

RENT STRUCTURE OF RESIDENTIAL PROPERTY: DO THE QUALITY OF INTERNAL AESTHETICS REALLY COUNT?

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Abstract

This study attempts to examine the rent structure of residential properties (tenements, bungalows and flats) vis-à-vis their variance across six different neighbourhoods in Minna, Niger State using descriptive statistics and Analysis of Variance test. Secondly by its exploratory nature, 290 samples of residential properties were drawn to determine the types and quality (using multi-dimensional scaling) of their internal aesthetic and the impact of such quality on rent variance within the study area. An interesting result of this study is that aside Sabon -Gari, an inner-core neighbourhood, variability in rent distribution is greatest for properties in F-Layout with such variability decreases with increasing distance from the inner part of Minna where F-Layout is located to further away locations such as Bosso Estate, Dutsen Kura Hausa, Tudun Fulani and Okada road. Within this purview, internal aesthetics account for 16.7% of the total variation in residential rents in the study area. As such property owners and real estate investors must rise to the challenge of improving the quality of internal aesthetics of dwellings especially in Sabon-gari, Tudufulani and Dutsen-Kura to be at parity with other neighbourhoods. This is against the backdrop that the rental price of a house depends of the utility and satisfaction embodied and derived from such aesthetics and these are differently priced by tenants.

Key words: Aesthetics, Rent, Residential, Property, Quality

Introduction

Unlike other asset class, real property and by extension residential property is highly differentiated, physically modifiable and a durable commodity. These characteristics depict that the market for residential property presents a somewhat peculiar complexity which makes long run equilibrium within the market elusive. Slow adjustments or lags resulting from the long durable nature of dwelling stock as well as other complications on the supply and demand sides ensure that the residential property market hardly adjust to exogenous changes (Dehesh and Pugh, 1995; Watkins, 2001). Despite these slow adjustments and other featured fluctuations (such as information asymmetric problem and changing financial cost of moving) rent has however remained a significant feature of most markets for housing services in the world as the interaction of the demand by residential property users with the current stock of space made available by the landlords predict the pattern of rents.

From the residential property market view point, the race for space would eventually culminate in cost (rental value) which must be borne by the space users and paid to property owners. Perhaps more than the property owners, space or property users are bound to generate considerable interest in rental price trends and link them back to some explicative factors. This is against the backdrop that rental value cyclicality have far-reaching implications on consumers' spending and saving pattern and also create self-reinforcing and dampening effects on demand and supply of housing itself (Stein, 1995; Ortalo- Magne and Rady 2004 and Sing *et al.*, 2006).

Aptly it has been stated by Worzala and Bernasek (1996) that the value of most real estate is derived from local market conditions impacting on the demand and supply and hence value. One of such peculiar local market conditions is the type of housing services or utility provided such as internal aesthetics, which depends on the configuration, structural and constructional attributes of the housing units which is hitherto influenced by household types and their particular needs. The primary objective of this paper is to examine the rent structure and variance within the Minna residential property market with the intent to determine the extent to which the attributive internal aesthetic quality of residential properties present within the study area impact on residential rents.

Determinants of Rent

Rent has been widely acknowledged as the cost borne as a result of the demand for space by the tenant for a specified period of time. Within the rental market the interaction between the residential property users and the current stock of space made available by the landlords predicts the pattern of rents and the level of occupancy, with vacancy clearing the market (Keogh 1994 and Geltner *et al.*, 2007). Geltner *et al.* (2007) further observe that rent itself gives a signal about the current value of the built space and the current balance of supply and demand for that space.

Theories of urban dynamics are deeply rooted in households and consumers utility. Urban location models such as the access-space model formulated by Williams Alonso in 1964 and later built upon by Richards Muth in 1969 for the analysis of urban land and property markets posits location as determining factor in household residential choice decisions (Goodman and Thibodeau, 1998). For example, the residential bid rent theory posits that, housing and accessibility to locations are jointly purchased and that it is only abstracting location specific amenities; that households would lower their bid price for housing as commuting cost increases. Location as the important feature of a property is a truism as it is key driver of real estate activities and values. In the context of residential properties, prime locations are not only determined by proximity to schools, CBD and public transportation but also by other externalities (Boyle and Kiel; 2001 and Bourassa *et al.* 2005).

Empirical studies by Evan (1995) and Watkins (2001) have however revealed a lukewarm support for the assumptions of some of these classical theories. They counter argue that, rather than the choice of residence, its rent and price being based on only location, they should be based on other attributes including location. This as Redfearn (2009) observes is partly due to the fact that residential property is a differentiated good which cannot be unbundled and repackaged such as to allow end users to buy and consume some selected set of housing traits at any desired location and partly because cities are distorted to the extent that residential prices and rents are influenced by employment centres, irregular sparse spatial amenities, disamenities and by neighbourhood idiosyncrasies.

Buyers and renters within the property market compete for dwelling units made available to them in the bidding process, with such dwellings made up of packages of structural, location factors and neighbourhood traits. It is these packages that determine rent and dwelling price (Adair *et al.* 1996; Basu and Thibodeau, 1998; Tse 2002; Bourassa *et al.* 2007; and Paez, *et al.* 2008). Typical examples of structural characteristics include gross floor area, number and area of bathrooms, and bedrooms and type and quality of internal and external aesthetics. With respect to location and neighbourhood factors, Galster (2003) mention that, "it does not mean that they are intrinsically coupled with the geography - some are physical environment (presence of scenery and neighbourhood image) others are related with individuals who lend their collective attributes to the space through aggregation (for example income and race)". These are both externalities which impact on rent and price.

To this end, the connection between these housing characteristics (structural, location and neighbourhood factors) and housing prices merit consideration. Studies by Allen *et al.* (1995) and Watkins (1999) reveal that tenants tend to limit their choice to specific property type regardless of location. Comprehensively, Maclennan and Tu (1996), Adair *et al.* (1996); Yates and Mackay (2006) findings suggest that, added to structural factors, spatial features are important housing price determinant, consequent upon the inelasticity of demand and short run supply over a given time frame. Suffice to say however that the issue whether structural characteristics are more important than locational effects in the process of housing price determination is still debatable as empirical research have suggested.

The focus of this paper is not the merits of any one factor over the other. Allen *et al.* (1995) and Watkins (1999) studies can be extended by focusing on an integral component of structural characteristics of a dwelling which is its internal aesthetics. In doing this it can be established that the structure of residential rents and subsequently determine if such structure and its variance is best explained by variance in aesthetic attributes of dwellings in Minna, Niger State.

Hypothesis of the Study

In passing, two major hypotheses (which are non-directional, leading to two- tail test) were set to achieve the primary objective of this study:

Hypothesis I:

Null Hypothesis (H_0): Variation in rents across the six neighbourhoods in Minna is statistically equal to zero ($H_0 = 0$).

Alternative Hypothesis (H_1): Rent variance across the six neighbourhoods in Minna is not equal to zero. ($H_0 \neq 0$).

Hypothesis II:

Null Hypothesis (H_0): There is no significant relationship between residential rents and internal aesthetic attributes of dwelling. ($H_0 = 0$).

Alternative Hypothesis (H_1): There is significant relationship between residential rents and internal aesthetic attributes of dwelling. ($H_0 \neq 0$).

Research Methodology

The data for this research is from six (6) of selected neighbourhoods (F-layout, Tudun Fulani, Dusenkura Gwari, Bosso Estate, Okada Road, Sabon Gari,) in Minna Niger State of Nigeria (Fig.1). In the figure, Okada Road is located between Dutsen Kura and GRA. The choice of the selected neighbourhoods is based on the heterogeneous nature of Minna in which its urban area comprising 25 neighbourhoods is segmented into transition, core and peripheral. By employing stratified random sampling, we selected 1 neighbourhood from the inner area (F-Layout,); 4 from the outer area (Tudun Fulani, Bosso Estate, Okada Road and Dusenkura Hausa) and 1 from the core area (Sabon Gari).

Basically, two (2) sets of data were collected from the study area. The first set includes the structural characteristics of the internal aesthetics of residential properties in the case study area. Five (5) variables which are surrogate for the type and quality of internal aesthetics of dwellings include: the types and condition of floors, internal walls, doors, ceilings and windows. The second set is the collection of residential property rents from properties for which corresponding data on

their internal aesthetics have been collected. We extracted these two sets of data from closed item questionnaires administered on residents who are tenants in tenements, bungalows and flats within the selected neighborhoods in the study area as at 2011.

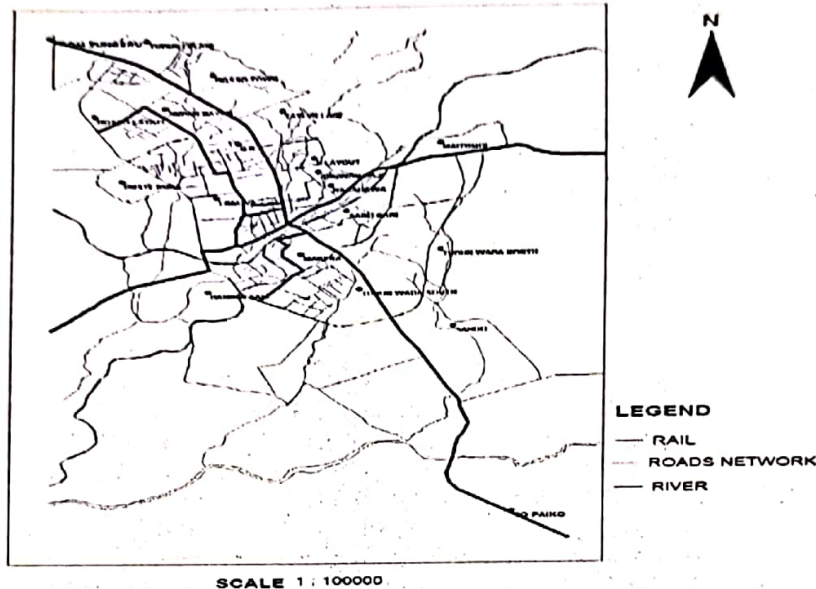


Fig. 1: The selected neighbourhoods in Minna

For this research, the tenants responded to 410 questionnaires of which 120 questionnaires were discarded due to missing and incomplete information especially on rent. As such the sample size for this study is 290 while the sampling ratio and interval are 0.73 and 1.37 respectively.

Taking a cue from handful of authors (Galster and Hesser 1981; Bonaluto *et al.* 1999 and Ame' rigo 2002) who have used multi-dimensional scaling (such as Likert and semantic differential) to develop a general model of housing quality that places user goals at the center of the evaluation of the residential environment, we focus on the perception of the residents using five (5) point Likert scaling to uncover the underlying dimension of the quality of the aesthetics in the study area. This entails residents ascribing scores (ranging from 1 to 5 to a continuum of responses on strongly disagree, disagree, undecided, agree and strongly agree) to each of the 5 aesthetic variables based on their perception in order to control for quality (for instance, based on quality and price, floor tiles tend to have higher premium and would be ranked and scored as such than concrete floor). The sum scores of aesthetic variables were then weighted for each property so as to arrive at the composite mean internal aesthetic quality score for each property and subsequently the aggregate mean score of internal aesthetic quality for each neighborhood. For comparison of internal aesthetic quality across the neighbourhoods in study area, we classify the quality of the aesthetics based on a subjective scaling cut-off (2.80-2.90 indicate poor quality of internal aesthetics; 2.91- 3.09 depict fair quality; while >3.10 is good quality).

For the purpose of analysis, the data were subjected to statistical techniques which set the stage for interpreting data and reaching conclusions in this subsequent section that followed. First Analysis of Variance a univariate analysis was used in order to assess the level of variance in rental values in

the study area. The fundamental procedure in ANOVA is to determine two separate population estimates (between and within group variance) from the rental value data collected from the 6 selected neighborhoods in the study area. Then an F-statistic is calculated from the ratio of the two estimates. A significant F-statistic implies that the mean populations of the rental value of residential properties within the neighborhood are not equal.

Subsequently, Levene's test as usual with analysis of variance was conducted on the residential rents in the 6 selected locations in the study area vis-a-vis Tukey's Honestly Significant Different (HSD) post-hoc test and homogenous subsets of the variables to determine where the significant effect lies. The final result is presented in the analysis of variance model and the post-hoc analysis of the multiple comparisons of the independent variables based on mean difference in subsequent section.

Secondly, we employed multiple regression model to show the extent to which interior aesthetics (predictor variables) predict or account for variation in residential property rent (the dependent or criterion variable) in the study area. The model further reveals the internal aesthetic variables which are important determinants of residential rents in the study area at 5% level of significance. In constructing a parsimonious model we establish if some of the assumptions of the classical regression model (uncorrelated residual term and multicollinearity of the regressors) have been violated. In passing we check for serial correlation in the residual term using the Durbin-Watson test. By following Johnston and DiNardo (1997), the Durbin-Watson statistics must be close to 2.00 to suggest that there is no serial correlation in the residuals of the estimated regression equation. The Tolerance and Variance Inflation Factors (VIFs) test for multicollinearity among the independent variables (Maddala 1992). As a rule of thumb, if the VIF of a variable exceed 10 or if its Tolerance is closer to zero, multicollinearity may be a problem (Gujarati 2003). The empirical results are presented next.

Structure of Residential Rent in the Study Area

Table 1 Summarily presents five parameters related to the structure of residential rent by neighbourhoods in the study area

Table 1: Rent structure of residential properties by neighbourhoods in the study area

Neighbourhood	N	Mean	Std. Deviation	Coefficient of Variation	*Minimum Value	*Maximum Value
Bosso Estate	75	126533	59286	46.85	20000	250000
Dutsenkura Hausa	46	87622	48840	55.74	18000	200000
Flayout	31	95161	137110	144.08	20000	280000
Okada Road	60	127417	60032	47.11	30000	250000
Sabon Gari	22	66818	30920	46.28	20000	120000
Tudu Fulani	56	97946	51573	52.65	20000	200000
Total	290					

* The minimum and maximum values signify that the minimum rents are for tenements; while the maximum in most cases are rents for flats and bungalows.

From in Table 1, Okada road had the highest mean residential rent of ₦ 127417 followed by Bosso Estate with an average rent of ₦126533. Seemingly, rents in F-layout (₦ 95161) and Tudu Fulani (₦ 97946) are within the same region. While Sabongari (₦ 66818) has the lowest mean rental value. Secondly, for all the sampled properties, the statistical variability relative to the mean residential

rent as indicated by the coefficient of variation is lowest in Sabongari neighbourhood; implying highest level of homogeneity in residential rent.

Thirdly, variability in rent distribution is greatest for properties in F-Layout with the variability decreasing with increasing distance from the inner part of Minna where F-Layout is located to further away locations such as Bosso Estate, Dutsen Kura Hausa, Tudun Fulani and Okada road.

However, rather than rely solely on descriptive statistics as reported in Table 1, there is need to employ higher level statistics to provide statistical explanations on the extent of variance in the structure of residential rents in the study area as follows.

Analysis of Variance in Rents

In Table 2 the null hypothesis of homogeneous population variance in the residential rents is rejected. In this regards the Levene's test for equality of variance reveals that the homogeneity of variance assumption underlying the analysis of variance test has been violated at 5% level of significance on the basis that the F-test statistic of 2.006 is lower, when compared with a 5%, F(5, 284). As such one can be confident that the population variance of the residential rent in the six neighbourhoods is not equal.

Table 2: Test of homogeneity of variances

Levene Statistic	Degree of Freedom (DF) 1	Degree of Freedom (DF) 2	Sig.
2.006	5	284	0.078

The result of the Analysis of Variance in rents as reported in Table 3 meant that rents varied statistically across the neighborhoods in the study area as F statistic (5.447) is greater, when compared with a 5%, F(5, 284). Therefore the null hypothesis of variation in residential rents in the study area is rejected (P-value of 0.0001 < 0.05). As such the analysis of the multiple comparisons using Turkey Honestly Significant Difference Test can proceed to determine the neighbourhood(s) where difference in rent lies.

Table 3: Analysis of variance for residential rents

Method	Degree of Freedom (DF)	Value	Probability
Anova F-statistic	(5, 284)	5.447	0.0001
Analysis of Variance			
Source of Variation	Degree of Freedom (DF)	Sum of Sq.	Mean Sq.
Between	5	1.25E+11	2.49E+10
Within	284	1.30E+12	4.57E+09
Total	289	1.42E+12	4.92E+09

Turning to the multiple comparisons using Tukey Post Hoc Test in Table 4, a look at the mean difference (column 3 of Table 4) reveals the neighbourhoods where the difference in rent lies. For instance, it is seen that significant differences in rent exist in such neighbourhoods such as Dutsen Kura Hausa, Sabon Gari, Bosso Estate and Okada Road. These differences in rents are significant at 5% level of significance compared to other neighbourhoods (See column 5 of Table 4). Specifically, it is apparent that Dutsen Kura Hausa is significant at 3%, Sabon Gari (0%), Bosso Estate and Okada Road at 3% respectively. This further led credence to the results in Table 1 in which

neighbourhoods such as Okada Road and Bosso Estate have high disproportionate level of rents relative to Sabon-Gari which has the least mean rent in the study area. Furthermore the results of the homogeneity subsets In Table 5 further explain the finding that rents are significantly different in Duksen kura Hausa, Sabon Gari, Bosso Estate and Okada Road. For example, an examination of *Subset 1* in Table 5 shows that rents in Sabon Gari are distinct from those of Okada road and Bosso Estate which fall in *Subset 2*.

Table 4: Multiple comparisons of residential rents in the study area

Dependent Variable: rent Tukey HSD					
(I) Neighbourhood	(J) Neighbourhood	Mean (I-J)	Difference	Std. Error	Sig. Level
Bosso Estate	Duksen kura Hausa	38911.11111*		12819.39115	0.031169
	Flayout	31372.04301		14516.27272	0.259443
	Okada Road	-883.333333		11775.36267	1.000000
	Sabon Gari	59715.15152*		16483.80847	0.004618
	Tudun Fulani	28586.90476		12006.72786	0.166481
Duksen-kura Hausa	Bosso Estate	-38911.11111*		12819.39115	0.031169
	Flayout	-7539.0681		15868.40795	0.996974
	Okada Road	-39794.44444*		13406.84017	0.037874
	Sabon Gari	20804.0404		17686.1567	0.847880
	Tudun Fulani	-10324.20635		13610.50004	0.974082
Flayout	Bosso Estate	-31372.04301		14516.27272	0.259443
	Duksen kura Hausa	7539.0681		15868.40795	0.996974
	Okada Road	-32255.37634		15037.57785	0.267385
	Sabon Gari	28343.1085		18952.19046	0.667452
	Tudun Fulani	-2785.138249		15219.43151	0.999971
Okada Road	Bosso Estate	883.333333		11775.36267	1.000000
	Duksen kura Hausa	39794.44444*		13406.84017	0.037874
	Flayout	32255.37634		15037.57785	0.267385
	Sabon Gari	60598.48485*		16944.68989	0.005439
	Tudun Fulani	29470.2381		12632.02628	0.184380
Sabon Gari	Bosso Estate	-59715.15152*		16483.80847	0.004618
	Duksen kura Hausa	-20804.0404		17686.1567	0.847880
	Flayout	-28343.1085		18952.19046	0.667452
	Okada Road	-60598.48485*		16944.68989	0.005439
	Tudun Fulani	-31128.24675		17106.2814	0.454721
Tudun Fulani	Bosso Estate	-28586.90476		12006.72786	0.166481
	Duksen kura Hausa	10324.20635		13610.50004	0.974082
	Flayout	2785.138249		15219.43151	0.999971
	Okada Road	-29470.2381		12632.02628	0.184380
	Sabon Gari	31128.24675		17106.2814	0.454721

*The mean difference is significant at 5%

level of
Significance.

However, rents in Dutsen Kura Hausa fall within both Subset 1 and 2. This reason for this is unclear. Unsurprisingly, rents of neighbourhoods within subset 1 (31%) and subset 2 (9.2%) are not significantly different from each other. This means that there is dissimilarity in rents within these two subsets since their probability values of 0.31 and 0.092 are greater at 0.05 level of significance.

Table 5: Homogeneity subset for residential rents

Location	N	Subset	Subset
-		1	2
Sabon Gari	22	66818.1818	
Duksenkura Hausa	46	87622.2222	87622.2222
F-Layout	31	95161.2903	95161.2903
Tudun Fulani	56	97946.4286	97946.4286
Bosso Estate	75		126533.3333
Okada Road	60		127416.6667
Sig.		.310	.092

Means for groups in homogeneous subsets are displayed.

(a) Uses Harmonic Mean Sample Size = 40.598.

(b) The group sizes are unequal. The harmonic mean of the group sizes is used.

Type I error levels are not guaranteed.

Identification of Major Internal Aesthetics in the Study Area

The predominant internal aesthetics were identified through physical inspection of the 290 residential properties in the study area. As seen in Table 6, terrazzo (36.2%) and concrete (30.6%) are the most common type of floor finishes in the study area.

Sandcrete is not often used and represents 5.8 % of the aesthetics internally used in the study area. For wall finishes; plastered block (43.4%) is the predominantly used. Mud, burnt bricks, sand creed and sand plaster are used only in few cases as they fall marginally below 10%.

Table 5: Major internal aesthetics in the study area

Structure	Internal Aesthetics	(%)
Floor	Terrazzo	36.2
	Tiles	27.2
	Concrete	30.6
	Sand screed	5.8
Interior Wall	Block plaster	43.4
	Mud	6.2
	Mud block	13.1
	Burnt brick	9.6
	Sand screed	6.5
	Sand plaster	7.2
	Plaster but not painted	13.7
	Card board	23.1
Ceiling		

	Wood	30.3
	Asbestos	40.3
	PVC	4.1
	Pop	2.00
Door	Metal	28.2
	Metal and glass	36.5
	Wooden	24.1
	Glass	11
Window	Metal	27.5
	Metal and glass	40
	Wooden	15.1
	Burglary	15.5
	Glass	1.7

For the ceiling; Asbestos and wood represent 40.3% and 30.3% of the aesthetics finishes used from which tenants derive utility in the 6 neighborhoods. However, PVC and POP are only used as finishes in exceptional cases, as they represent, only 4.1% and 2% of the aesthetics employed in ceiling finishes in the case study area respectively. Perhaps this might not be unconnected to the high cost of these construction materials.

For the door, metal and glass which represent 36.5% and metal 28.2% are the most common in the buildings examined within the study area. For Window, metal and glass represents 40% of the finishes while 27.5% are metal; which is the common building finishes in the selected neighborhoods in terms of window finishes. Whereas, for both door and window aesthetic finishes, Glass is seen as not commonly used in the study area.

Quality of Internal Aesthetics in the Study Area

The resultant result of the Likert scaling is the mean aggregate quality score of the 5 internal aesthetics for each neighborhood in the study area as reported in Table 7.

Table 7: Quality of internal aesthetics in the 6 neighborhoods

Bosso Estate	Dusten kura Hausa	F-layout	Okada Road	Sabon Gari	Tudu Fulani
3.20 (1)	2.99(4)	2.81(6)	3.13(2)	2.85(5)	3.06 (3)

In Table 7, good quality of internal aesthetic finishes for the buildings are evident in Bosso Estate (3.20) and Okada Road (3.13), Fair Quality of internal aesthetics in the neighborhoods are in Tudun Fulani (3.06) and F-layout (2.81). Low internal aesthetic finishes in the study area are in Dusten kura Hausa (2.99) and Sabon Gari (2.85). This low internal aesthetics might be connected to the fact that these two (2) neighborhoods are traditional settlements predominantly inhabited by indigenes who are original settlers in the city. Moreover, the rank of all the 5 neighbourhoods in the study area on the basis of the quality of their internal aesthetics as reported in parenthesis (row 2 of table 7).

Relationship between Residential Rents and Internal Aesthetics in the Neighborhood

Since it is obvious that there exist a significant variance in rents of properties within the study area, what evidence exists that such variance is as a result of the quality of the internal aesthetics? For

instance does high quality of aesthetics in Bosso Estate (3.13) and Okada Road (3.20) accounts for the high level of rent in these two neighborhood relative to other neighborhoods?

Before turning to the interpretation of the coefficients of the regression model in Table 4.9 a look at Table 4.8 reveals interesting results of the relationship between rent (dependent variable) and the five aesthetic finishes (wall finishes, door type, ceiling finishes, window material and floor type) as the independent variables. For instance, a diagnostic check of the model reveals that the R^2 shows that 16.7% of the variation in rent of residential properties is accounted for by the quality of building finishes in the study area and that 83.3% is due to other factors.

Table 4.8: Regression model summary of internal aesthetics of dwellings

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate	Change Statistics				Durbin-Watson	
					R^2 Change	F Change	df1	df2	Sig. F Change	
1	.409(a)	0.167	0.15	64665	0.167	9.444	6	282	0	1.999

- (a) Predictors: (Constant), wall finishes, door type, ceiling finishes, window material, floor type
- (b) Dependent Variable: rent

Furthermore, the result of the F-test for DF (6,282) shows that the model is adequate and good predictor of the explanatory variables at 5% level of significance, since the table value is less than 9.444. Again, since the Durbin-Watson statistics of 1.999 is almost closer to 2, it means the explanatory variables are not affected by serial correlation (that is the error terms are not correlated).

In Table 4.9 it can be seen from the coefficients of the regression that aesthetics connected to floor type, for example, is the most significant determinant of rent and adds ₦ 13142 to the residential rent of properties in the study area. Aesthetics related to window material and ceiling finishes also add ₦ 8071 and ₦ 8819 to rent and are significant at 5 % level of significance (P-values of 0.012 and 0.018).

Table 4.9: Regression coefficients of the model (a)

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.	Co linearity Statistics	
	B	Std. Error				Tolerance	VIF
1 (Constant)	-26590.452	20122.470		-1.321	0.187		
floor type	13141.581	4329.217	0.185	3.036	0.003	0.795	1.258
wall finishes	3349.592	1928.572	0.098	1.737	0.084	0.931	1.074
door type	-142.625	3321.118	-0.002	-0.043	0.966	0.963	1.039
window material	8071.366	3188.091	0.146	2.532	0.012	0.888	1.127
ceiling finishes	8818.835	3691.362	0.138	2.389	0.018	0.880	1.137

- (a) Dependent Variable: rent

However, aesthetics for wall, door type and roof type are not significant predictors of rents at 5% level of significance in the study area. In addition, the door type decrease rents in the study area by ₦ 143.

Conclusion

This study has attempted an examination of the underlying structure of residential rent vis-à-vis its variance across the different neighbourhoods in the study area. Secondly, by its experimental nature it has linked variance in real estate residential rents to attributive change in internal aesthetics of dwellings. An interesting result of this study is that aside Sabon -Gari, an inner-core neighbourhood, variability in rent distribution is greatest for properties in F-Layout with such variability decreases with increasing distance from the inner part of Minna where F-Layout is located to further away locations such as Bosso Estate, Dutsen Kura Hausa, Tudun Fulani and Okada road. In this regards, rent control might be a viable tool in the foreseeable future to prevent inequality in rent fixing within the inner part of the city. Within this purview, internal aesthetics account for 16.7% of the total variation in residential rents in the study area. As such property owners and real estate investors must rise to the challenge of improving the quality of internal aesthetics of dwellings especially in Sabon-gari, Tudunfulani and Dutsen-Kura to be at parity with other neighbourhoods. This is against the backdrop that the rental price of a house depends of the utility and satisfaction embodied and derived from such aesthetics and these are differently priced by tenants.

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