## THE INFLUENCE OF CONTEMPORARY **MODELS ON VALUATION PRACTICE IN NIGERIA**

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## AN OVER VIEW

- . In recent past, Property valuation has attracted a lot of attention especially in the areas of accuracy, variance and the development of new techniques. The issue here is: how has the Nigerian practitioner responding to this global development? In this wise, this paper based on empirical studies involving 250 estate valuers working in both public (97) and private (153) establishments; examine the practitioner's awareness, understanding, usage and problems of using any of the contemportry methods. any of the contemporary methods.
- any of the contemporary methods. The study, using hypothesis testing concerning proportion in a Bernoulli experiment, reveals that majority of the Nigerian practitioners are not aware of, do not understand, and had not been using any of the contemporary methods. The study recommends that adequate attention should be focused on resolving the myriads of institutional and economic problems inhibiting the evolution of adequate property market infrastructure and valuation practice by the Nigerian Institution Of Estate Surveyors And Valuers; and Estate Surveyors And Valuers Registration Board Of Nigeria.

## THE CONVENTIONAL VALUATION METHODS IN THE NIGERIAN REAL ESTATE PRACTICE

- Valuation practice started in Nigeria by a handful of RICS general practice surveyors and valuers in the late 1960s. By 29th August, 1975, Decree No 24 0f 1975 was promulgated to establish the Estate Surveyors and Valuers Registration Board of Nigeria as the official machinery for the regulation of the profession of estate surveying and valuation in the country Valuation practice fashioned in line with the UK practice continued without occasion for complaint in the 1960s and 1970s. With reference to income producing property, investment method of valuation were variously employed.
- Studies conducted by Ogunba (1997), Ogunba and Ajayi (2000) and Ogunba et al (2005) reveal that the Nigerian valuation practitioners believed that the investment method currently provides capital value estimates that are lower than market prices, consequently there is a general shift towards the adoption of Cost Method of Valuation even for Income producing property Income producing property
- Akinyode (1987), in a survey of sixty seven valuation reports drawn from fifteen valuers revealed that the Depreciated Replacement Cost method was the most important basis of valuation used by valuers in Nigeria. Similarly, a survey on the contemporary methods of valuation in Nigeria, a decade after Akinyode's study, showed that the Nigerian Estate Surveyors and Valuers had not seen the need to discard the Depreciated Bealescenet. Cert Method where it was reconcernet to de ce/Queba Replacement Cost Method where it was necessary to do so (Ogunba, 1996).

## THE CONTEMPORARY MODELS

- The contemporary models can be categorized as follows:
- **Discounted Cash Flow models** Statistical Approaches
- Neural Network and
- G I S. Approach.
- G I S. Approach. The Discounted Cash Flow model is the most appealing to the practitioners. In studies carried out by Mokrain (2002), valuation methods employed in the UK, Netherlands, Germany, France and Sweden vary between DCF approaches and income capitalization approaches. D C F models are explicit and are formulated to address the conventional method of over valuation of the term and undervaluation of the reversion and can be grouped as follows:
- Growth explicit models: Greaves 1972, Marshal's equated yield analysis (1976) Sykes Rational model (1981) is hybrid version of equated yield model.
- Real value approaches: wood (1973), real value/ equated yield approach: -simplified and remodeled version of greave's real value approach (Crosby, 1982).
- Simplines and remodeled version or greave shear value approach (crosby, 1982). Other models variously proposed in the literature include Hierarchical and statistical approach, Analytical Hierarchical Process (AHP), Verbal, unbalanced scaling technique commonly used in attitudinal research, Neural network model, Time series, G I S and Hedonic analysis (Greaves, 1984; Yeosweeching, 1983; Ong and Chew, 1996; Adair, Berry and McGreal, 1996; Do and Grudnitski, 1992; Conellan and James, 1996; Wyatt 1996)
- A lot has been written on the need and usefulness of each of these models, some of which are readily applicable to Nigeria real estate market while others are not. The purpose of this paper is not to replicate such views but to determine empirically the relevance of these models to Nigeria property market.

### THE METHODOLOGY

_	Since the study aims at assessing the encet of the contemporary models to valuation practice, the first step in the empirical analysis therefore, is to determine the need for such models. In this wise, the analysis were presented in two stages as follows: the extent of valuation accuracy and variance within the conventional valuation practice and
-	the influence of the contemporary models.
	For the study involving valuation accuracy and variance, fifteen (15) estate firms were engaged to value six recently purchased properties (A, B C D E and F) for sales and mortgages. Their valuations were compared with the actual purchase price. The dispersion between these valuations and the purchase price were analyzed and tested using t-statistic
	For the study involving the contemporary models, data were obtained from the questionnaire distributed to Estate Surveyors and Valuers practicing within the Lagos Metropolis and Akure, the Ondo state capital. Using the methodology of Finlay and Tyler (1991) and Bello, (2003), the respondents provided the primary data in respect of the following issues.

- Awareness of the model: This deals with the extent to which the Estate Surveyors and Valuers have heard about each of the models.
- Understanding of the model: This describes the extent to which the Estate Surveyors and Valuers understand each of the models.
- Usage of the Model: This determines to what extent, the Estate Surveyors and Valuers have recently used each of the models.

### DATA ANALYSIS AND DISCUSSION OF RESULTS Valuation Variance

#### TABLE 3: MEASURES OF VARIATION BETWEEN THE VALUATIONS OF THE FIRMS

PROPERTY	RANGE	STANDARD DEVIATION	KURTOSIS	COEFFICIENT OF VARIATION
PROPERTY A	915000.00	215623.68012	7.403	3.58
PROPERTY B	600000.00	146639.33728	1.155	2.27
PROPERTY C	1100000.00	286680.50908	0.028	4.71
PROPERTY D	3600000.00	10639884.53213	-0.693	29.31
PROPERTY E	4708000.00	1269735.10548	0.152	2.90
PROPERTY F	1000000.00	3163116.97238	-0.795	2.36

## DATA ANALYSIS AND DISCUSSION OF RESULTS Valuation Accuracy

#### TABLE 4: ONE SAMPLE T- TEST

	Test Value (Sales Price)	Т	df	Sig. (2- tailed)	Mean Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Property A	6000000	.377	14	.712	21000.00000	-98408.4140	140408.4140
Property B	6400000	1.382	14	.189	52333.33333	-28872.8249	133539.4916
Property C	5000000	14.726	14	.000	1090000.00000	931241.6257	1248758.3743
Property D	25000000	4.113	14	.001	11300000.00000	5407828.3417	17192171.6583
Property E	4000000	11.681	14	.000	3829666.66667	3126510.8026	4532822.5308
Property F	28000000	8.029	14	.000	6557466.66667	4805790.8736	8309142.4598

### DATA ANALYSIS AND DISCUSSION OF RESULTS The Influence of the Contemporary Models

Table 5: Test of Hypotheses: Summary of Findings (Z – Values).

	HYPOTHESIS 1 At Least 51% Are Not Aware X* (Z)**	HYPOTHESIS II At Least 51% Have Not Used This Measure X (Z)	HYPOTHESIS III At Least 51% Do Not Understand This Measure X (Z)	DECISION
DISCOUNTED CASH FLOWS	220 (11.702)	248 (15.25)	64 (-8.03)	Accept I, II & Reject III
NEURAL NETWORKS	250 (17.28)	250 (17.28)	250 (17.28)	Accept I, II& III
TIMES SERIES	250(17.28)	250 (17.28)	230 (12.97)	Accept I, II& III
HEDONIC/REGRE SSION MODEL	250(17.28)	250(17.28)	237 (13.85)	Accept I, II& III
GIS	250(17.28)	250 (17.28)	250 (17.28)	Accept I, II & III

# CONCLUSION

 This study has revealed the inadequacy of the conventional valuation methods being used by the Nigerian real estate practitioners and hence confirmed the need for Nigeria valuers to employ technique(s) that will enhance the quality of valuation services rendered to their clients. The study further revealed that, in spite of the obvious need for the contemporary valuation models, there is a low level of awareness, understanding and usage of these models by the Nigerian real estate practitioners.

# POLICY IMPLICATION

- The inability of the majority of these practitioners to understand the theoretical basis underlying these valuation techniques could be linked to the nature and content of their undergraduate curricula. Presently, except at graduate levels, most of the higher institutions offering courses in estate management in Nigeria have not incorporated the teaching of these models into their curricula and academic programmes.
- these models into their curricula and academic programmes.
  This need for Estate Surveyors and Valuers to provide qualitative service to their clients calls for changes in the curriculum and academic programmes of the polytechnics, colleges of technology, and universities offering courses in estate management as well as the post qualification professional training provided by the Nigerian Institution of Estate Surveyors and Valuers

