Udoka (2017) as impacting positively on property values. They both observed in their studies that land with the registered title will have reduced land ownership tussle and in the event of any register, rectificationany registered owner who suffers a loss is entitled to payment of the indemnity by the registry amongst other benefits and promote socio-economic development which therefore increases the value of a registered real property.

RESEARCH METHODOLOGY

This research adopted the use of questionnaires to gather information from the respondents which in this study are the expert valuers. The questionnaires were distributed between April and May 2017 to the 119 estate firms registered with the Rivers State branch of the (NIESV) as retrieved from the 2017 register of firms in the Rivers State branch secretariat and a total of 96 of them were retrieved indicating 80.7% response rate.

The questionnaire was divided into two sections. Section A sought to know the background of expert valuers used as respondents. They were asked to indicate their years of practice as professional valuers from the options given and if they are Consultant estate surveyor and valuer or Estate surveyor and valuer. The options for years of practice were in the range of 0-5 years, 6-10 years, 11-15 years, 16-20 years and above 20 years. This section helped to know how experienced the valuers are in order to ascertain if their responses will be credible and reliable.

The questionnaire sought in Section B for the responses of the expert valuers about the variables that influenced

property values by indicating from the list of variables as noticed from literature which one of the variables influences the value of real property in the study area. The essence of these questions is to enable the study to achieve its aim to ascertain the variables that influence residential property values from the valuers opinions. The expert valuers were asked to rank their responses on a 5 point likert scale ranged from 1-5 in this order; 1= not at all influential, 2= slightly not influential, 3= moderately influential, 4= influential and 5= extremely influential. This scale will reveal if these variables are influential or significant in the assessment of property value and assist in ranking the variables. The data collected were analyzed using descriptive statistics of frequencies, percentages and relative importance index.

DATA ANALYSIS

Experience of Expert Valuers: The expert valuers were asked to indicate the number of years they have put in as registered estate surveyors and valuers. Their responses are shown in table 1 below.

Table 1: Years of Practice as a Professional Valuer

Years of Practice	Frequencies	Percentages
0-5	18	18.8
6-10	27	28
11-15	23	24
16-20	18	18.8
20+	10	10.4
Total	96	100

Source: Field Data, (2017)

Table 1 above indicates that 18.8% (18) of the responses have practiced as professional valuers for 0-5 years, 28% representing 27 responses have 6-10years experience,24% representing 23 valuers have 11-15years experience as professional valuers while 18.8% representing 18 responses have 16-20years experience and only 10.4% representing 10 valuers have 20 and above years of experience.

The data revealed that the estate surveyors used as respondents were qualified valuers who had after the relevant tertiary qualifications gone through the relevant tutoring and training. It is believed that with several years in practice, the expert valuer is skilled enough and versatile in practice to give credible responses to questions asked. Experience enhances faster and more accurate judgements at solving problems within their domain since they have developed automated skills applicable to the problem, and they have an organized database from which to retrieve the solution.

The expert valuers were asked to state their position in the firm and their responses are shown in table 2

Table 2: The Position Held by the Valuers in the Firms

Position in Firm	Frequency	Percentage
Consultant estate surveyor and valuer	53	55.2
Estate surveyor and valuer	43	44.8
	96	100

Source: Field Data 2017

Table 2 indicates that 55.2% representing 53 responses were consultant estate surveyor and valuers while 44.8% representing 43 responses were professional estate surveyors and valuers.

The valuers were asked to indicate from a list of 24 variables, the variables that influences the value of real property in Port Harcourt metropolis. This revealed that the respondents have passed through the rigors of professional

exams by the Nigerian Institution of Estate Surveyors and Valuers (NIESV) including the licensing by the regulatory body of the practice of estate surveying and valuation known as Estate Surveyors and Valuers Registration Board of Nigeria (ESVARBON).

Variables that Influence Property Values in the Study Area: In this section, the study considered the variables that influence the value of real property as retrieved from literature and asked respondents to rank them as it influences property values in Port Harcourt metropolis. Hence, the following analysis and results in Table 3 were done for each category of a factor that influence value of real property in Port Harcourt metropolis and Table 4 shows the individual ranking of the variables using their RII values. These two tables (3 and 4) are presented and analyzed simultaneously. The results were generated using the Relative Importance Index (RII) analysis by Tawil (2008) with the formula stated accordingly:

$$RII = (1n_1 + 2n_2 + 3n_3 + 4n_4 + 5n_5)/5N$$

Where:

RII = Relative Important Index

n_1 = number of respondents that answered extremely not influential

n_2 = number of respondents that answered slightly not influential

n_3 = number of respondents that answered somewhat influential

n_4 = number of respondents that answered influential

n_5 = number of respondents that answered extremely influential

N = total number of respondents = 96

The valuers were asked to rank the variables in the order of influence on property values and their responses are represented in table 3 below;

Table 3: Ranking of Variables that Influence Real Property Value According to Characteristics

S/N	Locational Characteristics	NINF	SNINF	SWINF	INF	EINF	RII Values	Ranking
1	Non flooding area	0	0	24	76	345	0.93	1st
2	Nearness to healthcare facilities	0	0	39	112	275	0.89	2nd
3	Nearness to CBD	4	4	24	112	270	0.86	3rd
4	Nearness to green space	2	8	42	168	170	0.81	4th
5	Population density	2	8	45	196	130	0.79	5th
6	Nearness to work	10	18	39	56	250	0.79	5th
7	Nearness to major road	8	24	36	156	125	0.73	7th
8	Nearness to churches/mosques	26	20	36	96	120	0.62	8th
9	Nearness to factory	43	38	30	56	50	0.50	9th
Structural Characteristics								
1	Size of building	0	0	0	36	435	0.98	1st
2	Number of bedrooms	0	0	6	60	395	0.96	2nd
3	Age of building	5	10	42	152	170	0.79	3rd
4	Size of land	12	10	51	80	210	0.76	4th
5	Number of bathrooms/WCs	6	20	63	88	185	0.75	5th
6	Building type	0	32	72	128	120	0.73	6th
7	Number of living rooms	8	14	75	112	140	0.73	6th

Table 3: Contd.,

8	Property condition	19	32	18	48	215	0.69	7th
9	Parking space	4	30	63	188	45	0.69	7th
Neighborhood Characteristics								
1	Presence of good road network	2	0	18	48	380	0.93	1st
2	Electricity connection	0	4	15	160	245	0.88	2nd
3	Neighborhood security	2	12	12	128	260	0.86	3rd
4	Has borehole water	2	12	12	208	160	0.82	4th
Other Factor								
1	Registration of title document	0	32	27	176	130	0.76	1st

Source: field data, (2017)

Table 4: Ranking of Individual Variables that Influence Property Values

	S/N Variables	RII Values	Ranking
1	Size of building	0.98	1st
2	Number of bedrooms	0.96	2nd
3	Presence of good road network	0.93	3rd
4	Non flooding	0.93	3rd
5	Nearness to healthcare facilities	0.89	4th
6	Has electricity connection	0.88	5th
7	Neighborhood security	0.86	6th
8	Nearness to CBD	0.86	6th
9	Has borehole	0.82	7th
10	Nearness to green space	0.81	8th
11	Age of building	0.79	9th
12	Nearness to work	0.79	9th
13	Population density	0.78	10th
14	Size of land	0.76	11th
15	Registration of title document	0.76	11th
16	Number of bathrooms/WCs	0.75	12th
17	Building type	0.73	13th
18	Number of living rooms	0.72	14th
19	Property condition	0.69	15th
20	Parking space available	0.69	15th
21	Nearness to churches/mosques	0.62	16th
22	Nearness to major road	0.61	17th
23	Nearness to factory	0.50	18th

Source: field data, (2017)

From table 3 it is observed that for the locational characteristics non-flooding area, nearness to healthcare facilities and nearness to CBD ranked 1st to 3rd positions respectively while nearness to church/ mosque and nearness to factory ranked 8th and 9th.

For the structural characteristics, it is revealed from table 3 that size of a building, the number of bedrooms and age of building ranked 1st to 3rd positions respectively while property condition and parking space available ranked last with the same RII values of 0.69.

The variables which ranked as being extremely influential to property values for the neighborhood characteristic were the presence of good road networks, electricity connection and security which ranked 1st to 3rd respectively with the presence of borehole water ranking 4th as shown in table 3.

However, table 4 indicates that when these variables are ranked individually the outcome of the rankings changed.

From table 4 it is revealed that size of building ranked overall first with RII values 0.98, number of bedrooms followed with RII value of 0.96 ranking 2nd and presence of good road network with RII value of 0.93 ranking 3rd while parking space available, nearness to church/ mosque, nearness to major road and nearness to factory ranked 15th, 16th, 17th and 18^{th}respectively.

From the data analyzed, the value of residential property in Port Harcourt metropolis is influenced mainly by the size of building, a number of bedrooms, the presence of good road networks, non- flooding area, nearness to healthcare facilities, has electricity connection, security, nearness to CBD and availability of borehole water. It indicates that investors in residential property in the study area consider their comfort and spacious accommodation as paramount as such the high ranking of size of building and number of bedrooms being the two variables that ranked highest and this finding is supported by Selim (2008) and Cebula (2009) who in their respective studies found out that size of building and number of bedrooms influenced property values greatly.

From the findings the presence of good road networks ranked high and could be due to the desire of property developers to be able to move about freely and save money from vehicle repairs as a result of bad roads and considering the undeveloped nature of most neighborhoods, only those with good infrastructure are preferred. The findings from the study ofAnyanwu and Erhijakpor (2010) that good road infrastructure helps in improving property values in those areas where the roads are good supports this finding.

Areas not prone to flooding appear to have influenced property values in the study areas and this may be because most property developers would prefer to build on non-flooding areas to avoid the inconveniences accompanying flooding when it occurs. Nearness to healthcare facilities revealed having an influence on property values and this may be due to employment opportunities which will require the staff of the facility to seek for accommodation.

Electricity connection ranked high and this indicates the importance placed on electricity mainly as it appears to be a luxury good in our country instead of a basic infrastructure that should be available to all. Hammer et al (2000) and Johnson et al (2005) all posts that good and adequate infrastructure increases property values.

The presence of security influences property values as people desire to live and acquire real property in areas considered safe. This study was corroborated by the study of Ajibola et al (2014) who observed that the effects of militant activities in Port Harcourt affected property values. Nearness to the central business district (CBD) is influential to property values in the study areas. This could be as a result of easy accessibility to the center and it is supported by the study of Ge and Du (2007) which revealed that properties near the CBD commanded higher values. Presence of borehole water indicates an influence on property values in the study areas and this could be attributed to the need for people to have water readily available to them as it is very essential to living.

The other variables that ranked lowest in the ranking on table 4 were parking space available with RII value of 0.69, nearness to church/mosque with RII value of 0.62, nearness to the major road with RII value of 0.61 and nearness to the factory with RII value of 0.50. They ranked 15th, 16th, 17th and 18th positions respectively. The reason why parking space available ranked low may be due to people's desire to have a good and spacious house not minding the external spaces. Nearness to church/ mosque ranked 16th which is a low ranking and this may be due to noise from the speakers from these religious centers and is likely to reduce the property value of residential properties in close proximity. Nearness to major road may have ranked low due to people preferring to live in a more serene and quiet environment than on a major road where traffic noise and pollution will affect them. Nearness to factory also ranked lowest and this could be attributed

to the noise from the factory equipment and air pollution. Kemiki et al (2014) also support the observation that nearness to factory reduces property values. This could be the reason why most factories in the study area are located far away from residential areas or in areas that are exclusively for industrial purposes like the Trans Amadi Industrial area.

CONCLUSIONS AND RECOMMENDATIONS

The real estate market is known to be a complex market both locally and internationally. The study aimed at assessing the critical determinants of residential real property value in the study area from the expert valuers viewpoint and establish the determinants of real property values in the study areas. The paper applying the Relative Importance Index (RII), observed that the size of building ranked first, followed by the number of bedroom, the presence of good road network and non -flooding area as the variables that extremely influenced residential property values. This was followed by nearness to health facilities, electricity connection and security. Nearness to the factory, major road, and religious centers was found to rank lowest.

It is recommended that the neighborhood characteristics which are mainly provided by the government should be made available by the government while property developers should ensure that appropriate structural facilities are considered during development. The paper recommends that religious centers should be regulated by government to ensure that their effect of causing a reduction in the value of property near them is reduced.

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