

A COMPARATIVE ANALYSIS OF VALUATION AND SALES PRICE OF RESIDENTIAL PROPERTIES IN CALABAR METROPOLIS

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Abstract

The study compared and analysed valuation estimates and sale prices of residential properties in Calabar metropolis. The study adopted the research survey design and purposive sampling technique to select all practicing estate surveying and valuation firms in Calabar. A total of seven firms out of fourteen firms provided valuations and sale prices of seven properties. The valuations were compared to the sale prices of the properties which show some level of variation from the valuation estimate when compared to the later sales price. Property 1 shows a variance of 10%, property 2, 25%, property 3, 10%. Only property 4 was sold at the estimated valuation price while property 5 was sold above the valuation price indicating a 4.3% increase. Property 6 shows a variance of 14.7% and property 7 shows a variance of 25%. The accuracy of the valuation also depend on the knowledge of the valuer about the market, information on past transactions, his professional experience, avoiding undue pressure from clients and the appropriate basis and method of valuation to use. The findings from the study show that out of the seven properties studied, two were within the acceptable margin of $\pm 10\%$ while three were above the acceptable margin. The study recommends that the variance between the valuation estimate and the sales price should be minimal and fall within acceptable standards and only when the margin is slim can valuations be used as proxy for sale prices.

Keywords: Valuation accuracy, Capital values, Sales prices, Residential properties, Calabar.

1.0 Introduction

Property valuation performs an essential function in the property market by serving as surrogates for transaction prices (Bello and Thomas, 2015). Valuations provide advice on prospective purchases and sales and also provide information underpinning the property investment decisions. Therefore, valuations are central to all performance indices and the investment market in property cannot operate unless reliable valuations are produced. The valuers by virtue of their professional qualification are liable to carry out valuations and arrive at value estimates that are concise, precise, objective and credible. When preparing a valuation, valuers do not operate with perfect market knowledge; they must follow client instructions, make judgments, analyse information and respond to different pressures and all these factors influence the final valuation figure (Bretten and Wyatt, 2001). Valuation therefore, is regarded as very imprecise activity (Royal Institution of Chartered Surveyors 1997; Aluko 2000). Imprecision is an ex - ante measure of a positive or negative error that varies randomly every time the measurement is made (Bowles, McAllister and Tarbert, 2001). Hence, imprecise nature of property valuation can lead to some degree of valuation inaccuracy, variance and bias that has been the subject of debate among the academia all over the world. Real estate market is usually characterized as inefficient and imperfect market relative to the financial markets (Kang and Gardner, 1989). The market consist of properties of various types (commercial, industrial and residential) that are believed to have inflation hedging characteristics that make them ideal investment.

Investment in property involves huge capital outlay and investors are faced with the option of having their own equity capital or borrowed fund to finance the investment. Since the investment is not a liquid asset, its illiquidity is most often measured by the time the property spends on the market (Jud, Seaks and Winkler, 1996). Therefore, in carrying out transactions in real estate properties, sellers have to decide whether to maximize selling price and minimize time on the market. Also, buyers in the market have the duty of searching for desirable properties and negotiating for their appropriate prices. Therefore, properties that are easily sold at their fair market prices are considered more attractive and valuable than those that will stay longer in the market only to be sold for about the same price later. Calabar the study area is one of the nation's state capital whose socio economic activities has greatly been

promoted as a result of the influx of people in search of greener pastures. The state is mainly a civil servant state and government do not have provision for housing the teeming populace. Hence the residential property market is one whereby individuals have to buy and develop vacant land or buy existing properties. The residential property market is characterized by low transaction environment and no data bank for previous transactions. Sellers are therefore, faced with lack of new information on housing transactions. This make them to rely on stale information for the determination of list prices which often time can result in more time either on the market or selling at prices below prevailing market (Clayton, Mackinnon and Peng, 2008). This paper therefore examined how accurate residential property valuations are with the sales prices in Calabar metropolis.

2.0 Review of Literature

Market Value is the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had acted knowledgeably, prudently, and without compulsion). The accuracy of any valuation is, therefore, defined as how close the valuation is to the exchange price in the market place. (Crosby, Devaney, Key and Matysiak, 2003). Valuation accuracy is considered as being the proximity of a valuation (or prediction of the most likely selling price, often being an expectational assessment) to market price (or the recorded consideration paid for a property, being a current time or actual assessment) (Parker, 1999). Valuation accuracy measures the proximity of valuations to actual transaction prices i.e. how close are valuations to actual transactions prices (Babawale, 2006). Studies in valuation accuracy have therefore consisted of measuring the discrepancies between prior valuations and subsequent transaction prices on individual property using both economic error metric measurements (Babawale, 2006). As noted by Crosby, Devaney, Key and Matysiak (2003), studies of valuation accuracy have therefore consisted of measuring the relationship between valuations and subsequent sale prices of individual properties. Havard (1995) noted that valuations are central to all performance indices and that the investment market in property cannot operate unless reliable and accurate valuations are produced. Inaccurate valuation portends great dangers to the valuation profession as well as the property market and industry.

Parker (1998) remarked that if valuations have only a slim chance of accuracy, clients are likely to question the necessity of valuations and thus render the professional advice of

valuers useless. Brown (1991) also added that the whole basis of professional property advice rest on the assumption that valuations are a good proxy for prices and that inaccuracy in valuation could imply that performance measurement would be a fruitless exercise. As a result of the foregoing, there has been continues worldwide concerns on the ways to ensure not only valuation reliability but also a better and quality reporting to clients. Hager and Lord (1985) pioneered the debate and criticisms over valuation accuracy as an estimate of market price and the methods used in carrying out property valuations. They conducted a survey of 10 surveyors they invited to carry out a valuation of two properties. They were provided with the same information and instructions and the values from their valuations show variance significantly. The valuation produced $\pm 10.6\%$ and $\pm 18.5\%$ which suggests that the level of accuracy in valuation is very low compared to $\pm 5\%$ adopted benchmark (Hager and Lord, 1985; Ayedun, Oloyede, Iroham and Oluwunmi, 2011).

Matysiak and Wang (1995) conducted a study on the commercial property market prices and valuation with 317 set of properties with data provided by Jones Lang Wootton. Most of the valuations for these properties were conducted between three (3) and six (6) months prior to their sales date. They reported that the average absolute error provides an indication of the range of error for the whole sample of 317 properties. The average percentage error they noted should tend towards zero if there are no significant differences between under valuation and over valuation bias. Matysiak and Wang (1995) suggested that studies regarding agreement of valuations and prices cannot be addressed conclusively. They used standard deviation to analyse the result of 317 valuations and data sale prices from 1973 to 1991 and found out that the degree of confidence to achieve $\pm 10\%$ sales price of the estimated valuation was just 30%, which increases to 55% degree of confidence at $\pm 15\%$ of the valuation and 70% at $\pm 20\%$ of the valuation estimates. McAllister (1995) conducted a study which involved transaction data of 30 properties sold by private treaty and 27 by informal tender from 1987 to 1992. The data collected for this study was not sufficient to allow for the test of accuracy of the valuation based on different conditions of the market. The result of the study didn't support any higher degree of competence by valuers in predicting sale prices of properties. The author observed that for about half of the transaction (56%), valuers were accurate within 10% of the sale prices and in the overall; the mean absolute percentage error was 15% while the average percentage suggests an error of 10%. The study noted further that valuation accuracy has raised some complex methodological issues such as the measurement and potential impact of the lag period, the contamination of the price by the valuation and the fact that only successful transactions were analysed. The

researcher drew conclusion from his study that there is likely to be a problem of valuation error but that there is little evidence to suggest that valuation bias occurs.

Blundell and Ward (2008) studied valuation accuracy to determine the effects of market movements on sales valuation relationship. Their study covered a sample size of 775 property sales from 1973 to 1990 that were valued before by more than ten valuation groups. Their data was also collected from Jones Lang Wootton. The result suggested that the sales price of properties that were sold within the period of 1974 to 1990 was on a near average of 7% which was higher than the valuation and that the standard deviation of the differences was slightly higher than 18%. They observed that the distribution was not symmetrical considering the proportion of errors lying within $\pm 20\%$ range. Their results further revealed that 6% of the valuations overestimated the sales price by 20% and about 9% of the valuations underestimated the sales price by 20%. They concluded that valuations are marginally more accurate than might be expected, taking into consideration from both the theoretical perspective and in comparison with equivalent valuation in equity markets. They opined that valuations were on the average underestimates of the sale prices and this underestimation could be expected to be a function of the market performance.

Ogunba (1997) examined accuracy of investment valuations, their variation and how they can be addressed. His study focused on Lagos and because there was no database for transactions in property, he requested 30 estate valuation firms in Lagos to conduct a valuation of two residential properties sold earlier and located at Victoria Island and Ikoyi (prime areas of Lagos). The valuation opinion from the 30 firms was subjected to statistical tests using regression/correlation analysis, mean deviation etc. The result shows valuations as not being good proxy for market prices for three good reasons. These include the variation between the sales prices and the valuations was more than the margin of valuation error of $\pm 5\%$ adopted by him, the regression equation intercept was distinguished from the zero mark while the slope was distinguished from 1 also, the last reason being that the inter-quartile ranges were unacceptably wide. Ogunba (2004) study focused on the demand for accuracy in valuations and surveyed 200 firms in Lagos and the data collected were analysed using statistical tools such as range, interquartile range, mean deviation, regression analysis and analysis of variance (ANOVA). For the range and interquartile range test, He defined the standard of accuracy by a range not exceeding N500, 000 as this seems to be the maximum range clients in Nigeria can accept. The interquartile range provides the range of the more accurate of valuations of 50% and for accuracy it should not be more than N250,000. These tests were done on five states and it can be seen that the ranges are much higher than that

expected by clients he noted especially in Lagos. The second analysis was the mean deviation from the market price which Ogunba defined as the mean of the distances of the valuations from the actual market price. Ogunba measured accuracy by determining if the mean deviation from market prices exceeded 10% which he adopted as the acceptable limit of variance from the sales price. The result from his work shows that the deviations are very high and above the 10% adopted. In conclusion, Ogunba noted that there is a significant degree of inaccuracy in valuations in Nigeria and observed that the causes both come from the valuation practitioners and the educational background of the valuers.

Aluko (2004) conducted a study to find out how reliable valuations for mortgage purposes are. He examined if the open market valuations are a good proxy for prices in Lagos metropolis and interviewed 42 lending institutions and 59 estate surveying and valuation firms through stratified sampling. His methodology regressed the open market value for mortgage of each of the sampled properties onto its transaction prices. In order to test the reliability of mortgage valuations, he collected data for 121 open market sales relating to transactions on mortgaged residential properties from the Nigerian Deposit Insurance Corporation (NDIC), lending institutions and estate firms. The bank ordered a valuation of a mortgagor who was unable to redeem his mortgage to the lender on an open market basis before a sale of the collateral security. The valuation was carried out on the same basis as mortgage valuation executed before a loan is given. The data collected was from January 1994 to December 2002. The result shows that the relationship between the values and the prices of the properties sampled was 78% and it was significant at $p = 0.0000$ and 61% of the prices accounted for inaccuracy in their values. He concluded that the evidence from his regression analysis shows that there is a relative degree of accuracy in the open market valuation for mortgages and that they are a good proxy for predicting market prices, although the accuracy is not as good as that obtained in UK, USA and Australia.

Aluko (2007) examined valuers judgment in residential property valuations in Lagos metropolis by a survey of 59 estate firms randomly selected in Ikoyi, Lagos. The firms were allowed to inspect and value a particular property and asked to rank the features of the property in order of importance especially their contributions in valuing the subject property. This study revealed that there was inconsistency among valuation firms in the interpretation of value influencing variables for the same property. He noted that valuation variance is inevitable and concluded that the differences in the opinion of value for the valuer's judgement must not be too wide if valuation is to be reliable. Ajibola (2010) examined the causes of valuation inaccuracy in Lagos Metropolis by a survey of 300 estate surveyors and

valuers through questionnaires and interviews and 150 questionnaires were returned representing a response rate of 50%. The data analysis was done using descriptive statistics. He also interviewed selected executive members of the valuation profession in Nigeria and 10 valuation lecturers. His result shows that 78.8% of the respondents relied on in-house database for valuation assignments and reliance on in-house data source indicates that the valuers use information that may not be properly processed and this could in turn result in valuation inaccuracy. He noted that studies in UK, USA and Australia show acceptable range of valuation inaccuracy between $\pm 5\%$ to $\pm 10\%$ for UK and USA and $\pm 10\%$ to $\pm 15\%$ in Australia. On the contrary, Nigerian studies according to him produced outrageous figures by Ogunba and Ajayi (1998) of 33.43% for Victoria Island property and 36.47% for Ikoyi while Ajibola (2006) produced $\pm 24.82\%$ for Ikoyi and $\pm 51.54\%$ for Ojodu. He argued that valuation as presently carried out is not a good proxy for sale and mortgage transactions for properties in Lagos.

Ayedun, Oloyode, Iroham and Oluwunmi (2011) conducted a study on the perception of clients regarding the reliability of property investment valuations in Nigeria. They studied 24 commercial banks in Lagos and 50 property companies that form part of the major users of valuation reports and questionnaires were administered on them. The response rate of 62.5% for the banks and 64% for the property companies was achieved and data collected were analysed using descriptive statistics. In order to determine the reliability of valuation estimates as perceived by clients, they were asked to give their impression of valuation estimates from valuers based on their own experiences. 60% of the banks show that valuers opinions of valuation figures were not reliable, 26.66% agreed that valuations are fairly reliable while 13.33% believed that valuations are absolutely reliable. On the other hand, 56.25% of the property companies believed valuations from valuers are unreliable while 15.65% considered that valuations are absolutely reliable and 28.125% sees it to be fairly reliable. From the above results, it can be concluded that clients are far from being satisfied with the reliability and accuracy of valuation opinions from their external valuers. For margin of error accepted, both the banks and property companies suggest a margin of 1%-5% representing 47% and 56.25% respectively. 40% of the banks went for 6%-10%, and 13% for 11%-15% while 32.25% of the property companies went for 6%-10%. They concluded that the majority of clients as represented by banks at 47% and property companies at 56.25% needed valuer's valuation estimates to be close as possible to the market prices of properties.

In an empirical study to verify the level of valuation accuracy in Nigeria, Ayedun, Ogunba and Oloyode (2011) conducted an experiment by retrospective valuation of 12

residential properties which were sold between one and two months prior to the valuation date. The information about the sale prices was not made known to the valuers who did the valuation. The sample was made up of 45 estate firms by the use of stratified sampling and data obtained were analysed using descriptive and inferential statistics. The analysed results from the simulated valuation showed a range of differences between properties sale prices and estimates from valuations with N690,000,000 (six hundred and ninety million naira) differences for the 9th property. The mean and standard deviations also revealed a high level of inaccuracy and none of the mean value fell within 30% of the sale prices. The mean deviation from market prices for all the sampled properties was $\pm 32.44\%$ which represents a very high level of inaccuracy as compared to $\pm 5\%$ adopted by Hager and Lord (1985). It shows that market prices were not interpreted by valuers with reasonable measure of accuracy. This revealed that only 4.4% of the valuation estimates equals to the sale prices, 8.3% fell within $\pm 5\%$ margin of error while 15.2% fell within the margin of error range of $\pm 10\%$. They noted that if $\pm 10\%$ is set as the acceptable margin of error as in Hager and Lord (1985), then it means that valuations falling within the acceptable margin of valuation error were 15.2% only.

3.0 Methodology

The study adopted the survey research design. The study area is Calabar Metropolis. The population comprised of Estate Surveyors and valuers who are in active practice. A recent record by Nigeria Institution of Estate Surveyors and Valuers Calabar Branch indicates that a total number of 14 estate surveying and valuation firms have their offices in Calabar metropolis the study area of this research. Primary data was collected with the aid of questionnaire administered on practicing estate surveyors and valuers in the study area. The purposive sampling technique was adopted in the selection of the sample size for the study. Descriptive statistics using frequency tables and percentage distribution were used in analysing the data.

4.0 Data Presentation and Analysis

Table 4.1: Firms Areas of Specialization

Specialization	Frequency	Percent
Valuation	3	10.7%

Feasibility & Viability Appraisal	1	3.6%
Management & Agency	4	14.3%
Property Development	2	7.1%
General Practice	18	64.3%
Total	28	100%

Source: Field Survey, 2018

Table 4.1 shows the characteristics of the firms, it can be seen that 64.3% are in general practice while 14.3% are specialized in property management and agency, 10.7% valuation, 7.1% and 3.6% are specialized in property development and feasibility and viability studies respectively.

Table 4.2: Valuation not been close to the sale price because of the imperfect knowledge in the property market

Options	Frequency	Percent
Strongly Agree	11	39.3%
Agree	13	46.4%
Undecided	0	0%
Disagree	3	10.7%
Strongly Disagree	1	3.6%
Total	28	100%

Source: Field Survey, 2018

Table 4.2 above relates to analysis of various data collected in relation to that valuation can never be close to the sale price because of the volatility in the property market and the economy. This shows that 39.3% strongly agreed to that, 46.4% also agreed to the assertion, 10.7% and 3.7% of the respondents disagreed and strongly disagreed.

Table 4.3: A valuation should be a close approximation of the sale price.

Options	Frequency	Percent
Strongly Agree	17	60.7%
Agree	11	39.3%
Undecided	0	0%
Disagree	0	0%
Strongly Disagree	0	0%
Total	28	100%

Source: Field Survey, 2018

Any good valuation report should have values very close to the market prices and Table 4.3 shows the opinion of the respondents as to the closeness of estimated values to the market prices realizable. 60.7% of the respondents were totally in support of that and strongly agreed while 39.3% also agreed to that.

Table 4.4: Comparison of Capital Values with Sales Price in Calabar Metropolis

Date of Valuation	Location	Description	Purpose of valuation	Estimated Capital value (₦)	Sales price (₦)	Diff. in values	Margin of error
June 2016	Ekpo Abasi	3 Bedroom flat	Sales	40m	36m	4m	10.0%
October 2016	Akpabuyo	3 Bedroom detached bungalow	Sales	20m	15m	5m	25.0%
March 2017	Fed. Housing Estate	3 Bedroom bungalow	Sales	20m	18m	2m	10.0%
October 2017	Ekpo Abasi	Semi-detached 3 rooms office block	Sales	15m	15m	-	-
January 2018	State Housing Estate	5 Bedroom Duplex with BQ	Sales	115m	110m	5m	4.3%
February 2018	Ikot Effanga	Parcel of land	Sales	15m	17.5m	2.5m	14.7%
February 2018	Ekorinim II	Semi-detached House	Sales	80m	60m	20m	25.0%

Source: Field Survey, 2018

5.0 Results and Findings

The table above shows results on the comparison of Capital and Sales Values of landed properties within Calabar metropolis from 2016 to 2018. In June 2016, a 3 bedroom flat at Ekpo Abasi Street was valued for N40m and was later sold for N36m showing a difference in value of N4m and a margin of valuation error of 10%. In October 2016 also, a 3 bedroom bungalow was valued at N20m for sale at Akpabuyo but was sold for N15m showing a difference in value of N5m and a margin of error of 25%. In March 2017, a 3 bedroom bungalow was valued for N20m in Federal Housing Estate for sale and was sold for N18m showing a difference in value of N2m and a margin of error of 10%. In October 2017, an office block with 3 offices at Ekpo Abasi Street was valued for sale at N15m and also sold for N15m. This particular transaction shows a 100% accuracy of the valuation price with sales price. In January 2018, a 5 bedroom duplex with boy's quarters was valued for sale in State Housing Estate for N115m and was sold for N110m. This shows a difference in value of N5m and a margin of error of 4.3%. By February 2018, a parcel of land was valued for sale at Ikot Effanga at N15m and was sold for N17.5m showing a surplus of N2.5m and 14.7% increase. This indicates that the parcel of land was undervalued. Finally, in the same February 2018, a semi-detached house was valued at Ekorinim II for sale at N80m and was sold for N60m. This showed a difference in value of N20m and a margin of valuation error of 25%. The results from the table above show that majority of the valuations carried out were higher than the sales price of the properties studied thereby showing sales prices to be lower than the capital values from the valuations carried out. Further findings from the study indicate that it is only one property as indicated above that the sales price was equal to the valuation price, one property was sold above the valuation price while the rest of the properties were sold below the market value indicating a valuation margin of error of between $\pm 4.3\%$ to $\pm 25\%$. Adopting a margin of valuation error of $\pm 5\%$ to $\pm 10\%$, only four valuations out of the seven studied falls within the acceptable margin of error compared to United Kingdom. On the other hand, three of the valuations fall above the acceptable margin of valuation error. Therefore, valuations can be used as good proxy for markets or sale price.

6.0 Conclusion and Recommendations

Property valuation plays a very important role in the determination of sales prices of residential properties and also for future real estate investment analysis and decision. But how accurate or close are valuations to sale prices of properties determines the accuracy of such valuations. The valuer therefore has a big task in his opinion of value and subsequent upon the prevailing market conditions and the data available to him or her when carrying out the valuation assignments for various purpose. The accuracy of the valuation also will depend on the knowledge of the valuer about the market, information on past transactions, his professional experience, avoiding undue pressure from clients and the appropriate basis and method of valuation to use. It is an established fact that no two valuers can arrive at the same value for the same property but the variance between the valuation estimate and the sales price should be minimal and fall within the acceptable standards. Only when the margin is slim can valuations be used as proxy for sale prices.

References

- Ajibola, M. O. (2010). Valuation inaccuracy: An examination of the causes in Lagos Metropolis. *Journal of Sustainable Development*, 3(4), 187-193.
- Aluko, B. T. (2004). Reliability of Mortgage Valuation for Institutional Lending in Nigeria. *International Journal of Strategic Property Management*, 8(4), 193-203.
- Aluko, B. T. (2000). A Study of the Appropriateness of Mortgage Valuation for Institutional Lending in Nigeria. Unpublished Ph.D Thesis, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Aluko, B. T. (2007). Examining valuer's judgment in residential property valuations in metropolitan Lagos. *Journal of property Management*, 25(1), 98-107.
- Ayedun, C. A., Oloyede, S. A., Iroham, O. C., and Oluwunmi, A. O. (2011). Clients' perception of the reliability of property investment valuation in Nigeria. *Mediterranean Journal of Social Sciences*, 2(3), 479-486.
- Ayedun, C. A., Ogunba, O. A., and Oloyede, S. A. (2011). Empirical verification of the accuracy of valuation estimates emanating from Nigerian valuers: A case study of Lagos Metropolis. *International Journal of Marketing Studies*, 3(4), 117-128.
- Ayedun, C. A., Oloyede, S. A., and Durodola, O. D. (2012). Empirical study of the causes of valuation variance and inaccuracy in Nigeria. *Journal of International Business Research*, 5(3), 71-79.
- Babawale, G. K. (2006). The growing concern over valuation accuracy in Nigeria. *Journal of Land Use and Development Studies*, 2(1), 1-11.

- Bello, V. A., and Thomas, O. J. (2015). Valuation variance in the commercial property market in Lagos, Nigeria. *International Journal of Investment Management and Financial Innovations*, 1(4), 105-110.
- Blundell, G. F., and Ward, C. W. R. (2008). The accuracy of valuations- Expectations and Reality. Working papers in Real Estate and Planning. Henley Business School, University of Reading. Assessed 4th March, 2018 from <http://www.reading.ac.uk/rep/fulltxt/1408.pdf>
- Bowles, G., McAllister P., and Tarbert, H. (2001). An Assessment of the Impact of Valuation Error on Property Investment Performance Measurement. *Journal of Property Investment and Finance*. 19(2), 139-157.
- Bretten, J., and Wyatt, P. (2001). Variance in commercial property valuations for lending purposes: An empirical study. *Journal of Property Investment and Finance*, 19(3), 267-282.
- Clayton, J., Mackinnon, G., and Peng, L. (2008). Time variation of liquidity in the private sector real estate market: An empirical investigation. *Journal of Real Estate Research*, 30(2), 125-160.
- Hager, D. P., and Lord, D. J. (1985). The property market, property valuations and performance measurement. *Journal of Institute of Actuaries*, 112, 19-60.
- Jud, G. D., Seaks, T. G., and Winkler, D. T. (1996). Time on the market: The impact of residential brokerage. *Journal of Real Estate Research*, 12(3), 447-458.
- Kang, H. B., and Gardner, M. J. (1989). Selling Price and Marketing Time in the Residential Real Estate Market. *Journal of Real Estate Research*, 4(1), 21-35.
- Matysiak, G., and Wang, P. (1995). Commercial Property Market Prices and Valuations: Analysing the correspondence. *Journal of property Research*, 12(3) 181- 202.
- McAllister, P. (1995). Valuation Accuracy: A Contribution. *Journal of property Research*, 12(3), 203-216.
- Ogunba, O.A., and Ajayi, C.A. (1998). An Assessment of the Accuracy of Valuations in the Residential Property Market in Lagos. *Journal of the Nigerian Institution of Estate Surveyors and Valuers*, 1(2), 203-216.
- Ogunba, O.A. (2004). *The demand for accuracy in valuations: the case of Nigeria*. Paper presented at the International Symposium on Globalization and Construction, Thailand. Assessed April 3rd March, 2018 from <http://www.irbnet.de/daten/iconda/CIB6046.pdf>
- Parker, D. (1998). Valuation accuracy: an Australian perspective. Paper presented at the 4th Pacific Rim Real Estate Society Conference, Perth. Assessed 3rd March 2018 from <http://www.prrs.net/proceedings/proceedings1998/Papers%5CPark8Bi.PDF>

Royal Institution of Chartered Surveyors (1997). Commercial Property Valuation: An Information Paper. RICS, London.

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