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**APPLICATION OF INCOME CAPITALIZATION APPROACH FOR VALUATION OF  
INVESTMENT PROPERTIES: ENUGU, NIGERIA AS A TEST MARKET.**

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**ABSRTACT**

Generic valuation theories stipulate that the income capitalization approach is most appropriate in valuing investment properties for mortgages, sales, and other purposes. However, there appears to be a gap in the extant literature with regard to the extent to which valuers adopt this method in valuing income generating properties in the study area. This informs the aim of the study, which is to examine the application of the income capitalization approach in the valuation of investment properties in Enugu. The study adopted the survey research design. Data was obtained from primary sources using a data collection pro forma administered to a holistic sampling of ninety valuers in Enugu. Upon analysis with descriptive statistics, findings showed a greater percentage of valuers employed the depreciated replacement cost method rather than the income capitalization approach. Thus, the study proffered recommendations that would enhance the application of the income capitalization approach in valuing income generating properties in Enugu.

**Keywords:** All Risk Yield, Income Capitalization Approach, Income Generating Properties, Market Rent, Outgoings, Valuation

**1.0 INTRODUCTION**

Property valuation involves the appraisal of the value of property to depict the price at which the property would exchange in the property market at a stated point in time. The valuation of properties constitutes a vital element in the efficient functioning of modern economies and societies the world over. Property valuation is required for a number of reasons, including property

purchase and sale, mortgage, insurance, compensation claims, and financial accounts. The quality of any valuation depends on the data input, assumptions, valuation methodologies, and the judgment exercised by valuers in the valuation process (Ordway and Bell, 1984). To arrive at the value of a property interest, there are various methods of valuation used by valuers to do so, and these methods are: residual, profit/account, direct market comparison, and the investment method (also referred to as the income capitalization approach). The method of valuation to be used in the valuation of a subject property will be determined by the use to which the valuation will be put. For example, the income capitalization approach is theoretically considered appropriate in the valuation of investment properties for mortgage purposes (Ayedun, 2009).

The income capitalization approach is used in determining the present worth of the rights to future benefits to be derived from the ownership of a specific interest in a property under given market conditions (Ifediora, 2009). The income capitalization approach is used to value properties on the basis of the stream of rental income cash flow that is anticipated from the properties (Baum et al, 1997). The income capitalization approach is based on the principle of anticipation, which affirms that value is created by the expectation of benefits to be derived from possession, operation, and capital gain at re-sale (Ogunba, 2013).

The fundamental theory of the income capitalization approach is that a rational investor acting cautiously will pay more for an investment property than the present value of the stream of future rental income or benefits gotten from the investment property, taking into account the level of returns required and the risk in acquiring the property (Elekwachi et al., 2016). The method is traditionally used to value investment property and assumes that the owner-investor would surrender occupation for a periodic payment by tenants, normally termed rent (Udechukwu, 2009). The income capitalization approach is the most appropriate method for valuing investment property (Ayedun, 2009). The income capitalization approach has three primary variables in the determination of capital value, and these variables are rental value, outgoings, and yield.

Across the globe, some studies have been carried out to ascertain the method (s) of valuation used by valuers to value investment properties. A study carried out by Boyd (1995) revealed that 3% of valuers in Australia use the depreciated replacement cost method to value investment properties,

while a study by Mokrane (2002) revealed that the depreciated replacement cost method is rarely used by valuers in Sweden, France, the Netherlands, Germany, and the United Kingdom to value investment properties. In Port Harcourt, Rivers State, Nigeria, a greater percentage (59%) of valuation firms use the depreciated replacement cost method to value investment property for mortgage purposes (Ekenta & Iroham, 2014). In their study, Aluko (2007), Babawale (2006), Babawale (2009), and Ogunba (1997) revealed that 67.8%, 76%, 55%, and 63.3% of valuers in the Lagos property market revealed that the depreciated replacement cost method is more appropriate and most frequently used in valuing investment properties for purposes such as sale, letting, and mortgage. Elekwachi et al. (2016) assert that in Nigeria, because of the inflationary nature of the country's economy, most valuers favor the application of the depreciated replacement cost method in valuing investment properties for mortgage purposes. This is because the depreciated replacement cost method serves as a better proxy for market prices than the income capitalization approach, which produces a relatively lower market value than the actual market price (Ogunba and Ojo, 2007).

Despite the fact that most existing literature reveals that a greater percentage of valuers in some states in Nigeria, such as Port Harcourt, Rivers State, Abuja, and Lagos State use the depreciated replacement method in place of the income capitalization in valuing investment properties for relevant purposes such as mortgages, sales, purchases, etc., the state of affairs with regards to the application of the income capitalization approach in the Enugu State property market is not found in the extant literature, hence the need for this study to fill this gap in literature. Based on the foregoing discussion, the aim of this study is to examine the application of the income capitalization approach by valuers for the valuation of investment properties in Enugu State, Nigeria.

## **2.0 LITERATURE REVIEW**

This section of this study reviews extant literature that is relevant and related to this research.

### **2.1 Application/Appropriateness of the Income Capitalization Approach**

Biniyam (2017) examined the effectiveness of the use of the income method as an alternative to the depreciated replacement cost (DRC) method in the valuation of commercial properties in Addis Abba, Ethiopia. The study adopted the DRC method and the income method in analyzing the data

obtained from four selected commercial properties. The study revealed that the income method may provide a reliable estimate of value in the case where improvements increase in age, but for new buildings, the DRC method was more reliable.

Udobi et al. (2016) examined the reliability of the investment method in south-east Nigeria. A sample of eighteen (18) properties that were sold in 2014 was collected and the 21 valuers were asked to value each property without knowing the selling price using the investment method of valuation. The obtained data were analyzed using mean deviation from market price, standard deviation, and correlation analysis. The study found out that the margin of error obtained from the eighteen (18) sampled properties was 2.7%, which was within the acceptable margin of error of + or -10% adopted for the study. The P-value in the Analysis of Variance (ANOVA) table was 0.00, which meant that there was a statistically significant relationship between the market prices and value estimates.

Effiong (2015) examined the appropriateness of the income capitalization approach in the valuation of investment properties for mortgage purposes in Cross Rivers State, Nigeria. The study used a survey of twenty-eight valuers. Descriptive statistics were used for data analysis. The study revealed that the income capitalization approach is the most reliable method used in the valuation of investment property. The study pointed out some challenges in the use of the income capitalization approach, which are: lack of data on recent property sales prices; paucity of data on market rent; and paucity of data on property yield.

Bello & Okorie (2012) examined the appropriateness of the depreciated replacement cost method of valuation against the income capitalization approach in valuing investment properties for bank loans in Abuja, Nigeria. The study used a survey of eighty-six valuation firms and sixteen licensed commercial banks in Abuja. The data collected was analysed using the mean score and t-test statistics. The study revealed that the valuation figures of income-generating properties valued applying the depreciated replacement cost method were higher than the property sales price on foreclosure, while the valuation figures of income-generating properties valued applying the Income Capitalization Approach were below the property sales price on foreclosure.

Idowu et al. (2012) examined the suitability of the investment method in valuing residential properties in Lagos, Nigeria. The study used a survey of eighty-one (81) practicing valuers in the

Lagos metropolis. The study found that the investment method is an appropriate valuation method for valuing residential properties, although not solely used to determine the market value of a residential property. The hybrid method (a combination of the investment method, the comparative method, and the cost method) was generally used due to the paucity of data and lack of total confidence in the investment method.

Ilsjan (2005) investigated how real estate appraisers applied the income approach to the valuation of commercial properties for financial reporting purposes in Estonia. The study used a survey of 16 valuers administered with a questionnaire. The study revealed that at least 50% of the valuers used the income approach and sales comparison approach; less than half of the valuers used only the income approach; others varied between one or two methods; the income approach was established to be the main method used in the valuation of the market value of commercial properties; 55% of the valuers preferred to apply the DCF method in implementing the income approach; 25% preferred the capitalization method; and 20% applied both the DCF method and the capitalization method in one valuation.

Berman (1996) examined the valuation methods used by valuers in South Africa. A survey of 27 valuers was conducted via a questionnaire and interviews. The study revealed that when valuing commercial and industrial properties, the investment method was the most used method by valuers, followed by the discounted cash flow and comparable sales methods. When valuing residential properties, the comparable sales method was the most used by valuers.

Parker (1996) examined the principal methods of valuation used in the late 1990s for prime central business district offices in the United States, Canada, Great Britain, and Australia. The study used a survey of seventeen valuation firms across Australia, Britain, the United States, and Canada. The study revealed that in Australia, the United States of America, and Canada, the principle and secondary methods were the DCF method and the income capitalization approach, respectively. In Britain, the principle and secondary methods are the income capitalization approach and the discounted cash flow method, respectively.

## **2.2 Calculating the Variables of the Income Capitalization Approach**

Iroham (2012) investigated the application of heuristics (availability, representative, positivity heuristics, anchoring, and adjustment) by valuation firms in Nigeria. A survey of 218 valuation firms across Lagos, Abuja, and Port-Harcourt was used in the study. The study revealed that 71.9% of the valuation firms applied the rule of the thumb approach in calculating outgoings, while 28.1% of the valuation firms calculated outgoings using a sample of comparable properties; 55.7% of the valuation firms adopted easily available evidence of rent, while 44.3% of the respondents determined market rent through a market survey; and 63.5% of the valuation firms determined yield based on market survey, as against 36.5% that made use of easily available yield. The implication of this study is that there is disparity in the approaches adopted by valuers in the study areas to arrive at the values of the variables of the Income Capitalization Approach.

Ayedun (2009) examined the reliability and consistency of the use of the investment method of valuation in Lagos metropolis. The study used a survey of 127 valuation firms, 91 property companies and 25 commercial banks, all administered with a questionnaire and backed by an interview. The data obtained was analyzed using descriptive and inferential statistics. The study showed that the variables applied in the investment method were not derived from the property market and this phenomenon resulted in inaccuracy and inconsistency in valuation exercises carried out by firms of valuers. The respondent valuation firms did not have a uniform approach for calculating valuation variables, and this resulted in valuation inconsistency and inaccuracy between valuation firms.

Ilsjan (2005) investigated how valuers applied the income approach to value commercial properties for financial reporting purposes in Estonia. The study used a survey of 16 valuers administered with a questionnaire. The study found that all valuers found the input data for cash flow from contracts and compared it to market information; when contractual rent exceeded market rent, 3/4 of the valuers calculated with market rent and 1/4 of the valuers calculated with contractual rent; and when contractual rent was lower than market rent, the situation was more complicated and behavior was less homogeneous, but contractual rent was the most commonly used in practice, and similar results were found.

### **2.3 Application of the Depreciated Replacement Cost Method**

Okorie et al. (2015) investigated the reliability of the cost method in the pricing of investment properties used as securities for bank lending in the Wuse District of Abuja, Nigeria. The study used a survey of principal partners/branch managers of 56 valuation firms and loan officers of 18 commercial banks. Frequency tables, weighted mean scores, chi-squared, and t-test statistics were used to analyze the data that was obtained. The study revealed that 30.56% of the valuers adopted the cost method when valuing investment properties; the rule of thumb method (judgment deduction) was significantly used by valuers in estimating depreciation; and the mean valuation estimate of security properties was found to be higher than the sale prices realized on the property when sold in foreclosure.

Nwanekezie & Archibong (2013) through a survey of twenty-nine firms of valuers administered with a questionnaire revealed that 80.56% of the respondent firms adopted the depreciated replacement cost method rather than the investment method to value investment properties. Gitari (2001) examined the valuation of up-market residential properties in Nairobi, Kenya. The study used a survey of valuers practicing in Nairobi. The study revealed that the most appropriate method of valuing built residential properties is the investment method. The most preferred method adopted by valuers in the valuation of upmarket residential properties in Nairobi is the cost approach. However, comparable sales are adopted to justify the final opinion of value.

An important fact that has emerged from the review of extant related literature is that most previous studies focused on the application of the income capitalization approach by valuers in study areas such as Abuja, Calaber, and Lagos, all in Nigeria, and Ethiopia, South Africa, the United States, Canada, the United Kingdom, Australia, Estonia, and Kenya, with no study carried out to examine the application of the income capitalization approach in the valuation of investment properties in Enugu State, Nigeria. Hence, the review of extant literature has watered the soil for the planting of this study to fill this extant literature lacuna.

### **3.0 METHODOLOGY**

This study adopted the survey research design. The literature review and the gathering of information about the study area were done using descriptive and exploratory approaches, while the analysis of primary data was done using an explanatory approach. The study relied on both

primary and secondary sources of data. Primary data was collected through a questionnaire administered to ninety (90) valuers in Enugu metropolis. The retrieved primary data was analyzed using descriptive statistics.

#### 4.0 DATA PRESENTATION AND ANALYSIS

The field survey for the collection of primary data used in this study was undertaken between the months of February and March, 2021. The survey was undertaken by the researchers.

**Table 1: Questionnaire Given to Valuers**

S/N	Number of Valuers	Administered	Retrieved	Percentage (%)
1	120	90	90	100

**Source:** Researchers' Field Survey & Analysis, 2021.

Table 1 shows the number of questionnaires administered to valuers. Ninety (90) questionnaires were administered to the respondent valuers, out of which 90 were retrieved, indicating a 100% response rate. This 100% response rate can be connected to the tenacity of the researchers and the acquaintance and pleasantness of the researchers with many valuers in the study area, which is due to the fact that the researchers reside and work in the study area.

**Table 2: Profile of Valuers**

S/N	Sex	Frequency	Percentage (%)
I	Male	55	61.1
ii	Female	35	38.9
	<b>Age</b>		
I	Below 30	8	8.9
ii	31-40	25	27.8
iii	41-50	22	24.4
Iv	51-60	20	22.2
V	60 and Above	15	16.7
	<b>Educational Qualification</b>		
I	HND	25	27.8
ii	B.Sc	65	72.2
iii	M.Sc/MBA	22	24.4
Iv	Ph.D	12	13.3
	<b>Professional Qualification</b>		
I	ANIVS	90	100
ii	RSV	90	100
iii	FNIVS	13	14.4



	<b>Years of Experience</b>		
I	1-5yrs	3	3.3
ii	6-10yrs	16	17.8
iii	11-15yrs	18	20
Iv	16-20yrs	23	25.6
V	21-25yrs	19	21.1
Vi	Above 25yrs	11	12.2

Source: Researchers' Field Survey & Analysis, 2021.

Table 2 reveals that 61% of valuers are male, while 38.9% are female. The higher percentage of male valuers than female valuers could be attributed to the relatively low enrolment of females into property valuation and estate management programmes in Nigeria, and this phenomenon appears to be widespread across the globe. Table 2 reveals that the majority (72.2%) of valuers were found to be between the ages of 31 to 60, while those above 60 years accounted for 16.7%. Thus, valuers between the age bracket of 31 to 60 are four times those above 60. This result is not unexpected because the energy and zeal to work as a valuer is concentrated more on those aged 31 to 60, while those above 60 may have retired from work or are dead due to the relatively short life span of men in Nigeria. Those under 30 years of age accounted for 8.9% of valuers. This might be due to the mandatory period of training (a minimum of 2 years post-university education) required to qualify as a registered valuer.

Table 2 shows that valuers with the following educational qualifications: B.Sc, HND, M.Sc/MBA, and Ph.D, are 72.2%, 27.8%, 24.4%, and 13.3%, respectively. This shows that all the valuers have a strong academic foundation in the field of estate surveying and valuation. Hence, it's expected that they are equipped with basic knowledge of valuation principles, theories, and methods and would provide the researchers with the needed data for this study. Table 2 shows that 100% of the valuers are both associate members of the Nigeria Institution of Estate Surveyors and Valuers (ANIVS) and registered members of the Estate Surveyors and Valuers Registration Board of Nigeria (ESVARBON), while 14.4% of the study respondents are Fellows of the Nigerian Nigeria Institution of Estate Surveyors and Valuers (FNIVS). Hence, this shows that all the study respondents are well trained, knowledgeable, and qualified to assess the values of properties for various purposes. Table 2 shows that 17.8%, 20%, 25.6%, 21.1%, and 12.2% of valuers have 6–10 years, 11–15 years, 16–20 years, 21–25yrs, and above 25 years of working experience in the

field of estate surveying and valuation. Hence, they possess the requisite knowledge, exposure, and experience to provide the needed primary data for this study.

**Table 3: Methods of Valuation Used by Valuers**

S/N	Methods of Valuation	Frequency	Percentage (%)
1	Depreciated Replacement Cost Method	68	75.6
2	Investment/Income Capitalization Method	44	48.9
3	Direct Market Comparison Method	33	36.7
4	Combination of the investment method/ Depreciated Replacement Cost Method/ Direct Market Comparison Method	20	22.2
5	Discounted Cash Flow	5	5.6

Source: Researchers' Field Survey & Analysis, 2021.

Table 3 shows the methods used by valuers in Enugu metropolis to value investment properties in Enugu metropolis for mortgage, sales, purchase, and other related purposes. The finding that the income capitalization approach is used by valuers in valuing investment properties is in consonance with the findings in the works of Parker (1996), Effiong (2015), Udobi et al (2016), Chiwuzie et al (2017), Berman (1996), Ilsjan, (2005), and Bello & Okorie (2012). The use of the Income Capitalization Approach to value investment properties results in the estimation of a market value that is reliable. Investment properties valued using the Income Capitalization Approach have a valuation figure that is below the sales price of the property in foreclosure (Bello & Okorie, 2012).

Table 3 shows that valuers use the depreciated replacement cost method to value investment properties, and this is in consonance with the findings in the works of Okorie et al. (2015), Gitari (2001), and Nwanekezie & Archibong (2013). The findings that valuers use the direct market comparison method to value investment properties are in consonance with the findings in the works of Berman (1996), and Ilsjan (2005). The findings that valuers use a combination of the Income Capitalization Approach, the depreciated replacement cost method, and the direct market comparison method to value investment properties are consistent with Idowu et al. (2012)'s work. This finding is in contrast with valuation theory, which stipulates the use of the Income Capitalization Approach majorly to value investment properties.

**Table 4: Factors Responsible for the Relatively Low Usage of the Income Capitalization Approach**

S/N	Factors	Frequency	Percentage (%)
I	Poor availability of needed data	40	44.4
ii	Low capital value arrived at using the method	45	50
iii	Lack of adequate knowledge and skill in the use of the method	5	5.6

**Source:** Researchers' Field Survey & Analysis, 2021.

Table 4 shows that 50% of valuers do not use the income capitalization approach to value investment properties because of the low capital value arrived at using the method. This finding is in consonance with the findings of Ogunba and Ojo (2007), who revealed that valuers favor the application of the depreciated replacement cost method in valuing investment properties for mortgage purposes because the depreciated replacement cost method serves as a better proxy for market prices than the income capitalization approach, which produces a relatively lower market value than the actual market price. Table 4 also shows that 44.4% of valuers attributed their low usage of the income capitalization approach to the poor availability of needed data, while 5.6% attributed it to a lack of adequate knowledge and skill in the use of the method.

**Table 5: Approaches Adopted in Arriving at the Yield/Capitalization Rate**

S/N	Approaches Adopted in Arriving at the Yield/Capitalization Rate	Frequency	Percentage (%)
1	Intuition	40	44.4
2	Analysis of comparable market evidences/transactions	30	33.3
3	Both intuition/ analysis of comparable market evidences/transactions	20	22.2
4	Internally historic generated sources of data	6	6.7

**Source:** Researchers' Field Survey & Analysis, 2021.

Table 5 shows that the approaches adopted by valuers in arriving at a capitalization rate vary from one valuer to another. This result is similar to the findings in the works of Ogunba and Olatoye (2007). The authors pointed out that the approach to analyzing gross rent, outgoings, and capitalization rate differed widely from one valuation firm to another. Similarly, Parker (1992) revealed that no single approach was commonly and invariably used by valuation firms in the United States, Canada, Great Britain, and Australia in determining the capitalization rate in the course of valuing offices in central business districts, but rather the search for elusive comparable evidence and the principle of mentally juggling a variety of factors simultaneously and distilling

from each deliberation the capitalization rate for a given property investment was the most common approach.

The finding that analysis of comparable market evidence or transactions is an approach adopted by valuers in the use of the Income Capitalization Approach shares similar findings in the work of Johnson et al. (2000), who stated that for a valuer to use the Income Capitalization Approach, the valuer must determine the yield, and valuers will normally do this by analysis of other similar market transactions. For the Income Capitalization Approach to reflect the market price, an appropriate yield gotten from the calculation of the recent market sales price of similar properties and their rental values must be applied (Elekwachi et al, 2016). On the other hand, Effiong (2015) revealed that one of the challenges of the application of the Income Capitalization Approach is the absence of data on sales. The finding that valuers adopt both the intuition and analysis of comparable market evidence/transactions in arriving at a capitalization rate is in consonance with the findings in the work of Chiwuzie et al. (2017). The finding that valuers adopt the intuition approach to arrive at the capitalization rate is in consonance with the findings of the work of Ilsjan (2005).

**Table 6: Deduction of Outgoings from Gross Rent**

S/N	Deduction of Outgoings	Frequency	Percentage (%)
1	Yes	90	100.0
2	No	0	0.00

**Source:** Researchers' Field Survey & Analysis, 2021.

Table 6 reveals that all (100%) of the valuers deduct outgoings in the use of the income capitalization approach. This finding is in consonance with the components of the income capitalization approach, which, according to Ogunba (2013), are gross rent, outgoing (operating expenses), and initial yield/all-risk yield.

**Table 7: Components of the Outgoings Deduction**

S/N	Components that Make up Your Outgoings Deduction	Frequency	Percentage (%)
1	Repairs/Maintenance cost	88	97.8
2	Property management fee	90	100
3	Land use charge/property rate	85	94.4
4	Insurance	55	61.1
	<b>Other Items Include:</b>		

5	Vacancy Rate/Void	53	58.9
6	Ground Rent	20	22.2

**Source:** Researchers' Field Survey & Analysis, 2021.

Table 7 reveals that a very good component of outgoings is deducted by valuers in the use of the Income Capitalization Approach. This findings on the components of outgoings been deducted valuers is in consonance of the components of outgoings outlined by (Ogunba, 2013). The findings in Table 7 indicates that there is great variation amongst valuers that include ground rent, vacancy rate, and insurance as outgoings, as against those valuers that mostly included repairs/maintenance cost, property management fee, and land use charge/property rate as outgoing. This variation in the components of outgoings deducted by valuers shows that there is no homogeneity and consistency between valuers with regards to the components of outgoings deducted by them, and the consequence of this is varying net rent and consequently differential capital value.

**Table 8: Approaches Adopted in Calculating Outgoings**

S/N	An Approach to Calculating Outgoings	Frequency	Percentage (%)
1	A percentage deduction from gross rent	85	94.4
2	Based on property management records of the subject property's outgoings and expenditures	5	5.6
3	Outgoings from comparable properties	2	2.2

**Source:** Researchers' Field Survey & Analysis, 2021.

The findings in Table 8 about the approaches adopted by valuers in calculating outgoings are in line with the findings of Ayedun (2009), who outlined that the techniques used by valuers in quantifying annual outgoings are: comparable market evidence; the use of past property management records of a subject property; and applying a percentage of the gross market rent. The findings in Table 8 contrast with the findings in the works of Ogunba & Olatoye (2007), who revealed that the approach to determining outgoings differed widely from one valuation firm to another. Table 4.17 reveals that 94.12% of valuers adopted the percentage deduction from gross rent approach in arriving at outgoings, hence translating to the fact that the approaches to arriving at outgoings amongst valuation firms in Enugu State have little difference.

**Table 9: Approaches Adopted in Calculating Gross Market Rent**

S/N	Approach Adopted in Calculating Gross Market Rent	Frequency	Percentage (%)
1	Analysis of rent passing on occupied properties that are similar to the subject property being valued	72	80
2	Rent passing on the subject property being valued	13	14.4
3	Analysis of market rent placed on vacant to let properties that are similar to the subject property being valued	68	75.6

**Source:** Researchers' Field Survey & Analysis, 2021.

Table 9 shows that 64.71% of the valuers in the use of the Income Capitalization Approach derive their market rent by the analysis of rent passed on occupied properties that are similar to the subject property being valued, while 61.76% derive their market rent via analysis of market rent placed on vacant to let properties that are similar to the subject property being valued. Also, Table 9 shows that 11.76% of the valuers derived market rent from the rent passed on the subject property being valued. From this, it can be deduced that there is no singular approach adopted by valuers in calculating market rent in the use of the Income Capitalization Approach in the valuation of investment properties in Enugu metropolis. This finding is in consonance with the assertion of Ogunba & Olatoye (2007), who revealed that the approach to calculating gross market rent differs in Nigeria from one valuation firm to another. Similarly, Iroham (2012) revealed that 55.7% of valuation firms in Lagos, Abuja, and Port-Harcourt use easily available rental evidence as against 44.3% of valuation firms that determine rental evidence through market surveys.

#### **4.1 SUMMARY OF FINDINGS**

The analysis of the above primary data reveals the following findings:

- i. Most valuers in Enugu metropolis use the depreciated replacement cost method rather than the income capitalization approach to value investment properties in Enugu metropolis for mortgage, sales, and other related purposes.
- ii. The factors responsible for the relatively low usage of the income capitalization approach by valuers in Enugu metropolis to value investment properties are: poor availability of needed data, low capital value arrived at using the method, and lack of adequate knowledge and skill in the use of the method.
- iii. The approaches adopted by valuers in arriving at the capitalization rate varied from one to another, with most valuers adopting the intuition approach.

- iv. All the valuers deduct outgoings in the use of the income capitalization approach, and the components of this outgoings are repairs/maintenance cost, property management fee, land use charge/property rate, insurance, vacancy rate/void, ground rent.
- v. The approach adopted by valuers in analyzing market rent varied from one valuer to another. The two most adopted approaches are: analysis of rent passing on occupied properties that are similar to the subject property and analysis of market rent placed on vacant properties that are similar to the subject property.

## **4.2 RECOMMENDATIONS**

Based on the findings of this study, the following recommendations are proffered:

- i. The Nigerian Institution of Estate Surveyors and Valuers, Enugu State Branch, should encourage the use of the income capitalization approach by valuers, by setting up and running a reliable property data bank that is updated periodically where the estate surveyors and valuers can obtain vital data such as market rent, yield, and details of recent property sales, which are important valuation inputs in the use of the income capitalization approach.
- ii. The use of the depreciated replacement cost method of valuation in valuing income-producing properties for relevant purposes such as mortgages should be discouraged and frowned at.
- iii. There should be enforcement of the use of international valuation standards by valuers in Enugu metropolis in the use of the income capitalization approach.
- iv. The Nigerian Institution of Estate Surveyors and Valuers, Enugu State Branch, should organize a workshop and a Mandatory Continuous Professional Programme (MCPD) that would train and re-train valuers on the imperatives and application of income capitalization in the valuation of investment properties for relevant purposes.

## **4.3 CONCLUSION**

This study discovered that a higher percentage of valuers in Enugu State, Nigeria, use the depreciated replacement cost approach to value investment properties than the income capitalization approach. This study revealed that the factors behind valuers' low usage of the income capitalization approach are: low capital value arrived at using the method; poor availability of needed data; and a lack of adequate knowledge and skill in the use of the method. Thus, the

study proffered recommendations that would enhance the application of the income capitalization approach in valuing income-generating properties in Enugu.

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