

Methods of Intellectual Property Valuation in Nigeria: Preference of Estate Surveyors and Valuers in Southwest, Nigeria.

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Abstract

Estate Surveyors and Valuers (ESVs) are by laws, education and training recognised and adjudged as the most qualified professionals to determine the value of interests in property in Nigeria. In doing this, many processes and ingredients are necessary to be blended together to arrive at acceptable and market compliance value. One of such tools or ingredients are the methods of valuation adopted in the course of the valuation processes for different purposes and at a specific point in time. This study evaluates the preference of ESVs among the various methods of IP valuation in Nigeria. Total number of 247 questionnaires was used to elicit data from the practicing ESVs in Southwest, Nigeria. The data obtained were analysed with the use of Relative Importance Index (RII). It was found that the sampled ESVs preferred the use of Rule of Thumbs methods of IP valuation on the basis that the methods are very easy to use and devoid of rigorous calculations. Findings further showed that ESVs preferred the use of Discounted Cash Flow (DCF) and premium profits approaches as variants of income-based methods. The study therefore recommended the inclusion of valuation of IP in the valuation curricula of institutions offering Estate Management in the study area.

Keywords: Intellectual Property, Valuation Practice, Methods, Valuers, Southwest, Nigeria.

1. Introduction

The fact that Intellectual property (IP) has become a commodity that can be sold and bought in the open market makes it possess a value that is determined by the interaction of demand and supply. At any point in time, either arising from litigation or arbitration, probate resolution, exchange or transfer, or even assessment of the intrinsic value of such things as an old stamp, old coins or antiquity or medals via auction or outright sale; the value of IP ought to be determined [1]. [2] opined that both identifiable and unidentifiable intangible assets have and generate an enormous value and sometimes perform better than the tangible assets, and further suggested that developing countries must develop appropriate means of determining values to their intellectual property rights.

[3] asserted that there has been a shift in the business assets primarily from tangible assets to intangible assets as reflected in the balance sheets of some business concerns. They however queried the readiness of practicing valuers to adequately and reliably report the values of the intangible assets. It is therefore obvious that inadequate and poor valuation poses a great threat both to domestic and national economies. The valuation of intellectual property is therefore adjudged to be very significant because it is needed in every part of life. It is also important as the driver of

profitability and wealth creation in a knowledge economy [4].

As of today in Nigeria "valuation" which entails the determination of the monetary worth of property and interest therein at a given point in time remains the responsibility of Estate Surveyors and Valuers (ESVs) under Decree (Now Act) 24 of 1975 [5].

Unfortunately, perhaps due predominantly to the fact that IP majorly involves intangible items or assets, ESVs view it as a tricky and abstract valuation area and inanimately did avoid it. This is complicated by the fact that IP valuation is an uncommon business, but when it comes, it poses an intriguing problem to the valuers. However, the coming to light of the role that IP is now playing in income generation for talented individuals and corporate organisations is now raising awareness on the need to value IP appropriately when the need arises.

This study examines the appropriate valuation methods that are or are the preference of practicing Estate Surveyors and Valuers for valuation of IP in Southwest, Nigeria. The specific objectives are to:

identify the various methods of IP that are been used by Estate Surveyors and Valuers in Southwest, Nigeria; and fashion out the appropriate methods for valuing IP in the study area.

2.0 Literature Review

Intellectual property valuation methods have been discussed along with two major classifications: quantitative and qualitative methods, though with much emphasis on the quantitative method [6,7,8,9,10,11]. In an earlier study, [7] opined that valuation of intangibles is very complex even though several approaches have been proposed for its valuation. Like other kinds of literature on IP Valuation, the paper identified IP valuation methods to be quantitative and qualitative.

The quantitative include: market approach done by the sales comparison method; income approach with its variants such as the relief-from-royalty method, the multi-period excess earnings method, the cash flow method, the comparative income differential method; and cost approach with the cost of reproduction method and the cost of replacement method as its variants. Quantitative methods deal with the assessment of the monetary value of IP while the qualitative method is used in the analysis of IP based on the factors which influence value.

[8] described qualitative methods as the use of inferred calculations of the value of IP assets into monetary values while quantitative involves the use of a well-defined scientific measure that shows in monetary terms, the value of IP. The quantitative methods are majorly divided into three viz: cost-based, income-based, and market-based methods [12] while the qualitative method uses a value indicator approach.

Though, an author like [8] summarises the quantitative and qualitative methods of IP valuation into identifiable four approaches. These approaches include transactional (same as market approach); cost; income; binomial and other options. He asserted that Local and international valuation and accounting firms including PWC in a workshop presentation at WIPO Workshop on Effective Intellectual Property Asset Management by SMEs have adopted the use of these methods.

[6] reviewed the methods of valuing intellectual property rights in Alto while [13], prepared a report on the hidden value of IP in the UK in response to a research commissioned by UK Government to determine the appropriate methods for valuation of IP. Another study was done by the [9] which was however exploratory in

nature and also relied on the available literature to generate his findings and form his conclusion.

Also, [14] prepared a guide for the valuation of IP using examples to show the applications of the three major methods in the valuation of IP. [15] explored the present practices of patent valuation approaches and determined the applicability, uses, barriers, requirements, and advantages of IP valuation techniques in IP system of know-how in Turkey with the conclusion that more than one valuation techniques can be used to determine the value of IP. Meanwhile, [16] identified the choice of appropriate methods as one of the factors that affects valuation of arts and artifacts in Ogun State, Nigeria. [8] recently undertook a purely exploratory study based on literature by identifying the methods for valuation of IP. Meanwhile, unavailability of valuation software and lack of requisite knowledge of the usage has have been identified as barriers, generally to property valuation in Nigeria [17]. Also, [18, 19] both identified methods of valuation as a major determinants of land and landed peroperty. Overall, the review shows that none of the literature was carried out methods of IP valuation in Nigeria.

Based on the above classifications of IP valuation methods, Figure 1 below was created for easy referencing.

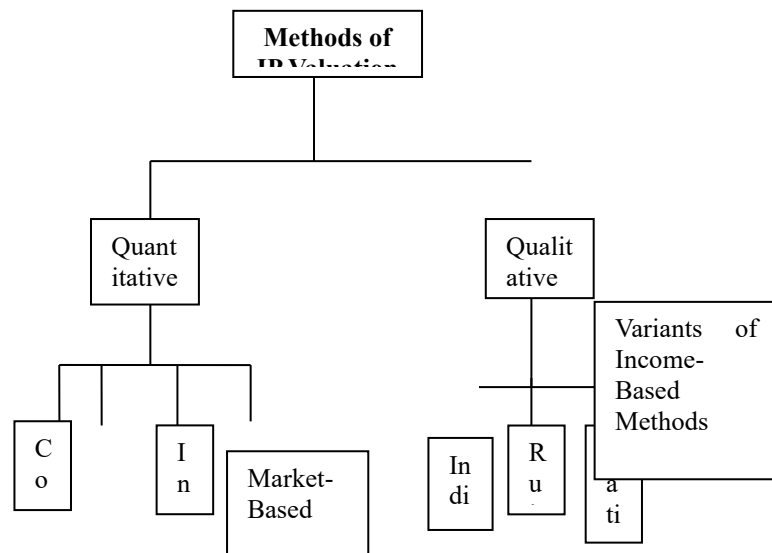


Figure 1: Conceptual Framework of Methods of IP Valuation Source: [20]

3 Materials and Methods

The study focused on the practicing Estate Surveyors and Valuers (ESVs) in the Southwest,

Nigeria. The choice of Southwest, Nigeria was necessitated because of the large presence of Estate Surveying and Valuation firms across all the six states. It is therefore hoped that the result obtained from the region can serve as representatives for other regions in Nigeria. Stratified random sampling method was adopted in selecting the samples among the firms of Estate Surveying and Valuation using the stratification earlier used in Southwest, Nigeria (See [21]). A self-administered structured questionnaire was used to collect data from the respondents. The questions in the questionnaire are closed and open-ended type. The close-ended questions took the form of a multiple-choice question to make it easier for the

respondents while the open-ended questions would allow the respondents to articulate their thoughts and opinions better in cases where their intentions or experiences could be easily expressed. The study administered a total number of 247 questionnaires and a response rate of 74.5% was achieved as shown in Table 1. Data obtained from the ESVs were presented in tabular form and analysed with the use of simple statistical tools such as frequency distribution, percentages, mean and standard deviation in order to determine the magnitude of acceptability of the ranked close-ended questions in the questionnaires.

Table 1: Response Rate of Respondents Per State

Ekiti	7	4	57.1
Total	247	184	74.5

Table 2: Profile of Estate Surveyors and Valuers (ESVs) in Southwest, Nigeria

Location of Estate ESVs	Questionnaire Distributed	Questionnaire Retrieved	Percentage of Surveyed State	Percentage of Total
Lagos	150	118	78.7	64.1
Oyo	38	23	60.5	12.5
Ondo	23	18	78.3	9.8
Osun	15	10	66.7	5.0
Ogun	14	11	78.6	5.4

Profile	Parameters	Freq. Membership(s)	% RICS	Total
Gender	Male	153	82.6	3
	Female	31	16.8	184
Age of the Respondent	Total	184	100.0	19
	Up to 30 years	21	11.4	1
	31-40 years	71	38.6	3
	41-50 years	62	33.7	4
	51-60 years	18	9.8	1
	Above 60 years	12	6.5	142
Highest Academic Qualified	Total	184	100.0	14
	HND/B.Sc	104	56.5	19
	M.Sc	73	39.7	65
	Ph.D	5	2.7	35
	PGD	2	1.1	29
Years of Experience	Total	184	100.0	36
	NIESV	166	90.2	36
	Up to 5 years	19	11.4	65
	6-10 years	71	38.6	35
11-15 years	62	33.7	29	
16-20 years	18	9.8	36	
Above 20 years	12	6.5		

Total

Source: Authors' Field Survey, 100.0

Table 2 showed that most of the respondents were male (83.2%) while female were just 16.8%. This could be adduced to the physical nature of estate surveying and valuation practice which require energy and vigour that could be tiresome and make estate surveying and valuation less attractive to female counterpart. The analysis of respondents' age revealed that that majority (83.7%) of the respondents were between 30 to 50years. This is an indication that the respondents contacted are in the age brackets of surveyors who should still be agile and also forward looking. It then implies that the information provided by the respondents will be adequate for achieving the aim and objective of this study. Respondents were also asked of their highest academic qualification with the intention of measuring the adequacy of their literacy level of the subject matter of IP valuation. It was found that 56.5% of the respondents have HND/B.Sc as their highest academic qualification followed by 39.7% who possesses master's degree. 2.7% of the respondents were holders of PhD while only 1.1% of the respondents graduated with PGD degree. The inference from this result is that the high level of academic certification posses by the respondents will make the information supplied by them useful in achieving the objective of the study. Next on the profile of the respondents is the professional membership of the **Table 3:** General Method (s) that are most appropriate for valuing IP

Methods of Valuation	Mean	Mean Rank
Rule of Thumb	3.60	1 st

Table 3 revealed that the use of the rule of thumb method ranked 1st with mean = 3.60 while income-based methods ranked 2nd (mean = 3.28). Cost-based and market-based methods ranked 3rd and 4th with a mean of 3.15 and 2.97 respectively. This suggests the rule of thumb to be the most popular method currently being used by the respondents for the valuation of IP in the study area. The results of the analysis in table 3 which showed the

Table 4: Acceptability level of methods that are variants of Income Methods of IP valuation

Variants of income methods	Mean	S.D	Mean Rank
Discounted Cash Flow Approach	2.88	1.681	1 st

respondents. Ninety percent of the respondents obtained their professional certifications from NIESV alone while just 0.5% belongs to RICS while the remaining 7.6% of the respondents had membership of both NIESV and RICS. This is also a true reflection of professional affiliation of the ESVs in Southwest, Nigeria. The analysed professional qualifications showed that 10.3% of the ESVs were Fellow of NIESV while only 0.5% were Fellow of RICS only. 1.6% were Fellows of both RICS and NIESV, 2.2% are both MRCIS and ANIVS, 77.2% are ANIVS, 7.6% are both FNIVS and MRICS and (.5%) are probationer/graduate. In relation to the experience of the respondents; majority (54.3%) of the respondents had 6 to 15years experience in estate surveying and valuation firms while only a few (19.6%) of them had above 20years experience. It is also believed that spread of years of experiences of the respondents will ensure reliability of information obtained.

4.2 Methods of IP Valuation

This section showed the results obtained from the respondents on their preference of general methods and variants of income based methods for valuing IP in Southwest, Nigeria. The results obtained are presented in table 3 and 4 below.

Income-based	3.28	2 nd
Cost-based	3.15	3 rd
Market-based	2.97	4 th

Authors' Field Survey

market-based method to be the least among the method being used by all the respondents further confirms that IP seldom changes hands in the market.

Further enquiry was made among the ESVs to ascertain the level of appropriateness of variants of income-based methods for the valuation of IP in the study area. The result of the enquiry is presented in Table 4.

Premium Profits Method	2.63
Excess Earnings Approach	2.44
Relief from Royalty Approach	2.40
Real Options Models	2.19
Monte Carlo	2.06

Decision Tree Analysis	2.01	1.232	7 th
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Table 4 revealed that all the variants of income-based methods are acceptable at varying degrees for the valuation of IP in the study area. Discounted Cash Flow (DCF) method ranked first among the seven variant approaches of income-based methods (mean = 2.88) while premium profits method ranked second with mean = 2.63. Ranked third and fourth are Excess Earnings Approach and Relief from Royalty Approach with mean equal 2.44 and 2.40 respectively. Others are Real Options Analysis, Monte Carlo Approach, and Decision Tree Analysis as 5th, 6th, and 7th with mean equal 2.19, 2.06, and 2.01, respectively.

Conclusion

The findings showed that the respondents prefer the use of Rule of Thumb as the best method for the valuation of IP. This is in total agreement with the literature that most valuers preferred the use of the rule of thumb for IP valuation because of its simplicity devoid of rigorous calculations and data sourcing. Another inference that can be drawn from here is that most of the respondents lack the knowledge for the use of other methods of IP valuation. An important reason for low knowledge arises from the non-inclusion of IP valuation in the curricula of schools and professional bodies that are producing graduates of Estate Management and Valuation, and the issuance of professional certifications respectively.

The use of the income method was also favoured by ESVs while the least favoured method is market-based methods. These also pointed to the fact that market data are not readily available for the valuers to use since IP assets seldom change hands in the market.

As it is applicable in the valuation of tangible property, results in Table 4 showed that ESVs preferred the use of Discounted Cash Flow (DCF) and premium profits approaches as variants of income-based methods to other methods such as decision tree analysis, Monte Carlo Simulation, relief from royalty and so on. This again borders on low knowledge of valuers in the use of these contemporary methods because of technicalities and rigorous calculations involved as asserted in [17]

It was therefore suggested that valuation curricula of educational and professional institutions saddled with the responsibilities of training undergraduates and practitioners for qualifications as registered Estate Surveyors and Valuers be improved to include valuation of IP. NIESV and

ESVARBON should made public, necessary guides for IP valuation.

It is hope that the study would enhance the practice of property valuation in Nigeria and also increase the tempo of advocacy for curriculum review among tertiary institutions offering estate management as a course and NIESV which is awarding the professional diploma to property valuation practitioners (Estate Surveyors and Valuers) in Nigeria

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AUTHOR CONTRIBUTIONS

A. S. Ibisola conceptualised the study, designs the questionnaire, collected the data, interpreted the data and prepared the draft and final version of the paper. **C. A. Ayedun** and **O. C. Oloke** supervised and review the edited and final versions of the paper thereby making necessary contributions leading to the perfection of the work.

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