

Factors Influencing Rental and Capital Values of Residential Investment Property in Abuja, Nigeria

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Abstract

There are various purposes the rental or capital values of residential investment property could be sought. However, most previous studies on factors influencing value of residential investment property are expressed in a general term; not specifically indicating whether rental or capital value. This may mislead investors in making the wrong investment decision. Using aggregation and disaggregation approach, this study examined the general and specific factors determining the rental and capital values of residential investment property in Abuja, Nigeria with a view to providing information that could guide the investment decisions. With the use of a structured questionnaire, cross sectional survey was adopted to obtain the perceptual opinion from 136 estate surveying and valuation firms in the study area. Data was analyzed with descriptive statistics of Relative Important Index (RII). The findings reveal a variation in the outcome of general factors and specific factors and that in specific term, factors influencing the capital value are significantly more in quantity and rating than the ones influencing the rental value. Out of the 23 (13 for rental and 10 for capital value) general determining factors, 11(3 for rental and 8 for capital value) are actually significant. Average number of rooms; change in maintenance cost/taxes and the neighbourhood characteristics mainly influence the rental value of residential property while cost of construction; type of structure/quality of facilities; potential of rental growth; title and size of the land; neighbourhood attributes; inflation impact; size and structural characteristics and state of supply in property market are the main factors influencing the capital value. This noted variation is an indication for property investment stakeholders to be cautious and specific in the selection of the most appropriate determining factors for their investment objective to avoid investment decision errors.

Keywords: Residential investment property, rental value, capital value, influencing factors

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1.0 INTRODUCTION

Residential investment property has some prospects and benefits which attract institutional and multinational investors to concentrate their investment on these investment assets (Ekpenyong, 2015). However, to have a sound decision making by investors and practitioners on residential investment property, factors that influence their values required a thorough understanding (McGough et al., 2000) for the purpose of distinguishing the factors that influence rental value from capital value. This is desired, because factors that influence the rental value may not be the same with that of capital value. Therefore, it may amount to confusion if reference is made to property value generally without specific reference (in classifying form) to either rental or capital value.

Past studies on factors influencing property value focus on systematic derivatives (demand side approach) of the economy such as: gross domestic product (GDP) (De Wit & Van Dijk, 2003); population growth rate (Ting, 2002); growth in consumption and unexpected inflation, unemployment rate (De Wit & Van Dijk, 2003; Kofoed-Pihl, 2009); prime lending rate and real estate interest rate (Chin, 2003; Kofoed-Pihl, 2009; West & Worthington, 2006); inflation (De Wit & Van Dijk, 2003; West & Worthington, 2006), but rarely on unsystematic derivatives (supply side approach) such as property factors. Unemployment rate has an element of demand factor that can affect the rental value, while inflation rate and real estate interest rate are mainly indicative of the supply factor.

Although, studies on analysis of property value trend and prediction have been mostly documented in the advanced countries, however, the study that specifically separates and identifies the unsystematic rental value from capital value determinants of property market in Nigeria context is still relatively scanty; this is a notable vacuum in residential property investment literature.

Emphasizing the individual property market peculiarities, Hui (2009) observed that the various studies conducted on real estate market of various countries could not be generalized to all countries and regions with differing property market environments because direct application of investment/performance determinants from developed countries or even other developing countries in the analysis of the direct real estate market in Nigeria may produce spurious and misleading results, due to the likely variations in their determinants.

In addition, most of the few indigenous studies on property value determinants in Nigeria such as Babawale and Adewunmi (2011), Ilesanmi (2012), Daniel et al. (2012), Adegoke (2014), Abidoye and Chan (2016), Babatunde (2018), Bello (2018), and Oladapo et al. (2019), among others focused on Lagos, Port-Harcourt and some other state capital cities.

It is obvious in the literature that stakeholders in residential property investment in Abuja may be misinformed and misguided if the factors that determine rental and capital values of investment property are not separated differently and classified for appropriate guidance. Obviously, the purpose and type of investment property will indicate what an investor is willing to pay. Property value appears differently to different parties, while the renters of residential investment property may only be interested in the factors that affect rental value at the point of utility he/she desires, the property owners and the real estate professionals may be interested in both rental and capital value, but in a separate form to have any meaningful investment decision taking.

■ 2.0 LITERATURE REVIEW

Generally, property investment evaluation is wider in scope; ranging from property reward analysis, property investment characteristics; property market maturity, diversification among others, but most importantly, sound decision making by investors and practitioners on residential investment property requires detail knowledge of the factors that influence the value (McGough et al., 2000). For ease of identification and referencing, Bello (2018) identified the type of structures of residential investment property (as guide for determining of property value) by property accommodation type for the purpose of analysis to include: a self-contained apartment, detached bungalow, semi-detached bungalow, a block of flats, detached duplex, semi-detached duplex, terrace duplex apartment among others (with or without boy's quarters and specified number of rooms). It should however be stressed that the differences between property value and its yields are dependent upon the type of property and point of view of the value.

Due to its heterogeneous nature, residential investment property value is determined by a variety of factors and these make the stakeholders to place different values on it (Abidoye & Chan, 2016). Residential investment property value is always noted with a purpose which may either be for rental or capital value purpose. Investors in residential investment property will consider in their rental arrangement, the structure and pattern of expected income while the renters may be more interested in the physical characteristics and quality that can indicate rental satisfaction as factors that will determine what amount they are likely to pay.

Value is the creation of minds of the stakeholders (investors, renters, professionals), but not in the physical property itself (Abidoye & Chan, 2016). However, property valuation is the combination of art and science of estimating the value of property. Art aspect of property valuation is the factors (attributes and characteristics of property) determining its value (Azmi et al., 2013) while the real estimation in quantity after translation of the quality represents its science. Art aspect of valuation in addition, requires the application of property market intuitive knowledge by the estate surveyors and valuers.

Residential investment property exhibits both qualitative (intrinsic or unsystematic) and quantitative (extrinsic or systematic) indicators altogether in its analysis of value, but greater attention of the past studies is on the quantitative indicators. Although, both qualitative and quantitative factors are effective signals of residential investment property values, quantitative indicators however have its derivatives from the qualitative indicators and the analysis emanated therefrom. Therefore, more emphasis is needed on the qualitative indicators of residential investment property values than the quantitative ones for a better analysis (Bello et al., 2020).

This is in compliance with the UN-Habitat (2011), where general factors considered for determining the quality of good accommodation towards its value measurement were specified to include: the quality in term of physical characteristics and durability of the building, materials use for building, levels of maintenance, level of crowding, access to jobs and public services, location and social support systems, responsiveness to tenants' mobility pattern and access to basic infrastructure. These qualitative factors are however, general physical factors determining residential investment property values which are not specifically segregated or classified into rental or capital value.

A lot of other studies have been done on the general qualitative factors (physical or abstract) responsible for property values and various intrinsic factors have been attributed to as the determinants of its value and reward. Specifically, residential investment property intrinsic characteristics responsible for the variation in their values include: accessibility (Ball et al., 1998); location, size, or structural characteristics (McCluskey et al., 2000; Tay et al., 1999); the impact of inflation and real estate construction cost as the capital value or long-run factors. While rental value or short-run factors include; increase in wealth arising from price (Leung et al., 2008); status of the existing occupier or new occupier (Singh & Singh, 2009); household income (Briggs & Ng, 2009); average number of room/floor area (Slade, 2000); changes in floor space and prime lending rates (Chin, 2003); size of sales facility (Kivilahti & Viitanen, 2006); neighborhood and physical characteristics (Marco, 2005).

Emphasizing further on the analysis of qualitative factors influencing residential investment property, Daniel et al. (2012), observed that understanding the desire satisfactions of investment property renters is a very useful qualitative indicator guiding property investors in the investment planning and to have effective determination of rental value of residential property, the details of tenancies and leases of rental housing is very important. These qualitative indicators of rental satisfaction such as rental pattern and tenancy duration otherwise known as part of property personality prompted Babatunde (2018) to observe that a tax policy framework that would encourage private sector investment in real estate would need to take cognizance of property rental arrangement and avoid rental disequilibrium in a bid to stimulate economic growth and development.

In a bid to interpret the influencing qualitative factors of residential investment property value in Ibadan, Adegoke (2014) observed that identification of numerous factors as determinants of residential property value may not be helpful to the stakeholders because of confusion in their general application; hence a need for specificity. Adegoke (2014) therefore, exhibiting similar findings with Fuerst and McAllister (2011) documented the factors influencing residential investment property value as physical characteristics; location, type of the building, number of floors, wall fence, age and condition of the building.

Abidoye and Chan (2016) from the framework of 20 attributes of residential investment property in Lagos, Nigeria observed in order of importance the most highly significant variables that influence the property value as: property location; neighbourhood characteristics; property state of repairs; size of property; availability of neighbourhood security and age of the property.

Babawale and Adewumi (2011) presented the factors determining the property value to include; quality of building facilities/basic amenities, accessibility/region/neighborhood/location, neighborhood type/quality/services, age of the property, land/plot size, built-up area, number of bedrooms, number of floors, quality of construction/finishing, structural attributes, availability of basic amenities and occupancy rate. However, specifying the neighbourhood characteristics (such as household income, percentage of renters, school districts, and economic boundaries) by McElveen et al. (2020) as the factors that influence the value of residential real estate concluded that the neighbourhood characteristics are primarily economic in nature.

Oladapo et al. (2019) study reveals that dwelling attributes of number of rooms, bath and toilets and accessibility attributes of nearness to primary and secondary school are the main attributes that determine the preferred location of tenants' residence and influencing the rental value of residential property, while Ilesanmi (2012) in his examination of the quality of public neighbourhood and residential property identifies the quality indicators that mainly determine the value ascribed to residential property finds out that blocks in the low-income residential estate exhibit a lower level of housing and environmental quality than the median income and the neighbourhood related defects in quality appear to be more severe than the building related defects; this has effect on the value ascribed to the residential investment properties.

Olajide (2018) explores the position of building/neighbourhood characteristics of investment properties among the key determinants of residential property value on residential neighbourhood and suggests that accessibility is the most significant determinant of property value, follow by neighbourhood security and lastly building/neighbourhood characteristics. There is however no statistically significant relationship between building/neighbourhood characteristics and investment property values.

Nuhu (2008) provided a documented record of letting and investment related activities of residential properties and their effects on property value, and finds out that there is sustainable upward trend in rentals of residential property due to inflationary condition of Nigeria and rising cost of construction, but with negative impact on residential property value and lettings, without such on demand for residential property. Although, this study is specific on rental value of residential property, but it limits its scope to the effects of rental value of residential properties, but did not include its determining factors. Furthermore, the study did not extend to analyze the factors that can influence the capital value to form a basis for comparison with rental value.

From the review of literature, factors affecting residential property values are generalized in aggregation form. They are not appropriately separated to distinguish which one influence rental or capital values specifically to guide the investors and other stakeholders. Except by readers' inference, which may be subjected to error of assumption, it is somehow difficult to distinguish which factors specifically influence the rental value or the capital value. This is a conspicuous gap in the literature which this study aims to fill. Lack of distinguishing these factors may grossly mislead the investors or other stakeholders in the investment decision making, mainly because residential real estate appeal differently to people with varying factors; depicting differing investment approaches or objectives.

As a framework for this study, a total of 23 qualitative indicators are harvested from the survey of literature and such are therefore listed under physical and abstract variables. Physical variables include: the type of structure; average number of rooms; size of the land; size/characteristics of the structure; neighbourhood characteristics; age/obsolescence; occupancy level/vacancy rate; additional amenities/facilities; type and physical characteristics of the property. The abstract variables include; cost of construction; change in maintenance cost and taxes; potential of rental growth; neighbourhood attributes; inflation impact/state of economy; state of supply in the property market; falling confidence by potential tenants; state of employment in the nation; renegotiation/rent review; household income; rent void; intake of new tenants/fresh letting; return on alternative investment and more demand over supply of property.

For the specific purpose of this study, it can be inferred from the above general listing that the qualitative indicators of rental value of residential investment property include: increase in wealth/household income; status of the existing occupier/new tenant; average number of room/floor area; state and type of building facilities; neighbourhood characteristics/environmental quality; physical characteristics; desired satisfaction; occupancy rate and residents' mobility. The qualitative indicators of capital value include: accessibility and location of the property to jobs and public places; size of the land/plot; structural conditions or characteristics; the impact of inflation; quality/cost of construction; structure/pattern of expected income; physical characteristics; type of the building; age of the building; number of floors; wall fence and basic infrastructures. These factors shall therefore be the framework for this study.

■ 3.0 METHODOLOGY

Cross sectional survey research design was adopted through the use of well-structured and duly administered questionnaires on all the 177 estate surveying and valuation firms (ESVFs) in the study area as obtained from the Directory of Estate Surveying Firms in Abuja (NIESV, 2013). By the provisions of the Nigerian Land Use Act of 1978, ESVFs are the only recognized professional firms when it comes to determination of property values (rental or capital) in Nigeria.

Primary data on opinions determining rental and capital value of residential investment property were collected from each randomly selected ESVFs in the study area. Rental value determining variables based on the survey of literature and further segregated by this study include: state or rate of employment, an increase in wealth/household income, intake of new tenants (fresh lettings), renegotiation/review of rent, excess demand for space over supply, occupancy level/vacancy rate, type of property, physical characteristics, neighbourhood characteristics, rent void, average number of rooms, additional amenities/facilities, and change in maintenance cost and taxes. These are variables that portray the short run attributes with particular attention of the renters in the property market. They are variables that translate the worth or value of property to the tenants or potential tenants.

Capital value determining variables include: quality/cost of construction, inflation impacts, structure/potentials of rental growth, neighbourhood attributes, size and structural characteristics of the building, quality of facilities, title and size of land, age and obsolescence, state of supply in the property market, and return on alternative investments. These are variables that portray the long run attributes with particular attention of the property owners/investors in the property market.

Each questionnaire comprises 3 sections: section A detailing the profile of responding ESVFs, section B identifies the rental value determining variables and section C identifies the capital value determining variables. The data collected were verified through Cronbach alpha coefficient, so as to strengthen the validity and interpretations of the collected data (Kvale, 2006). Data were collected with the adoption of ordinal scale measurement for the variables and analyzed using descriptive statistics of average ranking i.e. Relative Importance Index (RII). Relative importance index (RII) in value range of zero (0) to five (5) was used to analyze the responses from the respondents with the aim of ascertaining the degree of importance attached to each statement or issue by the respondents as previously done by several academic works (e.g. Bello et al., 2017; Le & Tam, 2007; Onwuanyi, 2018). This is because the statements/issues in the questionnaire are explanatory factors; therefore, RII will allow respondents to weigh their responses relative to their importance according to the extent of their agreement with the statements/issues to enable the draw of inference for the study. The RII was calculated as an extension of the frequency count with the equation:

$$RII = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{TFC} \dots\dots\dots (1)$$

RII is the summation of all weighted responses divided by the total frequency count, where n represents the frequency count for each option multiply by assigned scale e.g. 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree), TFC represents the total number of respondents for the study. The RII has the range of 0-5; the nearer the RII to 5 the more significant is the RII and closer the RII is to zero, the less significant is the RII. After the computation, the RIIs will then be ranked in order to determine their position of preferences. Adopting Abidoye and Chan (2016) yardstick, RII with 4.00 and above shall be taken as highly significant; 3.50 to 3.99 significant; 3.00-3.49 slightly significant and less than 3.00 insignificant.

■4.0 DATA ANALYSIS AND RESULTS

Variables determining the values of residential investment property are listed as 23 altogether at an aggregate level. Subsequently, this aggregate was disaggregated to 13 rental values and 10 capital values variables for the purpose of observing the likely variation in the outcomes. The frequency responses to the general factors influencing the residential investment property is presented in Table 1. Therein, the frequency response of 74 to strongly agree option is the highest response for cost of construction as a determining variable for residential property value. For the type of structure/quality of facilities 68 responses strongly agree while 64 is for the average number of rooms in the property. The least response to strongly agree is that of more demand over supply of 5 responses. These results in frequency responses may not be explicit enough to weight the degree of importance near accurate like the RII. This informs the further analysis base on the RII as follows.

4.1 RII of the General Factors Determining Property Values

In addition to the frequency count, Table 1 also displays the RII of the variables as weighted by the respondents indicating an improved response according to degree of importance. Of the 23 general property values determining variables, 11 are considered in their order of importance, to have highly influential impact/significant, adopting Abidoye and Chan (2016) yardstick because they are the variables with RII of 4.00 or more. Such variables are: cost of construction (4.47); type of structure/quality of facilities (4.40); average number of rooms (4.37); change in maintenance cost (4.34); potentials of rental growth (4.29); title and size of land (4.26); neighbourhood characteristics (4.25), neighbourhood attributes (4.17); inflation impacts/state of economy (4.16); size and structural characteristics (4.11) and state of supply in the property market (4.07). The variables with RII less than 4.00 shall for the purpose of this study be regarded as having low influential impact/significant and they include the following: age and obsolescence (3.96); falling confidence by potential occupants (3.95); state of employment in the country (3.88); renegotiation/review of rent (3.83); occupancy level/vacancy rate (3.79); and household income (3.65). Others variables with RII less than 4.00 include: rent void (3.61); additional amenities and facilities (3.60); intake of new tenants/fresh lettings (3.50); return on alternative investment (3.42); type and physical characteristics (3.11) and more demand over supply of housing (2.97). But this is a generalized result and Adegoke (2014) has observed that the aggregation of multiple determining factors may not be helpful and may lead to confusion of the stakeholders in property investment which have different objectives that needs to be segregated for specific interpretation hence the splitting into rental and capital values components in Tables 2 and 3.

Table 1 RII of general factors determining property values
(Source: Field survey)

GENERAL FACTORS	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	TFW	RII	Ranking
Cost of construction	74(370)	52(208)	10(30)	-	-	608	4.47	1 st
Type of structure/Quality of facilities	68(340)	59(236)	5(15)	4(8)	-	599	4.40	2 nd
Average number of rooms	64 (320)	62(248)	6(18)	4(8)	-	594	4.37	3 rd
Change in maintenance cost and taxes	66(180)	55(220)	10(30)	5(10)	-	590	4.34	4 th
Potentials of rental growth	55(275)	66(264)	14(42)	1(2)	-	583	4.29	5 th
Title and size of land	68(340)	45(180)	14(42)	9(18)	-	580	4.26	6 th
Neighborhood attributes	50(250)	74(296)	8(24)	4(8)	-	578	4.25	7 th
Neighborhood Characteristics	43 (215)	78(312)	10(30)	5(10)	-	567	4.17	8 th
Inflation impacts and state of economy	40(200)	82(328)	10(30)	4(8)	-	566	4.16	9 th
Size and structural characteristics	41(205)	73(292)	18(54)	4(8)	-	559	4.11	10 th
State of supply in the property market	33(165)	82(328)	19(57)	1(2)	1(1)	553	4.07	11 th
Age and obsolescence	50(250)	47(188)	25(75)	12(24)	2(2)	539	3.96	12 th
Falling confidence by potential occupants.	21 (105)	93(372)	16(48)	6(12)	-	537	3.95	13 th
State of employment in the country	48 (240)	51(204)	16(48)	15(30)	6(6)	528	3.88	14 th
Renegotiation/review of rent	39 (195)	48(192)	36(108)	13(26)	-	521	3.83	15 th
Occupancy level/vacancy rate	53 (265)	41(164)	16(48)	13(26)	13(13)	516	3.79	16 th
Household income	36 (180)	53(212)	18(54)	21(42)	8(8)	496	3.65	17 th
Rent Void	23 (115)	62(248)	28(84)	21(42)	2(2)	491	3.61	18 th
Additional amenities and facilities	19 (95)	55(220)	51(153)	10(20)	1(1)	489	3.60	19 th
Intake of new tenants/fresh lettings	17 (85)	66(264)	26(78)	22(44)	5(5)	476	3.50	20 th
Return on alternative investments	26(130)	46(184)	31(93)	25(50)	8(8)	465	3.42	21 st
Type and physical characteristics	6 (30)	42(168)	57(171)	24(48)	7(7)	424	3.11	22 nd
More demand over supply of housing	5 (25)	44(176)	35(105)	46(92)	6(6)	404	2.97	23 rd

4.2 RII of the Rental Value Determinants

The aggregated factors from the literature were subsequently segregated into rental and capital value components for the purpose of this study. Therefore, attempt was made to fix the RII of rental value variables responses to know their level of importance as property value determinants. Table 2 is a derivation from Table 1 and it shows the important indices of each of the rental value variables; where the average number of rooms on the property is ranked first on the list with RII of 4.37. Change in maintenance cost and taxes comes second with RII of 4.34, neighborhood characteristics of RII of 4.17 is ranked third while falling confidence of potential occupants with RII of 3.95 is ranked fourth.

Furthermore, state of employment in the country is ranked fifth with RII of 3.88, renegotiation and rent review is ranked the sixth with its RII of 3.83 while occupancy level or vacancy rate is rated seventh with the RII of 3.79. Household income with RII of 3.65 is ranked the eighth factor; the rent void on the property with RII of 3.61 is ranked ninth and additional amenities and facilities with RII of 3.60 is ranked tenth. In addition, the intake of new tenants/fresh lettings on the property with RII of 3.50 is ranked eleventh; type and physical characteristics of property with RII of 3.11 is ranked the twelfth factor while more demand over supply is the least ranked factor influencing the rental value of residential investment property at the study area with the RII of 2.97.

This ranking shows that 3 factors have high impact on the rental value of residential property. These factors are the average number of rooms which is the most significant factor, followed by change in maintenance cost and taxes and neighbourhood characteristics in their order of significance.

Table 2 RII of factors for the rental value
(Source: Field survey)

THE RENTAL FACTORS	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	TFW	RII	Ranking
Average number of rooms	64 (320)	62(248)	6(18)	4(8)	-	594	4.37	1 ST
Change in maintenance cost and taxes	66(180)	55(220)	10(30)	5(10)	-	590	4.34	2 ND
Neighborhood Characteristics	43 (215)	78(312)	10(30)	5(10)	-	567	4.17	3 RD
Falling confidence by potential occupants	21 (105)	93(372)	16(48)	6(12)	-	537	3.95	4 TH
State of employment in the country	48 (240)	51(204)	16(48)	15(30)	6(6)	528	3.88	5 TH
Renegotiation/review of rent	39 (195)	48(192)	36(108)	13(26)	-	521	3.83	6 TH
Occupancy level/vacancy rate	53 (265)	41(164)	16(48)	13(26)	13(13)	516	3.79	7 TH
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Intake of new tenants/fresh lettings	17 (85)	66(264)	26(78)	22(44)	5(5)	476	3.50	11 TH
Type and physical characteristics	6 (30)	42(168)	57(171)	24(48)	7(7)	424	3.11	12 TH
More demand over supply of housing	5 (25)	44(176)	35(105)	46(92)	6(6)	404	2.97	13 TH

4.3 RII of the Capital Value Determinants

Responses to the capital value determinants are also subjected to the relative importance index like did for rental value determinants. Table 3 exhibits that cost of construction tops the ranking list of capital value determinants with RII of 4.47; this is followed by type of structure and quality of facilities in second position with RII of 4.40. In addition, potentials of rental growth comes third with the RII of 4.29 while the title/size of the land is ranked fourth with its RII of 4.26.

The 4.25 RII of the neighborhood characteristics placed it at the fifth position, inflation impacts and state of economy with RII of 4.16 ranked the sixth, size and structural characteristics 7th position with its RII of 4.11 while state of supply in property market with RII of 4.07 is ranked eighth position. Age and obsolescence having RII of 3.96 is ranked ninth while return on alternative investments with RII of 3.42 is ranked the tenth position. This result indicates that cost of construction mostly influences the capital value of residential property value more than the other variables. Next to the cost of construction is the type of structure/quality of facilities while return on alternative investments is the least determinant factor of the residential property capital value.

Table 3 Relative importance index (RII) of factors for the capital value
(Source: Field survey)

THE CAPITAL VALUE FACTORS	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	TFW	RII	Ranking
Cost of construction	74(370)	52(208)	10(30)	-	-	608	4.47	1 ST
Type of structure/quality of facilities	68(340)	59(236)	5(15)	4(8)	-	599	4.40	2 ND
Potentials of rental growth	55(275)	66(264)	14(42)	1(2)	-	583	4.29	3 RD
Title and size of land	68(340)	45(180)	14(42)	9(18)	-	580	4.26	4 TH
Neighborhood attributes	50(250)	74(296)	8(24)	4(8)	-	578	4.25	5 TH
Inflation impacts and state of economy	40(200)	82(328)	10(30)	4(8)	-	566	4.16	6 TH
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State of supply in property market	33(165)	82(328)	19(57)	1(2)	1(1)	553	4.07	8 TH
Age and obsolescence	50(250)	47(188)	25(75)	12(24)	2(2)	539	3.96	9 TH
Return on alternative investments	26(130)	46(184)	31(93)	25(50)	8(8)	465	3.42	10 TH

5.0 DISCUSSION OF FINDINGS

The findings of the study have indicated that variables that mainly influence the general (unclassified) value of residential property in the study area are: cost of construction; type of structure/quality of facilities; average number of rooms; change in maintenance cost; potential of rental growth; title/size of the land; neighbourhood attributes and characteristics; inflation impact; size and structural characteristics and state of supply in the property market.

When classified on specific rental and capital basis, the specific factors influencing rental value of residential property in order of importance include: average number of rooms; change in maintenance cost and taxes and the neighbourhood characteristics. The result of average number of rooms is vital to variation in residential property value because the more the number of rooms available on the property, the more likely the rental value of such property. This implied that a property with more number of rooms is likely to have more rental value and consequential income than the one with less number of rooms and this shall consequently influence the overall return on the property. This is in line with the findings of Oladapo et al. (2019), Babawale and Adewunmi (2011) and Slade (2000). Therefore, the number of rooms in any residential accommodation indicates the likely variation in what renters will be willing to offer for its use (Bello, 2018). For example, holding other rental considerations constant, 3 bedrooms flat will command rental value that will be more than the 2-bedroom flat will command in the same location.

Change in property maintenance cost and taxes is another indicator of rental value. These items are always built into the rental value in line with the rental arrangement - indicator of rental satisfaction such as rental pattern and tenancy duration otherwise known as part of property personality-as previously exhibited by Daniel et al. (2012). Furthermore, since income on rent is a VAT-able income in Nigeria tax policy; taxes constitute part of income erosion of rental value and that may explain the reason why the study area yielded 20% of Nigeria overall VAT-able income on property for year 2016 (National Bureau of Statistics, 2017). Recognition of the various types of rental arrangement inclusive of the tax policy framework will therefore be a way of stimulating economic growth and avoid rental disequilibrium as revealed by Babatunde (2018).

Neighbourhood characteristics are indicated as the third factor influencing the residential property value is the extension of the building characteristics as confirmed factor by: Macro, 2005; Ilesanmi, 2012; Abidoye & Chan, 2016; Olajide, 2018). However, neighbourhood characteristics have been expanded beyond the scope of this study by McElveen et al. (2020), who categorized abstract aspect (household income, percentage of renters and economic boundaries) as part of neighbourhood characteristics which are economic in nature. Building characteristics cannot therefore be viewed in isolation from the neighbourhood characteristics; the duo are joint/pair factors of residential property value in most urban cities globally, therefore the finding of this study as one of the rental value factor for residential property aligns with the global evidence. There is however a noted deviation from this going by the finding of Olajide (2018) who observed that there exists no statistically significant relationship between building/neighbourhood characteristics and residential investment property values.

The specific factors influencing capital value of residential property in order of importance include: cost of construction; type of structure/quality of facilities; potential of rental growth; title and size of the land; neighbourhood attributes; inflation impact; size and

structural characteristics and state of supply in property market. The cost of construction may influence both the cost of acquiring property as well as property rent. High cost of building construction directly influences the capital value and probably the rental charge on the property because investors will expect disposal price or rental income that will commensurate with their capital commitment as the cost of construction of the property. However, this finding contradicts the findings of Nuhu (2008) which observed the rising cost of construction coupled with the impact of inflation as factors influencing the rental value of residential property value in Minna, Nigeria.

Type of structure and the quality of facilities available to residential property is another indicator of value that an investor will place on the property for the purpose of acquisition, although Abidoye and Chan (2016) and Daniel et al. (2012) documented the same result for rental value of residential property. However, there should be a good balance between the type of structure and the quality of facilities available to the structure. This agreed with the findings of Adegoke (2014), but by extension Babawale and Adewunmi (2011) added the neighbourhood facilities to the property facilities.

The potential of rental growth on the property encourages investors to invest with hope, although subject to the risk. This finding corroborates the study of Leung et al. (2008) and the structure and pattern of expected income documented by Abidoye and Chan (2016). This implied that when investors have in addition to the current income, an assurance for potential future growth in value and income, they are more attracted to such residential property investment.

Title and size of the land is another confirmed indicator of residential property value in the study area. Generally, on average, land size for residential property development is always above 1000m² (Bello, 2018) and the common title/tenure to land in the study area is the certificate of occupancy. This is because the study area is the only part of Nigeria that its authority does not recognize the customary or other title documents as tenure on the property except the certificate of occupancy. Despite the Supreme Court ruling CA/A/54/97 of 4th November 2004 that customary title document be recognized by the Federal Capital Development Authority (FCDA) any other documents aside the certificate of occupancy still remains strange title document as far as the study area is concerned. Therefore, property without the certificate of occupancy duly issued by the FCDA will be at a value disadvantage at the investors' appraisal. However, size of the land differs from the size of the building which is a fraction of the land coverage area. At the study area, Bello et al. (2020) has established the inverse relationship between the land size and the size of residential and commercial properties as 'the bigger the land size, the lesser the building coverage area for residential property and the smaller the land size, the bigger the building coverage area for the commercial property'. This indicates that the residential property with a small percentage of built up areas of land size attract more value to the investors than the ones with a high percentage of built up areas of land size.

Neighbourhood attributes of the residential property has abstract perspective as different from the neighbourhood characteristics with physical perspective. This is in conformity with the studies like Abidoye and Chan (2016) and Olajide (2018) which base their finding on security of the community and Ilesanmi (2012) who based it on the quality of environment, both descriptions display abstract attributes for this factor. Investors in and renters of residential investment property will therefore be at an investment advantage if the proper understanding of the exhibited characteristics of each of these value determining variables is adopted as a guide or template before embarking on property investment decision in the study area.

■6.0 CONCLUSION

This study identified 23 variables of residential investment property values from literature, evaluated them empirically to establish and distinguish the determinants of rental and capital values in Abuja, Nigeria through cross sectional qualitative survey. This was done with the use of a structured questionnaire which elicited perceptual data from the practicing ESFs in the study area. The data were analyzed on aggregation and segregation basis to classify the variables appropriately.

The findings reveal variation in the outcome of the 23 general (unclassified) factors on the aggregate level and the segregated 11 specific (classified) factors. In specific term, factors influencing the capital value are significantly more in quantity and rating than the ones influencing the rental value. Out of the eleven established variables one is for physical and two are abstract variables for rental value and three for physical and five for abstract variables for capital value. Specifically, average number of rooms on a property, change in maintenance costs and taxes and the neighbourhood characteristics mainly influence rental value while the cost of construction; type of structure/quality of facilities, potential of rental growth, title and size of the land; neighbourhood attributes; inflation impact; size and structural characteristics and state of supply in property market are the main variables determining the value of residential property in the study area.

Since purpose of investing or interest in residential real estate varies and value is the creation of minds of the stakeholders, therefore there should be separation of the template upon which stakeholders will take up advice and apply such for decision making. With these findings, existing or potential investors in properties in Abuja, Nigeria will apart from understand better the factors influencing residential investment property value generally, it will also enable them to distinguish appropriately between the rental and the capital value determining factors to make appropriate investment decisions with minimum error.

The study is however restricted to the specific factors that influence the rental and capital values of residential investment property, but not the relationship between rental and capital value (yield analysis). Since study on yield analysis may produce different results, further study is hereby recommended on yield analysis of residential or other types of investment properties in the study area.

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