

Valuers' strategies for coping with the dearth of market data in two Nigerian cities: Ibadan and Abeokuta

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ABSTRACT

Access to and analysis of data, especially market-related data, remains central to professional valuation. This paper examines the ease of eliciting market data for valuation purposes by valuers in the residential property sector and the reaction to the dearth of data among valuers in the two south-western Nigerian cities of Ibadan and Abeokuta. A five-point Likert-type scale was used to measure respondents' disposition towards alternative data sources with the results analysed using weighted mean score and logit regression. The study revealed that rental value and comparable sales price were most easily accessed with the greatest challenge being to access property yields and appropriate rates of depreciation. Given the difficulties in accessing data, it was found that valuers in the study area either make recourse to colleagues, shift to the next available method or adopt various alternative data-scooping measures, with years of practical experience, position in the firm and professional status exerting considerable influence on decisions. The paper suggests the establishment of a centralized databank for Nigerian valuers and a requirement for them to maintain a logbook of valuation computations with records of data used to justify otherwise inexplicable valuations, with further research into the interpretation and derivation of yields among Nigerian valuers recommended.

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Introduction

Valuation, being an assessment of the most probable price for which a property asset could be exchanged, is a means towards achieving a specific end and a basic decision-making tool. This makes it imperative for the value figure obtained from the exercise to be both accurate and reliable. Inaccuracy and unreliability of the value estimate determined and reported could lead to loss of investor funds and may damage the image of the valuer and his profession. For instance, the economic meltdown of 2007/2008 in the United States of America, which became a trauma for the whole world, has been alleged to be partly traced to "appraisal fraud" in respect of mortgage collateral (Black, 2013). While improvement in information and communication may ease the data challenge, this is not necessarily automatic as information must be generated before its communication may be considered.

Valuation is not a strict mathematical exercise but rather a process of data gathering, analysis and synthesis aimed at replicating most rational human economic behaviour within a defined framework. Ability to access all relevant data is, therefore, essential to replicate human economic behaviour. Of course, it is not only valuers that lament inadequate data. Davidoff and Hufford (2015) decry the dearth of data on business litigations, observing that most cases under the category are resolved by settlement, while those handled in courts seldom have a database of legal arguments and proceedings in matters capable of statistical analysis. But if easily reported and documented court proceedings are taken to be constrained sources of information, how might property transactions, that are mostly shrouded in secrecy, be considered?

Adomatis (2015) emphasized the predicament of British valuers having an absence of comparable properties and lack of data with respect to green residential buildings. However, Britain and most developed economies have apparently outgrown a basic lack of comparable data for common residential and commercial properties following a more explicit mode of property transaction, documentation and prompt publicity of official reports on the property market.

The subject of data as a challenge to valuation accuracy in Nigeria has received considerable attention among researchers in recent years (see, for example, Aluko, 1998; Ayedun, Oloyede, & Durodola, 2012; Ogunba & Ajayi, 1998; Onyejiaka, Oladejo, & Emoh, 2015). This is partly due to the fact that most activities in the property market have their success or failure hinging on the availability and interpretation of requisite data. Estate agents, prospective vendors, purchasers, lessees and valuers all need access to good and reliable data for effective decision-making, which is often hard to come by due, essentially, to imperfections in the local property market.

BizWatchNigeria (2014) reported the revelation by the nation's Surveyor-General that less than 3% of property owners in Nigeria have an official title or Certificate of Occupancy, almost four decades after the enactment of the Land Use Act, 1978, indicating the dismal proportion of property transactions that are officially documented in the country. Even among those transactions requiring official consent, the high cost of title transfer is being circumvented through a practice of "double agreement" with an agreement carrying a lower price being tendered to the authorities. Thus, relying on official records may result in the use of erroneous data.

Given the importance of data in valuation, it may be debated whether a valuation instruction should be declined for lack of reliable data. This is seldom conceivable in the Nigerian business world. Perhaps such an action could constitute professional disservice, since the valuer is expected to have greater access to market information than his client. However, what actually are the types of data required from the market and to what extent are they easily obtained? Where the requisite data is unavailable, how have valuers been handling the situation? These issues are the focus of this paper but the literature thereon is limited both within and outside Nigeria. This introduction is followed by a brief review of related literature, then the presentation of methodology and study area. Thereafter, the findings of the study are presented and discussed with conclusions thereafter.

Literature review

Moody and Walsh (1999) posited that information was increasingly becoming the most valuable asset of business firms. Required information itself is a product of relevant and adequate data. Data for valuation take different forms including property-specific data, market data and economic data. These various data types must be collected and analysed into useful information to arrive at an assessment of value. Olawore (2000) argued that the real estate (including property valuation) profession is one of service and thrives on information. Information itself is the soul of business and the basis of knowledge. According to Wyatt (1996), all valuation techniques rely on the collection and analysis of data: general data such as social, economic, planning and environmental attributes; and specific data including local market conditions, details of transactions such as location, physical and functional form and legal characteristics. Gilbertson and Preston (2005) agreed on the importance of information adding that, in the past, it was market knowledge that set valuers apart from their competitors, while, nowadays, their distinguishing competence relates to what they do with that data. Like any other professional service, client satisfaction is a key to success in valuation.

Suriatni and Buyong (1998) observe that the main reason for poor quality valuation is the massive amount of data involved. The validity of a final estimate of market value depends to a great extent on how well it can be supported by market data (Appraisal Institute, 1992; Wyatt, 1996). Haywood County (2011) contended that the validity of an appraisal can be measured against the supporting evidence from which it was derived and its accuracy against that very thing it is supposed to predict – the actual behaviour of the market. According to RICS (2002), objectivity is a fundamental ethical requirement for professional valuers without which confidence in the valuation system is called into question. Unfortunately, however, confidence and objectivity cannot be attained where the valuer encounters an insurmountable dearth of data in the process of carrying out his assignment.

As imperative as data is to effective valuation, researchers have identified a dearth of valuation data as a major problem in many economies. Wyatt (1996) reported that there was poor access to comprehensive property transaction data in England and Wales. Calhoun (2001) also added that, in the United States, data gaps and statistical uncertainties persist and to a certain extent are unavoidable given the infrequency and idiosyncratic nature of real property transactions. Hui, Cheung, and Pang (2010) found that, although Hong Kong was considered an active market, data on real estate transactions were “sparse” in statistical terms and obtaining accurate property valuations based on previous transaction prices posed several key methodological challenges.

Within the Nigerian property market, there have been numerous studies identifying the challenges confronting valuers in relation to accessing pertinent data (Ajayi, 2009; Aluko, 2007; Bello & Bello 2007; Ogunba, 1997). Babawale and Omirin (2011) and Babawale (2012) have also noted that Nigerian financial institutions are already becoming weary concerning the reliability of mortgage valuations being prepared by valuers, ostensibly due to inadequate data input and analysis. The authors recognized dearth of data as an impediment to valuation accuracy and/or reliability. Onyejiaka et al. (2015) acknowledged the absence of sufficient sales evidence for residential properties within Anambra State, Nigeria and suggested that valuers resort to the use of cost method. Apart from this last paper, which was influenced through its original design for improving the application of cost method,

none of the previous literature has paid specific attention to identifying the various types of data need and none has attempted to measure the level of accessibility of the various types of market data.

The next important consideration is the consequence of the absence of data in valuation. Absence of data may expose a valuer to undue influences (Ashaolu & Olaniran, 2015). Knowledge is power and clients who have it could use it to their advantage, especially at the expense of a constrained valuer. The scenario has been confirmed by researchers in valuation. For instance, Levy and Schuck (1998) conducted research into clients' influence on reported values in New Zealand by interviewing five registered valuers and by grouping the clients into the "sophisticated" and "unsophisticated" categories. The study found that sophisticated clients exerted information power in their client – valuer relationship to influence the latter's assessment of value. In related works, Levy and Schuck (1999, 2005) revealed that clients with expertise and knowledge of the property market usually had their ways to influence valuers through their expert/information power.

When the valuer is confronted with a dearth of pertinent data, the available options could vary widely. In developed countries, like the United States, alternative routes to eliciting market data could include government surveys, property listing and tax assessments (Calhoun, 2001). In fact, valuers in the United Kingdom have regular access to the prompt monthly property transactions report from the Department of Statistics (HM Revenue and Customs, 2015). Not only is such prompt release of official records a rarity in developing economies like Nigeria, seldom will the contents of such reports reflect actual field transaction details in a market with very limited official control. But for the non-reliability of official and documented property transaction prices in Nigeria, which are often deliberately lowered to reduce tax burdens, the records of the Ministries of Land would have served as an alternative source of data. However, many landed property transactions are not perfected through official documentation in Nigeria partly due to a tax evasion intent and the fact that only a small proportion of land titles have official records. Tax assessments, such as are obtainable under the Lagos State land use charge law, could provide a plausible value guide except that values under the law are derived using a mathematical formula rather than reflecting the market realities within the property's local setting.

Where spatial referencing of property value can be effective through value mapping, Wyatt (1996) considered the use of geographical information systems for value estimation. Yu, Liu and Zhang (2014) corroborated this position with a demonstration of how what they coined a "3DGIS" technique could be used to improve the management of transaction data in property valuation. Hui et al. (2010) also advocated the use of a hedonic-type value estimation method, though this variant still presumes the existence of reliable historical data on transactions from comparable properties. Given that the Nigerian residential valuation environment has not developed to the stage of providing market data from official statistical reports nor is sufficiently robust to take optimum advantage of contemporary technologies, it is relevant to understand the strategies being adopted to cope with the dearth of data challenge, which has not been addressed by previous Nigerian researchers.

Methodology

Field work for this study was conducted in December 2014 in the south-western Nigerian cities of Ibadan and Abeokuta, being those cities with the most vibrant residential property

market activities in the region. Findings from these cities tend to encapsulate the typical attitude of a Nigerian valuer outside the cosmopolitan centres of Lagos and Abuja, with a preponderance of related studies focusing on Lagos alone (see, for example, Ajibola, 2010; Ajibola and Oletubo, 2011; Idowu, Babawale, & Anyakora, 2012; Ogunba and Ajayi, 1998).

This study administered a structured questionnaire using a purposive sampling technique. Respondents were required to, among other things, identify key data required from the market, rank their ease of access to each, appraise the consequential relevance of various methods to the valuation of residential property investments and specify their course of action under various levels of data availability. The regular attendance register of practising estate surveying firms at the monthly branch meetings of the Nigerian Institution of Estate Surveyors and Valuers (NIESV) in both cities served as a sampling frame. The intention was to cover the registered estate surveyors and valuers (ESV) in each city but only 85 of the 92 on roll at Ibadan and 54 of the 63 in Abeokuta could be physically traced for the survey and analysed responses were limited to one ESV each from firms that regularly undertake valuation exercises using the minimum benchmark of two per month (Asholu & Olaniran, 2015). Eventually, only 33 respondent ESVs were found useful for the study.

The questionnaire survey, which was carried out directly by the researchers, was supplemented by an in-depth interview of two and one principal partners in Ibadan and Abeokuta, respectively, to further clarify the basis of actions being taken. Scoring of variables by respondents was carried out on a five-point Likert-type scale. The data were analysed using descriptive and ordinal logistic regression at a 5% level of significance.

Model specification

Assume:

Valuation Data Needed = $f(\text{Coping strategies})$

$\text{VDN} = f(\text{CS})$

$\Pr(y \leq j/x) = \Lambda(\Gamma_j - \beta_0 - X'\beta_i)$ for $j = 1, J - 1$

$\Pr(\text{VDN} \leq j/\text{CS}) = \Lambda(\Gamma_j - \beta_0 - X'\beta_i)$ for $j = 1, J - 1$

where:

X_i = regressors (independent variables which are next method as NXM; scooping method as SCM; colleagues assistance as COA; client help as CLH; intuition as INT; abandoning as ABD)

$X_1 = \text{NXM}; X_2 = \text{SCM}; X_3 = \text{COA}; X_4 = \text{CLH}; X_5 = \text{INT}; X_6 = \text{ABD}$

and:

Γ = threshold; β_0 = intercept; β_i = coefficients of regressors.

Λ = is a cumulative distribution function (CDF), it represents the probability that a random variable e_i will be as small or smaller than $b_0 + b_1X_i$

j = lowest response category for VDN; J = highest response category for VDN

Therefore, the model explicitly becomes:

$\Pr(\text{VDN} \leq j/x) = \Lambda(\Gamma_j - \beta_0 - X'\beta_i)$ for $j = 1, J - 1$; for this model $j = 1$ and $J = 5$ (With the use of five-point likert scale)

$\Pr(\text{VDN} \leq 1/\text{CS}) = (\Gamma_1 - \beta_0 - (\text{NXM}\beta_{\text{nxm}} + \text{SCM}\beta_{\text{scm}} + \text{COA}\beta_{\text{coa}} + \text{CLH}\beta_{\text{clh}} + \text{INT}\beta_{\text{int}} + \text{ABD}\beta_{\text{abd}}))$ for $j = 1, J - 1$

$\Pr(\text{VDN} \leq 1/x) = (\Gamma_1 - \beta_0 - (X_1\beta_1 + X_2\beta_2 + X_3\beta_3 + X_4\beta_4 + X_5\beta_5 + X_6\beta_6))$ for $j = 1, J - 1$

A priori expectation; $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6 > 0$.

Table 1. Description of respondents to the survey.

Characteristics	Frequency	%
<i>Age in practice</i>		
Less than 10 years	9	27.27
10–20 years	13	39.40
Above 20 years	11	33.33
<i>Status in firm</i>		
Staff	9	27.27
Partner	4	12.12
Principal	20	60.61
<i>Highest academic attainment</i>		
Below HND/BSc	1	3.03
HND/BSc	25	75.76
MBA/MSc	5	15.15
PhD	2	6.06
<i>Professional status</i>		
Graduate member/probationer	7	21.21
Associate	21	63.64
Fellow	5	15.15

Source: Field survey, 2014.

Table 2. Respondents' score of data accessibility.

Type	Score (out of maximum 165 or 33 × 5)	Rank	%
Comparable sales price (CSP)	111	2	67.27
Yield (Y)	79	5	47.88
Rental value (RV)	142	1	86.06
Cost index (CI)	100	3	60.61
Depreciation rate (DR)	86	4	52.12
Average score			62.79

Source: Field Survey, 2014.

Notes: 5 = very easily, 4 = easily, 3 = moderately, 2 = uneasily, and 1 = very uneasily

Results and discussions

Table 1 provides a description of survey respondents. More than 70% of the respondents have had more than 10 years practical experience, with over 60% being Principal Partners in their respective firms with all except one having undergone a minimum of 5-year formal education of first degree or the Higher National Diploma. Further, almost 80% of the survey respondents had been professionally registered for practice. Based on the foregoing, the decisions and opinions expressed by these respondents could be taken as typical of that of an informed and experienced professional in their field and within the locality of practice.

In Table 2, five common variable inputs were identified as important from market analysis and the ease of accessing each was weighed. While rental value was ranked the highest (with over 86%) and followed by comparable sales evidence (about 67%), the data on yield was ranked least (or most difficult with less than 48%) to access followed by that on depreciation rate (about 52%). It was not surprising that rents proved easiest to establish within the thriving residential property markets of Ibadan and Abeokuta. However, earlier studies have reported the difficulty of establishing true sales transaction prices in the Nigerian property market (Ayedun, Oloyede, & Durodola, 2012; Ogunba & Ajayi, 1998; Onyejiaka et al., 2015). Reasons often adduced include secrecy of transaction details, as most properties do not have official titles, duplicity of agreements to cut down on excessive

costs of official title transfer and the sharp practice of “loading” by agents that often veils the true transacted price between the vendor and buyer. When the paradox of relatively easy access to sales evidence and secrecy of property transactions was raised during interview with three of the respondents, two somewhat echoed a “popular” perception in practice that the “best of the recent serious offers” on a property listed for sale is often taken as an approximation of the transacted price. They justified this belief on the premise that “the offer reflects prevailing economic realities” and that the details of listed properties are easily obtained for comparative analysis. One respondent, nevertheless, conceded that such an anticipatory transaction could be misleading.

The recent valuation of collateral properties from non-performing bank mortgages by the Asset Management Corporation of Nigeria (AMCON) requires that valuers provide statistics of three comparable properties which have guided their opinion of value. Among the information required is date of sales transaction and specific address of the properties neither of which could be given with certainty in respect of anticipatory sales. Again, it was discovered that most comparable transaction prices had to be extracted with diligence by valuers who are privy to listed properties that were found to have been sold, often times by the more persuasive non-professional estate agents. The usual limitation here, it was identified, is the difficulty of establishing some detailed property features and circumstances of disposal for comparative analysis.

Another interesting finding from the study is the least weight given to property yields. This finding agrees with previous calls for an appropriate databank on yields for use in the investment approach to residential property valuation in Nigeria. The the professional body earlier commissioned research on the subject (Igboko, 1992) while contemporary studies are still linking the non-popularity of the investment approach in property valuation to non-reliable data on yields (see, for example, Idowu et al., 2012; Ojetunde, 2013). However, given that yield or capitalization rate is an interpolation of rent and sales price, both of which are easily ascertained from the findings of this study, raises the question of how is property yield to be determined? Such issues as whether only published or documented yield rates should be applicable in valuation could form another subject for research within the Nigerian practice.

Actual responses to inadequacy in data gathered in the course of residential property valuation among the respondents are presented in Tables 3–6, as correlated with their characteristic features. Generally, about 73% of the respondents make recourse to their colleagues for assistance, while some 36% explore other plausible methods of valuation. However, 27% were found to opt for indirect sources of scooping required data. The in-depth interviews revealed that this indirect approach, which respondents cautioned is fraught with errors of judgement, includes, among others, comparative analysis of particular properties’ location with another one where transaction data is known and historic trending/indexing of property prices from previously known price data with other rated courses of action including approaching the client for information (15%) and using intuition or judgement (9%). The use of intuition, which was least rated by the respondents in the study has, however, been reported to be prevalent among Lagos valuation practitioners (Ajibola & Oletubo, 2011). These various options are, however, non-exclusive as a valuer who could not obtain expected assistance from a colleague may resort to using the next plausible method of valuation, for instance. It is also noteworthy that none of the respondents considered difficulty in accessing data as sufficient basis for abandoning a valuation assignment.

Table 3. Reaction to inadequate data by respondents' years of practicing experience.

Action taken in absence of adequate valuation data	Less than 10 yrs	10–20 yrs	Above 20 yrs	Total (%)
Opt for next available method (e.g. cost)	2 (22%)	5 (38%)	5 (45%)	12 (36.4)
Adopt indirect data-scooping method	5 (56%)	3 (23%)	1 (9%)	9 (27.3)
Seek help from colleagues	6 (67%)	13 (100%)	5 (45%)	24 (72.7)
Approach the client for assistance	2 (22%)	1 (8%)	2 (18%)	5 (15.2)
Use of intuition/imagination	1 (11%)	2 (15%)	0	3 (9.1)
Abandon the assignment	0	0	0	0 (0)

Source: Field Survey, 2014.

Table 4. Reaction to inadequate data by respondents' position in firm (level of responsibility).

Action taken in absence of adequate valuation data	Staff	Partner	Principal	Total (%)
Opt for next available method (e.g. cost)	3 (33%)	2 (50%)	7 (35%)	12 (36.4)
Adopt indirect data-scooping method	5 (56%)	1 (25%)	3 (15)	9 (27.3)
Seek help from colleagues	6 (67%)	2 (50%)	16 (80%)	24 (72.7)
Approach the client for assistance	2 (22%)	1 (25%)	2 (10%)	5 (15.2)
Use of intuition/imagination	1 (11%)	1 (25%)	1 (5%)	3 (9.1)
Abandon the assignment	0	0	0	0 (0)

Source: Field Survey, 2014.

The influence of respondents' characteristics on their behavioural patterns can be examined through the criteria of experience (measured by years in practice), level of responsibility (as per position in firm), educational qualification and professional status (level of professional affiliation). As shown in Table 3, all those respondents in the average experience (10–20 years) bracket choose assistance from colleagues with those below 10 years in practice divided between this option and that of indirect data scooping. On their own, the top-experience category is also divided between seeking assistance from colleagues and opting for another method of valuation.

A possible inference here is that exploring indirect means of scooping data smacks of inexperience which could also be considered a foray into dangerous grounds which professional valuers outgrow over time. In terms of level of responsibility for valuer's action, the divide is better narrowed between Principal Partner (PP) and Staff as shown in Table 4. Again, while the PP shows high preponderance for assistance from colleagues with a 35% measure of opting for another method, the Staff have a slim variance in their preference between approaching a colleague and seeking data from indirect sources. Here, it may be inferred that communication among PP of various firms is easier and more productive than could be achieved among the lower cadre members of Staff.

From Table 5, the influence of educational attainment is not very clear-cut among the sample respondents. For instance, both the only individual without formal academic training and one of the two having a PhD reported a preference for the less popular option of approaching the client for pertinent valuation data. In the course of an interview with a respondent PhD holder, it was made clear that, with appropriate tact and firmness, sufficient unbiased guidance to value can be elicited directly from the client when every other source failed. However, there are dangers lurking under this approach. Achu (2010) posited that the client could take advantage of his perceived superior information power in negatively influencing the valuer. Ashaolu and Olaniran (2015) also relayed instances where seemingly genuine background information from the client was either deliberately fraudulent in intent or would have been innocently misleading.

Table 5. Reaction to inadequate data by respondents' educational attainment.

Action taken in absence of adequate valuation data	Below HND	HND/BSc	MSc/MBA	PhD	Total
Opt for next available method (e.g. cost)	0	10 (40%)	1 (20%)	1 (50%)	12 (36.4)
Adopt indirect data-scooping method	0	7 (28%)	2 (40%)	0	9 (27.3)
Seek help from colleagues	1 (100%)	19 (76%)	2 (40%)	2 (100%)	24 (72.7)
Approach the client for assistance	1 (100%)	3 (12%)	0	1 (50%)	5 (15.2)
Use of intuition/imagination	0	3 (12%)	0	0	3 (9.1)
Abandon the assignment	0	0	0	0	0 (0)

Source: Field Survey, 2014.

Table 6. Reaction to inadequate data by respondents' professional status.

Action taken in absence of adequate valuation data	Graduate	Associate	Fellow	Total (%)
Opt for next available method (e.g. cost)	3 (43%)	7 (33%)	2 (40%)	12 (36.4)
Adopt indirect data-scooping method	5 (71%)	3 (14%)	1 (20%)	9 (27.3)
Seek help from colleagues	2 (29%)	18 (86%)	4 (80%)	24 (72.7)
Approach the client for assistance	3 (43%)	2 (10%)	0	5 (15.2)
Use of intuition/imagination	1 (14%)	2 (10%)	0	3 (9.1)
Abandon the assignment	0	0	0	0 (0)

Source: Field Survey, 2014.

Table 7. Parameters.

		Estimate	Std. error	Wald	Odds ratio	df	Sig.
Threshold	[VDN = 1.00]	2.089	1.762	1.406	.120	1	.065
	[VDN = 2.00]	3.477	2.661	1.707	.031	1	.191
	[VDN = 3.00]	2.398	1.021	5.516	.091	1	.030
	[VDN = 4.00]	.554	.015	1364	1.740	1	.028
Location	NXM	.084	.032	6.891	.919	1	.008
	SCM	.200	.046	18.904	.818	1	.013
	COA	.144	.002	5184	.866	1	.019
	CLH	-1.227	.972	1.594	.293	1	.632
	INT	.475	.140	11.511	.622	1	.020
	ABD	1.899	1.588	1.430	.150	1	.126

Notes: VDN = 5 as reference category.

Link function: Logit.

Source: Authors' computation from SPSS output.

Conversely, Table 6 shows a clear influence of the respondent's professional status on his behaviour. While the Associates and Fellow members of the profession manifest similar disposition for colleague's assistance and alternative methods, in that order, graduate members scored indirect data-scooping highest, followed by equal disposition to both of alternative valuation method and resort to client's assistance.

From Table 7, the strategies for coping with market data among valuers were regressed via the ordinal logistic regression model. The odds ratios are used to predict strategies for coping with inadequate market data. In the model, factors found important in bivariate analysis were used. As depicted in Table 7, opting for next available method (e.g. cost), adoption of indirect data-scooping method, seeking help from colleagues and use of intuition predicted higher odds ratios which implies that an increase in the use of any of these strategies (while others are being held constant) will increase the degree of success achieved in a valuation assignment. Approaching the client for assistance and abandoning method predicted less odds ratio for effective property valuation.

Table 8. Test of parallel lines^a

Model	-2 Log Likelihood	χ^2	df	Sig.
Null hypothesis	54.687			
General	21.000 ^b	94.687	70	.765

^aThe null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

^bLink function: Logit.

Source: SPSS output.

Table 9. Model fitting information.

Model	-2 Log Likelihood	χ^2	df	Sig.
Intercept only	62.285			
Final	54.687	37.597	62	.026

Link function: Logit.

Source: SPSS output H_0 : Location coefficients for all variables in the model are zero.

Table 10. Goodness-of-fit.

	χ^2	df	Sig.
Pearson	76.255	70	.284
Deviance	54.687	70	.911

Note: Link function: Logit.

Source: SPSS Output H_0 : The model is adequate.

As revealed by the same Table 7, the increase in the resort to client assistance as a coping strategy will reduce the efficiency and reliability of property valuation. Interestingly, all the explanatory variables except client assistance approach show positive relationship with the dependent variable, thereby conforming to a priori expectation of the study. Only regressors with higher odds ratios were found to be statistically significant, while client approach and abandoning methods are statistically insignificant.

The probability value, as contained in Table 8, provides justification for the acceptance of the null hypothesis that the effect of each independent variable is the same for different logit functions of needed market data in property valuation. Furthermore, to predict the availability of valuation data outcome, a model was built *ab initio* and to determine the fitting of this model information in Table 9 was used. The probability value from that Table was very small compared to the 5% level of significance adopted for the study. This, therefore, implies that the model will improve the ability of the strategies highlighted by this study to accurately predict the availability of needed valuation data by valuers. Again, information in Table 10 reveals that the observed data are consistent with the fitted model consistent with the decision criteria formulated for acceptance or rejection of the null hypothesis.

Conclusion

It has been established in this study that market data for valuation is difficult to procure within the residential property markets in the Nigerian cities of Ibadan and Abeokuta. As a result, valuers have been adopting various coping strategies with decisions often influenced by their years of practice experience, professional status and level of responsibility associated with the eventual figure of value expressed for the property. However, findings

from this study depict the developing nature of the Nigerian property market in terms of data accessibility, data application and methodological approaches to valuation. Also, while records on comparable sales transactions were reported to be easily obtainable alongside easy access to rental evidence, respondents' least score for availability of capitalization rate (yield) is curious. Further research into the derivation of yields and their interpretation among Nigerian valuers would therefore, be informative.

However, with the limited number of effective respondents obtained from the two cities covered in this study, a similar study focusing on Lagos and other traditional Nigerian cities could offer a comparative analysis. Considering the formality of access to land in Abuja, a different market scenario may be anticipated and research on this basis is also suggested. The situation in the commercial property sector also needs investigation. Finally, it is suggested that a virtual, centralized databank should be created by the professional body (NIESV) to which registered members can have free access. Inputs thereto should also be sourced, perhaps through incentives, from members but scrutinized for validity before being uploaded to the databank as updates. Within this framework, it is suggested that the professional body should also mandate members to maintain a logbook of their valuation computations, including data-sets utilized for each exercise for future referencing. As earlier observed with AMCON's demand from valuers, this may be used to justify otherwise inexplicable valuations. It may be contended that this type of control is crucial to enforcing professionalism in the valuation market which is already being contested by Nigerian engineers.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- Achu, K. (2010, January 16–19). *Do clients influence valuations carried out for financial reporting purposes? Some evidence from Malaysia*. 17th Annual Pacific Rim Real Estate Society Conference, Gold Coast.
- Adomatis, S. K. (2015). The challenges of valuing green. *The Appraisal Journal*, Winter, 25–31.
- Ajayi, C. A. (2009). *International valuation standards as applicable in the use of the investment method of valuation and in mortgage valuation* (pp. 1–14). Presented at Mandatory Continuing Professional Development Programme Lagos: Nigerian Institution of Estate Surveyors and Valuers, Lagos.
- Ajibola, M. O. (2010, December). Valuation inaccuracy: An examination of causes in Lagos Metropolis. *Journal of Sustainable Development*, 3, 187–193.
- Ajibola, M. O., & Oletubo, A. A. (2011). Assessment of accuracy of valuation in the property market in Lagos Metropolis. *Global Journal of Engineering and Technology*, 4, 45–51.
- Aluko, B. T. (1998). Property valuation: Are estate surveyors and valuers interpreters or creators of values? The Estate Surveyor and Valuer. *Journal of Nigerian Institution of Estate Surveyors and Valuers*, 21, 9–17.
- Aluko, B. T. (2007, September 27). *Valuation of public infrastructural assets – Methodological issues and problems*. Paper presented at Workshop on Maintenance of Public Infrastructure organised by the Ondo State Branch of the Nigerian Institution of Estate Surveyors and Valuers, Akure.
- Appraisal Institute. (1992). *The appraisal of real estate*. Chicago, IL: Author.
- Ashaolu, T. A., & Olaniran, M. O. (2015). Professionalism or clienteism: An X-ray of valuation practice in south-western Nigeria. *British Journal of Applied Science & Technology*, 8, 521–530.
- Ayedun, C. A., Oloyede, S. A., & Durodola, O. D. (2012, March). Empirical study of the causes of valuation variance and inaccuracy in Nigeria. *International Business Research*, 5, 71–80.

- Babawale, G. K. (2012). An assessment of the current standard of real estate valuation practice Nigeria. *Elixir Social Science*, 47, 9094–9102.
- Babawale, G. K., & Omirin, M. M. (2011, September). Valuers' and valuation firms' characteristics as causes of inaccuracy in valuation in Nigeria. *Mediterranean Journal of Social Sciences*, 2, 11–22. doi:10.5901/mjss.2011.v2.n3.11
- Bello, M. O., & Bello, V. A. (2007). The influence of consumer's behaviour on the variables determining residential property values, Lagos, Nigeria. *American Journal of Applied Sciences*, 4, 774–778.
- BizwatchNigeria. (2014, October 7). *Unbelievable! Less than 3% land owners in Nigeria have C of O*. Retrieved October 24, 2015, from <http://bizwatchnigeria.ng/unbelievabale-less-than-3-land-owners-in-nigeria-have-c-of-o/>
- Black, W. K. (2013). The housing appraisers warned us about the crisis but we didn't listen. *Credit Write-downs*. Retrieved June 20, 2015, from <https://www.creditwritedowns.com/>
- Calhoun, C. A. (2001). Property valuation methods and data in the United States. *Housing Finance International*, 12–23. Retrieved from http://www.housingfinance.org/uploads/Publicationsmanager/0112_Pro.pdf
- Davidoff, G., & Hufford, W. L. (2015, January). Coping with the dearth of data in business litigation. *The Legal Intelligencer*, 27. Retrieved from <http://www.thelegalintelligencer.com/id=1202715812433/Coping-With-the-Dearth-of-Data-in-Business-Litigation?slreturn=20151105184304>
- Gilbertson, B., & Preston, D. (2005). *A vision for valuation*. RICS Leading Edge Series. London: RICS.
- Haywood County. (2011). Schedule of values: Appraisal theory, 5. Retrieved July 6, 2015, from http://www.haywoodnc.net/downloads/Tax/201112Forms/Reval_2011/SectionB_AppraisalTheoryandPropertyValuationTechniques.pdf
- HM Revenue and Customs. (2015, October). UK property transaction statistics: UK property transactions count. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/478760/UK_Tables_Nov_2015__cir_.pdf
- Hui, S. M., Cheung, A., & Pang, J. (2010). A hierarchical Bayesian approach for residential property valuation: Application to Hong Kong housing market. *International Real Estate Review*, 13(1), 1–29.
- Idowu, O. B. A., Babawale, G. K., & Anyakora, M. I. (2012). An evaluation of the appropriateness of the investment method of valuation for residential properties in Lagos. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, 3, 77–84.
- Igboko, N. P. (1992). *Research project on valuation methods in Nigeria with special reference to year's purchase*. Lagos: Research Report for the Nigerian Institution of Estate Surveyors and Valuers.
- Levy, D., & Schuck, E. (1998). Clients' influence on reported values. *RICS Cutting Edge Conference*. London: Royal Institution of Chartered Surveyors.
- Levy, D. S., & Schuck, E. (1999). The influence of clients on valuations. *Journal of Property Investment and Finance*, 17, 380–400.
- Levy, D., & Schuck, E. (2005). The influence of clients on valuations: The clients' perspective. *Journal of Property Investment and Finance*, 23, 182–201.
- Moody, D., & Walsh, P. (1999, June 23–25). *Measuring the value Of information: An asset valuation approach*; Paper presented at the Seventh European Conference on Information Systems (ECIS'99), Copenhagen Business School, Frederiksberg, Denmark.
- Ogunba, O. A. (1997). *A study of valuation and pricing methods in the residential property market in Lagos Metropolis* (MSc thesis). Department of Estate Management, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Ogunba, O. A., & Ajayi, C. A. (1998). An assessment of the accuracy of valuations in the residential property market of Lagos. *The Estate Surveyor and Valuer, Journal of the Nigerian Institution of Estate Surveyors and Valuers*, 21, 19–23.
- Ojetunde, I. (2013, May 6–10). *Revisiting the interaction between the Nigerian residential property market and the macroeconomy*. FIG Working Week: Environment for Sustainability Abuja, Nigeria.
- Olawore, A. (2000, September 7). *Information technology application to real estate practice*. paper presented to the members of the Department of Estate Management, the Federal Polytechnic Ilaro, Ogun State, Nigeria.
- Onyejiaka, J. C., Oladejo, E. I., & Emoh, F. I. (2015, June). Challenges of using the cost method of valuation in valuation practice: A case study of selected residential and commercial properties in

- Awka and Onitsha, Anambra State, Nigeria. *International Journal of Civil Engineering, Construction and Estate Management*, 3, 16–35.
- RICS. (2002). Property valuation, Carsberg report. Retrieved from http://www.rics.org/NR/rdonlyres/57BFA5BF-6F39-497C-923D-BE3750D310F0/0/carsberg_valuation_report.pdf
- Suriatinl, I., & Buyong, T. (1998, December). Residential property valuation using geographic information system. *Buletin Geoinformasi Jld.*, 2, 249–266.
- Wyatt, P. (1996, February). Using a geographical information system for property valuation. *Journal of Property Valuation and Investment*, 14, 67–79. doi:10.1108/14635789610107507
- Yu, H., Liu, Y., & Zhang, C. (2014, June 16– 21). *Using geographic information system to improve sales comparison approach to real estate valuation*. XXV FIG Conference, Kuala Lumpur, Malaysia.