



ASSESSMENT OF THE FACTORS AFFECTING RENTAL VALUES OF RESIDENTIAL PROPERTY INVESTMENT IN DUTSE KURA AREA IN MINNA, NIGER STATE.

INUWA, MOHAMMED DANLAMI¹ WALI, RAKIYA IBRAHIM² UMAR A. SAIDU³ BUKAR BABAGANA⁴

^{1,2}Department of Estate Management and Valuation, School of Environmental Studies, Niger State Polytechnic, Zungeru, Niger State. ³Department of Estate Management and Valuation, School of Environmental Studies, Federal Polytechnic, P.M.B 55 Bida Niger State. ⁴Department of Estate Management, Federal Polytechnic, Damaturu, Yobe State.

ABSTRACT

The study assesses the factors affecting rental values of residential property investment in Dutse Kura area in Minna, Niger State. Primary and secondary source of information were used, the primary source used enable the researchers to extract from the respondents information on the effect of the factors affecting rented value on the rent paid in study area for the period (2009-2018). Methodologies adopted for presentation and analysis for the study are percentages, liker scale, and analysis of variance. The result of analysis of variance revealed that there is strong significant relationship between rent paid in the study area and the factors affecting rental values. The result shows F – statistics to be 60.43162 and p -value to be 3.97E-14. In conclusion, it was recommended that there is need for government and investors to take note of these factors as it affects rental values in the study area, as these can be used in viability and marketability of an investment in future.

Keywords: *factors, rental values, residential, property and investment.*

INTRODUCTION

Recently, real estate investment has added more players who are interested in investing in different types of real estate investment opportunities that gives payoff and risk which lies between less risky and more risky investment components (Jones Lang Lasalle, 2011; Geltner and Miller, 2007). Real estate is now beyond seeing as a mere space provider to be view as strategic resources due to increase in IT technology and global competition and this made up between 10 – 30 percent of the major American and European corporation total assets (Ali, McGreal, Adair & Webb, 2008).

However, more allocation of resources to real estate in investment portfolio has been the reason in arisen issues in investment in real estate which is resulted in more demand of detailed analysis and strategic of real estate in taken investment decisions. According to Lindholm & Levainen, (2006), weaker real estate decision is reached when there is mismatch between corporate strategy and firm's real estate strategy.

According to Sarachchandra (2008), Residential properties can be consumption or investment good. It is consumption when is acquired for owner occupation while as an investment when is for optimum maximization of return from letting or outright sale which serves as a source of income to property owners.

According to Boon and Higgins (2007), rental value is the vital variable for weighing the performance of real estate and is also an indicator for assessing the viability of an investment schemes (Barlowe, 1986; Hui and Yu, 1993; Boon and Higgins, 2007).

Understanding the nature and the physical features of a residential property such as age of the property, size of the property, number of bedrooms, various amenities and services have been identified variables used to considered in determine rental value for residential properties. Also In addition to the features, income, proximity to work, population, access to public transportation, traffic congestion, environmental features and proximity to higher institution may have effects on rental value (Oni, 2009). Thus, there is need for experts in real estate industry in the country to have better understanding of the rental dynamics of the residential property and also the main determinants of residential property rental value in the country. Therefore, any investor that wants to invest in residential property need to seriously investigate into the nature and behavior of the residential property value and also to see property as complex bundle of potential service which has different divisions (Oyebanji, 2003). Early professionals in the real estate market define residential property market by some concept, which they see rent as differential brought about by cost of transportation and distance, attributed divisions in rental value capacity of land to differences in transport cost and location.

With the increased in issues in real estate investment, there is need for an immediate and effective decision prior to investing in residential property in order to be able to identify the factors that determine the rental value of residential properties investment.

LITERETURE REVIEW

Concept of housing

Housing is referred to as a lodging or shelter for human habitation (Encyclopedia Americana) or according to (Merit Student Encyclopedia) housing is a building that provides a home for one or more families. Jinadu (2007) defined a house as a structure which is used for shelter. Shelter is looked at as a dwelling that characterizes enclosing

walls and roof to protect human from wind, heat, precipitation, external attack and cold.

Housing is conceptualized and view in different ways by scholars as a vital component of human settlement which provide services to humanity. Housing is also seen as a collection of services or goods which consist the ancillary facilities and service, the physical structure, the amenities that around the building and the general environmental qualities (Agbola and Alabi, 2000). They further explain that the housing occupancy includes the consumption of neighborhood services such as schools and parks, proximity such as social environment and location such as amenities and accessibility.

The varied concepts and definitions of housing by scholars portray it as an indispensable and an important element of human settlement. Therefore, housing can be seen as a basic need that provides space for sleep, recreation, social requirement and work. United Nation Article 25 (1) of the Universal Declaration of Human right, recognized housing as a basic right which come next to food and clothing and must be provided to all for security and good life

Types of housing

Housing in different parts of the world differs due to different factors such as socio cultural, economic and variability in location. Therefore, housing can be categorized depending on physical structure, location, ownership, functions performed, mode of production and building material components. Based on these criteria, Junidu (2007) wrote on the different types of housing to include

- i. Housing types based on structure, layout and design. This can be subdivided into
 - a. Single detached housing. These are houses that stand independently of any other structure. Most of detached houses are owner occupied and may be one or two floors building.
 - b. Semidetached housing. These are one family or more family houses that share one wall between them but with separate and independent entrance and less privacy for economy reason.
 - c. Multiple row housing. According to (Chiara and koppleman 1978) multiple row housing is roomy units about 8 and above single room with common bathroom, toilet and kitchen.
- ii. Housing types based on location. These can be of two types
 - a. Urban housing: these are houses in urban areas, built with modern design, modern building materials and serviced with infrastructure and services

- b. Rural housing: they are houses located in rural area with simple design and built with local materials like raffia palm, mud wood and bamboo. There is inadequate or absent of basic services like pipe water, electricity etc.
- iii. Housing types based on ownership. These include
 - a. Public housing: These are built and owned by government and its agencies which are occupied by its staff, they are usually uniform in design and services.
 - b. Private housing: these are houses built and owned by individual in the society. Most of the private houses greatly variable in structural design and ancillary services present within and outside the house depending on the individual economic buoyancy, taste and preference.
 - c. Community housing: they are houses owned by the communities, constructed through community effort of community based organizations.
- iv. Housing based on function performed. we have
 - a. Income based rental housing: these are houses where tenants pay rent based on their income. These types of houses are found in United State of America where tenant are asked to pay 30% of their income for rent under the Housing Choice Voucher arrangement of the US department of Housing and Urban Development.
 - b. Market rate rental housing: these are houses where the rent is charged based on the prevailing market situation or on the value of the house.
- v. Housing based on the mode of production.
 - a. Low rise housing: these are single, two or three floors buildings which are either detached or semi building.
 - b. Bungalow housing: according to (Longman Dictionary, 1978) bungalow housing are houses which are all on one level.. it is characterized by low lying structure on the ground without upper floors
 - c. High rise housing: they are usually built in the central business districts of urban centres. They range from 5 to 50 floors. These types of houses used elevators to ease movement.
- vi. Housing based on building materials. These are categorized based on the preponderant building materials used. For example houses built by mud are referred as mud houses, built by wood are called wooden houses and those built by bricks are termed as brick houses.

Essential Qualities and Functions of a Good Housing.

Basically, all houses are shelters but not all shelters are houses. Therefore, a shelter can be called a house if it fulfills the need and aspirations of the occupants. Therefore,

a house should have a living and outdoor space, privacy, maximum of quiet environment, safety, aesthetic satisfaction and cleanliness.

According to (Onibokun, 2010) there are four basic essential qualities of a good housing.

- i. Protect the occupants against through sound construction, protection from fire, electricity defects, traffic hazard and home injury.
- ii. Fulfill the physiological need of the users through ensuring proper temperature, adequate ventilations and light and space for play and outdoor recreation.
- iii. Protect the users from infectious diseases from water supply, food and toilet facilities.
- iv. Guarantee fundamental psychological need of the occupants by adequate privacy and easy family life.

For the functions, they are similar and universal but differ according to the level of performance, depending on the types of housing, level of services and requirements offered. Generally, functions of a good house include

1. Promotion of good health and decent living
2. Provision of shelter, which protects man from harsh weather conditions
3. Provision of security against external attack
4. Provision of comfort and convenience for the inhabitants

Factors Affecting Rental Values of Residential Property Investment

Non standardization in classifying properties and because of the uniqueness nature of properties, they are priced separately (Ruvio, 2010). Due to this unique nature of properties, it becomes difficult to know the appropriated elements that will explain rental values. (Kim and Nelson, 1996), said that it is challenging and a complex process to researchers and practitioners when it comes to assessment of rental value of residential properties because it evaluating the neighborhood characteristics, market conditions and rental property. According to (McKenzie and Betts, 2006) mention the physical attributes that are measurable objectively to include age, space and condition while those measurably objectively are amenities. Odame (2010) itemized the physical attributes that can affect rental value to include number of bed rooms, location, and plot size, tenure of ownership rights number of floors, accessibility, quality and aesthetics. However, Zainudeen, Senarathne, Jayasena, & Rameezdeen (2006) see the location as a key factor from customer's point of view. Chris and Somefun (2007) and Nakamura and Crone (2004) explained the attributes includes bedroom, toilet, bathroom, kitchen, open space, drainage, water supply, refuse disposal, good

Methodology and Design

Research Design,

Descriptive, exploratory and investigatory techniques were employed. These techniques were used in order to reveal the factors that are affecting residential property values of the research areas and also to outline these based on their impact on the values of the residential properties in the study areas.

3.2 Types and Sources of Data

The sources of data used in this research work are primary and secondary. The primary data were obtained through questionnaire served to 13 registered estate surveyors and valuers firm and 213 occupants of the study area on their opinions regard to factors they think influences their rental values. 12(92%) questionnaires were retrieved from the registered estate surveyors and valuers while 157(74%) were retrieved from the occupants. Therefore a total of 169 questionnaires were retrieved.

RESULTS

Data collected were presented in tables, linker scale (most influence to the least), percentage (impact of the factors on the rental for the period (2009-218) in percentage) and ANOVA (level of significance between rental values and the factors).

Table1. Structural Factors Influencing Rental Values of a Residential Property

Suggested factors	Responses					Descriptive Statistics				
	SA	A	U	D	SD	Total	Sum	Mean	RII	Rank
Age of the building	73	52	14	24	6	169	669	3.96	0.79	3
Size of the rooms	64	61	2	31	11	169	643	3.80	0.76	4
Number of bedrooms	81	59	1	25	3	169	697	4.12	0.82	1
Quality of construction	79	55	6	22	7	169	684	4.05	0.81	2

Source: Filed Survey (2018)

Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD)

Analysis of the opinion on various structural factors influencing rental values is presented in Table1. Opinion from 169 questionnaires collected revealed that number of bedrooms has the highest relative important of 0.82 and rank 1 on the table is the most structural factor that influence rental value of residential property in the study area, follow by quality of construction with RII 0.81, ranking 2, then age of the building with RII 0.79, ranking 3 and lastly size of the rooms with RII 0.76 ranking 4

Table2. Neighborhood Factors Influencing Rental Values of a Residential Property

Suggested factors	Responses					Descriptive Statistics				
	SA	A	U	D	SD	Total	Sum	Mean	RII	Rank
security	49	67	18	21	14	169	623	3.69	0.74	3
Electricity and water supply	56	71	7	34	1	169	654	3.87	0.77	2
Infrastructure development	86	64	2	14	3	169	723	4.28	0.86	1
Tenant mixed	31	27	13	56	42	169	456	2.70	0.54	4

Source: Filed Survey (2018)

Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD)

Responses on the opinion of Neighborhood factors affecting rental values of residential property are presented in table2. The opinion revealed that infrastructural development which has the highest relative important derived from average mean of the responses opinion of RII 0.86 is rank 1 which suggested that is the most influence as regard to neighborhood factor affecting rental value of residential property in the study area, the second, third and fourth with RII 0.77, 0.74 and 0.54 are electricity and water supply, security and tenant mixed respectively

Table3. Locational Factors Influencing Rental Values of a Residential Property

Suggested factors	Responses					Descriptive Statistics				
	SA	A	U	D	SD	Total	Sum	Mean	RII	Rank
Nearness to place of work	89	45	17	15	3	169	709	4.20	0.84	1
Nearness to school	66	44	21	29	9	169	636	3.76	0.75	3
Proximity to CBD	63	52	19	23	12	169	638	3.78	0.76	2
Accessibility to highway	31	39	35	41	23	169	521	3.08	0.62	4

Source: Filed Survey (2018)

Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD)

The analysis on the opinion on responses on the locational factors affecting rental values residential property is presented in Table3. The response on opinion on locational factors affecting rental value of residential property of the study area shows

that the opinion nearness to place of work is rank first with RII 0.84. This revealed that is the most influencing factor as regard to locational factor, next is proximity to CBD with RII 0.76 follow by nearness to school RII 0.75 and lastly accessibility to highway with RII 0.62.

Table4. Economic Factors Influencing Rental Values of a Residential Property

Suggested factors	Responses					Descriptive Statistics				
	SA	A	U	D	SD	Total	Sum	Mean	RII	Rank
Income	59	83	4	18	5	169	680	4.02	0.80	1
Population		44	21	29	9	169	636	3.76	0.75	3
Employment	63	52	19	23	12	169	638	3.78	0.76	2
Increased in household	31	39	35	41	23	169	521	3.08	0.62	4

Source: Filed Survey (2018)

Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD)

Analysis on the suggested factors on the economic factors affecting rental values of residential values in the study area are presented in table 4. The descriptive statistics on the suggested factors rank income first on RII 0.80, second, third and fourth are Employment, population and increased in household respectively.

Table5. Effects of Factors affecting Rental Values of Residential Property on Rent Paid

Years	Locational %	Structural %	Neighborhood %	Economic %
2009	44.38	30.18	18.34	7.1
2010	40.82	36.69	20.71	1.78
2011	31.36	40.24	24.26	4.14
2012	46.74	37.28	13.02	2.96
2013	26.04	50.89	21.89	1.18
2014	45.56	43.79	7.1	3.55
2015	42.6	46.15	6.51	4.74
2016	37.87	24.85	36.1	1.18
2017	39.65	35.5	18.34	6.51
2018	33.14	36.09	22.49	8.28

Source: Filed Survey (2018)

Responses regard the opinion of respondents on how each of the factors affects rental values of residential property of the study area for the period (2009-2018) is presented in Table5. Locational factor has more effect on the rental value in year 2009 with percentages of 44.38%. Next is structural factor with 30.18%, follow by neighborhood then economic with 18.34% and 7.10% respectively. The year 2010, locational factor also top the effect but with reduction in percentage. But in year 2011, structural factor top the effect, next is locational factor but neighborhood and economic factor maintaining their position, third and fourth. In year 2013 the topping goes back to locational factor. This is how they are exchanging highest effect with locational factor and structural factor. This revealed that the factors affecting rent value of residential property in the study area are locational and structural factors.

Table6. Analysis of variance on the effects of factors affecting rental values of residential property on rent paid

ANOVA							
Source of Variation	SS	df	MS	F	P-value	F crit	
Between Groups	23899.7	3	7966.567	60.43162	3.97E-14	2.866266	
Within Groups	4745.8	36	131.8278				
Total	28645.5	39					

Source: Filed Survey 2018

The result from the Analysis of Variance on the effect of the factors on the rental values is presented in table6. The result of the ANOVA revealed that F – statistic at 60.43162 is significant at 0.05 levels while p-value at 3.97E-14 is greater than the chosen level of significance 0.05. Therefore, there is statistically significance between rental values and the factors.

FINDINGS. CONCLUSION AND RECOMMENDATIONS

5.1 Findings

It revealed that number of bedrooms and quality of construction are some of the factors the residents in the study consider to be influencing rental value. Also some of the

residents look at the infrastructural development and provision of at least 20 hours light supply and 24 hours water supply are the reasons influencing their rental values.

Most of the residents are civil servants or traders, therefore nearness to place of work (federal secretariat) and CBD (main market) are the reasons while they are paying higher rent.

The study further discovered that income also plays an important aspect in the rental value of the study area because most of the residents are high income earners and big business men.

Locational and structural factors are the most prominent factors that affect the rental values in the study area.

Lastly, the result of the analysis of variance revealed that there is a significant relationship between the factor affecting the rental values and the rent paid.

Conclusion.

The study on the factors affecting rental value of residential property in the chosen case study was carried out in order to have a look on the reasons why rent in the study area is high despite being mixed with local community. The study also provides information to investors on the options factors that they need to analyze when facing a problem of this nature. Therefore this study is sending information to investors that for them to earn a higher rent there is a need to construct buildings of a high quality.

Recommendations

There is a need for government to come to the aid of the people of the study area to bring to an end to the persistent increase in the rental value of residential property. This can be done by government ensuring strict enforcement of planning regulation in the nearby or next neighborhood to the study area and also provide infrastructure and social amenities of more qualitative than the study area. This will attract the attention of people to the nearby areas and bring stability to the rent paid.

There is a need for government and investors to take note of these factors as it affects rental values in the study area, as these can be used in the viability and marketability of an investment in the future.

It can be recommended that there is a need to make other factors more functional through provision of public tertiary schools which will be a fuel for development of all other types of buildings (tenement houses) which are mostly for students. Therefore, bringing together low income earners with high income earners which fosters tenant mix.

REFERENCES

Agbola, T. and Alabi, M.A. (2000). Housing, Poverty and Environment, the Nigerian Situation, A paper presented at the National Seminar of the Nigerian Institute of Building, held at Premier Hotel, Ibadan: between 29th and 30th March, 2000.

- Ali, Z., McGreal, S., Adair, A., Webb, J. (2008). Corporate Real Estate Strategy: A Conceptual Overview. *Journal of Real Estate Literature*, 16 (1), 3 – 21.
- Barlowe, R. (1986), *Land Resource Economics* 4th. Ed., New Jersey: Prentice Hall.
- Boon, F.N. and Higgins, D. (2007), “Modeling the Commercial Property Market: An Empirical Study of the Singapore Office Market”, *Pacific Rim Property Research Journal*, 13(2): 176-193.
- Chiara, J.D and Koppleman, L.E (1978), *Site Planning Standards*, McGraw Hill Book Company, New York.
- Chris, A. O., & Somefun, A. O. (2007). The effects of facilities provision on rental values of Residential properties in Ikeja: Lagos State, *Journal of Land Use and Development Studies*, 3, 61-67.
- Geltner, D.M., Miller, N.G., Clayton, J., Eichholtz, P. (2007). *Commercial Real Estate Analysis & Investments* Mason: Thomson South – Western.
- Hui, E.C.M. and Yu, K. H. (2006), “The Dynamics of Hong Kong’s Office Rental Market”, *International Journal of Strategic Property Management*, 10: 145-168..
- Jinadu, A.M (2007) *Understanding the Basics of Housing; A Book of Study Notes for Students in Tertiary Institutions. Revised Edition*
- Jones, Lang Lasalle. (2011). *Nordic City Report Spring 2011* (Nordic Office Markets, February 2011). Stockholm: Jones Lang Lasalle.
- Lindholm, A.L., Leväinen, K.I. (2006). A framework for identifying and measuring value added by corporate real estate, *Journal of Corporate Real Estate*, 8 (1), 38 – 46.
- Mckenzie, J. D. & Betts, R. M. (2006), *Essentials of Real Estate Economics*, (5th ed) USA, Delmar Cengage
- Nakamura, L. I. & Crone, T. M. (2004), *Hedonic Estimates of the Cost of Housing Services: Rental and Owner Occupied Units*, Working paper, Federal Reserve Bank of Philadelphia 04-22.
- Odame, W. K. A. (2010). Residential Market Development in sub-Saharan. *International Journal of Housing Markets and Analysis*, 3(4), 308-326.
- Oni A. O. (2009) “Developing Predictive Models of Commercial Property Values in Emerging Economy: Case study of Ikeja, Nigeria”.
- Onibokun, Poju (2010), *Housing Finance in Nigeria*. Nigeria Institute of Social and economic Research (NISER), Ibadan; Intec Printers; pp. 199-210
- Oyebanji, A. O. (2003). *Principles of Land Use Economics* Centre for Environmental Planning Development and Management. Lagos
- Ruivo, R. (2010). Determinants of rental rates in major cities in the United States, *Bryant economic research paper*, 3(7), 1-14
- Sarachchandra, C. A. (2008). *Housing development finance in Sri Lanka*, Colombo

Zainudeen, N. Senarathne, S. Jayasena, S. & Rameezdeen, R. (2006). Horizontal housing property market, Built- Environment-, Sri Lanka, 7(1), 16-22.