

Comparative Study of Rental Values of Two Gated Estates in Lekki Peninsula Lagos

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Abstract. The study which entailed a comparative analysis of rental values of residential properties of restricted access and open access gated estates is aimed at discovering differences in rental values. Analysing these rental values of restricted access (Crown Estate) and open access (Victoria Gargen City) estates in Lekki Peninsula, as case studies will aid investors and policy makers to be better guided in their decision-making processes. To achieve the objective of the study, structured questionnaires were administered to 160 residents of Crown Estate out of which 116 respondents returned their questionnaires filled; 120 questionnaires were administered to the residents of Victoria Garden City out of which 90 questionnaires were retrieved while 45 questionnaires out of the 60 administered to the Estate Surveyors and Valuer's managing properties in Crown Estate and Victoria Garden City (VGC) were retrieved. The collected questionnaires were subsequently analyzed using relevant statistical techniques such as the frequency distribution tables and the t-test. The study revealed that being gated had no effect on the choice of residency. However, location was discovered to be a germane feature in the choice of either estate. The result also revealed significant difference in rental values in the two estates. The study therefore recommends appropriate features - such as location and provision of good neighbourhood quality amongst others in the planning of any estate.

Keywords: Rental values, residential property, restricted access gated estate, open-access gated estates

INTRODUCTION

Residential land use, among the various competing urban land uses, is the largest consumer of land in urban areas (Olayiwola, *et al.* 2005). The quality of living is however strongly influenced by the environment a person resides in. The assessment of the quality of living, standards of housing and support infrastructures should therefore be major issues for consideration while providing residential units. For this reason, real estate's located in areas with functional and reasonably adequate infrastructure that support stress-free everyday living; attract high demand and command good value. This explains the attraction to places like Ikoyi, Victoria Island and Lekki Peninsula among other much sought-after locations in Lagos for residential properties. In these areas, the creation of gated communities has become predominant and this is because of the basic amenities and infrastructures that enhance property value (Tse and Love, 2000; Jensen and Durham, 2003; Chau, *et al.* 2004; Olujimi and Bello, 2009).

There has been a considerable growth of interest in recent years surrounding the emergence of 'gated communities', 'fortified enclaves' and other forms of privatized public space (Atkinson and Flint, 2004). Man being protective about land and his environment resulted in the formation or creation of residential gated communities. Gated communities are usually walled and gated residential developments restrict public entry. They are residential areas with restricted access designed to privatize normally public spaces. The concept can refer to a residential area with restricted public access. Other terms include - security villages, fortress neighborhoods, and exclusive leisure developments and so on (Atkinson and Flint, 2004). These new residential areas occur in both new suburban developments and older inner city areas for the purposes of security and segregation (Ajibola, et al. 2011). These gated residential communities can however be of restricted access or they could have open door policy. A residential gated community with restricted access is one that has a tight security. Outsiders cannot have access to the estate without an invitation by a resident of that estate. Estates that have such policies in Nigeria include Crown Estate, NICON Town and Banana Island. On the other hand, there are also gated

residential communities with the open door policy, that is, there is no restriction of entry and exit into such estates. Examples of such residential gated estates in Nigeria include Victoria Garden City, Dolphin Estate, and Festac Town.

Although, living in a gated residential community has a cost to it, that is, homeowners must sustain both the cost of building infrastructure and their collective goods - such as waste disposal, road, sidewalks, communication networks (which are usually paid for as service charge) which is usually borne by the public government. Neverthless, the efficiency of a residential gated communty is subject to its capacity to satisy its residents. If the residents and prospective and protential buyers are satisfied with the level of security and maintenance of common property such as the estate centre, a residential gated communty could perhaps have a boost in its property value.

Property values, especially rental values have constantly been on the increase. Overpopulation, market forces of demand and supply of housing are basic factors influencing variations in rental values in urban areas (Dung-Gwon and Rikko, 2009). Assessing the rental value of residential properties is a complex and challenging process because it involves analysing the rental property, neighborhood characteristics and market conditions (Kim and Nelson 1996). However, this study is poised at comparatively analysing the rental values of these sets of estates using Victoria Garden City (VGC) and Crown Estate Lekki Peninsula representing open door estates and restricted access estates respectively. The choice of these two estates amongst the lots is due to their proximity and somewhat similarities. The outcome of this study is intended to produce result that will serve as a guide to investors and policy makers in decision making process.

MATERIALS AND METHODS

This research work used the cross-sectional survey method by administering questionnaires to the residents of Crown Estate, Victoria Garden City and the registered Estate Surveyors and Valuers in Lagos Island. From a pre-research investigation, it was discovered that Crown Estate has about four hundred (400) housing units occupied representing about 67% of the planned capacity of the

estate while Victoria Garden City has above six hundred (600) houses complemented with recreational park, shopping complex and other ancillary structures. According to the Nigerian Institution of Estate Surveyors and Valuer's Directory of Members and Registered Firms in Nigeria, Seventh Edition, the population of Estate Surveyors Firms in Lagos Island is One hundred and Four (104). However, the study was confined to one hundred and four (104)registered practicing Estate Surveyors and Valuation firms in Lagos Island. The appropriate sample size of the household of Crown Estate was taken as 40% of the total study population, representing one hundred and sixty (160) households, while that of Victoria Garden City was 20% of the total study population representing one hundred and twenty (120) households. This is as postulated by Nwana (1981) suggesting that if a population is in few hundreds, 40% of the population or more could serve as a good sample while a population in many hundreds should have a minimum of 20% sample as a good representative. Based on the above premise, 60 of the registered practicing Estate Surveying firms were surveyed as an appropriate sample size representing almost 60% of the population. In order to prevent prejudice in selection; the random sampling technique was adopted in the distribution of questionnaires to the residents of Crown Estate and Victoria Garden City, also, to firms of Estate Surveyors and Valuer's in Lagos Island.

Study Area

The Lekki Peninsular is regarded as the fastest real estate market in the whole of Africa, although like most Nigerian cities, with haphazard structures with individual and corporate developers without any planned linkage between the estates and service infrastructure. The Lekki distribution comprises a naturally formed peninsula on the Atlantic Ocean East of the Central Business District in Lagos Island and on Lagos Lagoon. The peninsula is approximately 70 to 80 km long; stretching from Victoria Island in the west to Refugee Island in the east; with an average width of 10 km. Lekki Peninsular includes several estates, gated residential developments, and agricultural farmlands, areas allocated for a Free Trade Zone (FTZ), an airport, and a seaport.

Crown Estate

Crown Estate is located along Lekki-Epe Expressway, Lekki Peninsula in Eti-Osa Local Government Area of Lagos State. Crown Estate was developed by Crown Realties Plc. It is a low density gated residential estate on 41.7 hectares designed to accommodate about 600 homes. Crown Estate is popular with the upper class residents of Nigerian high society because of its quiet and serene environment and also because of its distance from Lagos' hustle and bustle. The estate is finished with modern infrastructures. Electricity is quite frequent. A water treatment plan is installed with a house-to-house connection of potable water. The roads are well paved with interlocking blocks and streetlights are backed-up with a standby generator. There is also a shopping centre where residents can get anything they want instead of leaving the estate to shop. The Estate also has a recreation centre with a basketball, volleyball, tennis, gymnasium, green area for children and a swimming pool. There is also a book club in the Estate.



Figure 1: Crown Estate Map

Victoria Garden City

Victoria Garden City is one of the most affluent neighbourhoods of Lagos, Nigeria. It is located along Lekki-Epe Expressway, Lekki Peninsula in Eti-Osa Local Government Area of Lagos State. It is located a little after Ikota Housing Scheme along Lekki-Epe Expressway. It was developed by HFP Engineering Nigeria Limited. It has some of the most opulent residential facilities in Nigeria and has some of the most expensive real estates on the entire African continent. However, due to the limited available land, many of these are vertical apartment buildings. Victoria Garden City is a comprehensive estate of approximately 2 million square meters by the Lagos Lagoon consisting of residential, commercial and public service areas. The Estate is planned for about 30,000 residents and about 2,000 low-density houses, commercial and public facilities. The estate is perfectly finished with modern infrastructures. Electricity is connected to the National grid so power is very stable. A water treatment plan is installed with a house-to-house connection of potable water. The telephone exchange in the city is connected to the international gateway with a fibre backbone. The roads are well paved and streetlights are backed-up with a standby generator. А recreational park is also available to the residents of the estate.

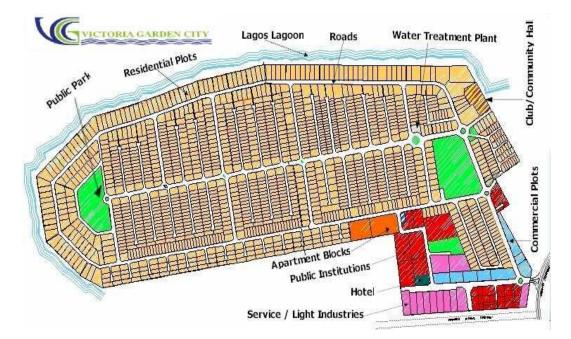


Figure 2: Victoria Garden City Map

DATA ANALYSIS

Out of the one hundred and sixty (160) questionnaires administered to the residents of Crown Estate, one hundred and sixteen (116) were retrieved, representing 72.5%. For residents in Victoria Garden City, ninety (90) questionnaires were retrieved out of the one hundred and twenty (120) administered representing 75% response. The same rate of response was recorded for the Estate Surveyors and Valuers as forty-five (45) questionnaires were retrieved out of the sixty (60) administered. Data collated will be analyzed using tables, charts then the relative important index and the student-t test of significance.

RESULTS AND DISCUSSION

Findings from the research reveal that both estates have almost similar accommodation predominantly detached houses, and bungalows.

The first research question which deals with factors, derived from literature, attracting respondents to the various estates, is ranked in Tables 2 and 3, using the Relative Importance Index as shown below:

Table 2: Reason for Occupation of Crown Estate

Factors	Strongly	Agree	Indifferent	Disagree	Strongly	Total	RII	Rank
	agree				disagree			
	60	43	12	1	0	116		
Location	$a_i n_i$	$a_i n_i$	$a_{\mathrm{i}}n_{\mathrm{i}}$	$a_i n_i$	$a_i n_i$		4.397	3rd
	300	172	36	2	0	510		
	41	55	13	7	0	116		
Accessibility	$a_{i}n_{i}$	$a_{\rm i}n_{\rm i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$		4.121	6^{th}
	205	220	39	14	0	478		
Neighbourhood	68	41	6	1	0	116		
Quality	$a_{i}n_{i}$	$a_{\rm i}n_{\rm i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$		4.517	1^{st}
	340	164	18	2	0	524		
Nearness to place	39	50	20	5	2	116		
of work	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{\rm i}n_{\rm i}$		4.026	8^{th}
	195	200	60	10	1	467		
Physical condition	45	53	16	2	0	116		
of building	$a_{i}n_{i}$	$a_{\rm i}n_{\rm i}$	$a_{\mathrm{i}}n_{\mathrm{i}}$	$a_{i}n_{i}$	$a_{i}n_{i}$		4.216	5^{th}
	225	212	48	4	0	489		
Gated	60	42	11	3	0	116		
communities	$a_{i}n_{i}$	$a_{\rm i}n_{\rm i}$	aini	$a_{i}n_{i}$	$a_{i}n_{i}$		4.371	4^{th}
	300	168	33	6	0	507		
	65	36	14	1	0	116		
Security	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{\rm i}n_{\rm i}$		4.422	2^{nd}
	325	144	42	2	0	513		
Good waste	41	46	21	8	0	116		
disposal	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{\mathrm{i}}n_{\mathrm{i}}$	$a_{i}n_{i}$	$a_{i}n_{i}$		4.034	7^{th}
	205	184	63	16	0	468		
Availability of	38	46	23	9	0	116		
infrastructures	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$		3.974	10^{th}
	190	184	69	18	0	461		
	44	40	22	10	0	116		
Good drainage	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$			9^{th}
system	220	160	66	20	0	466	4.017	

Source: Author's Field Survey, 2013

Factors	Strongly	Agree	Indifferent	Disagree	Strongly	Total	RII	Rank
	agree				disagree			
	30	37	23	0	0	90		
Location	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{\rm i}n_{\rm i}$	$a_{\mathrm{i}}n_{\mathrm{i}}$		4.078	1^{st}
	150	148	69	0	0	367		
	30	34	26	0	0	90		
Accessibility	$a_i n_i$	$a_{\rm i}n_{\rm i}$	$a_i n_i$	$a_{i}n_{i}$	$a_{i}n_{i}$		4.044	2^{nd}
	150	136	78	0	0	364		
Neighborhood	20	41	29	0	0	90		
Quality	$a_i n_i$	$a_{\rm i}n_{\rm i}$	$a_i n_i$	$a_{i}n_{i}$	$a_{i}n_{i}$		3.90	4^{th}
	100	164	87	0	0	351		
Nearness to place	25	41	24	0	0	90		
of work	$a_i n_i$	$a_{i}n_{i}$	$a_i n_i$	$a_i n_i$	$a_i n_i$		4.011	3rd
	125	164	72	0	0	361		
Physical condition	19	26	37	5	3	90		
of building	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_i n_i$		3.589	5^{th}
	95	104	111	10	3	323		
Gated	11	32	35	12	0	90		
communities	$a_{i}n_{i}$	$a_{\rm i}n_{\rm i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$		3.467	9^{th}
	55	128	105	24	0	312		
	22	27	28	7	6	90		
Security	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_i n_i$	$a_{i}n_{i}$		3.578	7^{th}
	110	108	84	14	6	322		
Good waste	14	28	31	17	0	90		
disposal	$a_{i}n_{i}$	$a_{\rm i}n_{\rm i}$	$a_{i}n_{i}$	$a_{i}n_{i}$	$a_{i}n_{i}$		3.433	10^{th}
	70	112	93	34	0	309		
	11	39	29	11	0	90		
Availability of	$a_{i}n_{i}$	$a_{i}n_{i}$	aini	$a_{i}n_{i}$	$a_i n_i$			8^{th}
infrastructures	55	156	87	22	0	320	3.556	
Good drainage	18	31	27	14	0	90		
system	$a_i n_i$	$a_{i}n_{i}$	$a_i n_i$	$a_{i}n_{i}$	$a_i n_i$		3.589	5^{th}
	90	124	81	28	0	323		

 Table 3: Reason for Occupation of Victoria Garden City

The results show the factors that attracted respondents to Crown Estate and Victoria Garden City respectively. In table 2, neighborhood quality (4.514) is the most important factor that attracted them to Crown Estate and is ranked 1^{st} , followed by security (4.422), and finally location (4.397). However, the least determinable factors for their residency in an ascending order of priority are availability of infrastructures (3.974), good drainage system (4.017) and nearness to place of work (4.026). Table 3 shows factors that attracted the respondents to Victoria Garden City. The most predominant factors stated by the respondents are location (4.078), accessibility (4.044) and Nearness to place of work (4.011) respectively. However, the least determinable factors for their residency is having a good waste disposal system (3.433), others are being a gated estate (3.467) and availability of infrastructure (3.556).

One distinguishing factor prominent between both estates is location. They are located by the Lekki-Ajah Expressway which is the shortest road to Victoria Island where most people work. People living in the estates are able to avoid Ajah's traffic especially at the peak hours. The other important factors for residing in the estates are accessibility, neighborhood quality, security from ills in the society. All these factors subtly describe the location of the estates as a predominant factor in making choices for residence.

One feature that has least attraction to the estates is the provision of infrastructure. Residents place less hype on good waste disposal and good drainage system. Although these factors are quite important based on the high RII scores recorded, they are not to be provided at the expense of top most priority factors. Another feature that is least regarded is the fact that these estates are gated. Results from Table 2 indicate such factor as the fourth least determinant factor in Crown Estate while Table 3 places it as the second least determinant factor in Victoria Garden City. Hence, being a gated estate has least effect on the choice of residency to these estates.

The tables below give the average rental values of the various property types in the two estates between 2008 and 2012

Year	Property Type	Average Rent (N)	Average		
			Rent (N)		
	Crown Estate	Victoria Garden City			
2008	3 Bedroom	812, 500	1.010.007		
	Bungalow		1,016,667		
	4 Bedroom Bungalow	1, 200, 000	1,287,500		
	3 Bedroom Duplex	1,110,00	1,475,000		
	4 Bedroom Duplex	1,225,000	1,800,000		
2009	3 Bedroom	853,333.33	1,200,000		
	Bungalow				
	4 Bedroom Bungalow	1,225,000	1,500,000		
	3 Bedroom Duplex	1,250,000	1,640,000		
	4 Bedroom Duplex	1,525,000	2,050,000		
2010	3 Bedroom	1,075,000	1,250,000		
	Bungalow		1,200,000		
	4 Bedroom Bungalow	1,262,500	2,050,000		
	3 Bedroom Duplex	1,021,083.33	1,650,000		
	4 Bedroom Duplex	1,650,000	2,600,000		
2011	3 Bedroom Bungalow	1,250,000	1,300,000		
	4 Bedroom Bungalow	1,350,000	2,000,000		
	3 Bedroom Duplex	1,347,000	1,716,666,67		
	4 Bedroom Duplex	1,840,000	2,500,000		
2012	3 Bedroom Bungalow	1,275,000	1,350,000		
	4 Bedroom Bungalow	1,375,000	2,100,000		
	3 Bedroom Duplex	1,562,500	1,800,000		
	4 Bedroom Duplex	2,106,666.66	2,866,666.67		

Table 4: Average Rental Values in Crown and VGC Estates (2008-2012)

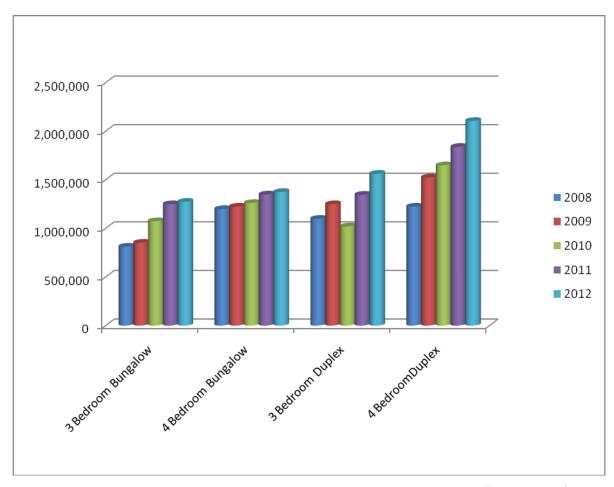


Fig 3: Average annual rent paid for properties in Crown Estate (2008-2012)

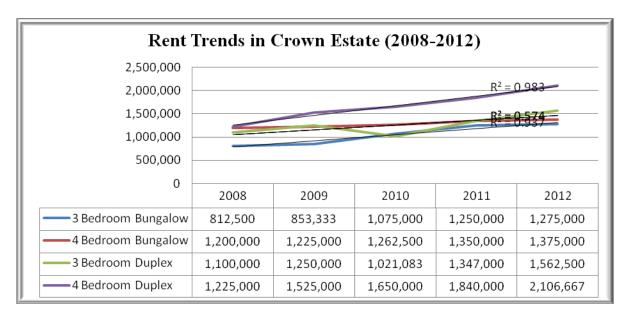


Figure 4: Rent trends of properties in Crown Estate (2008-2012)

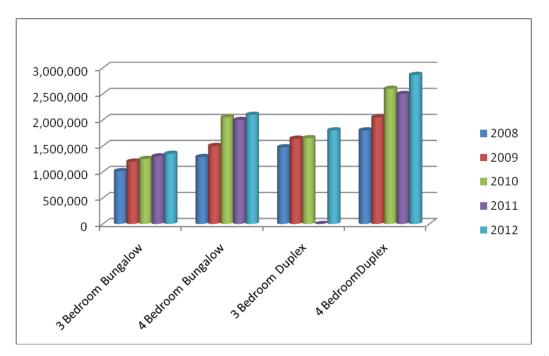


Fig 5: Average annual rent paid for properties in Victoria Garden City (2008-2012)

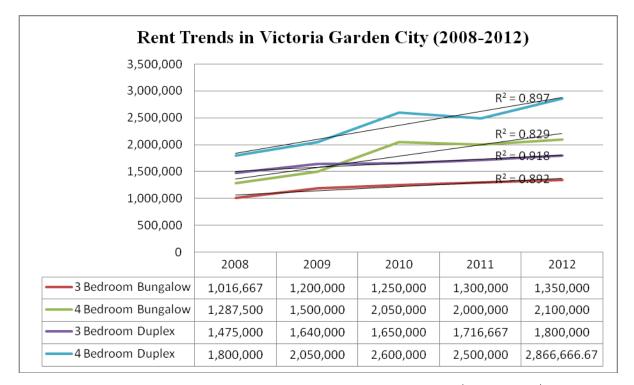


Figure 6: Rent trends of properties in Victoria Garden City (2008-2012)

Rental Value of	(X ₁ ²)	Rental Value of	(X1 ²)
Crown Estate from		Victoria Garden City	
2008- 2012		from 2008-2012	
(1 000'000)		N 000'000)	
(X ₁)		(X ₁)	
0.8125	0.6602	1.0167	1.0337
1.2000	1.4400	1.2875	1.6577
1.1000	1.2100	1.475	2.1756
1.225	1.5006	1.8	3.24
0.8533	0.7281	1.2	1.44
1.225	1.5006	1.575	2.4806
1.25	1.5625	1.640	2.6896
1.525	2.3256	2.050	4.2025
1.075	1.1556	1.250	1.5625
1.2625	1.5939	2.050	4.2025
1.0211	1.0426	1.650	2.7225
1.65	2.7225	2.6	6.76
1.25	1.5625	1.3	1.69
1.35	1.8225	2.0	4
1.347	1.8144	1.7167	2.9471
1.84	3.3856	2.5	6.25
1.275	1.6256	1.35	1.8225
1.375	1.8906	2.1	4.41
1.5625	2.4414	1.8	3.24
2.1067	4.438	2.8667	8.218
Total 26.3056	36.4228	35.2276	66.7448

Table 5. T-Test for Rental Value of Crown Estate and Victoria Garden City

Mean $(M_1) = 1.3153$

Mean (M_2) = 1.7614

The tabulated T value is 2.09 at 0.05% level of significance. Since the calculated T value (25.9360) is more than the tabulated T value (2.09), the null hypothesis is thereby rejected. Hence there is a significant difference in rental values between Crown Estate and Victoria Garden City. Thus, the difference in rental

values, perhaps people prefer the open access policy of Victoria Garden City and as such ready to pay more rent.

CONCLUSION

The result of the analysis employed in this study has shown that being gated has no effect on the choice of residency by occupants. This is even shown considering the fact that the more restricted estate commanded less rental values that are significantly different from the open access gated estate. However, the location of such estate is paramount particularly in terms of nearness to place of work, good neighbourhood quality and accessibility. Hence, the location and provision of good neighbourhood quality amongst others should be taken as important and paramount in the planning of any estate. Moreso, provision of infrastructure is not a paramount criterion when investing in Estates in the study area, so investors should not embark on superfluous projects resulting to "elephant project". It is believed that implementation of recommendations proferred will safeguard interest of all concerned stakeholders.

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