The Determinants of Shopping center rent in Akure, Nigeria

Victoria BELLO, Nigeria

Key words: Determinants, Shopping Centers and Rents

SUMMARY

The study examined the determinants of shopping center rents in Akure. Data were drawn from eighty three retail shops in five shopping centers located in the city and registered practicing Estate Surveyors and Valuers. The list of the registered and practicing Estate Surveyors and Valuers in Akure was taken from the 2011 Record Book of Registered Estate Surveyors and Valuers at the Nigerian Institution of Estate Surveyors and Valuers (NIESV) Secretariat in Akure. In the record book, the Estate Surveyors and Valuers registered and practicing in Akure are twenty (20) in numbers. The data were analysed using the Multiple Regression Model and the Weighted Mean Score Method. The Multiple Regression Model was used to test the relationship between market rents (dependent variable) for shopping centers and various independent variables while the Weighted Mean Score Method was used to determine the variables Estate Surveyors and Valuers frequently used in the determination of shopping centers rental value. The result revealed that all the independent variables used such as age (AGE), area of shop (AREASHOP), location (LOC), vacancy of shop (VACS), gross turnover of sales (GROSTS), population of customers (POPCUST) and retail mix (RETMIX) are significant determinants of rental value of shopping centers in the study area. The study recommended among other things that Estate Surveyors and Valuers, should ensure that the public are aware of their services as Estate Agents instead of living it in the hands of quacks.

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1. INTRODUCTION

Shopping center has been regarded as extremely attractive investment by many investors and this has in general been keenly sought when offered for letting or sale (Millington, 1996). The turnover which is generated from them is partly determined by location, physical and lease term characteristics which may either attract or repel potential consumers (Cox and Brittain, 1998). However, the assessment of shopping center rental values draws on evidence of rents agreed for comparable properties. In making comparisons, valuers apply subjective rental adjustments to reconcile for differences in property characteristics occurring across the properties (Bello, 2000). Indeed, the utilization of the comparative method to accurately assess the relative ranking of such attributes in the market place and determine their impact on rent is problematic (Adair et al., 1996, Bello and Bello, 2007). In this wise, O' Roarty et al., (1998), noted that the function of the retailer must be considered.

In shopping centers for instance, the rent paid by a tenant bears relation to the ability of that tenant to trade profitably from that location. This has always been a salient criterion but as competition has forced retailers to accept lower margins for their profit levels, the impact of 'cost' on the profit equation has become more important. Retailers of Shopping Centers have been forced to look at the cost equation in terms of their space requirement. They are therefore less willing to accept the level of rents in the market and may consider relocating if they feel that current rentals are too high for their cost requirement. This should mean that the market will adjust to ensure that value in exchange (rental value) and value in use (worth to the retailer) converge (French, 2000). Hence Sirmans and Guidry (1992) noted that understanding the determinants of shopping center rents is important to the Estate Surveyors and Valuers who are involved in market analysis and site selection of such properties. Nevertheless valuers fail to account for variation between retail function and the impact of individual property factors on rental value. This potentially leads to misguided valuations. In determining the rental value of a subject property, inappropriate evidence may be undervalued to determine a unit value even though in the market place the subject and comparable properties belong to distinct tiers (that is the occupier of the subject property would not be expected to make a bid for the comparable property). Also, valuers interpretations of evidence may lead to over or under estimations of rents as the perceived impact of a factor may have a positive impact on trade and hence rental bid for one type of retailer and a negative impact for another. Hence Hager and Lord (1985) stated that "the success of a valuation relies extensively on personal knowledge, expertise and interpretation of many variables which exist".

However, the complexity of the property price formation process requires an analytical approach which makes it possible to settle the cross-influences between the numerous dimensions affecting property values (for shopping centers) and to assess the marginal

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contribution of each attribute underlying property buying decisions (Des Rosier et al., 1996).

Much work has been done in the determination of property values (residential and shopping centers) in the United Kingdom, United States and Australia (Trott, 1980; Fraser, 1988; Kihore, 1996). In Nigeria, very little effort has been made. The few that exist only looked at the determinants of residential and office property values (Bello, 2000; Oladapo, 2000). It is against this background that this paper tends to examine the following issues. What factors do Estate Surveyors and Valuers consider in determining shopping center rents in Nigeria? Are the factors interpreting the retail property market?

The remainder of the paper is organized as follows. The next section (section 2) consists of a review of existing literature on retail property market and the factors that determines shopping center rents in the study area. The review is followed by discussion of the research method employed with the results presented and analyzed in section 3 and 4. The paper concluded with a summary of findings, recommendation and conclusion and this is detailed in section 5.

2.1 THE RETAIL PROPERTY MARKET IN AKURE

The retail property market in most parts of the world has experienced a growing degree of concentration resulting in fewer and larger stores since the middle of the twentieth century (Biba et al, 2006). Its design has changed significantly, expanding from individual stores located on the streets to large shopping centers. Many of the changes have been linked to metropolitan growth patterns, changes in urban transportation systems, as well as evolving retail marketing techniques (Beyard and O'Mara, 1999). Similarly, changing shopping behavior choices of households affect the shaping of the retail sector. These are expressed through household mobility, as well as through their purchasing power and preferences for retail trade forms that offer a large diversity of products and services (Baker, 2000; and Gobillon et al, 2003). According to Richards et al., (1999) the robust economic performance of the sector in many nations such as United States of American, United Kingdom over the last decade has increased the population's standard of living. As a result, the retail sales in most countries of the world have witnessed tremendous growth over the years (Richards et al., 1999).

In Akure, the retail property market is evolved around the multiple nuclei theory developed by Harris and Ullman (1945). Harris and Ullman (1945) argued that in many urban areas there may be more than one focal point and that each of the discrete nuclei influences the location of certain land uses. The theory allows for the development of the most irregular pattern of urban land use as development can proceed from more than one center. Shopping centers in Akure are located along this pattern. They are designed on one or two floors building with little or no parking spaces. This is contrary to what operates in most part of the world where shopping centers are designed with ample car – parking space with easy access to enable shoppers to buy in bulk and transfer goods to their vehicles (Carter and Vandell, 2005). The shopping centers in Akure are majorly neigbourhood shops designed to accommodate all types of trade such as barbing and hair dressing saloon, food stores, clothing, jewelries, provision stores, handset stores to mention a few. Despite the increasingly importance and

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growth of the shopping centers, statistical records are non-existence or sparse where they are available. This may be as a result of the relatively little research conducted to analyze the rental market for shopping centers in the country. Nevertheless, empirical studies in the property market in Akure and Nigeria as a whole have mainly focused on the office and residential sectors (Oladapo, 2000, Bello, 2000).

2.2 FACTORS THAT DETERMINES SHOPPING CENTER RENT

Empirical research in the United Kingdom and the United States of American focusing on the Shopping center rents are quite numerous (Hetherington 1988; Sirmans et al., 1989; Sirmans and Guidry 1992; Mejia and Benjamin, 2002; Carter and Vandell, 2005; Des Rosiers et al, 2005). Hetherington (1988) provides a specification of retail shopping rents that is based upon the volume of retail sales or alternatively real retail profits. Hetherington (1988) noted that the effect of retail sales on rents is mostly significant in small towns. Also, Location has long been known to play a major role in the retail rent setting process (Sirmans and Guidry, 1992; Des Rosiers et al, 2005). In particular, center site selection and retail store development has long been driven by primary market data linking income, wealth and location (Des Rosiers, 2005). In addition, a cross-sectional study by Sirmans and Guidry (1992) examined the variation in retail rents across shopping centers in the United States. Retail rent variation was modeled on customers drawing power (shopping center size, age of shopping center and national anchor tenant), architectural design, location, and market conditions. The estimates showed that all these factors were significant in the determination of retail rents, explaining about 85 percent of the variation in rents when combined together.

Nevertheless, research has also shown how retail mix affected rent levels. Brown (1992) indicated that retail mix is the combination of stores occupying the shopping center. The importance of retail mix to shopping center sales was also highlighted by Kirkup and Rafig (1994) who noted that tenant mix affects the overall image of a shopping center and Anikeeff (1996) argued that retail mix was more important to shopping centers than to any other type of commercial property. However, the reason for the existence of shopping centers is the need to satisfy the consumers' multipurpose and comparison of shopping needs. Although, space agglomeration is often considered sufficient to satisfy those needs, the character of the retailers that occupy the space is equally important. Miceli et al (1998), discussed this issue by looking at the shopping center owner's decision to mix substitute and complement retailers. In their view, shopping center Landlords may at first consider limiting the entry of substitute retailers to let stores achieve monopoly rents and meet more effectively the consumers' multipurpose shopping needs. Yet they noted that Landlords realize that the goal was not just in one store's profit but in the inter-store externalities associated with multiple stores.

Despite the above, the ability and willingness of a retailer to pay rent for a shopping center is essential in the determination of the value of the property. In order to determine what rent can be paid for a particular retail outlet, the retailer has to first estimate the level of trading that can be expected from the outlet. That is an estimate of the anticipated gross turnover in that location for the particular type of trade. However, the variables that determine the shopping center rents in these studies included volume of sales or profits, location, customers drawing

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TS04G - Valuation - Mass Appraisal Techniques, 6054 Victoria Amietsenwu Bello The Determinants of Shopping Center Rents in Akure, Nigeria power (shopping center size, age, national anchor tenant, architectural design, and market condition), ability to pay rent, retail and tenants mix. The situation however, is different in Nigeria were only some of the variables are present. This may be because of the different market that exist. In this respect the Estate Surveyors and Valuers were asked to provide information on the variables used in the determination of the rental value of shopping centers in Akure.

3 DATA AND RESEARCH METHOGOLOGY

The study examined the determinants of shopping center rents in Akure. Data were drawn from eighty three retail shops in five shopping centers located in the city and registered practicing Estate Surveyors and Valuers in Akure. The retail shopping centers are all multi – tenanted buildings of various sizes The list of the registered and practicing Estate Surveyors and Valuers in Akure was taken from the 2011 Record Book of Registered Estate Surveyors and Valuers at the Nigerian Institution of Estate Surveyors and Valuers (NIESV) Secretariat in Akure. In the record book, the Estate Surveyors and Valuers registered and practicing in Akure are twenty (20) in number. The Estate Surveyors and Valuers were asked to provide information on the variables considered in the determination of the rental value of shopping centers. This was necessary in other to know the exact information to ask the occupants of the shops in the shopping centers. The data collected were analysed using the Weighted Mean Score Method and Multiple Regression Model. The Weighted Mean Score Method was used to determine the variables the Estate Surveyors and Valuers use in rent determination of shopping centers. 4 - point likert scale; the highest score that is obtainable been 4 signifying that a variable is most frequently used was adopted for the study.

The Multiple Regression Model was used to test the relationship between market rents (dependent variable) of the shopping centers and various independent variables. The regression model used for the study is stated as:

Where $MKTRENP_1$ = the market rent for the property a_0 - a_7 = are the parameters estimated by the software package e = error term

The variables for the model are defined in Table 1.

Table 1: Variable list and Description

VARIABLES	DESCRIPTION	
MKTRENP	Market rent for the Property (Naira)	
AGE	Age (Years)	
AREASHOP	Area of shops (Square meters)	
LOC	Location (Prime, not prime)	
VACS	Vacancy of shop (Square meter)	
GROSTS	Goss turnover of sales (Naira)	
POPCUST	Population of customers (Number)	
R ETMIX	Retail Mix (1, 0)	

Source: Compiled by the author, 2011

4. DATA ANALYSIS AND DISCUSSION OF RESULTS

This section of the analysis deals with the variables the Estate Surveyors and Valuers considers in determining shopping center rents in Akure, Nigeria and the effect of the variables on shopping centers rental value. The results of the analysis are detailed in Tables 2, 3, 4 and 5.

Table 2: Variables used in the determination of rents of shopping centers in Akure

Variables	Not used	Fairly used	Frequently	Most frequently	Mean rating
			used	used	value
	1	2	3	4	
Age	0.00	5.00	15.00	80.00	3.75
Area of shop	0.00	10.00	30.00	60.00	3.50
Location	0.00	0.00	15.00	85.00	3.85
Vacancy of					
shop	20.00	10.00	20.00	50.00	3.00
Gross turn over	5.00	15.00	15.00	65.00	3.40
Population of					
customers	0.00	5.00	10.00	85.00	3.75
Retail Mix	5.00	0.00	35.00	60.00	3.50
Architectural					
Design	70.00	15.00	10.00	5.0	1.50
Notional					
anchor tenant	85.00	15.00	0.00	0.00	1.15
Market					
condition	45.00	5.00	10.00	40.00	2.45
Tenant Mix	65.00	25.00	5.00	5.00	1.50
Ability of					
tenants to pay	15.00	20.00	25.00	40.00	2.90
rent					

Source: Compiled by the author, 2011

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Table 2 shows seven variables (age, area of shop, location, vacancy of shop, gross turnover of sales, population of customers and retail mix) having mean scores of 3.00 and above. Since the mean scores of the variables falls within the region of 3.00, it therefore depicts that they are the variables frequently used by the Estate Surveyors and Valuers in determining shopping center rents in the study area and these are the variables used in this study for the Multiple Regression Analysis shown in Tables 3, 4 and 5

Table 3: Analysis of Variance (ANOVA)

Model	Sum of	Df	Mean	F	Sig
	Squares		Square		
Regression	8.224E9	7	1.175E9	224.464	$.000^{a}$
Residual	3.926E8	75	5234093.947		
Total	8.617E9	82			

Source: Analysis of Field Data, 2011

Table 4: Model Summary of the Regression of the Determinant of Shopping Center rents

Model	Unstandardized Coefficient		Standardized Coefficient		
		Std Error of			
	В	the Estimate	Beta	T	Sig
Constant)	-15616.199	5199.027		-3.004	.004
AGE	790.898	112.504	.402	7.030	.000**
AREASHOP	145.358	16.194	.379	8.976	.000**
LOC	25306.601	2337.247	1.193	10.828	.000**
VACS	2137.610	219.283	.422	9.748	.000**
GROSTS	.596	.108	.702	5.533	.000**
POPCUST	-171.068	58.159	407	-2.94	.004*
RETMIX	-27966.652	1719.530	-1.350	-16.264	.000**

Source: Analysis of Field Data, (2011)

 $R^2 = 0.954$

Adjusted $R^2 = 0.950$

Standard Error of the Estimate = 2287.81423

^{*}denotes 1% significant level

^{**}denotes absolute significant level

Table 5: Zero - Order, Partial, Part Correlation Coefficients in Akure

	Correlation			
	Zero- order	Partial	Part	
(Constant)				
AGE	.229	.630	.173	
AREASHOP	.458	.720	.221	
LOC	.258	.781	.267	
VACS	235	.748	.240	
GROSTS	.730	.538	.136	
POPCUST	.761	322	072	
RETMIX	205	883	401	

Source: Analysis of Field Data, (2011)

Table 3, 4 and 5 show the empirical results of the regression model. In table 3, the overall model fits well as indicated by the significant value which is below 0.05 and Adjusted R^2 (0.950). The Adjusted R^2 0.950 implies that 95.0% of the variance in the rental value of shopping centers can be explained by variation in the independent variables.

In Table 4, all the independent variables (age (AGE), area of shop (AREASHOP), location (LOC), vacancy of shop (VACS), gross turnover of sales (GROSTS), population of customers (POPCUST) and retail mix (RETMIX)) are significant. The parameter for area is positive and significant indicating that large shops demand higher rents in the market place. Furthermore, the level of vacancy in shopping centers has direct implication on the price of shopping center property investment. This is not contrary to expectation as Hagen and Hansen (2010) noted that as vacancy rate in shopping center declines over time, the return (value) on the rental property investment rises ceteris paribus increases. Also, rents are expected to be highest when population is dense, there is high gross turn over, good location and a good retail mix. With a good retail mix customers are able to satisfy all their needs in one shopping center. This is in agreement with the findings of Anikeeff (1996) that retail mix is very important to shopping centers since it will satisfy the consumers' multipurpose and comparison of shopping needs.

In addition, the relative importance of the variables (population of customers (POPCUST), gross turnover of sales (GROSTS), and area of shop (AREASHOP)) can be seen from the Zero – order, Part and Partial correlations between property values and the independent variables (Table 5). The Pearson coefficient of correlation between the rental value of shopping centers and population of customers (POPCUST), gross turnover of sales (GROSTS), and area of shop (AREASHOP) are 0.761, 0.730 and 0.458 respectively. Since this variables are positively correlated to the dependent variable, it confirms the expected relationship between these variables and the rental value of shopping space.

CONCLUSION AND RECOMMENDATION

Despite the increasing importance of shopping centers, research on the determinants of shopping center rents in Nigeria has been scarce; hence the need for the research in the

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country. Multiple regression analysis was used to link rental values with the various independent variables (age, area of center, location, vacancy of shops, tenant mix, population and gross turn over in the shopping complex). The model shows that all the variables used in the analysis are significant in determining the rental value of shopping centers in the study area.

In the light of the above, it is recommended that Estate Surveyors and Valuers, should ensure that people are aware of their services as to include Estate Agents instead of living it in the hands of quacks. This will help in the reduction of the incidence of shopping centers' vacancy rate as a result of high rent charged. In addition, government should give priority to the area where shopping centers can be located for maximum productivity and income generation. This gesture will forestall void been experienced in shopping centers because of the high rent charged by landlords especially in area where there is no market.

REFERENCES

Adair, A.S., Berry, J.N. and McGreal, W. S. (1996). Valuation of residential Property: analysis of participant behavior. Journal of Property Valuation and Investment, 14 (1), 20 -35.

Anikeef, M. (1996). Shopping Center Tenant Selection and Mix: A Review, in Megatrends in Real Estate, J. D. Benjamin (Ed), Norwell: Kluwer Academic Publishers.

Baker, G. R. (2000). Towards a Dynamic Aggregate Shopping Model and its Applications to Retail Trading Hour and Market area Analysis, Regional Science, 2000, 79, 413 - 34

Bello, V.A (2000). An Empirical Analysis of the Determinants of Residential Property Values in Lagos Metropolis. M. Tech thesis submitted to The Post Graduate School, Federal University of Technology, Akure.

Bello, M. O. and Bello, V. A. (2007). The Influence of Consumer Behaviour on the Variables Determining Residential Property Values in Lagos, Nigeria. American Journal of *Applied Sciences*, 4 (10), 774 – 778.

Beyard, M. D and O' Mara. W. P. (1999). Shopping Center Development Hand book 3rd Edition, Washington, D. C, Urban Land Institute.

Biba, G., Des Rosiers, F., Theriault, M and Paul, V. (2006). Big Boxes Versus Traditional Shopping Centers: Looking at Households' Shopping Trip pattern. Journal of Real Estate Research, 14 (2), 176 -202.

Brown, S. (1992). Tenant Mix, Tenant Placement and Shopper behaviour in a planned shopping center. The Services and Industrial Journal, 12 (3), 384 – 403.

Carter, C. C and Vandell, K. D. (2005). Store Location in Shopping Centers: Theory and

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Estimates. *Journal of Real Estate Research*, 27 (3), 238 – 259.

Cox, R and Brittain, P. (1998). Retail Management, London, Pittman Press Limited. Dale, G. (1989). The Business of Retailing, Hutchinson Education, London.

Des Rosier, F. D., Lagana, A., Theriault, M and Beaudoin, M. (1996). Shopping Centers House Values: An Empirical Investigation. *Journal of Property Valuation and Investment*, 14 (4), 41 – 62.

Des Rosiers, Theriault, M and Menetrier, L. (2005). Spatial Versus Non – Spatial Determinant of Shopping Centers Rents: Modeling Location and Neigbourhood – Related factors. *Journal of Real Estate Research*, 27 (3), 294 – 304.

Fraser, W. D. (1988). Valuation Techniques: A matter of Evidence and Motive in French, N. (2001). Editorial Paper. *Journal of Property Investment and Finance*, 19 (4), 339 – 340.

French, N. (2000). Editorial Column. *Journal of Property Investment and Finance*, 18 (3).

Gobillon, L., Selod. H and Zenou, Y. (2003). Spatial Mismatch: From the Hypothess to the Theories Working Paper # 693, 12A: Brown, Germany.

Hagen, D.A. & Hansen, J.L. (2010). Rental Housing and the Natural Vacancy Rate. *Journal of Real Estate Research*, 32(4), 413 – 433

Hager, D. P and Lord, D. J. (1985). The Property Market, Property Valuations and Property Performance Measurement. Institute of Actuaries, London.

Harris, C. D and Ullman, E. I. (1945). The Nature of Cities. *Annals of the American Academy of Political and Social Sciences*, 242, 7-17.

Hetherington, J.T. (1988). Forecasting of Rents. In A. R. Macleary and N. Nanthakumaran, editors, Property Investment Theory, London: Spon.

Kihore, R. (1996). Discounted Cash Flow Analysis in Property Investment Valuations. *Journal of Property Valuation and Investment*, 14 (3), 63 – 70.

Kirkup, M and Rafig, M. (1994). Managing Tenant Mix in New Shopping Centers. *International Journal of Retail and Distribution Management*, 22 (6), 29 – 37.

Mejia, L. C and Benjamin, J. D. (2002). What Do We Know About the Determinants of Shopping Center Sales? Spatial Vs Non – Spatial Factors. *Journal of Real Estate Literature*, 10 (1), 3 – 26.

Miceli, T. J., Sirmans, C. F and Stake, D. (1998). Optional Competition and Allocation of Space in Shopping Centers. *Journal of Real Estate Research*, 16 (1), 113 – 26. Millington, A. (1996). The Valuation of Rental Property in Australia. *Journal of Property*

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Valuation and Investment, 14(3), 33 - 62.

Oladapo, R. A. (2000). The Analysis of Office Property Market in Akure, Ondo State. M. Tech Thesis. Department of Estate Management, Federal University of Technology, Akure.

O'Roarty, B., McGreal, S. and Adair, A. (1998). Clustering Retailers by Store Space Requirements: Comparable Evidence, retail function and rental value. *Journal of Property Valuation and Investment*, 16 (2) 133 – 143.

Richards, S. T., Clement, K. L and Marie, S. L. (1999). The Determination of Rent in Shopping Centers: Some Evidence from Hong Kong. *Journal of Real Estate Literature*, 7, 183 – 196.

Roulac, S. E. (1982). Valuation Decisions in a Turbulent Economy: Challenges to Tradition, Opportunity for Distinction. *The Appraisal Journal*, October, 564 – 580.

Sirmans, G. S; Sirmans C. F and Benjamin, J. D. (1989). Determining Apartment Rent: The Value of Amenities, Services and External factors. *Journal of Real Estate Research*, 4, 33 - 44

Sirmans, C. F and Guidry, K. A. (1992). The determinant of Shopping Center Rents. *Journal of Real Estate Research*, 8, 107 – 16.

Troth, A. (1980). Property Valuation Methods: Interim Report, Polytechnic of the South Bank. Royal Institution of Chartered Surveyors, London.

BIOGRAPHICAL NOTES

Dr (Mrs.) V. A. BELLO is a Senior lecturer in the Department of Estate Management and the Sub Dean of the School of Environmental Technology, in the Federal University of Technology, Akure, Nigeria. She graduated from the Department of Estate Management, Obafemi Awolowo University, Ile – Ife with a Bachelor of Science Degree (Second Class Upper Division). She obtained a Master of Technology and PhD from the Federal University of Technology, Akure, Nigeria. Her research interest is in Property Valuation. Dr (Mrs.) Bello has published in many international and local journals. She is also an active member of the Nigerian Institution of Estate Surveyors and Valuers, Ondo State Branch.

CONTACTS

Dr (Mrs.) Bello, Victoria Amietsenwu Federal University of Technology, Department of Estate Management, P.M.B 704, Akure Ondo State Nigeria

Tel: +234-803-668-8879

E- mail: vicbellofuta@yahoo.com