# **CHAPTER ONE**

# **INTRODUCTION**

### 1. Background to the Study

It was in 1987, in the wake of some well publicized research works by actuaries Hager and Lord that Drivers Jonas first sponsored Investment Property Databank (IPD) to carry out detailed research into valuation accuracy in the United Kingdom. The Royal Institution of Chartered Surveyors (RICS), as the valuers' professional body, later took over the role of sponsor. In doing so, they were adopting one of the principal recommendations of Sir Bryan Carlsberg's Working Party on valuation practices.

In 1985, Udo-Akagha, one of the leading estate surveyors and valuers in Nigeria, while writing a foreword to "Guidance Notes on Property Valuation" noted that;

"there ought to be no reason why two or more valuers valuing the same interest in a property for the same purpose and at the same time should not arrive at

the same or similar results if they make use of the same data and follow the same valuation approach".

In the same vein, in 1998, an editorial on page 2 on "property valuation and the credibility problems" in The Estate Surveyor and Valuer, the professional Journal of the Nigerian Institution of Estate Surveyors and Valuers stated *inter alia* that

"the valuation process has been the focus of recent debate and controversy both within and outside the profession as cases of two or more valuers giving different capital values with wide margins of variation for the same property abound".

Comments of this nature have led many to ask whether estate surveyors and valuers are interpreters or creators of value. From the above statements, it is evident that the twin problems of inaccuracy and inconsistency (variance) in the valuation practice exist in Nigeria. Even in developed countries such as Britain, Australia, Canada and USA, the valuers' estimates, methods and processes have been increasingly criticized for over the past thirty years as clients seek advice in increasingly sophisticated investment markets (Baum and Macgregor, 1992).

In the same vein, there has also been a focus on the seeming inability of valuation estimates to accurately represent/interpret market prices or serve as a security for bank loans. Bretten and Wyatt (2002) observed that valuers do not operate with perfect market knowledge while valuers in many instances follow clients' instructions, analyze available information, make judgments and respond to different pressures from stakeholders when preparing a valuation in a market atmosphere of heterogeneity. However, the study of valuation accuracy should be a continuing one as is the case in the United Kingdom (UK) where the RICS of late teamed up with the Investment Property Databank (IPD) to produce investigations into valuation accuracy in Britain on a two (2) yearly basis.

The effort in this work will accordingly be the study of valuation accuracy and consistency and the factors influencing their occurrences, to cover a more up to date time period with a view to

validating/invalidating, expanding and updating the results in the pioneering efforts of Ogunba (1997), Ogunba and Ajayi (1998) and Aluko (2000). Accordingly, the present effort will be to deal with valuation of properties in the Lagos metropolis which is regarded as the most active investment property market city in Nigeria.

## **1.2 Statement of the Research Problem**

Property valuation performs an essential role in property transactions. It provides advice on prospective purchases and sales in addition to supplying material information to underpin property lending decisions. Moreover, since the 1960s and 1970s, property valuations have been used to proxy the exchange price of property investments for performance measurement purposes. This more recent use of valuation indices is a major difference between the property performance measurements and the performance measurement of other investment media markets wherein measurement are undertaken by reference to market transactions.

The differences have led some analysts to argue against property as a portfolio asset, which in turn has led to the under-representation of property in many portfolios. Moreover, the lack of confidence in the use of valuation-based indices might be evidence that the portfolio industry does not readily accept valuations as accurate indicators of prices (and hence returns) in the absence of accuracy studies proving that they are proxies for each other.

Ajayi (2003) noted that increased valuation accuracy and consistency are the demand of the more sophisticated and enlightened clients in the emerging property market of today and the property market has seen remarkable change within the past forty years. Europe and the US have witnessed the emergence of institutional investors, the management of investments on portfolio basis and the recent advent of new property finance methods including securitization and unitization. Clients are now getting much more sophisticated and analytical in their decision making approaches and therefore increasingly require more accurate and consistent valuation estimates from their consultant valuers.

While Accountants, Stockbrokers and other financial consultants have progressively refined their financial analytical techniques to meet and satisfy their changing clients' expectations, it is rather unfortunate that the property professionals - represented in Nigeria by the Estate Surveyors and Valuers - have been rather slow and lukewarm in their attitudes and approach to the required accuracy changes in valuation practice thereby resulting into complaints from clients about valuation estimates (Ojo, 2004).

The issue of accuracy is also imperative because the profession as it is today is facing stiff competition in all facets of its traditional areas of practice, taking into consideration the fact that the estate agency aspect of the profession has become an "all comers" affair and moreover, that Engineers, Lawyers, Facility Managers and even some stark illiterates ("quacks" of the profession) do engage in property management functions. At the same time, Quantity Surveyors are agitating to take-over the insurance valuation aspect of the profession, whilst Engineers are also seeking to be plant and machinery valuers. In the face of such stiff competition, the estate surveyors can ill afford to be found negligent in the accuracy of their work.

The implication is that the valuation surveyor is faced with both increasing client requirements for accuracy as well as stiffer competition from related professionals. These twin issues of stiff competition and consistency cry out, as it were, for the valuer to respond with pace setting levels of accuracy, and sophistication in his valuation advice. The problem of inaccuracy in valuation manifested itself recently in the case of the valuation of the assets of Nigeria Telecommunication Limited (NITEL) for privatization/disposal purposes when members of staff of the company as well as the interested stakeholders and members of the public in Nigeria openly voiced out their complaints against the excessively low valuation figures/estimates the estate surveyors ascribed to the assets of the company. It was on the strength of such complaints that the then Federal Government under President Olusegun Obasanjo canceled the whole privatization exercise and ordered a re-valuation.

Other instances of valuation estimate inaccuracy according to Ojo (2004) came from financial institutions who continuously complained about the accuracy and reliability of mortgage valuation figures supplied them, which they considered as under-representing the values of such foreclosed collateral securities. He went further to note other instances of alleged inaccuracy which were being investigated by the Professional Practice Committee of the Nigerian Institution of Estate Surveyors and Valuers.

In addition, Ogunba (1997) and Ogunba and Ajayi (1998) alluded to the fact that the average layman nowadays casts doubt on valuation estimates emanating from estate surveyors and valuers. No matter how unjustifiable the criticisms might be, that estate surveyors and valuers are often influenced to hike their valuation estimates because of the need to increase or generate their fees, such criticisms or allegations are a pointer to the fact that inaccurate valuation estimates call to question the valuation skill, integrity and competence of Estate Surveyors and Valuers especially in their core area of practice. From the legal perspective, there is danger that valuers in Nigeria are increasingly found liable for negligence in cases where their valuation figures or estimates mislead unsuspecting and uninformed clients, notwithstanding the exclusion clauses often entrenched in Nigerian valuation reports (Okoror, 1995).

Besides, there is the looming possibility that the property investing public, faced with continuously unreliable estimates, may decide to dump the services of estate surveyors and valuers in favour of services from other consultants such as the Accountants, Financial Analysts, Engineers or Quantity Surveyors who, they think may be able to provide more realistic and reliable estimates. It is therefore important for estate surveyors and valuers to wake up from slumber and take the issue of valuation accuracy and consistency more seriously.

Other envisaged consequences of continuous and unchecked inaccuracy and inconsistency are adequately summarized by Aluko (2004) as:

- Constraints on property performance analysis due to uncertainty surrounding valuations. This may be damaging to the operation of both the property market and property indices;
- Adverse influence on the relevance of the valuer because if a valuation can only have a limited likelihood of accuracy, the client may question why a valuation is necessary at all;
- Adverse influence on the credibility of the valuer as inaccuracy in valuation means that professional advice would be meaningless as the whole basis of property advice rests

on the assumption that valuations are a good proxy for prices; and,

• There could be damage to confidence imposed on the property market.

There seems to be relatively sparse research work in Nigeria on valuation accuracy, reliability and credibility as against such studies in the UK, US, Canada and Australia especially in the past three decades. Also, in the face of the globalization of efforts in this very important and core area of the profession; Nigeria and the rest of Africa cannot afford to feel unconcerned and lukewarm if they want to be relevant in the emerging scheme of things.

In the face of such increasing needs for accuracy, reliability and credibility in valuations, we cannot therefore afford to fold our arms in the face of these problems, observations and criticisms and expose ourselves and the profession to ridicule. It is against the foregoing background that the following questions agitate the mind of the researcher in a bid to ensure that valuation estimates become more accurate and standardized in Nigeria. The study focuses in the main on valuations and sale prices of properties as well as valuations between firms by examining the degree to which they are proxies for each other and if not, the reasons why they fail to be proxies. In view of the foregoing, the questions to be addressed include:

- What is the maximum acceptable margin of error (acceptable to all stakeholders) of valuations relative to realized prices?
- Are Nigerian valuations a good proxy for valuations of other firms?
- Are investment valuations a good proxy for property market transaction prices?
- What are the causes of inaccuracy in property investment valuations in Nigeria, if it at all inaccuracy exists?
- What are the condition(s) necessary to ensure correct estimates of market price?
- Are client influences significant contributors to inaccurate valuations in Nigeria?

## 1.3 Aim and Objectives of the Study

The main aim of this study is to examine the degree of accuracy and consistency in valuers' estimation of realized property market prices in Lagos metropolis with a view to improving on the quality of valuation practice.

The specific objectives of the study are to:

- 1. Ascertain the perceptions of stakeholders as to the maximum acceptable margin of error in valuation estimates relative to sale prices within the study area
- 2. Determine if open market valuations are good proxies for real property investment markets in the study area
- 3. Examine if open market valuation estimates of one firm are good proxies for contemporaneous valuations of other firms in the study area, and

4. Identify and examine clients' mode of influence on valuation estimates.

The essence of the study is to address the above issues and problems by focusing mainly on the questions of reliability/consistency benchmarks and the nature and causes of reliability and consistency of the professionally prepared investment valuations in the Lagos metropolitan property market.

## 1.4 Significance of Study

The RICS teamed up with the Investment Property Databank (IPD) to carry out investigations into valuation accuracy in Britain on a bi-yearly basis. Since the Nigerian Institution of Estate Surveyors and Valuers (NIESV) and the Estate Surveyors and Valuers Registration Board of Nigeria (ESVARBON) are yet to follow suit, there is the need for estate surveyors in academics to continuously investigate valuation accuracy and consistency and share with their colleagues in practice results and implications of their findings and induce them to fund future research efforts on this issue.

The huge sums of money invested in real estate on an annual basis are enormous. The current happenings in the US with regards to bubble burst from the mortgage sector of the country's economy are already affecting the fortunes of other countries. To avoid such risks in Nigeria, this study serves as an eye opener for estate surveyors and valuers in practice, other professionals and stakeholders in the real estate business as to the extent of risk they are about to take.

Valuer's clients are handicapped in decision making by the absence of adequate and reliable information in the property market, unlike the capital market where values of securities can be imputed quickly and easily from the prices at which identical assets trade in regular active markets. Information about market values in the property market is much more difficult to ascertain due to the heterogeneity of properties, the infrequency with which they trade, and the difficulty in observing or tracking transaction prices due to secrecy. Additionally, the decentralized nature of most property markets give rise to a dispersion of privately agreed transaction prices about notional market values. The implication of this is that capital market operators and portfolio managers require valuations as a proxy for price. The Nigerian Institution of Estate Surveyors and Valuers therefore needs to encourage research to determine the veracity of inaccuracy claims and if proven, to take corrective action. The present research is in this direction, in an attempt at assisting the profession to justify its property price predicting relevance. The outcomes of earlier studies carried out by Ogunba (1997), Ogunba and Ajayi (1998), Aluko (2000) and Ogunba (2004) in the area of valuation accuracy/variation have tended to be contradictory in the sense that while Aluko's work found that valuation estimates emanating from Nigerian valuers were accurate others concluded otherwise. It is necessary to clarify the position as to what can be considered as the acceptable margin of error and identify plausible reasons for valuation inconsistency amongst valuers operating in the same region and with similar educational background. This is necessary to instill confidence in the ever increasing clients searching for genuine information about the real estate market trends over time and in the near future.

## 1.5 Scope of Study

No matter how ambitious a researcher could be, no single study can be all encompassing. Hence, study limits have to be defined clearly. Investments in real estate are an ongoing issue on daily basis all over the country. However, time constraint does not allow for the coverage of the entire country. For this reason, the scope of of this research is restricted to Lagos metropolis where the vast majority of Nigerias' valuation practice is generated. The Directory of the NIESV (2002 edition) shows that out of 439 registered estate surveying and valuation firms in Nigeria, 52% of the firms are based in Lagos metropolis alone. Lagos Metropolis consists of five convenient business districts namely: Marina/Broad Street, Lagos Mainland consisting of Yaba/Ebute Meta, Apapa/Ijora, Ikoyi/Victoria Island and Ikeja from which deductions are made for each of the districts and for the whole of the Lagos metropolis. The five districts represent the major business sectors of Lagos metropolis, where the bulk of valuation activities normally takes place and where most practicing surveyors are concentrated. Lagos Island harbours majority of banks, multinational companies, insurance companies, and also where wholesale and retail commercial activities are concentrated. Lagos Mainland on the other hand represents the intermediary between the former Federal/State capital territory and the new Lagos State capital. Ikeja is the present Lagos State capital with its attendant employment opportunities as well as concentration of commercial activities. Apapa/Ijora axis represents the commercial neighbourhood that has developed overtime as result of the presence of Apapa seaport acting as the drawing force of both people and commercial activities.

In the choice of property to be studied, Ajayi (1990) noted that wide and detailed studies provide stronger basis for rigorous comparative analysis and more generalizeable conclusions. However, the study concentrated on residential property valuation only. This is necessary because sampling all sectors of property valuation may be impossible for a single researcher given the nature of the study and the time limit to complete the study.

In the choice of valuers, three basic classifications of estate surveyors and valuers has been identified namely private-sector estate surveyors and valuers (i.e. those estate surveyors and valuer working in private practice), public-sector estate surveyors and valuers (i.e. estate surveyors and valuers working in government establishments such as Ministries, Corporations etc) and the academicians. The study focused on valuers in private practice because they are in the majority and are actually the people mostly engaged for valuation assignments by various stakeholders.

There are various methods of valuation such as Investment, Cost/Contractor, Residual, Profit and Comparative methods. For this study, emphasis is given to the Investment Method of valuation because most investors look up to the returns they can make on whatever they put into any venture within reasonable time limits. An intensive study of the five methods of valuation, on the other hand would be too wide and cumbersome.

The purposes for demanding for a valuation exercise are varied. There are valuations for rating and taxation, compulsory acquisition, insurance, balance sheet, merger, mortgage, auction, etc. This study is limited to valuation for property sale purposes only. This is to avoid wide study of all purposes of valuation which could lead to conclusions which may be general and without specific implications or applications in the real estate business.

Notwithstanding the above limitations, the validity of the study would not be affected.

#### 1.6 The Study Area

Lagos State covers an area of about 3,577 square kilometers, representing 0.4% of Nigeria's

territorial landmass according to Esubiyi (1994). The State shares boundary in the North with Ogun State, West with the Republic of Benin, and stretches for over 180 kilometers North of the Guinea Coast of the Atlantic Ocean. Politically, Lagos State according to Ogunba (1997) had expanded as a result of rural-urban drift and had become a metropolis enclosing settlements such as Mushin, Oshodi, Ikeja, Agege, Shomolu, Bariga, Epe, Ikorodu and Badagry. The 2006 National census put the population of the State at 9,013,534.

Lagos Metropolis has been chosen as the study area because it is the most important commercial city in Nigeria thus providing a sufficiently vibrant economic base and valuation activity which the researcher hopes would provide a vigorous and robust study base Lagos apart from being Nigeria's former capital, is the largest metropolitan city in Africa. The metropolis is located within the coastal frontage of Lagos State and is bounded in the West, by the Republic of Benin, in the East by Ondo State and Atlantic Ocean in the South and in the North by Ogun State. The metropolis covers an approximate land area of 2,350 square kilometers spreading over four main islands of Lagos, Iddo, Ikoyi and Victoria islands.

On the economic scene, Lagos metropolis has grown from a small farming and fishing settlement to become an important centre of commerce, finance and maritime in Nigeria, housing the headquarters of several banks, industries and commercial enterprises. According to the NIESV Directory (2002), most Estate Surveyors and Valuers aggregate around major business districts of the metropolis such as Lagos Island, Ikeja, Apapa/Ijora, and Lagos Mainland where there is the expectation of a very active property market.

## 1.7 Definition of Key Terms

In a study of this nature, it is considered necessary and desirable to define key terms with a view to clarifying both operational and constructive definitions to avoid ambiguity. Constructive definition involves substituting the concept or construct of the term we are defining with other concepts or constructs, the operational definition requires that the concept or construct be assigned a type of meaning which the researcher wants to carry throughout the study.

## 1.7.1 Market Value:

Market Value is the estimated amount for which a property should exchange on the date of valuation between a willing buyer and willing seller in an arm's length transaction after proper marketing wherein the parties had acted knowledgeably, prudently, and without compulsion IVSC (2002). The accuracy of any valuation is, therefore, defined as how close the valuation is to the exchange price in the market place.

## 1.7.2 Market Price:

Market price refers to realized prices; the recorded consideration paid for a property which has ostensibly been left in the market for a reasonable period of time. The recorded consideration is taken as the best price that a property asset could realistically command in the free market.

Transactions do not occur at the point where most players in the market would assess its worth; the transaction occurs at a point which the seller considers to be the highest bid. Market price should therefore capture the highest price at which the property can be sold. Ordinarily, in a perfectly competitive market where there is full information, market value should equate with market price.

## **1.7.3 Valuation Reliability/Accuracy:**

Reliability according to Allan (2000) is the degree to which a measurement instrument gives the same results each time it is used, assuming that the underlying object/situation being measured does not change. One can test reliability by determining whether several observers of an object/situation will give similar accounts of it. Reliability is used interchangeably with the term accuracy in this study. Mathematically, reliability/accuracy is usually measured either in terms of percentage standard deviations ranging from  $\pm 5\%$  to  $\pm 15\%$ , or through statistical tests such as regression equation, where it is expected that the intercept of the equation would be statistically indistinguishable from zero and the constant indistinguishable from one. The study adopts Crosby et al (2003) definition of reliability/accuracy as the closeness (proximity) of the valuation to the realized exchange price.

According to French (2007) uncertainty was defined as anything that is not known about the outcome of a venture at the time the decision was made. Similarly, Mallision and French (2000) observed that "normal uncertainty is a universal and unsurprising fact of property valuation. The open acknowledgement of that fact, and transparent management of its implications, will enhance the utility of valuations".

## **1.7.4 Valuation Consistency and Variation:**

Consistency is a term used interchangeably with the term variation in this thesis. It describes the quality of being mutually constant or not being contradictory. Relating this to the present study, consistency in this study will be taken to refer to the closeness or otherwise of the valuation predictions of two or more valuers who carry out valuations of the same property or properties at the same period of time. The terms reliability and consistency are mathematically measured either in terms of percentage standard deviations or through statistical tests such as regression equation, where it is expected that the intercept of the equation would be statistically indistinguishable from zero and the constant indistinguishable from one.

French (2007) observed that the problem with variance research is that information pertaining to it either has to be set up artificially with a number of valuers asked to provide valuation on set of properties or the analysis relate to valuation s carried out at different points of time in the market. The outcomes of such studies varies substantially and in essence simply reports that different valuers have different ideas and thus produce different valuation figures.

### 1.7.5 Valuation

This is the process of estimating the market value, insurance value, investment value or some other properly defined value of an identified interest or interests in a specific parcel(s) of real estate as at a given date. It is the estimate of the most likely selling price, the assessment of which is the most common objective of the valuer. The most likely selling price is commonly termed "open market" or "market price". Baum and Crosby (1988) distinguish between two types of valuation: price prediction to the market or to an individual. Valuation in this thesis is taken to be the prediction of most likely sale prices in the market rather than to the individual.

## **1.8 Limitations of Study**

In the course of the study the under-listed constraints were encountered. These constraints included:

- 1. Limited human, material and financial resources at the disposal of the researcher which imposed restrictions on study coverage.
- 2. The technical nature of some of the questions that were put across to respondents which necessitated the researcher resorting into the use of personal interviews for some respondents thus taking a toll on the time of the researcher.
- 3. Getting actual selling prices of properties is usually tricky and problematic because the sale of a property is always conducted with a high degree of secrecy. Moreover the market / sales prices stated in documents transferring ownership usually submitted to the Land Registries are, more often than not, manipulated to avoid/reduce tax payments.
- 4. The study of a few selected towns and cities can not be completely typical of all towns and cities in a country as big as Nigeria. However, since majority of estate surveyors and valuers in Nigeria aggregate and concentrate in the study area, the findings of the study is believed to be applicable to majority of valuers in the country.

The constraints however did not significantly affect the results of the study because necessary precautions were put in place to consult experienced professionals who had practiced across varying economic spheres before and after Nigeria got her independence. For this reason, the findings, observations and recommendations that emanated from the study could be tested across the major cities within the country and found useful.

## **1.9 Chapter Summary**

In this Chapter, a comprehensive introductory overview to the study was undertaken. The research problem was defined against the background of increasing criticism of valuation methodologies in recent times in Nigeria. The study therefore examined the nature and causal factors of inaccuracy in valuers' estimation of realized residential property market prices in Lagos metropolis, Nigeria. The justification for the study was premised on three issues: First is the need for estate surveyors

in academics to continuously investigate into valuation accuracy and consistency and share with their colleagues in practice results and implications of their findings and induce them to fund future research efforts on this issue. The second justification for the study is to serve as an eye opener for estate surveyors and valuers in practice, other professionals and stakeholders in the real estate business about inherent risk in inaccurate and inconsistent valuation. The third justification arose from the need to determine the veracity of inaccuracy claims and if proven, to take corrective action. The present research is in this direction, in an attempt at assisting the profession to justify its property price predicting relevance. The scope of the study was limited to Lagos Metropolis which is Nigeria's major commercial/industrial nerve centre. The next Chapter is a review of relevant literature on the subject of study.

# **CHAPTER TWO**

# LITERATURE REVIEW

#### 2.1 Introduction

This Chapter is concerned with a review of literature on accuracy and variance in valuation as well as the causal factors which may lead to inaccuracy in the valuation process. The Chapter is structured into eight sections: the first section examines investment method of valuation while the second section deals with past works on valuation accuracy debates especially on the acceptable margin of error in valuation accuracy and variance. The next four sections reviewed past valuation accuracy studies carried out in UK, USA, Australia and Nigeria respectively. The eighth section reviews literature on behavioural influences on valuation accuracy while past works on clients' influences on valuation accuracy were examined in the last Section. The Chapter ended with comments by way of Chapter summary and conclusion.

#### 2.2 Investment Method of Valuation

Apart from being purchased for use and occupation, real property can be held as a form of investment. Hence, investors will put their capital into it so as to receive annual returns thereon in the form of rent. Thus, estate surveyors and valuers are frequently called upon by owners or potential owners to value various interests (freehold or leasehold) in properties for the purpose of a sale or acquisition. In such a case, the investment method of valuation is the most appropriate method to use.

The investment method is the method of estimating the present worth of the right to future benefits to be derived from ownership of an interest in a specific property under given market conditions. This process is known as income capitalization since it involves the conversion of future income flows derivable from a property to a lump sum.

## 2.2.1 The Premise of the Investment Method of Valuation

The investment method of valuation is based on the premise that the value of an asset (property) is the sum of the present values of the streams of periodic net benefits enjoyed by the owner of the asset for the duration of his interest. These benefits may be monetary or non-monetary. Therefore, for income producing properties, the market value of an interest is the sum of the present value of the periodic net incomes discounted at the appropriate opportunity cost of capital for that kind of investment.

The foregoing suggests that the investment method of valuation is based on the principle that annual values and capital values are related to each other and, given the income a property produces, or its annual value, the capital value can ascertained. Thus, amongst others, the valuer faces the problem of how the annual values are related to the capital values. The relationship of annual value to capital to capital value is defined in terms of a multiplier, which is commonly known as the "Years Purchase" (YP). In valuation terms, this multiplier is more appropriately described as the Present Value of =N=1 per annum. The multiplier is used in the conversion of the annual values into a capital value.

Net Annual Value (Net Income) X Years' Purchase = Capital Value ... Eqn. 2.1

or (NI) X (YP) = CV ... Eqn. 2.2

where

NI is Net Income; YP is Years Purchase and CV is the Capital Value

YP is derived from the rate of interest which an investor requires he would be able to obtain from investing in a property. This rate of interest or yield reflects the quality of the investment. The net annual value, more commonly described as net income per annum represents the annual income after deduction of landlord's irrecoverable outgoings such as taxes, insurance, repairs and management fees.

## 2.2.2 The Applicability of the Investment Method of Valuation

The investment method of valuation is most appropriate for valuing properties which generate an income flow or could produce an income flow, and are held as an investment by owners; because as a method, it closely reflects the behaviour of the various parties operating in the same kind of property market. That is, the method is applicable to any kind of property for which a pattern of expected market income could be determined. The income expectations could be based on contractual rents fixed in a lease or the expectations of investors in the property's rental market. Thus, it is fundamentally important that a property is income-producing or capable of producing income before the investment method of valuation can be applicable.

## 2.2.3 The Conditions for the Use of the Investment Method

It is instructive to note at this juncture that two distinct approaches have evolved for assessing the open market value of an income-producing property namely: the direct capitalization method, otherwise known as conventional approach, and the discounted cash flow (DCF) method. In the direct capitalization approach, a fixed continuous income flow and an overall or all-risks capitalization rate derived from the analysis of sales of comparable properties let on similar terms and conditions are used to calculate property's present worth. Here, the capitalization rate takes care of the market forecast of future expectations of rental income. However, in the light of the foregoing, this approach has been subject of criticisms on the grounds that it fails to specify explicitly the income flows and patterns assumed by the valuer.

The direct capitalization or conventional approach of investment method is appropriate where:

- i) A regular flow of income is expected from the property;
- ii) There is reliable evidence of the amount expected from the property its expected duration; and
- iii) There is expected rate of capitalization or years' purchase for income stream of expected character.

On the other hand, Discounted Cash Flow (DCF) approach is appropriate where the expected earnings of the property may vary from period to period. The DCF approach, therefore, requires the valuer to specify precisely what rental income and expenses are expected when, and for how

long. The valuer is therefore forced to concentrate on the national and local economic issues likely to affect the value of the specific property as an investment.

### 2.2.4 Data Input requirements for the Investment Method

Valuation is a process which requires careful consideration of a number of variables before figures can be substituted in mathematically proven formulae. In light of this, for the investment method of valuation, the following data inputs are required.

- i) The quantum (amount) and timing of expected periodic incomes, and the duration for which the incomes will be received;
- ii) The expected periodic expenses, obligations and allowances for cash reserves and replacements. All these fall into category of outgoings (i.e. landlord's expenses);
- iii) The market derived capitalization rate and figure of years' purchase (YP) for direct capitalization, or the determination of the appropriate discount rates in the case of discounted cash flow approach;
- iv) Any specialized information about individual or category of person whose property's investment value is to be found e.g. tax bracket, tax rate, allowances and exemptions;
- v) Inflation rates, expected growth rates in incomes, and miscellaneous expenses and cost obligations; and
- vi) The expected degree of variation, if any, between expectations and probable realization regarding incomes and outgoings.

#### 2.2.5 Investment Valuation Model

This is the model or approach normally adopted when valuing an income producing/generating property. It presupposes that the value of an interest in a property to an investor depends upon the benefits which he expects to derive from the property. It assumes that a rational investor will not pay more for property than the present value of all the future possible incomes from the property. In other words, investment model is based on the principle that the value of a property depends on its ability to generate a regular stream of income. The method takes a utility or productivity view of value. It is concerned with the present value of the future benefits from a property. The concept of time value for money is germane to the investment model. This simply says that one Naira today is of much value than one Naira receivable at a future uncertain date.

By this method, the value of a property equals the sum of present values of all the anticipated future net incomes from the property. Discounting is the language used by the investment approach to bring all the future incomes (benefits) to their present value (using appropriate yields).

Generally, the capital value of a property, using investment method is given by:

$$CV = (NI) x (YP)$$

where CV is the capital value of the property; NI is net income generated by the property after all deductions have been made from the gross rent; and YP is the appropriate Years' Purchase is the value now of the right to receive or the obligation to pay =N=1 each year for a given number of years at a given rate(s) of compound interest (Ifediora, 2005).

Once the future income is determined, the present value (PV) of the income(s) can be derived by discounting the future income using:

PV = 1/A or 1/(1+i)

...Eqn. 2.4

where PV is the present value of the income, 1 is the income (=N=1) generated by the property; while n is the number of years over which the income is receivable; and i is the discount rate.

It is pertinent to note that the discount rate must be high enough to encourage the investor to put his money in the investment. A lot of criticisms have been made against the investment method but it still remains the appropriate method for valuing income producing properties, especially where there is lack of recent market sales data.

#### 2.2.6 Underlying Basic Concept of Investment Method

Unlike other types of values, investment value represents the value of a specific property to a particular investor (Ajibola, 2006). According to Appraisal Institute (2001), investment value is the value of a property to a particular investor based on that person's (or entity's) investment requirements. In contrast to market value, investment value is the value to an individual, not necessarily value in the market place. It reflects the subjective relationship between a particular investor and a given investment.

Though there may be times when the market value and investment value will tally, yet the investment value differs in concept from the market value. Thus, the investment value is the price an investor would pay for such investment in consideration of its ability to satisfy his desires, needs, or investment goals. Investment valuation focuses on giving advice to an individual investor on the worth of his investment, taking account of the peculiar nature of the investment, the investor and the totality of the economy.

In carrying out valuations using the investment method approach, in addition to the preliminary works of field inspection and data collection, the valuer must of necessity obtain an estimate of rent (income) either directly or using similar properties, deduct outgoings (expenses) peculiar to the investment there from, to arrive at the net income. The net income is then capitalized with appropriate yield to arrive at the value of the investment.

Arriving at each of the variables depends on the experience and training of the valuer and this makes the value arrived at a subjective one. For example, in determining the rent, the valuer is faced with the problem of identifying what constitutes the appropriate rent for the property. In using similar properties, he has to consider whether or not the rent obtained can be adapted for the purpose under consideration, what constitutes the adjustments to be made and to what extent. On the other side of the outgoings, the valuer has to determine what outgoings are peculiar to the investment and what percentages are to be allowed.

Of greater importance is the yield to be applied to the net income. Unless the valuer is versed in the field of general investment, the value estimated may not meet the investor's aspiration. In determining the yield, the valuer must take into consideration the yield from other forms of investment that may be competing with the investor's fund. In other words, the yield used in capitalizing the net income must be comparative with what he would get if he chooses to invest his money in another investment vehicle. In addition to all the above, the valuer must take account of the effect of taxation, inflation and other risk(s) peculiar to the investment.

In summary, the application of the investment model involves analyzing the capabilities of property, forecasting the periodic income and transforming the income expectations into a value estimate.

## 2.2.7 Associated Problems with the Use of the Investment Method

The value estimates obtained by investment method of valuation according to Udechukwu (2006), is very sensitive to the quality of data inputs employed in the valuation process. Using investment

method of valuation entails the determination of gross income and making necessary adjustment for outgoings so as to arrive at the net income, which is capitalized with the appropriate yield to arrive at the capital value. The major inputs therefore in the determination of freehold capital value using investment approach are: (1) gross income (2) outgoings and (3) yield.

The determinations of these three variables are fraught with problems which invariably affect application of investment method, if they are not well chosen and adopted. The result may be a distortion of the final valuation figure arrived at with such inputs.

Generally speaking, capital value is derivable with the use of investment method using the following simple formula

Net Annual Value (Net Income) X Years' Purchase = Capital Value ...Eqn. 2.6

From the foregoing, it could be reasonably deduced that wrong adoption of any of the inputs in the above equation by the valuer will definitely result in wrong valuation estimate.

The various inputs required for carrying out investment valuation as contained in the above stated equation and how their wrong applications often result into inaccurate valuations are examined below.

## 2.2.7.1 Determination of Gross Income

Gross income can be described as the total income receivable by an investor in real estate. The gross income represents the whole money collectable from the tenant(s) occupying a property without taking into consideration the landlords' statutory obligations as it concern outgoings.

The starting point in carrying out investment valuation is the determination of gross income of such property before deducting outgoings. In ascertaining the gross income there is the tendency for the valuer to choose rental values that are either higher or lower than what the property can command most especially when income is substantially lower than the prevailing market rent for the property in which case the valuer has to resort to the comparative approach in determining the rental value to adopt.

The determination of the gross income by the valuer is seriously prone to mistakes since such exercise is subject to the intuition or subjective opinion of the valuer and whenever such a situation occurs the result is inaccuracy in capital value estimation. Inability to correctly interpret rental market by the valuer is a veritable cause of valuation inaccuracy and/or variance.

## 2.2.7.2 Determination of Outgoings

Outgoings are the annual expenses incurred by the landlord or tenant to keep the property in a state to command its market rent. It is the total amount of money spent or paid annually by the lessor or lessee in order to make the property habitable.

The issue of outgoings deductable from the gross rent receivable by the property owner prior to capitalization of the net rent, just like gross income determination, is another contentious issue which if not properly handled or carried out can result in inaccurate estimate of the capital value of property. The major heads of outgoings include repairs and maintenance, insurance, management, income tax, general rates, voids and bad debts, rent paid to a superior landlord and sinking fund.

#### 2.2.7.2.1 Quantification of Outgoings

Having identified the major forms of outgoings associated with landed properties in this country, it is necessary to examine how the estate surveyor and valuer qualifies them when carrying out their valuation assignments. The estate surveyor and valuer commonly uses any of these methods in quantifying annual outgoings.

- i) Comparable Evidence: This involves the use of evidence from comparable properties to determine for the case at hand. If the figure of outgoings in respect of a property is available, such a figure could be adjusted for similar properties.
- ii) The Use of Past Records: These records are those relating to the property in question. Records are not easy to keep and are not easily kept. Only very few people keep accurate records of their expenses in respect of property maintenance and other outgoings. Where records are available, they are the best evidence, which could be used without much adjustment.
- iii) Adopting a Percentage of the Full Rental Value: This is the most prevalent approach in this country. Valuers rarely bother to itemize outgoings, rather they lump them together and apply a percentage considered to be appropriate for the type of property and location. When this approach is used the outgoings are said to be grossed up. Valuers take as much as 20% of the full rental value to represent outgoings.

The above scenario paints a picture of general lack of uniformity and consistency amongst the valuers in the mode of determining outgoings which would definitely result in differential net rental incomes and consequently varying capital value estimates.

### 2.2.7.3 Determination of Capitalization Rate/Yield

In investment method of valuation, the selection of the capitalization rate/yield is perhaps the most important element. Capitalization rate is defined as a rate of interest used for converting series of net income payments into capital value. Quite simply, a years' purchase is the multiple by which capital value exceeds current rent (and rental value) and the capitalization rate is merely the expression of that multiple in the form of an annual percentage return. Thus, yield is a simple measure of a complex amalgam of the advantages and disadvantages of an investment. Capitalization rate must therefore demonstrate the degree of risk attached to the income, its anticipated duration and its ability to recapture the capital investment as a means of providing for depreciation, inflation and uncertainty including risks and time-preference element (time value of money).

Just as in other valuation inputs, the valuers are not uniform and consistent in their estimation of capitalization rates/yields for the purpose of capitalizing the net income with a view to arriving capital values. The way and manner in which some valuers arrive at the yields/capitalization rates for the purpose of valuation leave much to be desired as some valuers often resort to using the rule of thumb approach instead of carrying out detailed analysis of the available data prior to applying them to subject property for valuation purpose. The resultant effect of all these is disparity in the yield or capitalization rates by the valuers which ultimately lead to inaccurate valuation and of course variation in valuation of different firms. The diversity in approach by the valuers in the determination of yield/capitalization rates, to a great extent, often result in inaccurate valuation estimates and/or variation in

valuations by the different valuation firms.

From the above, it is evident that using investment method of valuation requires that the valuer must be conversant with recent developments in valuation models than just applying the rule of thumb. Availability of reliable data for these inputs can not be compromised by the Nigerian Institution of Estate Surveyors and Valuers and there must be free flow of information.

#### 2.3 Benchmarking Valuation Accuracy

It is noteworthy that whilst a hundred percent valuation accuracy in market price prediction is an "aim" (Millington, 1985), it should neither be expected nor necessarily sought to be fully achieved, in a prior valuation. Millington in the study carried out in UK argues further that expectation of absolute accuracy (or a zero per cent margin of error), is "foolish" and akin to an aspiration to predict the winner of the Grand National, which if achieved, would remove risk, and the prospect of gains and losses from property investment. The fundamental characteristics of property as an asset class, the imperfect nature of the property market, the lack of a central register of sales, the individual character of buildings and confidentiality of information are all cited reasons which can preclude accuracy (see, for example, Mainly for Students (1985) and Millington, 1985). Millington (1985) observes that the condition of full information of prices, homogeneity of product, ease of mobility of participant and product and competition between numerous active participants should exist for a perfectly competitive market but are absent for the property market. Such imperfection, he argues is compounded by other factors which also influence supply or demand for investment property, including the cost and availability of credit, tax charges on investment framework within which the author contends "great" and "regular accuracy" are "impossible". The various opportunities for rounding up numbers or figures during the valuation process, was cited as one of the major reasons why total valuation accuracy cannot be achieved (Millington, (1979) while noting that: "Where a series of figures are all "rounded off" there is always the possibility of cumulative errors being unacceptably large". Perhaps, however, the most entrenched support for valuation inaccuracy comes from reliance of the valuation process upon the comparable evidence, which is generally in limited supply.

Acceptance of Millington's arguments does not however preclude the establishment of an appropriate margin of error acceptable to all stakeholders – valuers, courts, the valuers' clients, professional institutions etc. At the moment, there appears to be no universal consensus as to what the acceptable level of inaccuracy should be. What level of inaccuracy can be recommended as acceptable to all valuation stakeholders? There is as yet no clear guidance on this from the professional bodies. For example, at no point even within the RICS's Valuation Standards Manual (the "Red Book"), or any of the RICS's professional guidelines is there any definition of what constitutes the acceptable minimum level of accuracy that should be achieved by valuers working within the scope of the manual definition (Harvard, 2001). There is similarly no guidance in this regard from Nigeria's Guidance Notes on Property Valuation (1985) even though the Guidance notes recognize that "practice problems do arise where differences of opinion of two valuers on the same property are so wide that the values could not be relied upon".

One may therefore turn to valuation accuracy studies and legal cases for some insight. Hager and Lord (1985) whose work in UK was among the studies that provoked much of the later works on

valuation accuracy envisaged a range of  $\pm 5\%$  either side of the 'correct' value; Baum and Crosby (1988) cited "margins of error" of  $\pm 5\%$  to  $\pm 15\%$ . In Nigeria, Ogunba and Ajayi (1998) employed a margin of error of ±5% taken after Hager and Lord (1985)'s study while Ogunba (2003) employed a margin of error of  $\pm 10$  per cent. In Australia, Parker (1988) carried out a property valuation estimate accuracy study in which  $\pm 5\%$  to  $\pm 10\%$  margin of error, a mode of  $\pm 5\%$  and arithmetic mean ±6.04% were adopted. Bretten and Wyatt (2002) in United Kingdom conducted a study amongst the valuation stakeholders on the acceptable margin of error for mortgage loan security. The result showed that 36% of the respondents favoured a +/-5% margin of error as permissible, 40% considered a +/-10% variance while 24% of the valuers considered a +/-15% variance as an acceptable margin of error. The authors quoted one of the investors as saying that the size of bracket would depend on the nature of individual valuation and that a single percentage range cannot satisfy all cases. All works cited above fail to establish a consensus, though a compromise margin of  $\pm 10$  per cent seems to be up-and-coming. Whilst valuation inaccuracy appears to be generally expected, there are however considerable differences as to what should constitute the acceptable extent or range of such inaccuracy. While Hager and Lord (1985) anticipated a range of "about ±5%", Glover (1985) quoted Michael Mallinson (then chief surveyor at the prudential) as citing a figure of  $\pm 10\%$  was the outer limit of an acceptable margin of difference (this view or stand was equally supported by Mainly for Students (1985). Baum and Crosby (1988) suggested that "it is even common to quote an acceptable margin of error of up to  $\pm 15\%$  in valuations".

The courts in the UK of recent have also constituted themselves into one of the major stakeholders in the discussion of acceptable margin of error. Courts have always adopted the "margin of error" principle as a means of establishing whether a valuer has been negligent in his duty or not. The "margin of error" or "bracket" is a theoretical bracket placed at equal distances on either side of valuation deemed by the court to be "correct". The "correct" valuation figure as well as the size of the bracket is provided by expert witnesses called to assist the court with unbiased opinions on the valuation that defendants should have reasonably reached with plaintiff at the relevant date (Crosby, 2000). Norris and Joyce (1994) noted that the "acceptable margin of error" or "bracket" was first used in UK courts in the case of Singer and Friedlander V John D.Wood & Co (1977) 243 EG 212 (a case concerning a rural residential development), in which the judge held that there can be a "permissible margin of error of 10% either side of the 'correct figure', extended to 15% in "exceptional circumstances". Norris and Joyce (1994) further noted that in the case of Trade Credits Limited V Baillieu Knight Frank (NSW) Limited (1985) Aust. Torts Reports 80-757, Court Decision No. 18, (a case concerning a rodeo property), expert evidence indicated a margin of "up to 15%". Similarly, in Private & Trust Co. Limited Vs S (UK) Limited (1983) EG 112 (a case concerning the redevelopment of an office property), the Judge Rice J accepted a "permissible margin of error of 15% on either side of (a) bracket of value". One of the judicial cases that did not arrive at a definite conclusion was one which focused on the valuation of an investment property involving Banque Bruxelles Lambert SA V Eagle Star Insurance Company Limited and others (1994) 31EG 68 and (1994) 32 EG 89, where the valuation of three substantial office properties produced differences from market price in the range of between 39% and 74%. Whilst the Judge, Phillips J expressed an opinion that such differences were unacceptable, he did not however express an opinion as to the extent of acceptable margin of error, though he did note that the plaintiff, Banque Bruxelles Lambert assumed that "valuations will be within  $\pm 10\%$  of true market values".

From the foregoing discussions, one can assume that UK literature accepts that the lack of hundred per cent accuracy is a fundamental feature of valuation principles and practice, with  $\pm 5\%$  to  $\pm 15\%$  maximum levels of variance appearing to be generally accepted within the qualitative commentaries, and 10% to15% generally accepted within court precedent. Thus, whilst the literature indicates inaccuracy of between 5% and 15% or between 10% and 15% as noted above, it does not consider its acceptability to the user. It appears that an aggrieved user (client) of valuation estimate may not likely succeed in a claim of incompetence if the level of inaccuracy is +/-15% of the market sale figure. From the study of literature so far, the position of the user of valuation estimates has not been the subject of much research.

## 2.4 Empirical Valuation Accuracy Studies in the United Kingdom.

In the UK, the valuation accuracy (or inaccuracy) debate was triggered off by Hager and Lord (1985)'s work wherein they conducted a small sample survey of ten Surveyors who were invited to value two properties. In one case, the range of valuations was +/-10.6% and in the other, it was +/-18.5% suggesting a relatively low level of valuation accuracy relative to the +/-5% benchmark adopted. This study was however, criticized by Reid (1985) who questioned the information and instructions given to the valuers and the quality of the response from the valuers to the request and the fact that the valuers were not given fees for the assignment (a reason which suggests that they may not likely carry out a thorough job). Moreover, the number of properties used for the study was considered to be too small for drawing representative conclusions.

Brown (1985) conducted a larger and much more rigorous study on a sample of 29 properties for which there were transaction prices and recent prior valuation figures. In the study, independent valuation firms were made to carry out the valuations of the subject properties. Both valuations and sale transactions took place between 1975 and 1980. In addition, both the valuations and the sale transactions were based on the RICS definition of Open Market value, which excludes special purchases, forced sales etc. The author used regression analysis to compare valuation estimates and sale prices on the 29 sampled properties. However, the number of properties sampled for the study is considered too small to be able to draw unbiased conclusions.

IPD/Drivers Jonas (1988) also adopted a regression based procedure, but made use of a much larger sample size of 1,442 properties, all of which were sold between January 1982 and March 1988. Each of these properties had at least two (2) open market valuations prepared in respect of them in the two consecutive years preceding their sales, with all the valuations undertaken between January 1980 and December 1987. They analyzed these samples with the inverse of the IPD/Drivers Jonas procedure (the least square model regressed price on value). This study also found a high correlation of 93.4% between valuation estimates and transaction prices ( $R^2 = 93$ ) suggesting a high level of valuation accuracy.

In 1990, IPD/DJ updated their study with a larger analysis of 2,400 properties for which there were transaction sales figures and valuation estimates. The study still observed high correlations between valuation estimates and sale prices as earlier found in their 1988 study, thus further supporting an UK (IPD/DJ, 1990) study. However, Lizieri and Vienmore-Rowland (1991) questioned the regression based statistical methodology adopted by IPD/Drivers Jonas and Brown for their studies drawing attention to its inherent flaws (a problem known as heteroascidity). Despite this criticism, IPD and Driver Jonas continuously updated their regression based studies

in 1992, 1994, 1996, and lately 2004 with increased sample sizes, analysis period and range of statistical analyses employed. Results obtained consistently maintained the same basic findings concerning high levels of valuation accuracy. The Lizieri and Venmore-Rowland (1991) criticism exposed the statistical validity of studies of the IPD/DJ which employed simple regression analysis to find high levels of valuation accuracy (see, for example, Brown, 1992). In the same way, the potential role of behavioural research in the determination of valuation accuracy debate has been suggested to questioning too (Waldy, 1997).

Matysiak and Wang (1995) employed standard deviations in their analysis of 317 sets of valuation estimates and transaction prices data covering the period of 1973 to 1991. Following the extensive statistical discussions and manipulations, the authors found that the probability of achieving a selling price within +/-10% of the valuation estimate was only 30%, rising to a probability of 55% within +/-15% of the valuation and 70% within +/-20% of the valuation estimates. The authors also went on to examine the propensity of valuers to overvalue in falling markets and undervalue in rising markets. The study noted that ".....given the indicative evidence for the significant impact of the bull/bear market environments in conditioning the valuation figures, more analysis is required in eliciting the relationship between valuer's behaviour and changing market conditions" (Matysiak and Wang, 1995). However, whilst the Matysiak and Wang (1995) findings would appear to undermine those of other studies concerning high levels of valuation accuracy relative to transaction sales, the complexity of the statistical analyses adopted renders a full appreciation of the findings challenging as not too many people can handle some of the statistical tools employed in their study.

Hutchison et al (1995) surveyed five national valuers and five local valuers for each of 14 centres in UK, seeking valuations at no fee for a range of hypothetical retail, office and industrial buildings with particular characteristics in actual locations and with standard leases. Valuation variation (consistency) rather than accuracy (reliability) was examined. They found differences in the variance of valuation between national and local valuation firms (8.63% and 11.86% respectively for national and local firms). The authors discovered that over 80% of all the valuations produced a variation from the mean of less than 20%, which is a wider valuation variation than that suggested by Brown's (1991) earlier study. The results of the study are however open to question as the valuers were paid no fee and moreover, the properties considered were hypothetical.

Mokrane (2002) addressed the twin issues of valuation accuracy and consistency in five European countries (UK, France, Sweden, Netherlands and Germany). In these countries, he considered time periods of 1990 to 2000 in UK; 2,000 properties over the period of 1999 to 2000 in France; 1,800 properties over the period of 1997 to 2000 in Sweden; 5,700 properties over the period of 1999 to 2000 in Germany. The accuracy tests made provision for the adjustment of previous valuation for market movements and capital expenditures and receipts that may have taken place between the valuation date and transaction date. With regards to accuracy, he came up with conclusions that there exists only a short "distance" between transaction sales and adjusted valuations in the respective countries, though valuation estimates differed from sale prices. With regards to consistency, he found that in most of these countries, the degree of variation was low and the change-in-valuer effect was statistically significant.

Bretten and Wyatt (2002) investigated the extent and possible causes of variance in property

investment valuation for commercial lending purposes within UK using questionnaire survey circulated to 220 lenders, finance brokers, valuers, property companies and institutional investors involved in commercial property valuation process in order to gauge professional opinion. They observed that the main cause of variance was the individual valuer's "behavioral influences" and that parties to a valuation instruction widely accept "the margin of error" principle. Their study concluded that variance can enter the valuation process at any stage, from the issuing of instruction letters and negotiation of fees through to external pressure being exerted on the valuer when finalizing the valuation figure. Although the study circulated to 220 individuals involved in the commercial property valuation process, they however did not involve the court officials. This study considered this very necessary and involved 6 court officials (5 judges and one court registrar) in addition to other individuals involved in the commercial property valuation process. In addition, their survey failed to recognize the need for the use of real life valuation and sale figures and for this reason, this study made use of valuation and sale figures of 131 real life recently valued and sold properties in addition to the valuation of 12 selected properties valued by 45 valuers.

Crosby, Devaney, Key and Matysiak (2003) identified whether the 2002 sales in the IPD Monthly index threw any light on whether the sale price was known before the completion date or if in their study of timing of the valuation and sale data in UK uses valuations and sales data from the sale was agreed before completion date. The study concluded that timing issues had been identified as one of the technical difficulties in producing definitive results on differences between prices and valuations.

Generally, the UK review shows that there have been contradictory findings over the years. Researchers such as Hager & Lord (1985), Matysiak and Wang (1995) and Hutchison et al (1995) seem to suggest that valuations are inaccurate and inconsistent (especially if one adopts a maximum margin of error of +/-10%), while authors such as Brown (1985), IPD (1988, 1990, 1992, 1994, 1996, 2004), and Mokrane, (2002) felt otherwise. The difference appears dependent on the statistical methodology employed. Whilst the high accuracy/variation advocates employed regression based procedures, the low accuracy/variation advocates employed mean/standard deviations. Even then, general conclusions are difficult to make because of the heteroascidity problems with the regression based procedure and the problem of an acceptable maximum bracket of error with the standard deviation approach.

#### 2.5 Empirical Valuation Accuracy Studies in the USA

In the US, only a few research works have been carried out on the issue of valuation accuracy and/or variation relative to that of UK. The first study was carried out by Cole, Guilkey and Miles (1986) in a survey using a database of valuations and subsequent transaction prices provided by the National Council of Real Estate Fiduciaries to the researchers. The study was based on 144

transactions, which took place between January, 1974 and June, 1984. The lag period was taken into account by adjusting the valuation estimates according to inflation rate between the date of valuation and the date of sale. The results indicated that the appraisal value was on average, over 75% (inflation adjusted) different from the sale price. A range of +18% to -28% was found. The study also examined the standard deviation of the absolute percentage difference between sale prices and valuation estimates. Interestingly, they found that the standard deviation did not decrease significantly where the dates of valuations and sales of properties were closer to each other or when the dates were far from each other. Surprisingly, they found that most current appraisals exhibited nearly as great a standard deviation as the more distant appraisals. It was concluded that the overall results do not indicate a high degree of reliability (accuracy) in the individual commercial appraisal product.

A more succinct valuation accuracy study in the US involved a broad analysis of the investment characteristics of commercial property by Abrams (2004), for which a database of 84 transactions was analyzed. The study found an average percentage difference between value and price (or premium) of 8.67%. A total of twenty eight properties (representing 31% of the transactions), were sold at prices which averaged 3.1% below their last appraisal value while 61 properties were sold at premiums averaging 14.1%. However, little information was provided on the sample size and the methodology adopted for the study, making the study difficult to appraise critically. Moreover, it is difficult to reconcile the small percentage of 8.6% margin of error arrived with the much larger margin of (+18% to -28%) by Cole et al (1986).

#### 2.6 Empirical Valuation Accuracy Studies in Australia

Newell and Kishore (1998) undertook the first known major valuation accuracy study in Australia. They conducted an empirical test into the accuracy of commercial property valuations as an effective proxy for sales using the commercial property monitor (CPM) database, MSW value-General records and the Independent Property Trust review transaction details. A total of 218 commercial property sales (consisting of 101 offices and 117 retail properties worth \$15.5 billion from Sydney over the period of 1987 to 1996 were examined for the study. The regressionbased procedure adopted in Matysiak and Wang (1995) was adopted in their statistical analysis after proper adjustment had been made to take care of the time lags between the time the valuations were carried out and the time the respective sales were made using the PCA property indices. Having accommodated the time lag between valuations and subsequent sales of the properties as well as the differences on the market conditions by the introduction of dummy variables, the resultant regression equation portrayed that valuation, on the average, are an effective proxy for sales particularly after necessary adjustment were made for timing and the state of the market. In each case, the slope coefficient was statistically indistinguishable from 1.0, the intercept terms were also indistinguishable from 1. These results are consistent with the UK regressions showing that internationally, valuers are generally doing a good job of impounding information into values.

Parker (1998) carried out a major empirical study on valuation accuracy in Australia adopting a plus or minus ten percent (+/-10%) maximum margin of error as his test of accuracy. He made use of seven properties, each of which was independently valued by a different major national firm of valuers. Offers to purchase were received for the seven properties at close of tenders and the prices nominated by the seven potential purchasers (who were all different) remained unchanged to become the market prices at which each property was sold for a total sum of \$105.2 million. Even though none of the valuations at the end of the day matched the market price exactly, he concluded that valuations are a good proxy for price in the Australian investment property market. However, the number of properties used for the sample size is considered very small to the extent that results obtained would have to be interpreted with caution.

## 2.7 Empirical Valuation Accuracy Studies in Nigeria.

From the 1980s, literary (albeit non empirical) comments began to be made on the accuracy of valuations in Nigeria. A past President of the NIESV, Udo-Akagha (1985) in his foreword to the first edition of the Guidance Notes on Property Valuation posited that

"there can be no reason why two or more valuers, valuing the same interest in a property for the same purpose and at the same time should not arrive at the same or insignificantly different results if they make use of the same data and follow the same valuation approach. But very often this is not usually the case and in some of these unfortunate cases, the profession is thrown into considerable embarrassment".

The above quotation captures the growing concern among valuers and their clients at the time. Estate Surveyors and Valuers were faced with increasing allegations of wide variations in the valuation estimates supplied by them. Similar comment was made by Igboko (1992) who while researching into the investment method of valuation in Nigeria, at the instance of the NIESV, observed what he described as a "weak grasp of valuation" amongst the valuation practitioners. He came to a conclusion that many of the investment valuations conducted were actually "misvaluations" and "guesstimates". He did not however provide any credible empirical statistical basis to justify his conclusions.

Ogunba (1997) undertook an empirical step at addressing the question of accuracy and variance in investment valuations in Nigeria using Lagos metropolis as the study area. In the absence of a database of property valuations and sales, he resorted to the approach of requesting thirty Lagos based practicing estate surveying and valuation firms to carry out valuations of two residential properties earlier sold located at Victoria Island and Ikoyi respectively. The valuation estimates subsequently arrived at by the valuers was subjected to a number of statistical tests such as range, inter-quartile range, mean deviation and regression/correlation analysis. The result of the statistical tests showed that valuations were not good proxy for market prices, for three reasons. First, the average variance between valuations and prices was far in excess of his adopted margin of error of +/-5%; the intercept in the regression equation was statistically distinguishable from zero and the slope statistically distinguishable from 1; and third, the range and inter-quartile ranges were unacceptably wide. Based on these observations, the results of the study must be interpreted with caution because only two (2) properties were considered (as in the Hager and Lord, 1985 study) and the sample of valuers (thirty firms) was small. In addition, the properties were never inspected nor were the valuers paid for their services.

Aluko (2000) carried out an accuracy study on a larger scale with a focus on mortgage valuations and subsequent sale prices of such mortgaged properties used as collateral securities. In his study, Bank records of mortgage valuations conducted by fifty nine (59) estate firms in Lagos metropolis were examined. The sale prices of the properties were compared with their earlier valuation estimates and analyzed by means of regression/ANOVA. He came to a conclusion that valuations in Nigeria are a good proxy for price and that despite the anecdotal evidence to the contrary the mortgage valuers are doing a very good job of price prediction. Although the study sample size is larger than that in Ogunba & Ajavi (op. cit.) study, and even though the study overcame the problem of valuers not inspecting properties and not being paid, the sample size of fifty nine estate firms is still considered small for drawing generalizeable conclusions. In addition, the sale prices of collaterized property adopted for cross-checking the result of the prior valuations were forced sale values which do not meet the definition of open market value. What is more, auction sales of foreclosed properties by bidders do not satisfy the conditions stipulated by the open market transaction processes in that auctioneers, the selling authority may be impatient to allocate sufficient time for the sale or further negotiations necessary to get the best of the transaction. Finally, the study did not consider the time lags between the dates when the properties were valued and the dates such properties were eventually sold.

Ogunba (2003) expanded the coverage area of accuracy studies to a consideration of property valuation estimates and sale prices in the six States of Southwestern Nigeria. The approach adopted in the study was similar to the one adopted in his earlier work. A total of 171 estate surveying and valuation firms which constituted 75% of the sample frame of estate surveying and valuation firms in Southwestern Nigeria were employed for the study. Statistical tests such as range, inter-quartile range, mean deviation, regression analysis, and analysis of variance employed by the author confirmed his earlier work that valuation estimates were not good proxy for sale prices and also that valuation estimates of one firm were not good proxy of other firms. The study also extended to an examination of the causes of valuation inaccuracy under topics such as the conduct of valuations, and the educational and practice structure of the valuation industry. Though the study improved on earlier studies in terms of sample size, study area and scope of coverage, it is still open to the criticism of sample properties not being inspected by the valuers prior to their valuation and neither were the valuers paid for their services.

Adegoke (2008) investigated valuers' behavior in Nigeria when valuing properties in localities that they lack substantial prior experience in Nigeria. He sampled 122 estate surveying and valuation firms in Lagos metropolis. He used quasi-experimental and survey methods for the study. The researcher employed simulated valuation method in carrying out valuation of a single commercial office property located in a city that the participants/respondents were not familiar with. The study revealed a wide variance of valuation outcomes from the mean which showed that the valuation outcomes were not reliable. While the study used only a single property for valuation experiment and only supplied the participants with description of the property, this study firstly made use of real life property wherein 131 actual sale prices and valuation figures were compared and secondly, participant valuers were requested to value 12 recently sold properties with a view to comparing their valuation outcomes with the sale figures of the properties.

Babawale (2008) in his study identified valuer's knowledge and experience, valuation approach and individual characteristics of valuation firms as the most significant contributors to the problem of inaccuracy of residential property valuation in the Lagos metropolis.

## 2.8 Observed Gaps/Limitations in the Previous Accuracy/Variation Studies.

The following is an itemization of gaps/limitations in various reviewed studies in the UK, US, Australia and Nigeria which the present study would attempt to fill:

- Non-consideration of transactional relevance studies such as Hager and Lord (1985) and Hutchison et al. (1995) compare valuations to valuations and so have no market relativity. To address this observed limitation, property values were compared to transaction prices in this study and at the same time, contemporaneous valuation estimates were compared.
- Non-consideration of lagging studies such as IPD (IPD / DJ, 1988, 1990), Brown (1991) and Aluko (2000) compare property valuation estimates to property transaction prices without necessarily taking into consideration the time element. In an attempt to address this observed limitation, this study made use of property valuation estimates and sales prices carried out within a calendar year.
- Basis of fees Reid (1985) argued that the absence of a fee for the valuers in Hager and Lord (1985) and Ogunba (1997) studies may have contributed to the level of accuracy observed in the results of their studies. To address this limitation, in the present study, the valuation estimates for which fees/remunerations were paid to each of the valuers engaged were adopted in part of the study.
- Sample size the quantitatively analytical studies include a wide range of sample sizes from 2 (Hager and Lord, 1985) to 2,400 (IPD/DJ, 1990) with each present limitation. A sample size of 2 may potentially distort the results by being too small and allowing too great an influence on the results by the characteristics of the particular properties and their market contexts. Conversely, a sample size of 2,400 may distort the results through differences at the individual property, sector or geographic levels being obscured by the overall nature of the results. Accordingly, to address this limitation, an analytical study should ideally comprise a sample large enough to provide statistically robust findings whilst being small enough to observe the effect of differences at the individual property, sector or geographical levels. Sufficient data which will neither be too small nor too larger to the extent of distorting the result of the study was adopted for the study. To this extent 131 Federal Government landed properties which were valued prior to their disposal and another 12 properties which had been sold and respondents were requested to value were employed for the study.
- Firm Bias Brown (1991) comments on the possible effects of "firm bias" in the valuation process. The extent to which "firm bias" may have occurred within the data sets used for the various quantitatively analytical studies cited above and the influence that this may have had upon the results are unknown. However, to address this limitation, 45 valuers were involved in the valuation of 12 properties adopted for the study.

In summary, the practical limitations of the quantitatively analytical literature comprise the

absence of real life / real time data, the lack of transparency through consistency and independence and the achievement of results which do not have both a robust basis and individual property relativity.

## 2.9 Behavioural Research into Valuation Accuracy

The theoretical foundation of behavioural research into the valuation process was laid by Newell and Simon (1972) who proposed a theory of human problem solving. This theory viewed the human mind as an information processor of limited capacities. It stated that behaviour is a function of two major components: the task environment and the human being processing system. The task environment is the complex external environment in which a human being operates. The human information processing system on the other hand consists of two major components namely short-term and long-term memories which are of limited capacity. The short term memory functions is an information filter device which is made of limited storage processing capacity while the long term memory storage device consists of larger database, called semantic memory with unlimited storage capacity but with a slow and tedious memory indexing system. The underlying principle is that human beings tend to develop simplifying short cuts or rules of thumb to solve complex problems.

The valuation process corresponds to the general information-processing model of humanproblem solving of Newell and Simon (1972, 1978), as it provides a standard, systematic algorithm to employ when confronting a valuation task environment and forming a perception of the problem. Training in the normative valuation process aids the valuer in acquiring the expertise needed to identify the task-relevant cues in that environment in order to move efficiently from problem perception to problem solving. In capital valuation for sale purpose for instance, this training includes recognition of the fact that the open market value is the problem-solving objective. However, while formal training is conducted using well-structured problems, real world problems tend to be ill structured. This is because valuers operate in complex environments where the outcome of the task is uncertain. The valuers' task environment includes market data which is often incomplete or inaccurate, contributing to the complexity of the environment.

Behavioural research into the decision making process of valuers according to Ajayi (2006), is therefore a tradition of research into human information processing and heuristic behaviour in complex environments. The behavioural influence faced by valuers can lead to the abandonment of 'best practice', potentially leaving the valuer with no option than to arrive at inaccurate valuations. The decisions the valuer must take when valuing a property will always involve subjective opinion, and consequently a degree of inaccuracy and variance is inevitable. Almost allbehavioural investigations into the problem solving of property experts in the past focused on valuers. The researches can be grouped into three main categories namely:

- Departures from normative models;
- Comparative sale selection; and
- Valuation biases.

First, research into normative versus descriptive processes was initiated by Diaz (1990a). The normative model suggests a general-to-the-specific data collection strategy. Here the actual valuation processes of expert residential valuers were found to differ from normative models.

Whereas the normative appraisal process is fundamentally deductive beginning at the widest possible focus, the valuers of this experiment used a more efficient inductive process that began with the subject property. A behavioral study by Adair, Berry and McGreal (1996) concluded that residential valuers viewed critical property characteristics differently than did actual market participants. This called into question methodologies and positive models of value formation.

Second, the comparative sale selection process used by experts were described and contrasted with novice selection process in Diaz (1990b). Experts appeared to use a multiple stage selection strategy (compensatory search and a non-compensatory screen strategy) and tended to consider less data as compared to novices suggesting the potential for sub-optimal and even biased results. Novices on the other hand used cognitively demanding search strategies and postponed final selection judgment until they had examined all sales. The sales potential for biased results in comparable sales selection was further studied in Wolverton (1996) and Gallimore and Wolverton (1997). These studies produced evidence that knowledge of subject property transaction price could bias comparable sales selection as well as final value judgment. Valuers both in UK and USA were found susceptible to these biases but at different degrees, presumably due to different valuation culture and different task environment.

Third, inspired by Tversky and Kahneman's (1994) work in heuristic problem solving, investigation into bias in valuation judgment has become an important theme within the body of valuation behavioural property research. For example, Gallimore (1994) noted that valuers might inappropriately give greatest weight to the most recently considered information. Evidence of a confirmation bias was uncovered in Gallimore (1996) where expert valuers indicated that they make early, preliminary value judgments and then seek evidence in support of these early opinions. Harvard (1999) found an upward bias among student valuers who were more likely to adjust a low valuation upwards than a high valuation downwards. Diaz and Hanz (1997) observed that experts operating in geographically unfamiliar markets were influenced by anonymous expert opinions while expert valuers operating in markets familiar to them were not so influenced.

Once again working with expert valuers in unfamiliar markets, Diaz and Hanz (1997) uncovered other significant reference point anchors including unclosed contract prices on subject and comparable properties. The tendency of valuers to use their own previous value judgments as anchoring reference point was uncovered in Diaz and Wolverton (1998). Seeking a behavioural connection to the appraisal-smoothing hypothesis, this study demonstrated that valuers insufficiently update their previous value judgments, anchor to their previous valuations and tend to make adjustments to the previous valuations, which may be insufficient within the available market evidence. Clients' feedback is another valuation topic currently attracting and receiving attention from behavioural valuation researchers. Many of the studies deal mainly with issues relating to client's feedbacks and pressures.

Kinnard, Lend and Worsala (1997) in the survey of US appraisers carried out came up with the conclusion that the perceived valuation goal of US appraisers is strongly related to the degree and nature of client feedback. He equally found some evidence that appraisers may be willing to change valuation conclusions in response to a client's pressure.

Levy and Schuck (1999) conducted in-depth interviews with five senior New Zealand Registered Valuers and came up with the anecdotal evidence that client pressure does exist in New Zealand.

The authors equally concluded in the same study that the magnitude and direction of the client induced bias are influenced by a wide range of factors such as the type of client, characteristics of the valuer and valuation firm, purpose of the valuation and information endowments of clients and valuers alike.

## 2.10 Client Influence in Valuation Accuracy

Valuations are the output of a service offered to clients on a contractual basis and it is frequently the case that this is done in order to obtain independent opinions of value for the consumption of such third parties as lenders, buyers or shareholders. Prior to empirical researches of client influence on valuations, complaints of valuers undercutting fees to compete and allowing their clients, (especially those who provide them with a substantial number of assignments annually), to state their own values abound. Such allegations of undercutting of fees and value "fixing" under client's pressure have undermined the professional reputation of valuers. While in the absence of empirical clarifications, there was little concrete evidence of these complaints, persistent allegations and complaints from investors and users of valuation reports (particularly banks and other financial institutions) tend to give credence to the fact that valuers unethically yield to clients' pressures while carrying out valuation assignments. These complaints and allegations have succeeded in reinforcing the notion that valuers are not independent and often succumb to some form of pressure. The concern for investigation into client influence is necessitated by its effect on valuer independence and the credibility of reported values in the profession. Although valuers face obligations to provide independent and informed opinions of value, they are also interested in satisfying their clients in order to avoid conflict over fees and precipitated repeat business. As a result, clients and/or valuers are in many cases motivated to influence the outcome of a valuation to the potential detriment of other stakeholders. This may be done intentionally or unintentionally, implicitly or explicitly.

The real estate literature shows that valuers and appraisers in many countries of the world are experiencing such problems. Amongst the earliest commentaries on this problem was that of James Graaskamp (cited in Fraser and Worzala, 1994). This study found that users (clients) of appraisals were the major culprits of the "demise" of the appraisal industry. He indicated that a lender can control valuers by "shopping" to find valuers willing to provide the desired value, or threaten to withhold payment for valuation figures perceived too low for the valuation purpose desired by the client. The lender can also (as small valuation firms fear), threaten to cut off future business if a mortgage value is not high enough to make him qualify for a desired loan.

Kohli (1989) described various types of powers, which clients can wield against valuers. The first, "reward power" is "an individual's ability to provide material and non-material rewards to other individuals". Coercive power on the other hand is "an individual's ability to provide material and non-material punishments to others" (Kohli, 1989). Evidences of clients using such powers have been noted by several authors, particularly in the area of opinion "shopping" where clients do not search for right answers, but the answers they wish to hear (Hendrickson and Espahbodi, 1991). Expert power is defined as "the extent to which others perceive an individual as being knowledgeable about relevant issues" (Kohli, 1989). Expert power according to Levy et al (1999) arises as a result of clients' knowledge of the valuation process and the property market within which a property is being valued. Information power is defined as "an individual's access to and control of information" (Kohli, 1989). This potential source of influence is worthy of note in relation to the valuation process due to its heavy reliance on the flow of information from a client to a valuer. Commercial reality places the valuer in a vulnerable position whereby a client may choose to withhold certain information perceived as detrimental to the preferred outcome.

Another issue proposed as having the potential to increase client influence is the definition of values. There has been criticism that current definitions are too restrictive resulting in valuers being asked to undertake impossible tasks. More specifically, the commonly used definitions tend to limit values to one set of circumstances, whereas properties actually sell under different situations (Roberts and Roberts, 1991). Other external factors, such as market conditions in which the client / valuer interact may increase the likelihood of client pressure (Kinnard et al; 1997). The implication of this is that a highly competitive valuation market may encourage a valuer to report a particular value in order to retain the client.

Poneman (1992) conducted a study on levels of integrity of accounting firms, which may be of potential application to valuation firms. His findings suggest that accounting firms possess different ethical cultures. If this is also applicable to the valuation industry then it may be possible that different companies as well as individual valuers possess differing levels of integrity and ethical behaviour that may in turn affect their vulnerability to client pressure.

Rushmore (1993) reports on the prevalence of opinion shopping in the valuation industry in which clients threaten to seek out and employ alternative valuers that are prepared to give them the reported value they require. Kinnard et al (1997) also found evidence of clients seeking the views of various valuers until a favourable figure is found. There are several other threats or coercive / reward tactics cited in valuation and even auditing literature. These include the promise of more briefs, a decrease in the number of assignments, addition to an approved valuer's list, threat of court action, refusal to pay the fee, monetary incentives and loss of a contract. Rushmore (1993) examined the ethical issues involved in the performance of appraisal services for hotels. He pointed out that some lenders are more interested in inflated appraisals rather than unbiased, objective estimates. Pressures, which are exerted by clients on valuers, can sometimes be subtle and indirect, while they can also occasionally be obvious and abusive.

Fletcher and Diskin (1994) note that clients and stakeholders enjoy an agency/Principal relationship in which conflicts of interest do arise as a result of an incongruence of objectives. Clients have economic incentives to influence valuations in order to maximize asset-based fees or loan-to-value ratios. This is however in conflict with the interest and desire of stakeholders for accurate and objective valuation estimates.

A study conducted by Smolen and Hambleton (1997) put forward a series of statements to appraiser respondents to establish their perceptions on the degree of client influence on valuation appraisals. The study found that majority (80%) of the sampled appraisers agreed that "appraisers are sometimes under pressure by clients to adjust values". Martin (1997) reported similar results. He found that the first situation which comes to mind for most appraisers, when they speak of ethics and unethical conducts in property valuation, is where they (valuers), produce a value estimate that accommodates the desires of a specific individual client rather than one that is impartial, objective and independent.

A study by Smolen and Hambleton (1997) shows that the characteristics of the client – as well as the characteristics of the individual or organization providing the service, may also have impact on the amount and type of influence imposed on the service provider. The authors conclude that certain clients are more likely to apply pressure to valuers to influence their reported values. In particular they identify mortgage brokers as being the primary sources of client pressure, followed by commercial banks.

Kinnard et al. (1997) found that valuers experienced significant pressure from mortgage brokers and bankers. Smolen and Hambleton (1997) equally found that larger companies enjoy an advantage over weaker competitors while Kinnard et al. (1997) found a direct relationship between client size and likelihood of valuers revising their reported values to suit the demand of their big clients. The valuers they surveyed, however, were not aware that the size of the client influenced their decisions.

In New Zealand, Levy and Schuck (1999) confirmed the widely held belief that valuations are indeed influenced by clients. In their study that drew from in-depth interviews of practicing valuers in that country, they found that the primary factors affecting the degree to which clients' influence valuations are the type of client, the characteristics of valuers and valuation firms, the purpose of a valuation and the information endowments of clients and valuers. One important issue highlighted is the ethical dilemma faced by valuers as a result of relying on client-supplying information, which could be bias through omission, intentionally or otherwise.

Levy and Schuck (1999) show that there are several ways and means that a client may influence the reported value of a property within the commercial environment: the 'powers' available to clients are related to the terms and conditions of an instruction, the payment of consideration, and the provision of information as is depicted in figure 1 below:



Figure 2.1: Valuation within the Commercial Environment Source: Levy and Schuck (1999).

Levy and Schuck (1999) articulated the factors or characteristics that affect the degree to which client powers can affect valuations, as well as the extent. These according to them fall into four main categories: the characteristics of the individual or organization providing the service; the characteristics of the client; external characteristics, including the regulatory framework, professional criteria and current market conditions; and the characteristics of the service to be provided.

There is potentiality that a valuation practice earning a large percentage of its revenue from single a client may be tempted to "please" that client and by so doing succumb to client pressure (Smolen and Hampleton, 1997). This dependency may not be restricted to the firm as a whole, but may also exist in the case of an individual officer or partner (Miller, 1992). Within the auditing industry an audit firm providing management consultancy services to its client will be more likely to acquiesce to the clients wishes (Lindsay, 1989). This highlights the potential for client influence to exist in situation where a consultant carried out more than one task for a client. In addition, it was also observed that the financial position of a client tends to have impact on the client's ability to influence a valuation estimate. He suggests that a client in good financial condition is seen as more likely to obtain its preferred outcome than a client in poor financial condition.

Graaskamp (1988) discusses factors external to the service provider / client relationship as influencing accuracy. Such external characteristics include the regulatory framework, the definition of value and market conditions. Issues relating to the effectiveness or otherwise of a regulatory framework have been discussed extensively by a number of authors not only in real estate discipline but even in the auditing practice. Graaskamp (1988) for example argues for the introduction of Federal regulation in the valuation industry to exclude valuers susceptible to control by clients while Hendrickson and Espahbodi (1991) were of the opinion that penalties currently being imposed for violations of ethical practices in the auditing industry are not effective deterrents. This observation was due to the prevalence of the practice of "opinion shopping" by clients and its perceived detrimental effect on auditor independence and thus the credibility, role and status of the accounting profession. In the same vein, in the real estate practice, Kinnard et al (1997) also acknowledged the growing perception that commercial valuers have lost some of their independence and that additional regulations are required to deter client pressure and encourage valuer's independence.

Market power may also serve to encourage clients to use threats to coerce a valuer to value a property for a desired figure. This market / competitive pressure may be compounded by the practice of lenders limiting their approved valuers' list thus placing pressure on valuers to acquiesce (Smollen and Hambleton, 1997). The characteristics of the client and services provided by them cannot be examined in isolation from the environment within which their relationship exists. Evidence suggests that working within the "real world" commercial environment may result in certain pressures that could impact on the client / service provider relationship.

There are a number of characteristics peculiar to an individual valuation assignment that may serve to affect the extent of client influence on a valuer. An important characteristic of a good valuation is the range of values that can be legitimately defended by a valuer and this range of values is closely related to conditions in the property market and quantity/quality of comparable evidence available.

Another factor unique to the individual valuation capable of affecting the potential for client influence has to do with the level of valuation complexity. Complex valuations often present more opportunities for changes than simple valuation (Rushmore, 1993). There are situations when a valuer may be reluctant to expose what may be considered as previous "mistakes" to their client. Although in these circumstances the client may be unaware of the influence they are exerting, the valuer may be encouraged to adopt an earlier valuation result in anticipation of his clients' likely reaction to valuations figure deem not favorable to the clients' cause. Geltner (1993) in his work reported that a valuer "will typically be aware of the previous appraised value" and will prefer not to be placed in a position where they have to be asked to come and explain or justify a large variance in value, particularly if it is a negative one.

The amount of discretionary judgment required for each valuation may also affect the potential of client influence. Many valuations involve a certain amount of subjective and / or discretionary judgment and this may be susceptible to suspicion from both the clients and interested stakeholders. Roberts and Roberts (1991) in their work noted that different values may exist for the same property if valued from different viewpoints or perspectives and such existence of these different figures may implicitly lead to client influence. For instance, a valuer being instructed to carry out a valuation for a sale of a property may be encouraged to report a more optimistic or higher figure than for a property that is for purchase.

## 2.11 Types of Influence Adopted by Clients

This section is devoted to the examination of how clients can translate their potential power into influence over valuer with a view to achieving their anticipated valuation estimates. A number of influential power adapted from the work of Kohli (1989) and Paserwark and Wilkerson (1989) are discussed below.

Kohli (1989) identified reward power which he defined as "an individual's ability to provide material and nonmaterial rewards to other individuals" as one of powers often adopted by clients in an attempt to achieve their desire result. He also identified coercive power which he described as "an individual's ability to provide material and nonmaterial punishments to others" as one of potent powers often resorted to by some clients in achieving their desire results. The use of coercive power has been noted by a number of authors in the auditing industry particularly in the area of "opinion shopping". Opinion shopping has been defined as the "practice of seeking an auditor willing to support a proposed accounting treatment designed to help a company achieve its objectives even though doing so might frustrate reliable reporting" (Hendrickson and Espahbodi, 1991). Opinion shopping is not a search by a client for the right answer, but seeking for the answer the client wishes to hear.

Rushmore (1993) reported that the use of opinion shopping was prevalent in the US valuation industry where he found that valuers were sometimes coerced by clients threatening to employ other valuers who were prepared to give them the reported value they desire. Kinnard, Lenk and Worzala (1997) also found evidence of clients seeking the view of successive valuers until one is found that will come up with the valuation figure they need. This practice has serious implications for valuer independence and the credibility of the valuation profession as valuers are threatened with the probable loss of a contract and possibility of loosing further works if they fail to dance to

the tune of such clients.

There are a number of other threats or coercive/reward tactics that are cited in the valuation and auditing literature including; the promise of more work, decrease in the number of assignments, the addition to an approved valuation list, threat of court action, refusal to pay the fee, monetary incentives to produce the desired outcome, blackmail and the loss of a contract (Rushmore 1993; Smolen and Hambleton 1997; Hendrickson and Espahbodi 1991).

Kohli (1989) identified information power which he defined as "an individual's access and control of information" as one of the most important source influence often resorted to by clients in the valuation process since valuation process relies heavily on the flow of information from a client to the valuer. He discovered through study situations where clients deliberately withheld certain information perceived by such clients as detrimental to their preferred outcome from valuers while highlighting the positive attributes of the property being valued.

From the above discussion, it is possible to conclude from past researches that depending on clients' background characteristics, valuations are susceptible to different levels of client influence.

## 2.12 Chapter Summary

The main focus of the literature review carried out in this Chapter was on valuation accuracy and variance. The review was divided into sections namely: Section 2.1 introduced the Chapter. In Section 2.2, the study considered the question as to whether there could be an acceptable benchmark of valuation accuracy in the practice of valuation. The review examined past studies on the subject matter and came out with the idea that there may not be 100% valuation accuracy since there would always also be variation in the valuation estimates of one firm to another firm or firms. However, from literature, a range of +/-5% was considered acceptable limits especially in countries like UK and US where valuation practice is more advanced and standardized while there has been no agreed acceptable limit in Nigeria by earlier researchers to date.

Section 2.3 of the Chapter examined the previous researches on valuation accuracy study in UK, the methodologies adopted and also the results of their research efforts were dealt with while the shortcomings of the various studies were equally brought to the fore to pave way for area to be examined in this study. The literature review has showed that the existence of valuation inaccuracy and inconsistency is inconclusive.

Similarly, Section 2.4 showed that in the US, not much study has been carried out on the subject matter of accuracy and consistency in valuation estimates.

In the same vein, Section 2.5 of the Chapter reviewed the available literature on valuation accuracy and consistency studies in Australia. In this country, studies suggest that valuations have been generally accurate. Section 2.6 of the Chapter examined studies such as Ogunba and Ajayi (1998), Aluko (2000) and Ojo (2004) on valuation accuracy or consistency in Nigeria. The position of these studies is that the issue of accuracy or otherwise is still inconclusive, as is the case in UK. Section 2.7 reviewed the gaps/limitations observed in the literature.

Section 2.8 examined the issue of behavioral research into the valuation accuracy debate. Generally, studies focused on heuristic behaviour of valuers and have confirmed the existence of anchoring and adjustment heuristics. The issue of client influence in the subject of valuation accuracy was the subject of review under Section 2.9while section 2.10 examined types of client influence often employed by valuation clients on valuers. Generally, studies in various countries confirmed the existence of client influence and traced the various forms such influences take in respective countries. Section 2.11 was devoted to Chapter summary.

In the next Chapter, the researchers' work is on the conceptual framework of the research.

## **CHAPTER THREE**

## **CONCEPTUAL FRAMEWORK**

#### **1. Introduction**

The attempt in this chapter is to articulate a concept for the study in the form of a framework of expectations for empirical examination. The attempt is to bring out of reviewed literature and the researcher's reflections, models of acceptable margins of valuation/price error, models of the existence or otherwise of valuation accuracy/variance, models of behavioural influences on accuracy and models of the manner of client influence on valuer estimates in Nigeria.

In line with this reasoning, the chapter highlights and discusses earlier authors' conceptual views of the various factors in valuation accuracy and variation, and from these teases out a wide-ranging set of propositions, which would be presented at the end of the chapter as a-priori expectations. The a-priori expectations would of course form the base for empirical investigations in subsequent Chapters.

The Chapter's discussions on the concept were organized according to the objectives of the study and the chapter is accordingly arranged into four sections. The first section discusses the author's expectations in respect of acceptable margin of error. This is followed by a discussion on the researcher's expectations in respect of the existence of valuation accuracy and variance. Section 3.4 contains discussions on behavioural and other causes of accuracy and variance. The next section, examines expectations on client influence on valuation accuracy. All the expectations are then summarized into an eclectic model in the following section and then structured into formal *a priori* expectations (in lieu of formal hypotheses) in the subsequent section. The chapter then closes with a summary.

#### 3.2 Expectations on Maximum Acceptable Margin of Error

Valuation accuracy literature distinguishes between the maximum margins of errors for different stakeholders (for both valuations versus realized prices and valuations versus valuations). Thus, differing margins of error are expressed by stakeholders such as actuaries, Courts and valuers in their textbooks and research papers. As stated in the last chapter, actuaries appear to suggest  $\pm 5\%$  (Hager & Lord, 1985). Ranges of  $\pm 5\%$  to  $\pm 15\%$  are the maximum levels of inaccuracy appearing to be generally accepted within the valuers' qualitative commentaries, while  $\pm 10\%$  to  $\pm 15\%$  is generally accepted within court precedents. There has been little attempt up till now to examine the views of the third group of stakeholders (the valuers' clients) in this regard. It is rational to expect that the maximum acceptable margin of error from the view point of each stakeholder would depend on the degree to which that stakeholder requires valuations to accurately proxy realized prices. The more the stakeholder perceives the need for accurate valuation estimates, the lower would be his maximum margin of error.

The client is perhaps the stakeholder that requires highest accuracy. Sometimes the very existence of their business depends on the accuracy of estimates. Banks are clients who make profit from lending using collateral securities to manage risk. Their ability to make profit depends on the accuracy of valuation of the collateral security. The other category of client, developers and investment portfolios, also immensely require accuracy for performance measurement and development appraisals. Clients are therefore likely to advocate for a maximum margin of error that is

lower than that of other stakeholders, perhaps not exceeding  $\pm 5\%$ .

The valuer is also interested in accuracy, but is arguably not as concerned as the client in requiring valuations to exactly proxy price. A valuer sees his valuation as merely an expression of an opinion that would approximate prices under normal conditions. He would be happy if his estimates are exactly duplicated in realized prices, and he is wary of charges of negligence if his predictions are very wrong, but it is rational to expect that his need for close to 100% accuracy is much less than the need of his client whose very business depends on it. Valuers are therefore expected to advocate for a relatively higher maximum margin of error of  $\pm 10\%$ , rising to  $\pm 15\%$  where market evidence is rather scanty.

The court is the stakeholder that is the determinant of liability for negligence. In valuation negligence cases, it would have to balance the need to protect the valuer's client's need for high accuracy with the valuers' need for adequate leeway given the prophetic limitations of his methods and the availability of market evidence. It seems reasonable to expect that this stakeholder would adopt a margin of error position someway midway between the valuer and his client.

In summary, the a-priori expectations in respect of the first objective are, that valuers, courts and clients have successively higher needs for valuation accuracy in that order, and the higher the stockholders need for accuracy, the lower is the maximum acceptable margin of error. However, consensus margins of error for all stakeholders are not expected to exceed  $\pm 10$  per cent of market price/valuations of other firms.

#### **3.3 Expectations on Accuracy and Variance**

The issue here is whether valuations are an adequate proxy for realized sale prices or a proxy for the valuations of other firms. It is noted that in the valuation accuracy/consistency literature, there is no consensus of opinion on the acceptable margin of error on valuation estimates and property sale prices. In the case of valuation variation, some researches have concluded that variation does exist (for example, Hager and Lord, 1985; Hutchinson et al, 1996; Brown and Matysiak, 2000; Crosby et al, 1998, 1999; Ogunba, 1997; Ogunba, 2003 etc), while others (such as Brown, 1985; Mokrane, 2002 etc) provide evidence to the contrary. The conclusions on accuracy are equally indecisive. Some accuracy investigations point to the existence of inaccuracy (for example in the UK: Brown, 1985; Cullen, 1994; and in Nigeria: Ogunba, 1997; Ogunba and Ajayi, 1998; Ojo, 2004). While the majority of studies suggest that the valuation estimates adequately predict prices (for example in the UK: IPD, 1988, 1990, 1997; Matysiak and Wang, 1995; McAllister, 1995; in Nigeria: Aluko, 2000, Iroham, 2007).

There seems to be a growing support for the view that valuations are a good proxy for prices, though not as a result of a predictive accuracy or skill on the part of the valuer. In this school of thought are Crosby, French and Ward, (1993) and Baum et al (2000) in the UK and Iroham (2007) in Nigeria. These authors conclude from their empirical studies, that in both countries, realized prices tend to move towards (or be caused by) prior placed values, which in turn get a feedback from the market. Valuations therefore, they argue, do not stand above the market as is assumed in the researches of the above paragraph, but are an integral part of the market. If one follows this reasoning, then valuations would be expected to proxy realized sale prices because of a valuation-price causal relationship. The argument is that since it is the duty of valuers to advise both sellers and buyers in the property market, then the valuations of both buyers and sellers should at least

mimic each other, in essence, whatever valuation estimate arrived by the valuer advising the seller should translates into what the property can be sold for in the market.

However, the few empirical researches carried out on accuracy/variance in Nigeria gave contrary results. Empirical investigations conclude that valuations do not proxy price or valuations of other firms in southwestern Nigeria (see Ogunba, 1997, Ogunba & Ajayi, 1998; Ogunba, 2003). It may therefore not be appropriate to unquestionably adapt the Baum et. al.'s (2000) emerging school of thought to resolving questions of valuation accuracy/variance in Nigeria, despite the findings in Nigeria by Iroham (2007). It appears more reasonable to cautiously adopt a-priori expectations that valuations are not a good proxy for both realized prices and the valuations of other firms.

## 3.4 Behavioural and Other Causes of Valuation Accuracy and Variance.

The issue for resolution here is the definition of expectations in respect of factors responsible for sub-optimal valuation reliability/consistency. A comprehensive model of such factors can be gleaned from earlier models postulated by prior authors who have examined the issue from different perspectives.

(a) The Ogunba structure-conduct performance model

In Nigeria, Ogunba (1997, 2002) postulated a structure conduct performance model in discussing valuation accuracy and its causes. This model had its source in Bain's (1968) macro economic model of industrial performance. Bain advocated that the way an industry is structured impacts the conduct of its participants which in turn ultimately impacts the performance of the industry as a whole. Ogunba transposed this model to the valuation industry and envisaged that where the output of the valuation "industry" (valuations) is faulty (that is, inaccuracy/consistency), then the causes are traceable to the manner valuations are conducted which in turn is traceable to the way the valuation profession is structured (educationally and professionally).

Figure 3.1: Structure-Conduct Performance Model

## Source: Adapted from Ogunba (1997)

Factors noted in the 'structure' of the valuation industry include the education background of the valuer, organizational type of the valuation firms, location of the valuation firms/organizations, relative experience/inexperience of valuers in valuation practice, ability/inability to translate valuation theory into practice and ability/inability to source for market indices. Following the model, these structural factors impact on factors in the 'conduct of the valuation industry' (that is the way valuers conduct their valuations in the valuation process). Factors examined in the conduct of valuations included the manner of determining gross income, mode of deductions for outgoings, and the mode of determination of yield (capitalization rate). In this regard, the model considered a variety of 'conduct' issues such as the adoption of outdated rules of thumb yields and variant modes of determining each valuation variable (gross income, outgoings, yield), which were found to differ widely from firm to firm. Conduct issues also included the use by some practitioners of the cost approach to value for valuing investment properties. In this regard, the study noted that 63.3% of respondent valuers opted for using the cost method of valuation in valuing investment properties, while 53.7% of respondents indicated that the cost method provides value estimates which are closer to selling price than investment method estimates.

Generally, the study depicted a situation of deficiency in the educational and practice structure of the valuation industry which had impact in creating an inefficient and non-uniform valuation conduct (general lack of uniformity in choice of method and mode of determining valuation variables amongst the practicing valuers), which in turn was a cause of differential and inaccurate capital values (sub-optimal; performance).

## (b) Aluko's (1998, 2000) model

Aluko (1998, 2000) addressed causal factors from a more direct perspective of modeling. He envisaged seven groups of causal factors impacting on valuers' ability to correctly and consistently interpret the market. These were skill, experience and judgment, problems of relevant data; problems of imperfect property market; problems in value estimation and value prediction; client influence; unrealistic valuation assumptions; and unreliability of valuation techniques in unstable markets (see figure 3)

Figure 3.2: Model of factors responsible for inaccurate valuations

Source: Adapted from Aluko (1998)

Aluko's (1998) observed that: "it is often discovered that in practice problems do arise where differences of opinion of two valuers on the same property are so wide that the values could not be relied upon. As the society is demanding high standard for the services it receives and for which it pays, it is important that our profession ensures that high standards are maintained by all members". This problem was seen to arise from a series of causal factors:

The first of these factors was that of skill, experience and judgment of the valuers as one of limited ability in the interpretation of property value. He envisaged that a degree of individual valuer's experience and judgment is required to arrive at optimal opinions of market price behavior. Related to this group of factors was that of unrealistic valuation assumptions among valuers. In addition, the model observed that data is the driving force that fuels valuation analysis, but a problem faced is the collection of representative data, which is compounded by a lack of adequate and reliable databanks. The level of development of real property market was also identified as a major and crucial cause of valuation inaccuracy in Nigeria. The author envisaged that where the property market is non-existent or not fully developed, the investment method will not produce valuation thrives on market evidence. This reasoning is more applicable to the rural areas or less developed part of the country.

Volatility of the country's economy is another major cause perceived as causing valuation inaccuracy in Nigeria. The author envisaged that Nigeria's economy is unstable and valuation techniques are markedly unreliable in such unstable markets. He cited Roulac (1985) that turbulent and unstable economic times challenge tradition and threaten past practice. Aluko also discussed the growing influence of clients as a factor influencing the accuracy of mortgage valuations.

## (c) The Ojo (2004)/Ogunba & Ojo (2007) Model

The recent papers of Ojo (2004) Ogunba & Ojo (2007) envisage a model of seven factors affecting valuation accuracy. These are the reverse yield gap, use of different valuation methods for investment property, use of different valuation inputs, the absence of a valuation standards manual, valuation heuristics and client influence and valuation irrationality.

Some of the factors in the model are previously unconsidered by any other model builders. For example the model draws attention to factors affecting valuation accuracy in the country. One of these is the reverse yield gap: inflation in Nigeria. The authors see that there has been a reverse yield gap situation since the beginning of the recession of the 1980s, which has been responsible for the invalidation of rules of thumb, previously held in stable market conditions. This has resulted in confusion among valuers as to the ability of the investment method of valuation to produce accurate results. The continued use of rule of thumb yields (say 5% for residential properties in Victoria Island) in inflationary circumstances is undoubtedly a cause of lower than market price valuations.

The other major factor in valuation inaccuracy in this model is that of valuation irrationality. The

authors postulate that there have been changes since 1960 in investors' expectations without a corresponding change by valuers of their investment valuation procedure, and the logic underlying conventional investment valuation techniques became questionable. In essence the authors suggest that inaccuracy occurs because the conventional valuation over values the term and under values the reversion.

The use of different methods was described as another cause of inaccuracy. This has to do with the use of different methods of valuation for the same property even where the basis of valuation is open market value. A majority of Nigerian practitioners presently favour the use of the cost method of valuation, which they reason would serve as a better proxy for market prices. The use of different valuation inputs into the valuation equation was seen as an additional factor in valuation inaccuracy. For the investment method, the major inputs in the determination of freehold capital value are: gross income, outgoings and yield. Unfortunately, the mode of determining the values of these variables in the investment valuation formulae differs widely from firm to firm. In this regard, the non-availability of a good databank has contributed to the problem of accessibility to market information which would have aided the uniformity in the valuation inputs by the valuers reducing or totally eliminating the rate of disparity in valuation estimates prepared by valuers.

The absence of a valuation standards manual or handbook to ensure standardization and uniformity of approach in the determination of valuation inputs and preparation of valuation reports by practitioners was seen as another factor affecting accuracy. Valuation heuristics and client influence were other causes of the valuation accuracy problem in the country as envisaged by the authors. Heuristics refers to a situation where a valuer forms a preconceived opinion on the worth of the property being valued and then works to the preconceived answer (as it were).

[pic]

Figure 3..3: Model of factors affecting Valuation Accuracy

Source: Adapted from Ojo (2004), Ogunba & Ojo (2007)

#### (d) Heuristic Behavior models

Behavioural research into real estate valuation is concerned with the valuers' behavior through the valuation process and its impact on the eventual valuation estimates arrived at after the valuation exercise. The main thrust of the behavioral study is that valuers, most especially the expert valuers, tend to adopt cognitive shortcuts called heuristics when carrying out valuation assignments and through this, they contribute remarkably to the problem of valuation accuracy. In an attempt to validate this concept a growing number of researches have been conducted in the past two decades.

The study of heuristic behaviour in professional conduct was pioneered by Kahneman and Tversky (1972) and Evans (1989), and these have been discussed at some length in the review of literature. The authors identified four types of heuristic behaviour affecting professional conduct: representative heuristics; availability heuristics; anchoring and adjustment heuristics and positivity heuristics. Representative heuristics is described as a form of stereotyping, whereby decision makers make decisions out of their experience of similar objects and events. Availability heuristics refers to the tendency of a decision maker to perceive a problem in a prescribed way once essential components have been recognized from past experience. Anchoring and adjustment heuristics refers to the tendency of decision makers to adopt and rigidly stick to an initial estimate before evidence is considered. Positivity heuristics refers to sticking to previously held beliefs in a rigid mindset which could resist contrary evidence. The model that results from the postulation of these heuristic factors can be depicted in the following diagram.

Source: Adapted from Tversky and Kahneman (1974) and Evans (1989)

Nearly all of the studies into the effect of heuristics on valuation accuracy/consistency have focused on anchoring and adjustment heuristics. For example, Gallimore (1994) carried out an experimental study about the valuation processes and looking particularly at the effect of anchoring and confirmation bias (i.e. the tendency for valuers to form early opinions about a subject property and then seeking information with which to confirm the preconceived opinion. Moreover, Harvard (1999) examined the UK valuers' tendency to apply anchoring and adjustment heuristics strategy in unfamiliar locations, postulating that there is a great risk of valuation variance/inaccuracy in such locations due to the risk of adopting an inappropriate initial anchor and insufficient subsequent adjustments. Anchoring and adjustment heuristics refers to a situation where a valuer before concluding his valuation workings already forms a preconceived opinion on the worth of the property being valued. This problem becomes more serious where such opinion is voiced out to the client or a third party. It then becomes incumbent for the valuer to adjust his workings to produce valuation estimates that would uphold or validate his prior held or preconceived opinion, which was not based on any analytical calculations.

The present research would adopt examining anchoring and adjustment heuristics (as it affects valuation accuracy), and would accordingly postulate that in the Nigerian environment:

- . There is a greater tendency among valuers to anchor and adjust from previous valuations than to undertake fresh market analysis in valuations.
- . The less familiar the location, the greater the tendency for insufficient anchoring and adjustment from past valuations

## 3.5 Models of Client Influence on Valuation Accuracy.

Studies into client influence on valuation estimates are among the most recent areas of research into accuracy in the valuation process. In Nigeria, valuation practitioners commonly experience this problem, especially in mortgage valuation (Ogunba, 1997); mortgage valuation clients usually request for high valuation figures so that they can qualify for higher loan amounts.

This research is interested in the various means and approaches by which clients influence valuers with a view to influencing the eventual valuation figures emanating from the valuers. These means and approaches are made possible by the powerful position occupied by clients and the opportunities available to them to influence valuations. Two of the major models of factors influencing valuations are discussed hereunder:

The Levy and Schuck (1999) Model.

Levy and Schuck (1999) conducted a study on New Zealand valuers using intensive interviews to extract the relevant information on client influence from the respondent valuers. They found that the type of pressure exerted on valuers by the clients is a function of factors such as client sophistication, characteristics of the valuer and the valuation firm, the purpose of valuation and the information endowment of clients and valuers. They also discovered that the sophisticated clients tend to influence valuers through information by emphasizing positive attributes of the subject property and while at the same time withholding the negative information or supplying selected information. On the other hand unsophisticated clients tend to employ what can be regarded as coercive tactics such as a threat to withhold fee or future engagements.

#### The Koli (1989) Model

Kohli (1989) categorized the factors responsible for client influence into four: First, is what he described as "reward power" which refers to a client's ability to provide material and nonmaterial rewards to other individuals (valuation practitioners) with a view to influencing the end result of an event. A second factor is "coercive power" which can be described as the client's ability to provide material and nonmaterial punishments to others with a view to achieving a desired end result.

Another means through, which the clients can apply their powers in order to influence the valuation estimates is through what Kohli (1989) referred to as "information power". Information power can be described as "an individual's access and control of information". This potential source of influence is particularly worthy of examination in relation to valuation process due to its heavy reliance on the flow of information from client to valuer. Commercial reality therefore places the valuer in a vulnerable position whereby a client may choose to withhold certain information perceived as detrimental to their preferred valuation outcome. Kohli (1989) also identified expert power as another very important type of influence that the client can exert on the valuer. This factor is defined as "the extent to which others perceive an individual as being knowledgeable about the relevant issues". For the purpose of this study, expert power arises as a result of client's knowledge of the valuation process and the property market within which a property is being valued.

Figure 3.5: Model of Client Influence Factors affecting Valuation Accuracy.

Source: Adapted from Kohli (1989)

Drawing from the various authors reviewed above, the researcher's was able to come up with combined eclectic concept of factors influencing vulnerability of valuers to client influence in Nigeria which in turn contribute to valuation accuracy/variance. This is diagrammatically presented hereunder in figure 3.6. These factors can be classified into four broad categories:

- i) The vulnerable characteristics of the individual valuers and/or valuation firms providing the service;
- ii) The characteristics of the client;
- iii) External characteristics such as the regulatory framework; professional requirements/criteria and the prevailing market conditions.
- iv) The inherent characteristics of the valuation service to be provided.

Figure 3.6: The Author's Concept of Factors Intensifying Client Influence on Valuations

An elaboration on the factors depicted in the above diagram is provided herein below:

# (i) The Vulnerable Characteristics of the Valuers and/or Valuation Firms

A number of factors relating to characteristics of the valuers and the firms they represent are envisaged to potentially intensify the degree of influence clients exert. One of these is drawn from the findings of Poneman (1992) who observed that accounting firms possess different ethical cultures. If this holds true for the valuation industry, it may be possible that valuers/valuation firms possess differing levels of integrity and ethical behaviour. It is envisaged that the lower the standard, the more vulnerable they are to client pressure.

Smolen and Hambleton (1997) point to another potentially significant factor: they observed that a valuation practice earning a large percentage of its revenue earnings from a single client may be tempted to "please" that client and thus succumb to pressure from the client when carrying out valuation assignments for such client. This dependency may however not be restricted to the valuation firm as a whole, but may also exist at the level of individual officer or partner of the firm.

Another important factor, which is envisaged to intensify vulnerability to client influence in the Nigerian valuation industry, is firm size. Most of Nigerian valuation firms are very small in size and this might make the firms greatly vulnerable to client influence in their quest for business survival.

# (ii) The Characteristics of the Client

Some characteristics of clients are also envisaged to intensify the amount and type of influence imposed on the valuers. Smolen and Hambleton (op. cit) found that certain categories of client are more likely to apply pressure on valuers to influence values. First, they identified mortgage bankers as being the primary sources of client pressure and followed by commercial banks. The study also found that larger client companies enjoy an influential advantage over smaller competitors. Kinnard et al (1997) found a direct relationship between the client size and the likelihood of valuers revising their reported values (the valuers they surveyed were however not aware that the size of the client influenced their decision).

Several authors suggest that the more critical the result of a particular valuation is to a client, the more likely that the client would exert pressure on the valuer. In Nigeria, critical results may manifest as where the client applies for say mortgage loan which is directly related to valuation outcomes.

The financial position of a client is also a factor that may impact on the client's ability to influence a valuation. Kinnard, Lenk and Worzala (1997) suggest that a client in good financial condition is more likely to obtain its preferred valuation outcome figures than a client in poor financial condition.

# (iii) External Characteristics

The literature highlights some factors external to the valuer/client relationship which intensify client influence on valuations. Such external characteristics refer in the main to the valuation regulatory framework and property market conditions.

Issues relating to the effectiveness of a regulatory framework have been addressed by number of authors in Nigeria. Ogunba (1997), Ogunba and Ajayi (1998) and Ojo (2004) argue for the introduction of valuation regulation in the form of valuation manuals and handbooks to serve as guiding documents for valuers carrying out valuation assignment for clients. The absence of such guidance, particularly in the aspect of how to respond to client influence (as is the case in New Zealand), portends danger to the ability of valuers to resist, and ultimately the accuracy of valuations emanating from the valuers. Moreover, currently there is an absence of a clear penalty for violation of such ethical issues from the relevant regulatory institutions for erring valuers in the matter of valuation inaccuracy except perhaps from the disciplinary committee of the Nigerian Institution of Estate Surveyors and Valuers, which arguably might treat some surveyors as sacred cows.

Other external factors impact on the vulnerability of valuers to clients. One of these is the market conditions in which the client/valuer interact, which Kinnard et al (1997) put forward as increasing exposure to client pressure. Their proposition is that a highly competitive valuation market may encourage a valuer to succumb to reporting opinions of value favorable to clients in order to attract more work.

## (iv) Inherent Characteristics of Valuation

There are a number of characteristics specific to an individual valuation that may serve to affect the amount of client influence exerted on a valuer. An important characteristic of a valuation is the range of values that can be legitimately defended by a valuer. If a valuer can reasonably defend a figure demanded by a client, be it at the top, middle or bottom of the range, he may be more susceptible to client influence. This range of values is closely related to conditions in the property market and quality and quantity of comparable evidence available.

Another very important factor, which is unique to the individual valuation capable of affecting the potential for client influence, is the level of valuation complexity. Complex valuations present more opportunities for changes than simple valuations (Rushmore, 1993). There are obvious situations when a valuer may be reluctant to expose what may be considered as previous "mistakes" to their client. Although in these circumstances the client may be unaware of the influence they are exerting, the valuer may be encouraged to adapt the valuation result in anticipation of their client's reaction. Getner (1993) documented that a valuer "will typically be aware of the previous appraised value" and will prefer not to be placed in a position where they have to explain or justify a large change in value, particularly a negative one.

Finally, it has been claimed that different values may exist for the same property if valued from different viewpoints according to Roberts and Roberts (1991). For example, a valuer being instructed to carry out a valuation for a sale of a property may be encouraged to report a more optimistic figure than for a purchase. From the above discussion, one can postulate that the more amenable a valuation is to different values, the more the susceptibility of a valuer to client's influence.

## 3.6 Summary and Modeling of Research Concept

Drawing from all the preceding discussions in this chapter so far and appropriate sections of Chapter Two, the researcher is now in a position to put together a model that encapsulates some characteristics which have potential to impact valuation accuracy/consistency.

The model is diagrammatically represented in Figure 3.7 below:

Figure 3.7: Valuation Accuracy and Consistency Determinant Model.

The research model is explained in some details

## 3.6.1 Behavioural Influences on Valuation Accuracy/Consistency

As discussed earlier, certain types of heuristic behaviour are envisaged to affect the accuracy and consistency of estimates arrived at by valuers In Nigeria. In this regard, the research model follows Kahneman (1974) and Evans (1989) in identifying four types of heuristic behaviour which could affect valuers' professional conduct, namely representative heuristics; availability heuristics; anchoring and adjustment heuristics and positivity heuristics.

Postulations have been made in the earlier section on what the researcher expects would be the influence of Nigerian valuers' heuristic behaviour on the accuracy of the valuations they produce.

## 3.6.2 Client Influences on Valuation Accuracy/Consistency.

Client influences on valuation estimates have been discussed earlier. Drawing from the literature, there are many and varied approaches by which clients influence the valuation figures generated by their appointed valuers. Some of the tricks employed by clients according to Kohli (1989) include the adoption of "reward, information, expert and threat/coercive powers" with a view to achieving their much desire figures in valuation.

Postulations have been made in the earlier section on what the researcher expects would be the manner of client influences on the accuracy of the values that valuers produce.

## 3.6.3 Clients' Potential Influencing Weapons

As depicted in the above model, there are four potential main weapons available to valuation clients for achieving their desired valuation figures or estimates from their valuers. These powers in a nutshell amount to how client can translate their potential power into influence over the valuer. These powers are discussed further below.

#### (a) Expert Power

Kohli (1989) described expert power as "the extent to which others perceive an individual as being knowledgeable about relevant issues". Even though, there does not seem to be explicit reference to the use of exert power within the valuation industry literature pertaining to client pressure, but the results of Kohli's study relating to buying centres within organizations indicated expert power as an important element or determination of influence especially in large groups. In the same vein, Pasewark and Wilkerson (1989) also discovered expertise as a source of power in influencing the auditors' independence.

#### (b) Coercive/Threat Power

Coercive power is described as "an individual's ability to provide materials and non-material punishments to others" by Kohli (1989). Evidence of clients imposing such power has been noted by a number of authors particularly in the area of 'opinion shopping'. Opinion shopping has been described as the "practice of seeking an auditor willing to support a proposed accounting treatment designed to help a company achieve its reporting objectives even though doing so might frustrate reliable reporting" (Hendrickson and Espahbodi, (1991). It is pertinent to state that opinion shopping is not an effort by the client to search for the open market value of his property, but rather an effort at seeking for a conceived property value that he has in mind. Rushmore (1993) reported the prevalence use of opinion shopping in the valuation industry; the study revealed that valuers were sometimes coerced by clients with threat of employing another valuer who would be agreeable to state the client's conceived property value in his final report. Kinnard, Lenk and Worzala (1997) found evidence of clients seeking the view of successive valuers' until one is found that will come up with the valuation figure they need. Such a practice has serious implications on valuers' independence and credibility of the valuation profession. Valuers are usually threatened with the loss of the immediate job as well as future patronage if the required request is turned down eventually.

Besides, the practice constitutes a serious problem to the reliability and consistency of the valuations emanating from the professional valuers as it deprived the affected valuers the much required independence and freedom to do their works as required.

There are a number of other threats or coercive tactics that often employed by clients in a view to influencing the valuers to do their bidding. Such threats or coercive tactics include: decrease in number of assignments, addition to an approved valuer list, threat of court action, refusal to pay fee (Hendrickson and Espahbodi 1991; Rushmore 1993; Smolen and Hambleton 1997).

## (c) Reward Power

Kohli (1989) in his study described reward power as "an individual's ability to provide material and non-material rewards to other individuals with a view to currying favour". The study unmasked a number of reward tactics often employed by clients in their attempt to influencing valuers to secure their required valuation figures. Such tactics include the promise of more work; promise to increase the fees, promise to link the valuers to other works etc. The danger in this kind of practices is that it has serious implications on the valuers independence and the credibility of the valuation profession.

## (d) Information Power

Information power has been described by Kohli (1989) as "an individual's access to and control of information". This potential source of influence is worthy of thorough examination in relation to the valuation process since the valuation process relies heavily on the information emanating from

the client to the valuer in the course of valuation assignment. Commercial reality therefore places the valuer in a vulnerable position whereby a client may choose to withhold certain information perceived to be detrimental to their expected valuation figure or estimate.

## 3.7 A-Priori Expectations.

Drawing from the discussions in the preceding sections of this chapter, the following a-priori expectations are put forward for testing in Chapter five.

- Valuers, courts and clients have higher needs successively for valuation accuracy in that order
- Margin of error for all stakeholders would not exceed  $\pm 10$  per cent of market price
- The higher the stakeholders need for accuracy, the lower the maximum acceptable margin of error.
- Valuations are good proxy for realizable market prices
- Valuations of one firm are good proxy for the valuations of other firms.

## 3.8 Chapter Summary

The Chapter has attempted to weave together a concept of expectations to address all the study's objectives. The summary of expectations in this regard has already been articulated in the previous section and need not be reiterated here.

The attempt would be to start considering the process of validating or invalidating the expected outcomes. This must however be preceded by detailed discussion of the methodology. Such methodological issues are the subject of extensive deliberation in the next Chapter.

# **CHAPTER FOUR**

#### METHODOLOGY

#### 4.1 Introduction

Following from the review of related literature and definition of research concept in the preceding Chapters, this Chapter describes in a lucid, logical and chronological manner, methodological frameworks employed empirically to investigate issues raised in an attempt at satisfying objectives of the study. The Chapter starts by reviewing methodological approaches adopted in prior studies. From amongst earlier reviewed approaches, the approaches found suitable and appropriate for this study were defined and adopted. The Chapter proceeded to address in detail the population, sample frame, sample size, sampling techniques, choice of data collection instruments, questionnaire design and the techniques of data presentation and analysis for the study. The Chapter closes with a summary.

## 4.2 Choice of Methodological Approach

The main purpose of this study is to examine accuracy and consistency of the investment method of valuation in Lagos Metropolis, Nigeria with a view to putting forward appropriate recommendations that can improve the quality of property valuation outputs in the country, thereby making property valuation services more qualitative and robust to the property valuation stakeholders in general.

Relevant studies on investment valuation practice in Nigeria started with Igboko's (1992) descriptive criticisms. In his pioneering study, Igboko described the attitude of valuers to valuations in his survey, which covered the whole country. However, his effort was very descriptive in nature and as such, his work can at best be described as an arm chair criticism of investment method of valuation as practised by Nigerian valuers. His methodological approach, though logical and reasonable, is therefore of little value and assistance to this study in the sense that his findings were not empirically proved or justified.

The Hager and Lord (1985) methodological approach on the other hand is considered an improvement on arm chair approache in that it was empirical and useful in giving an idea about the range of dispersion of the value estimates and the extent of spread of values around the market prices. However, the use of ranges alone can give false results and can be deceptive due to the fact that there can be some few extreme values which can eventually lead to the distortion of the overall results of the study.

To this extent, the Brown's (1985) methodological approach which involves the use of regression analysis and which is the approach IPD/Drivers Jonas has consistently been adopting for their periodic studies (1980-2004) on the subject matter of valuation accuracy is found more suitable and useful for this study since it involves serious and more rigorous statistical analysis. However, due to the criticisms of Lizieri and Venmore-Rowland (1991) levied against the use of regression methodology as earlier discussed in the literature review, this study has to adopt the combination of Regression Analysis, ANOVA and Hager & Lord (1985) ranges for a more solid and robust results. The point needs to be clarified here that while the ranges (including inter-quartile ranges) if singly adopted for the study might be inadequate at establishing the existence of accuracy or inaccuracy in property valuation estimates, they however become quite useful when they are combined with more sophisticated statistical analysis such as regression analysis. Both range and inter-quartile range were particularly useful for establishment of how consistent valuers were in carrying out valuation assignments while the regression analysis approach on the other hand was found appropriate in assessing if valuation estimates were good proxies for market prices. It is noted however that in the use of regression analysis, both Brown and the IPD relied heavily on available databanks in the UK, this is however not the case in

Nigeria as a result of which the researcher had to rely on a combination of Ogunba (1997) regression approach of using results of simulated valuation estimates of 12 recently sold residential properties purposely carried out by respondents at the request of researcher for the study in conjunction with the data (consisting of valuation estimates and eventual sale prices) on the Federal Government landed properties in Lagos State sold in 2007 by Presidential Implementation Committee on Federal Government Landed Property through the Committee and Punch Newspaper of 5<sup>th</sup> February, 2007. To further strengthen the usage of regression and range methodologies, Analysis of Variance (ANOVA) was used. The combination of these approaches were found useful in both Aluko (2000) and Ogunba's (2003) studies.

All the above approaches were useful in establishing a measure of accuracy of valuations and realized prices/valuations of other firms. Even at this, the study was limited to only establishing whether the valuers in Nigeria are consistent and reliable professionally without subjecting such findings to further clarification. To examine client influence as a possible contributory factor to inaccuracy and inconsistency in investment valuations in the country, various conceptual approaches in this regard have been examined in Chapter Three while the concern here is the methodological aspect of the chosen concept. The data to be secured here is necessarily non-parametric and consequently would not lend itself to parametric analysis such as regression analysis or ANOVA.

However, non-parametric tests such as Relative Importance Indices (RII), frequency, etc which were employed by Oloyede (2005), Amidu (2006) and Adegoke (2006) in earlier studies were used in this study.

## **4.3 Study Populations and Data Requirements**

The study population for this study is primarily the estate surveyors and valuers in the study areas. The estate surveyors and valuers as earlier mentioned are the real property consultants professionally recognized in Nigeria to conduct valuations. In view of this, the primary focus of this study remains the estate surveyors and valuers in private practice in the study areas. The estate surveyors and valuers in the public sector have been excluded from the study (drawing from Ogunba's 1997 study), because surveyors in the public sector seldom engage in any serious valuation assignments for private clients. The Directory of the Nigerian Institution of Estate Surveyors and Valuers (2002) indicates that a total number of 228 estate surveying and valuation firms have their offices in Lagos Metropolis the study area of this research. This figure represents approximately 31% of the 439 estate surveying and valuation firms practicing in the country.

The other groups of population for the study are the clients of estate surveyors and valuers. One of such clients is the Presidential Implementation Committee on Federal Government Landed Property that engaged the services of estate surveyors and valuers for the purpose of valuation of Federal Government residential landed properties located within Lagos Metropolis for their eventual disposal. Other clients considered for the study include banks (which employ the services of valuers for mortgage valuations), and property development/investment companies (which often employ the services of estate surveyors and valuers for valuations for either sale or purchase purposes). Mortgage banks are however excluded from the list as a result of a mass crash that occurred in this sector in the mid-1990s which brought them to their knees and make only

commercial banks remain at the core of real estate finance. The data sourced from the Presidential Implementation Committee on Federal Government Landed Property and Punch newspaper of 5<sup>th</sup> February, 2007 was used as secondary data in the provision of valuation estimates and sale prices. The data requirement from banks and development/investment companies are similar in the sense that the information required from them were basically to seek their opinion on the acceptable margin of error in valuation. In addition, Judges and Registrar of Lagos State High courts were sampled for the study with the aid of interview guide.

## 4.4 Sample Frames

The sample frame refers to the various listings and size of the sample populations. The sample frame of the estate surveyors and valuers was secured from the most recent Directory of the Nigerian Institution of Estate Surveyors and Valuers (2002). The directory indicates 439 practicing estate surveying and valuation firms in the country and that 228 of the firms are based in the study area. The sample frame for commercial banks was secured from the Central Bank of Nigeria (Soludo, 2006), which specifies 25 mega banks (now known as Deposit Money Banks) existing in Nigeria and all of which are having their head offices within the study area. The sample frame of property portfolio managers/property developers was secured from the directory of Association of Housing Corporations in Nigeria (2006). Drawing from this list, there are a total of 132 Property Development Companies /Property Investment Portfolios in the study area.

## 5. Method of Sampling

In a study of this nature, several methods of collecting samples offer themselves. There are four principal types. These include random sampling, systematic sampling, stratified sampling and cluster sampling.

In the random sampling technique, according to Ogunba (1997), each population member is assigned a unique number and members are selected using random numbers. Systematic sampling on the other hand involves using of natural ordering for the population. In essence, it involves the selection of a random starting point between one and the nearest integer to the sampling ration. Cluster sampling involves identifying clusters of population, selecting some of the clusters and addressing all the population in selected clusters.

The stratified random sampling technique was found appropriate, as it has been successfully employed in earlier studies (e.g. Ogunba and Ajayi, 1998, Ogunba 2003 etc). Specifically, the approach involves a combination of approaches - stratified and random samplings. Stratified random sampling involved the division of the firms listed in the official register of the Nigerian Institution of Estate Surveyors according and Valuers into groups to their geographical/neighbourhood locations. Thereafter, from each location, a random sample selection of the firms was done. This method was adopted because it allowed for the consideration of the heterogeneous nature of the study population and it prevented bias in the sample selection of the sample population.

## 4.6 Sample Size

In respect of the sample size of Estate Surveying and Valuation firms, the most recent Directory of the Nigerian Institution of Estate Surveyors and Valuers (2002) was used in determining the total number of firms operating in the study area. The directory showed that a total number of two hundred and twenty eight (228) registered Estate Surveying and Valuation firms have their offices in Lagos metropolis. The required sample size from this sample frame was derived by means of a demographic formula usually adopted for determination of sample sizes Otte, (2006) as follows:

#### $N = P (100-P) \times Z/D^2$

## Where:

N = required sample size

 $\mathbf{P}$  = anticipated prevalence

**D** = allowable error estimate (desired precision)

Z = appropriate value from the normal distribution for the desired confidence level However, Otte (2006) added that if the sample size derived is quite large a readius

However, Otte (2006) added that if the sample size derived is quite large a readjustment is deduced as follows:

N'=N/(1+N/T)

...Eqn, 4.2

...Eqn, 4.1

## Where:

N' = adjusted sample size

N = previous sample size

 $\mathbf{T}$  = total population

The research anticipated a minimum response rate of 25% and an allowable error estimate of within 5% of the true prevalence, the following deductions was then made:

**25 (100-25) x (1.96**<sup>2</sup>/5<sup>2</sup>) = 288

... Eqn 4.3 ... Eqn. 4.4

Following readjustment: 288/(1+(288/228)) = 127.28(127 ... Eqn

However, a total of 127 firms were adopted as the sample size of the Estate Surveying and Valuation firms for the study. This figure represented about 56% of the total population of estate surveying and valuation firms, which is in line with the recommendation of Nwana (1981) which recommended a minimum of 40% of the total population when the population is in few hundreds.

In the same vein, the recent Directory of the Association of Housing Corporations of Nigeria (2006) was resorted to for determining the appropriate sample size for the study and the directory revealed that a total number of 132 institutional property companies/investment portfolios based in Lagos Metropolis. Using equations 4.1 and 4.2 described above gave a total of 91 property development companies/investment portfolios, which was considered as the sample size for this focus group. This represents 69% of the study population which is not at variance with a minimum of 40% of the population as recommended by Nwana (1981).

In respect of the sample size for the banks, recourse was given to Denscombe (2003) which stated that any population of less than 30 people or events cannot not be sampled but rather the whole of the population be considered for the study. In line with this school of thought, the entire sample frame of 25 Mega (Money Deposit) banks in Nigeria was adopted as the sample size for the study while a total of twelve (12) numbers of Lagos State high court judges/registrar was sampled.

## **4.7 Data Collection Instruments**

No doubt, many data collection instruments can be adopted to accomplish the tasks in this study. The various alternative instruments include participant/personal observation; in-depth interviews, mail questionnaires (postal surveys), telephone surveys and self-administered questionnaires.

To understand the data collection technique that would be appropriate, it is considered useful to first articulate the process of data collection. First, data on prior valuation figures and their subsequent sale prices in respect of the recently sold Federal Government residential properties in the study area (i.e. Lagos Metropolis) was sourced from the ad-hoc Presidential Implementation Committee on Federal Government Landed Property. This permitted a comparison of valuations with sale prices of properties. This in turn helped in the determination of the level of accuracy of valuations prepared by the valuers in the study area. Second, questionnaires were distributed to valuers to complete with a view to extracting some relevant information relating to accuracy and consistency of valuation. In addition, the questionnaire also include a section which required the respondent valuers to value some recently sold properties which they have no pre-knowledge of their sale figures with a view to ascertaining the level of accuracy and consistency of valuation. Questionnaires distributed to valuers and their clients were to assist researcher in ascertaining causal factors surrounding valuation inaccuracy and inconsistency.

The option of mail questionnaires too was also given consideration. This approach has the advantage of covering respondents over a wide geographical area. However, the approach had to be dropped due to the problem of low response often associated with mail questionnaires. The researcher did not wish to risk having a low response rate from any of the earmarked strata since this would likely have a negative impact on the balance of respondents to the study. Moreover, respondents to mail questionnaires might find it difficult to understand some of the technical questions in the questionnaire and would need some personal clarification from the researcher.

An in-depth personal interview was again considered in a bid to record a one hundred percent response rate from the designated strata and also to be able to explain questions where necessary. A reflection on this approach showed that this method has the tendency of limiting the respondent's sample size because it is time consuming and very costly. Finally, a combination of self-administered questionnaire backed-up by in-depth interviews where necessary was considered the most appropriate data collection instrument for the research. The method ensures a wider coverage and a high rate of response. Additionally, questionnaires ensure uniformity and permitted an objective comparison of results while interviews give respondents the ample opportunity to express themselves more expansively than it would have been with only questionnaires. The use of interviews also permits detailed explanation of issues on subject areas where some respondents may be knowledgeable. Ogunba (1997), Ogunba (2002) and Olaleye (2005) found this approach useful and beneficial in their earlier works. For this reason, this approach was adopted for this study.

In the course of gathering information for the study, the instruments used were (a) selfadministered questionnaires on the three respondent valuation stakeholders namely: (a) estate surveying and valuation firms (b) property companies/investment portfolios and (c) banks while the high court judges/registrar were interviewed orally.

The first questionnaire, which was administered on estate surveying and valuation firms, was structured into three sections. The first of the sections dealt with questions on the background and characteristics of the respondents and the sampled firms in terms of sex, age, location of office, level of employment, year of establishment, etc while second section attempted to find out some vital information about their perceptions on the subject matter of accuracy and consistency of investment valuations.

The third section consisted of the descriptions of twelve (12) residential properties, located variously within the Lagos metropolis, sold within three months period of the study. The valuers were provided with vital information required for carrying out valuations of the properties and were instructed to use the investment method. The fact that each of the respondent valuers received the same set of information is critical as the exercise was meant to ascertain the level of accuracy and consistency of the valuers over valuation estimates emanating from them. Details about the 12 sampled properties are provided in Table 4.1

S/N	Properties	Sale Prices	Location	Description
			Of Properties	Properties
		(000,000)		
		(=N=)		
1	Property 1	200	Ikoyi	5-bedroom Detached House;
				2-bedroom Guest Chalet plus
				2-room BQ on 2644 sq. mts
2	Property 2	20	Ojodu	5-Bedroom detached House;
				2-room BQ and Security House
				on 821.74 sq. mts
3	Property 3	18	Ojodu	3-Storey block of 6No.
				3-bedroom flats built on

Table 4.1: Summary Details of 12 Sampled Properties

  4 	  Property 	4	35	Amuwo-Odofin Residential Housing	684.30 sq. mts 4-Bedroom Detached House on 600 sq. mts
  5   	  Property   	5	26	Estate, Ojo Amuwo-Odofin Residential Housing Estate, Ojo	4-Bedroom Semi-Detached House   on 720 sq. mts 
6     	Property	6	20	Amuwo-Odofin Residential Housing Estate, Ojo	3-Bedroom Terrace House on   240 sq. mts
7 	Property	7	65	Lekki	4-Bedroom Terrace House on   700 square mts
8	 Property	8	55	Lekki	4-Bedroom Semi-Detached House  on 600 sq. mts
9	  Property 	9	180	Lekki	A block 6No. 3-Bedroom on 600
10	Property	10	2.5	Ojokoro, Lagos/Abeokuta Road	2-Bedroom flat located on the first floor in a block of 6No. flats within Ojokoro Housing Estate.
	Property	11	3	Ojokoro, Lagos/Abeokuta Road	3-Bedroom flat located on the first floor in a block of 8No. flats within Ojokoro Housing Estate.
12   	Property   	12	52	Ogba, Ikeja	A block of 4No. 4-Bedroom flats located within Ijaiye Medium Income Housing Estate at Ogba, Ikeja; Lagos State.

## Source: Authors' Field Survey, 2008

All the properties were sold within a period of three months prior to the administration of the questionnaires. The respondent valuers were requested to value the 12 properties using investment method of valuation without being made aware of the actual sale prices of the properties

The intention was firstly, to ascertain whether or not the capital value estimates arrived at by the respondents will tally with or be in close range to the transaction (sale) prices of the properties.

Secondly, the results of the valuation estimates by the respondent valuers are to assist in determining the level of variations in the capital value estimates arrived at by the different valuers.

Also, the results of the valuation will assist in determining the various rates of inputs such as gross rent, outgoings and yields adopted for the valuation of each of the properties by each of the valuers since the rate of each of these inputs adopted for the valuation will also have a significant/resultant effect(s) on the eventual capital value estimates of the properties.

The second questionnaire was for banks. The first section of the questionnaires dealt with background information about the respondents while section two sought from respondents their opinions or perceptions on the adequacy or otherwise of the valuation estimates emanating from estate surveyors and valuers in terms of accuracy and consistency.

The third questionnaire was administered on the property development/investment companies.

The first section of the questionnaires just like that of the banks dealt with background information about the respondents while section two sought from respondents their opinions or perceptions on the adequacy or otherwise of the valuation estimates emanating from estate surveyors and valuers in terms of accuracy and consistency.

The high court judges/registrar opinions on the subject matter were sampled with the aid of interview guide.

## 4.9 Techniques of Measuring A-Priori Expectations

The first three a-priori expectations have to do with margins of error. The first is:

• Valuers, courts and clients have successively higher needs for valuation accuracy in that order

The three variables in this expectation (need for valuation accuracy for each of the three stakeholders) are measured by requesting each stakeholder to rank its need for valuation accuracy on an ordinal scale.

The second a-priori expectation is that:

• Margins of error for all stakeholders would not exceed  $\pm 10$  per cent of market price.

The variables in the above expectation are first the listed margins of error and second, the level of acceptability to each stakeholder. Margins of error were listed on ordinal scales in questionnaires and acceptability of each margin of error was measured using Likert scales.

The third a-priori expectation is:

• The higher the stakeholder's need for accuracy, the lower is the maximum acceptable margin of error

The variables here are the requirement for accuracy for each stakeholder and the corresponding maximum acceptable margin of error. Each stakeholder's requirement for accuracy was measured (in the previous a-priori expectation) using ordinal scales. The other variable, maximum acceptable margin of error was also measured using ordinal (Likert) scales.

The fourth a-priori expectation is that:

• Valuations are good proxies for realized market prices

The first of these a-priori expectations has two variables: valuations (dependent variable) and market prices (independent variable).

The fifth a-priori expectation is that :

• Valuations of one firm are good proxy for the valuations of other firms.

This a priori expectation also has two variables: valuations (dependent variable) and concurrent valuations of other firms (independent variable). For the dependent variable in the two a priori expectations, there are three types of valuations that were measured. First is the prior valuation of the disposed federal government residential properties in the study area, which was secured from the Presidential Implementation Committee on Federal Government Landed Property. Second were the valuations of estate surveyors who were asked to value twelve recently sold properties

without being made aware of their sale prices. Both the dependent and independent variables in the first a-priori expectation were obtained from the realized sale prices and the valuation estimates (aptly tagged reserved bid prices) from the Presidential Implementation Committee on Federal Government Landed Property.

#### **10.** Methods of Data Analysis.

The methods that were employed in the analysis of data in respect of each of the a-priori expectations are tabulated in Table 4.2

Table 4.2: Techniques of Data Analysis for A-Priori Expectations

A-Priori Expectation	Nature of data		Technique employed
			for Analysis
Valuers, courts and clients	Non-parametric d	lata	Relative Importance
have successively higher			Indices, ANOVA,
needs for valuation accuracy			Standard Deviation
in that order			
Margins of error for all	Parametric and		Frequency
stakeholders would not	non-parametric d	lata	distributions,
exceed ±10 per cent of			Mean, Standard
market price			Deviation.
The higher the stockholder's	Parametric and		Mean, Standard
need for accuracy, the lower	non-parametric d	lata	Deviation,

is the maximum acceptable margin of error		Coefficient of    Correlation
Valuations are good proxies	Parametric data	Frequency
for realized market prices		distributions,
		Regression
		Analysis, ANOVA,
		Student's T-Test,
		Range/Semi-Inter
		Quartile Range,
		Standard Deviation
Valuations of one firm are	Parametric data	Frequency
good proxies for the		distributions,
valuations of other firms.		Range/Semi-Inter
		Quartile Range,
		Standard Deviation

Source: Authors' Compilation of Methods of Data Analysis, 2008

What follows is a brief exposition on the various data analysis methods described above.

## a) Frequency Distributions

Frequency distribution was employed in generating the distribution characteristics of the variables and data made used of in the subsequent statistical analysis of the data. The descriptive statistics like mean and standard deviation was used in addition to frequency and percentage distribution.

## (b) Mean Deviation

The mean is defined as the arithmetical average of the set of data, derived by adding up all of the data and dividing it by the number of the data. it is a measure of central tendency of a set of N numbers X1, X2, X3, X4, X5, .....XN. It is symbolically represented as X

Where X = each data in the set

N = total number

It is calculated thus:

$X = X_1, X_2, X_3, X_4, X_5, \dots, X_N$	Eqn, 4.5
Ν	
SX	Eqn 4,6
Ν	

# (c) Range:

The range is the difference between the highest and the lowest numbers in a set of numbers (distribution)  $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_4$ ,  $X_5$ ..... $X_N$  and is defined thus:

 $\mathbf{R} = \mathbf{X}_{N-X_1}$ 

Where  $X_N$  = the Highest Number

 $X_1 =$ the Lowest Number

In the earlier chapter on methodology Range (R) is defined as

R = Difference between the Highest Valuation Estimate and the Lowest Valuation Estimate.

(d) Mean Deviation from Sale Price: is a measure of variability or dispersion of the mean (X) from the set of numbers in the data. It is the average deviation of the individual data from the mean without regard to both the positive (+) and negative (-) signs. This symbolically explained thus:

MD = 1/NS|X - X| ... Eqn, 4.8

Where X = each data in the set

N = total number of data in the set

X = the mean

However, the Mean Deviation (MD) is adopted in this study and is represented thus:

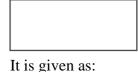
MD = 1/NS|Transation Price - Valuation| ... Eqn, 4.9

#### (e) Range/Semi-Inter Quartile Range

The range of a set of numbers is described as the difference between the largest and the smallest numbers in the set for a set of numbers (n). In attempt to analyze the accuracy of the capital value estimates of the valuation prepared by the valuation practitioner's vis-à-vis the market price, the range and semi inter quartile range which really assisted in determining the measure of dispersion and/or deviation of the valuation estimates from the market price was made used of.

#### (f) Standard Deviation

The standard deviation which is a measure of the variation of returns or of the clustering of observations around the mean was also employed to establish the relative importance of factors ranked by the respondents in the course of filling the questionnaires and most especially to establish their degree of agreement or otherwise with some/certain factors' ranking.



....Eqn. 4.10

Where S= the standard deviation of return or of the ranking of observations

Xi = the set of ranking produced by the respondents on each factor/variable

N = the number of respondents (observations).

X = the mean of the ranking of observation.

#### (e) Relative Importance Indices

The idea behind the adoption of scaling methods or approaches is derived out of the need that, instead of wanting to establish whether or not a respondent is favourably inclined to an issue or not as can be deduce from the answers given to question(s) in the questionnaires, one can get a measure and a reasonably reliable actual position of the respondent(s) on the attitude continuum with the aid of Relative Importance Index. Under Relative Importance measure, factors are to be rated against a scale to assist in assessing the significance of each factor. The scale will then be transformed into an index otherwise known as Relative Importance Index (RII) for each factor to determine the ranks of the different factors. The Relative Importance Index (RII) is evaluated using the following expression:

RII = Sw

Where Sw = Sum of weighting given to each factor by the various respondents

A = Highest weight

N = Total number of respondents.

#### (f) Regression and Correlation Analysis

In addition to the above described statistical measurement tools, regression and correlation analysis was employed to explain the relationship that might be existing between valuation figures arrived at by the valuers prior to their disposal with their eventual sale prices in the property market. Correlation was employed in measuring the strength of the association between the valuation figures and their subsequent sale prices. Regression on the other hand was adopted for the purpose of developing a model that can be used to predict the valuation figure that is predictive of the market pricing. Besides, data on the accuracy of valuations of one firm in comparison with the valuations of other firms were analyzed with the aid of Correlation and Regression analysis The Correlation and Regression analysis were employed in view of the fact that techniques had earlier been employed with success by Ogunba (1997) and Ogunba and Ajayi (1998) for similar studies.

#### (g) Analysis of Variance (ANOVA)

The Analysis of Variance is a statistical technique that makes use of interval or ratio level (of measurement scale) of variables. It is applied when a researcher is interested in the test of differences between means of two or more samples of one or more variables like other parametric statistics; it is applied under the following situations, namely:

- i) when the variables are measured at the interval or ratio level;
- ii) when the sample is randomly drawn from the population;
- iii) when the variables are assumed to be normally distributed in the population;
- iv) when the distribution of variables has equal variance, that is, the condition often referred to as Homoscedasticity; and
- v) when the variables means are independent of one another.

ANOVA is used to test whether two or more sample variances are significantly different. In essence, it is a technique that determines if there are differences between two or more sample means beyond the differences to be expected by chance. Analysis of Variance permits a decision maker to conclude whether or not all means of the population under study are equal based upon the degree of variability in the sample data. Therefore, when the samples are drawn randomly, and each sample is independent of the other samples; when the populations under study have distributions, which approximate to the normal curve; and when the population from which the sample values are obtained all have the sample population variance (s2), Analysis of variance is mostly approximate The technique had earlier been employed by Amidu (2006) for similar study hence its adoption for this study.

## (h) Pearson's Product Moment Correlation Coefficient

This technique is used to determine correlation between pairs of variables. The statistical model is given as:

[pic] ...Eqn. 12 r =

Where x = X - X; and

y = Y - Y

#### 4.11 Chapter Summary

The Chapter examined methodological issues pertinent to the study. The choice of methodological approach favoured is the Brown's (1985), Ogunba and Ajayi (1998) and IPD (2004) which involves the use of regression analysis. This was complemented with the Analysis of Variance (ANOVA) approach that was found useful in Aluko (2000) and Ogunba (2003) respectively and also Mean Absolute deviation, Range and Inter-quartile Range.

The study populations chosen were estate surveyors and valuers in the private sector, banks property development companies/investment portfolios and High Court judges/registrar. Sample frames were 228 valuation firms, 25 banks, 35 judges/registrar and 132 property development companies. A total of 127 estate surveying and valuation firms formed the sample size of the Estate Surveyors and Valuers while a sample size of 91 was adopted for the property companies and the entire 25 commercial banks within the study area were considered and twelve Lagos State high court judges/registrar constituted the sample size. The stratified random sampling technique was considered the most appropriate method of sampling while combination of self-administered questionnaire with in-depth interviews was adopted for data collection.

## **CHAPTER FIVE**

# PRESENTATION, INTERPRETATION AND DISCUSSION OF DATA

#### **5.1 Introduction**

In the preceding Chapter, a detailed discussion of methodological issues that are essential for the achievement of the aim and objectives of this study was carried out. This Chapter is devoted to the analysis of data gathered from the field by the means of various statistical techniques earlier discussed in this study. The Chapter has been arranged into various sections. The first section discusses the various stakeholders namely the estate surveyors and valuers, property development companies, courts and commercial banks. All the estate surveyors and valuers randomly selected were analyzed based on the five commercial districts into which Lagos metropolis has been zoned namely: Ikeja which is the State capital, Ebute Metta/Yaba, Victoria Island/Ikoyi, Apapa/Ijora and Lagos Island. This was followed by analysis of respondent estate surveyors and valuers by their sex, age, years of professional experience, academic qualifications, number of conferences/workshops/seminars attended between years 2002 and 2007 and areas of specialization. Similar analysis was carried out on the respondent banks' staff and property development companies' staff. The second section examined the various perceptions of valuation accuracy and variance (inconsistency) and liability for valuation inaccuracy and variance by stakeholders in Lagos metropolis. Following this was the examination of the various methods of determining capitalization rates, gross rental incomes for Investment Valuations by the estate surveyors and valuers, and mode of determining rates of outgoings deduction from the gross rents for Investment Valuation purposes in Lagos metropolis. The numerous sources, frequency and modes of clients' influence on valuation followed. The third section examined and tested each of the five postulated a-priori expectations postulated in section 3.7. The final section dealt with the causes of inaccuracy/inconsistency in the conduct of valuation which was identified as capitalization rates applied by respondents, gross income (rent) applied by respondents, and outgoings adopted for the valuations respectively. A summary of the work carried out in this Chapter was made.

#### **5.2 Preliminary Survey Details**

The field survey for the collection of relevant data for this study was undertaken between the months of April and July, 2008. The survey was undertaken personally and with the aid of two field assistants. The various responses were subsequently coded and analyzed by means of Statistical Package for Social Scientists (SPSS version 11) and Statgraphic Statistical Softwares. In an attempt to get the views of relevant stakeholders on the subject matter of the study, three different sets of questionnaires and an interview guide were prepared and administered to Estate Surveyors and Valuers in private practice, banks, property development companies and High Court Judges/Registrars. Table 5.1 below gives details of distribution and response rate to questionnaires administered for each of the four study groups.

	-				
Questionnaire St	takeholders/Study	Distributed	Retrieved	%age	
PC	opulation			success	
1  Es	state Surveyors and 🛛 🛛	127	82	65	
Va	aluers				
2   Pr	roperty Development	91	61	67	
Cc	ompanies/Portfolio				
Ma	anagement Companies				
3  Ba	anks	25	16	64	
4  Cc	ourt Judges/Registrar	12	6	50	

#### Table 5.1: Distribution of Questionnaires to Valuation Stakeholders

Source: Author's Field Survey and Analysis, 2008.

A total of 127 questionnaires were administered on the Principal Partners of the 127 practicing estate surveying and valuation firms operating within Lagos metropolis. A response rate of 65% was achieved. This achievement was due largely to the good rapport existing between the researcher and most of the estate surveyors and valuers practicing within the study area for being an active member of the Lagos State Chapter of the Nigerian Institution of Estate Surveyors and Valuers (NIESV). Responses to questionnaires by estate surveyors and valuers during State Chapter meetings were better than in their various offices because most estate surveyors and valuers were discovered to be more of field officers during working hours.

A response rate of 67% was achieved on questionnaires administered to 91 members of staff of property development companies' staff. The researcher was able to achieve this feat as a result of contacts earlier established with professionals in the property development companies while working with J.A. Oluwatudimu and Company (a firm of Estate Surveyors and Valuers in Ikeja) between 1992 and 2002.

Questionnaires were distributed to all the 25 mega banks but only 16 of them were retrieved with the support and assistance of a colleague working at Nigeria Deposit Insurance Corporation (NDIC) one of the commercial banks regulatory body.

A similar method was employed in contacting the only Court Registrar in charge of Lagos State High Courts and twelve (12) Judges respectively. The Researcher was able to interview the Court Registrar and five (50%) of the Judges with the assistance of a close friend working at the court registry that facilitated my accessibility to the Court Registrar who in turn linked me up with the other judges. The response rate of fifty per cent from Judges/Registrar is not unexpected in view of the judges' tight schedules and the sensitive nature of their assignments.

## **5.3 Profile of Respondents**

In order to ensure the reliability of the data for the study, the questionnaire sought information on the characteristics of the respondent firms of estate surveyors and valuers in private practice, banks and property development companies/investment portfolios.

#### 5.3.1 Profile of Estate Surveyors and Valuers

#### **5.3.1.1 Response Rate According to Location**

Lagos metropolis was categorized into five main business districts as earlier discussed in Chapter One. A total number of 127 questionnaires were administered which represented approximately 56% of 228 estate surveying and valuation firms operating in Lagos Metropolis. Out of 127 questionnaires administered, a total number of 82 questionnaires were retrieved and found useful for analysis. Questionnaire distribution and response rates by locations are as contained in Table 5.2 below:

Location	No. of	Administered		Percentage
	firms/		Retrieved	
	Location			
Ikeja	42	30	20	67
Ebute Metta/Yaba	23	17	8	47
Victoria Island/	40	29	19	65
Ikoyi				
Apapa/Ijora	20	15	11	73
Lagos Island	50	36	24	67
Total	175	127	82	65

#### Table 5.2: Questionnaire Distribution to Valuers by Location

Source: Author's Field Survey and Analysis, 2008.

Table 5.2 showed that majority (50) of estate surveying and valuation firms within Lagos metropolis had their offices at Lagos Island while Ikeja and Victoria Island/Ikoyi districts followed with 42 and 40 firms respectively. Apapa/Ijora district with 20 firms had the lowest number of firms. As noted above, majority of estate surveying and valuation firms were discovered having their offices within Lagos Island. This might be due to the fact that most banks, insurance companies and other such conglomerates which are potential employer and user of services of estate surveyors and valuers have either their head offices or corporate head offices within the district. Ikeja with 42 numbers of estate surveying and valuation firms came second. Ikeja happens to be the administrative headquarters of Lagos State with concentration of both government and private establishments which are potential employers of services of estate surveyors and valuers which are potential employers of services of estate surveyors and valuers which are potential employers of services of estate surveyors and private establishments which are potential employers of services of estate surveyors and valuers which are potential employers of services of estate surveyors and valuers which are potential employers of services of estate surveyors and valuers which are potential employers of services of estate surveyors and valuers which are potential employers of services of estate surveyors and valuers which are potential employers of services of estate surveyors and valuers which are serving as pull factors. Moreover, the state Secretariat housing

the Land Use and Allocation Bureau as well as Lands Registry where perfection of all real estate transactions within the State can only be perfected is located at Alausa in Ikeja district. This could also be responsible for concentration of estate surveying and valuation firms that are often involved in perfections of such transactions as Governors' Consent and Certificate of Occupancy (C. of. O). Victoria Island/Ikoyi area with 40 estate surveying and valuation firms came next after Ikeja. This is probably due to the fact that the highest property values in Nigeria can be found within the district which serves as impetus for estate surveyors and valuers to locate their offices there so as to share out of the benefits the district possess. Ebute Metta/Yaba had 23 firms while Apapa had 20 firms within their domains. These could be due to the fact that there are no major private or government establishment presence within both district except seaport within Apapa where there is no major work for estate surveying and valuation firms.

With regard to the percentage of response rate Table 5.2 above indicated that Apapa/Ijora district with the least concentration of estate surveying and valuation firms recorded the highest (73%) response rate. This could be due to interest shown by the district in the activities of Lagos Chapter of Nigerian Institution of Estate Surveyors and Valuers (NIESV) since the questionnaires were administered in one of the meetings of the chapter. Also, the success rate recorded in Ikeja, Lagos Island and Victoria Island/Ikoyi where 67% and 65% respectively were recorded as a result of active involvement of members of the districts in the activities of Lagos State Chapter of Nigerian Institution of Estate Surveyors and Valuers (NIESV) wherein the questionnaires were administered.

Details of data so obtained from respondent estate surveyors and valuers with respect to sex, age, academic qualification, experience and number of conferences/seminars/workshops attended between 2002 and 2007 are as contained in Tables 5.3 below.

		<b>L</b>	e e e e e e e e e e e e e e e e e e e	
Parameter	Sub-Division	Frequency	Percentage	
Sex	Male	56	68	
	Female	26	32	
Age	Below 30 yrs	3	4	
	31-40 yrs	32	39	
	41-50 yrs	26	32	
	51-60 yrs	13	16	
	Above 60 yrs	8	10	
Years of Professional	1-10 yrs	4	5	

#### Table 5.3: General Characteristics of Respondent Estate Surveyors and Valuers

Experience		
11-20 yrs	21	26
21-30 yrs	45	55
31-40 yrs	7	9
Above 40 yrs	4	5
Highest Academic   OND	5	6
Qualification		
HND	27	33
B.Sc	32	40
M.Sc	17	21
PhD	1	1
No. None	12	15
Conferences/Workshops/		
Seminar attended		
Between 2002 & 2007		
1-5	51	62
6-10	16	20
11-15	2	2
16-20	1	1

Source: Author's Field Survey and Analysis, 2008.

Table 5.3 above indicated that among 82 estate surveyors and valuers who responded, 68% of them were male. This result is not unexpected because of stress and pressure which the estate surveying and valuation profession entails. Most female estate surveyors and valuers prefer working in the public service such as Ministries, Corporations, and Government parastatals since private practice demands long hours of work even during weekends and public holidays at times. In addition, the need to take care of their family especially at their children bearing period prevents many women from working in private estate surveying and valuation firms.

The majority (71%) of practising Estate Surveyors and Valuers were found to be between 31 and 50 years of age while those above 50 years accounted for 26%. Thus practising estate surveyors and valuers between 31 and 50 years are twice those above 50 years of age. This result is not unexpected because the energy and zeal to run private business such as estate surveying and valuation firms is more within the 31 to 50 years age bracket. In all, those below 30 years of age accounted for approximately 4% of respondents. This might be due to the mandatory period of training (a minimum of 2 years post university education) required to qualify as a registered estate surveyor and valuer.

Majority of the principal partners of estate surveying and valuation firms (81%) have experiences ranging between 11 and 30 years as can be seen from Table 5.3. This is not unexpected because the profession officially started only about thirty four (34) years ago (1975) when it was recognized by the Federal Government. Only a few practices existed before 1975 and most of them were owned by expatriates such Fox and Company; Knight, Frank and Rutley among others.

With regard to the number of conferences, workshops and seminars attended by the respondent estate surveyors and valuers between 2002 and 2007, it was discovered that 62% of the respondents attended average of 1 to 5 conferences/workshops/seminars within the 6 year period,

20% attended 6 – 10 conferences while 15% of the respondents did not attend any. This suggests that valuers are taking time out to improve their knowledge, though the majority attendance of 1 - 15 conferences/workshops/seminars cannot be seen as very sufficient.

#### 5.3.1.2 Estate Surveying and Valuation Firms' Areas of Specialization

The questionnaire sought to ascertain the areas of specialization of respondent firms of estate surveyors and valuers. Results obtained are as contained in Table 5.4 below.

Table 5.4: Respor	ndent's Firm's Ar	ea of Specialization	
Area of Specialization	Frequency	Percentage	ĺ
		(Approx.)	ĺ
Valuation	3	3.65	ĺ
Property Financing and	1	1.22	l
Development			l
Estate Agency	3	3.65	ĺ
Property Management	2	2.44	ĺ
General Practice	73	89.02	ĺ
Total	82	100	l

#### T-11. 5 4. D n

Source: Author's Field Survey and Analysis, 2008.

A cursory look at Table 5.4 above shows that the majority (89.02%) of respondent firms engage in general practice, as a means of survival, therefore giving no room for specialization. If we accept the argument that specialization gives rise to efficiency, then this result may suggest that most firms of estate surveyors and valuers might not be operating at the highest level of efficiency. Only 3.65 per cent of estate surveying and valuation firms specialize in valuation.

## **5.3.2 Profile of Bank Officials**

Table 5.5 below provides information on various characteristics of respondent bank officials.

	r			
Parameter	Sub-Division	Frequency	Percentage	ĺ
Sex	Male	11	69	ĺ
	Female	5	31	ĺ

Table 5.5: Bio-Data of Respondent Bank Officials

Age	21-30yrs years	0	0
	31-40 yrs	11	69
	41-50 yrs	5	32
	51-60 yrs	0	0
Working experience	1- 5 yrs	5	31
	6-10 yrs	9	56
	11-15 yrs	1	6
	16-20 yrs	0	0
	21-25 yrs	0	0
	Above 25 yrs	0	0
	No response	1	6
Highest Academic	HND	4	25
Qualification			
	B.Sc	7	44
	M.Sc	5	31

Source: Author's Field Survey and Analysis, 2008.

Table 5.5 indicated that 69% of the respondents are male as against 31% female respondents. This might be due to the stress and pressures of Bank work which might discourage some women at the child rearing stage. The majority of the Bank respondents have 6-10 years of professional experience (56% of respondents), while 31% of the respondents had 1-5 years experience. The majority of respondents have sufficient experience to provide reasoned responses.

Table 5.5 also documented that majority of the respondents had either a Bachelors Degree (44%) or Higher National Diploma (25%) while 31% of respondents had Master of Science degree. The above statistics show a high education base for the Bank respondents which also implies that the respondents are sufficiently educated to understand and respond to the various questions.

# **5.3.3 Profile of Property Companies**

Table 5.6 below provides information on various characteristics of property companies.

	1 1 1	1	1	
Parameter	Sub-Division	Frequency	Percentage	1
Sex	Male	39	64	1
	Female	22	36	1
Age	21-30yrs years	7	12	1
	31-40 yrs	36	59	1
	41-50 yrs	14	23	1
	51-60 yrs	2	3	1
	Above 60 yrs	2	3	1
Years of Experience	1-5 yrs	10	16	1
	6-10 yrs	12	20	1
	11-15 yrs	15	25	1
	16-20 yrs	6	10	1
	21-25 yrs	8	13	
	26-30 yrs	6	10	1
	Above 30 yrs	4	7	1
Highest Academic	OND	2	3	1
Qualification				1
	HND	23	31	1
	B.Sc	29	25	
	M.Sc	7		
	PhD	0	0	

1			1	1	2
Table 5.6: Bio-Data of Pro	operty Development	<b>Companies'</b>	Respon	Iden	its

Source: Author's Field Survey and Analysis, 2008.

Table 5.6 showed that there were more male respondents (64%) than female respondents (36%) among property company respondents. The reasons for this could be due to the stress and pressure involved in the industry which discourages female participation. Table 5.6 above also showed that a majority of the respondents fall within the ages of 21 -50 years. This is probably because this age bracket is the most active in business. In addition, the same Table 5.6 also showed that the largest group of respondents (25%) has practical experience ranging between 11 and 15 years, followed by the group of respondents with 6 to 10 years experience (20%). This is considered a reasonably high level of experience for the purposes of responding to this study.

Table 5.6 also indicated that 56% of the respondents have either HND or B.Sc Degrees in their respective field of studies while 25% possessed M.Sc degrees in their academic fields. This again suggests that the respondents in property development companies are sufficiently educated for proficiency in what they are doing and that they are able to respond adequately to the research questions.

With regard to the age of the property development organizations, Table 5.7 showed that all the age groups are represented. However, the analyses showed that majority (74%) of the respondent property development firms were established within 1 to 15 years.

Parameter	Sub-Division	Frequency	Percentage
Age of Firm	1- 5 yrs	20	33
	6-10 yrs	11	18
	11-15 yrs	14	23
	16-20 yrs	4	7
	21-25 yrs	1	2
	26-30 yrs	6	10
	Above 30 yrs	5	8
No. of Valuers in	the 1-5	15	63
Firm			
	6-10	5	21
	11-15	3	12
	15-20	1	4

## **Table 5.7: Analysis of Property Companies**

Source: Author's Field Survey and Analysis, 2008.

This is perhaps because the establishment of private property development companies is a fairly recent phenomenon in Nigeria. Earlier, what existed for the most part were public companies such as State Housing Corporations and the Federal Housing Authority.

Table 5.7 also indicated that the largest group (63%) of the respondent property companies has between 1 to 5 estate surveyors and valuers in their employment while the next group (21%) has 6 to 10 surveyors. This low level of estate surveyor and valuer staffing is probably due to the fact that property development companies do not require many estate surveyors and valuers for the type of works they do.

## 5.4 Testing of the A-Priori Expectations

This Section attempts to resolve the a-priori expectation postulated in chapter Three. The first three a-priori expectations have to do with margins of error. A-priori expectation one examines stakeholders need for accuracy depending on their risk profile. A-priori expectation two determines the maximum margin of error for each stakeholder while a-priori expectation three compares the results from a-priori expectations one and two to see if there is any correlation between them.

# **5.4.1** A-Priori Expectation 1: Valuers, courts and clients have higher needs for valuation accuracy in that order

There is the need to have an insight into the work of the estate surveyors and valuers. First, variations and accuracy in valuations follow from the fact that estate surveyors and valuers interpret information, as individuals, differently. Second, the decisions a valuer must take when valuing a property will always involve subjective opinion and consequently a degree of valuation variance is inevitable. Third, with relative paucity of available property information, estate surveyors and valuers tend to operate in an 'information poor' environment. These three factors may lead to a lack of precision in valuation estimates and probable inaccuracy in the comparison of valuation estimates against realized transaction prices.

In the same vein, various stakeholders involved with valuation estimates have different perceptions as to why valuation estimates were in some cases not equal to sale prices. This development *is* perhaps healthy for the valuation profession itself, in that it both prompts greater analysis of valuers' performance and gives an opportunity to explain the perfectly valid reasons why there might be differences between valuation and sale price. The results, it is hoped will, generate debate on the full range of possible explanations and that; such opinions in turn could generate ideas for further analysis. To this effect, valuers, banks, courts and property development companies were presented a number of statements to ascertain their perceptions of the level of accuracy required for valuation estimates relative to selling prices. The statements were as follows:

- 1. Valuation estimates that are not 100% equal to sale prices are not useful. This statement corresponds to 100 percent accuracy required
- 2. Valuation estimates should closely approximate sale prices. This statement corresponds to  $\pm 10$  percent accuracy required of valuation estimates vis-à-vis selling prices.
- Valuation estimates should just be a loose approximation of realized sale prices of the property. This statement corresponds to ±20 percent accuracy required of valuation estimates vis-à-vis selling prices

The responses to these statements were on a 5 point Likert (ordinal) scale with 1 representing strong disagreement and 5 representing strong agreement. Responses are presented using Relative Importance Indices (RII) in Table 5.8:

# Table 5.8: Perceptions of Respondents' Need for Valuation Accuracy in Nigeria (Relative Importance Indices)

L /					
Statements on Valuation	Weight	Valuers'	Clients'	Courts'	
Estimates vis-à-vis Sale	e	Frequency	Frequency	Frequency	
Prices					
Valuation estimates that	t  30	18	34	1	
are not 100% equal to sa	ale				

prices are not useful (±  0% of sale price)				
Valuation Estimates should	   20	63	41	5
closely approximate to	20	05	11	
sale price (±10% of sale				
price)				
Valuation estimates should	10	61	2	0
just be a loose				
approximation of realized				
sale prices of the				
property (±20% of sale				
price)				
Total		82	77	6
Weighted Mean Ranking		22.1	24.2	21.7
Standard deviation		1.25	1.28	1.25

Source: Author's Field Survey and Analysis, 2008.

The above result shows that the a-priori expectation is not entirely confirmed. The expectation was that valuers will have the least need for valuation accuracy followed by courts and clients. However, the above result shows that Courts have the least need for accuracy followed by valuers and clients. This result does not completely negate the expectations. It is confirmed that clients have the highest need for accuracy. The only difference is that courts do not require a higher level of accuracy than valuers. This is probably because courts rely on valuers to determine the level of accuracy required in negligent cases.

The validity of the above result was tested by recourse to analysis of variance. The attempt was to examine if the difference in the weighted scores of stakeholders in the table above is statistically significant at the 5% level of significance. ANOVA analysis gave the following results (Table 5.9 below)

# Table 5.9: Analysis of Variance Comparing Valuers, courts and clients needs for Valuation accuracy

Variations	Sum of	df	Mean	F	Sig.	
	Squares		Square			
Between	890.997	2	445.498	104.171	061	
Groups						
Within Groups	825.386	193	4.277			
Total	1716.383	195				

Source: Author's Field Survey and Analysis, 2008.

ANOVA result reveals that valuers, courts and clients have significantly different needs for valuation accuracy at  $F_{(2,195)} = 104.171$ , and P=0.061 significant level.

# 5.4.2 A-Priori Expectation 2: Margins of Error for all Stakeholders would not exceed $\pm 10$ % of Market Price

Stakeholders were asked to indicate what in their opinion should be the maximum margin of error beyond which a valuer should be considered negligent. The result for each of the stakeholders are presented below using means and standard deviations as in Table 5.10 below:-

Table 5.10: Mea	n Margin of	Error for al	l Stakeholders
1 4010 01101 11104		LILOI IOI WI	

Variations	N	Margin of	error
		Mean	Std.
			Deviation
Valuers' Expectation	82	±11. 6827	2.51342
Courts' Expectation	6	±10.8127	2.36833
Clients' Expectation	77	±10. 2317	0.81944

Source: Author's Field Survey and Analysis, 2008

The above results negate the a-priori expectation that margins of error for all stakeholders would not exceed  $\pm 10$  % of market price. In fact, all the stakeholders posit margins of error in excess of  $\pm 10\%$ , which suggests that a margin of error of  $\pm 10\%$  is considered too stringent. It is noteworthy that all the posited margins of error are within the same narrow range of 10.23% and 11.6827% (a range of only 1.451%). Clients have the lowest expected margin of error ( $\pm 10$ . 2317; SD = 0.81944) courts ( $\pm 10.8127$ ; SD = 2.36833) and then by valuers ( $\pm 11.6827$ ; SD = 2.51342). This means that clients and courts have a lower expected margin of error than that advocated by valuers. For the purpose of this study, we suggest that the lowest of the above margins of error ( $\pm 10.2317$ ) should be adopted as it would not be ideal for valuers to be working towards compliance with a margin of error of  $\pm 11.6827$  while their clients are expecting higher standards ( $\pm 10.2317$ ). Certainly, valuers cannot afford to operate using a margin of error above that advocated by courts, else they may find themselves liable in negligence cases.

# **5.4.3** A-Priori Expectation 3: The higher the Stakeholders need for accuracy, the lower the maximum acceptable margin of error

The attempt here was to examine the correlation between a-priori expectation 1 and a-priori expectation 2, that is, to test if there is positive, or negative or no correlation between the stakeholders' need for accuracy based on their company risk profile and the margin of error they posit. This a-priori expectation would be tested by means of the coefficient of correlation (R). Where R is positive, this means that the correlation between the variables is positive (the higher one variable, the higher the other variable) and vice versa for negative correlation. The results of this test are documented in Table 5.11.

Variations	N	Need for	Accuracy	Margin of	error
		Mean	Std.	Mean	Std.
			Deviation		Deviation
Valuers' need for	82	22.1	1.25	10.8127	2.36833
accuracy					
Courts' need for	6	21.7	1.25	11. 6827	2.51342

Table 5.11: Mean for Stakeholders' Need for Accuracy and Margin of Error

accuracy						
Clients' need for	77	24.2	1.28	10. 2317	0.81944	
accuracy						

Source: Author's Field Survey and Analysis, 2008

The coefficient of correlation calculated from the above data was -0.576. This means that the correlation between need for accuracy and posited margin of error is negative and strong. In other words, the a-priori expectation that the higher the stakeholders need for accuracy, the lower the maximum acceptable margin of error is justified.

However, there is a need to prove empirically that the difference among the means is significant and it is not due to error of sampling. ANOVA was used to examine whether the difference between the means is significant or due to chance. The results are presented in Table 5.12 below.

 Table 5.12: ANOVA Comparing Means of Stakeholders' Need for Accuracy and Margin of

 Error

Sources of	Sum of Squares	Df	Mean	F	Sig.
Variation			Square		
Between Groups	9454.168	2	4727.08	5.737	.088
Within Groups	159006.350	193	823.867		
Total	168460.518	195			

Source: Author's Field Survey and Analysis, 2008

The findings indicate that the higher the stakeholders need for accuracy, the lower the maximum acceptable margin of error.

The next two a-priori expectations have to do with two related issues: valuation accuracy and valuation variance tests. A-priori expectation 4 focuses on valuation accuracy while a-priori expectation 5 addresses valuation variance.

# 5.4.4 A-Priori Expectation 4: Valuations are good proxies for open market sale prices

The test of this a-priori expectation involved the use of a wide variety of tests: Analysis of variance/student's t-test, Regression analysis, mean deviation from market price, the range and the inter-quartile range.

Two sets of property data were employed in testing this a-priori expectation.

1. First, following the procedure of Ogunba (1997 and 2004), all the respondent valuers were asked to value twelve recently sold properties without being aware of the sale prices. Each of the valuers was given a common set of information. The properties were well described but the valuers did not inspect the properties and were not paid for the valuation assignments.

2. Second, the study compared transaction prices and prior valuations of 131 Federal Government residential properties in Lagos State which were sold (privatized) in 2007 (Tables 5.13 and 5.14). The use of this approach was necessary given the criticisms of the above approach that valuers did not inspect the properties being valued and that valuers were not paid. This approach overcomes the criticisms of the Ogunba (1997 and 2004) approach, Since the properties in this case *were* inspected and the valuers collected fees.

Table 5.13: Federal Government Landed Properties Sold in Lagos State
--

Zones	Location	No of	%age	
		residential		
		Properties		
1	Apapa GRA	26	20.0	
2	Ikeja GRA	50	38.0	
3	Ijora GRA	3	2.0	
4	Victoria Island	52	40.0	
	Total	131	100	

Source: The Punch Newspaper, Monday February 5, 2007 pp 66-75

# Table 5.14: Federal Government Landed Properties Sold in Lagos State by Street Locations

S/N	Property Address	No of
		Properties
1	Ayoola Coker St., Ikeja GRA	3
2	Docemo Road, Ikeja GRA	1
3	Ladoke Akintola St. Ikeja GRA	18
4	Esugbayi St. Ikeja GRA	3
5	Oba Akinjobi St. Ikeja GRA	3
6	Remi Fanikayode St. Ikeja GRA	15
7	Sasogbon St., Ikeja GRA	5
8	Sowemimo St. Ikeja GRA	2
9	Child Avenue, Apapa GRA	4
10	Danfodio Road, Apapa GRA	7

11	Hall Lane, Apapa GRA	1
12	North Avenue, Apapa GRA	1
13	Iseyin Road, Apapa GRA	1
14	Ogedengbe Road, Apapa GRA	6
15	Park Lane, Apapa GRA	3
16	Point Road, Apapa GRA	2
17	Akarigbore St , Victoria Island	3
18	Akin Adesola St, Victoria Island	12
19	Bishop Kale St, Victoria Island	14
20	Idejo St, Victoria Island	5
21	Kasumu Ekemode St, Victoria Island	7
22	Legico , Victoria Island	1
23	Oju-olokun St, Victoria Island	4
24	Saka Tinubu St, Victoria Island	7
25	Ijora GRA	3
	Total	131

Source: The Punch Newspaper, Monday February 5, 2007 pp 66-75

(a) Accuracy Results Using Regression Analysis

Regression analysis was carried out first in respect of the 12 properties valued without inspection, and secondly in respect of the privatized (sold) properties. In the first case, regressing Price (P) into value (V) give the following statistics contained in the table:

### **Table 5.15: Regression Coefficients for Un-inspected Properties**

	Least Squares	Standard		
Parameter	Estimate	Error	P-Value	
Intercept	-11.5488	12.0954	0.3622	
Slope	2.79321	0.379176	0.0000	Ì

Source: Author's Analysis, 2008 Thus, P = -11.55 + 2.79V .... Eqn. 5.1 where P = Price and V = Valuation Estimates The ANOVA test on the above relationship gave the following results:

#### **Table 5.16: Analysis of Variance for Uninspected Properties**

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value	
Model	39903.2	1	39903.2	54.27	0.00000	
Residual	7353.33	10	735.333			
Total (Corr.)	47256.6	11				

Source: Author's Analysis, 2008 Correlation Coefficient = 0.91891 R-squared = 84.4396 percent (R-squared (adjusted for d.f. = 82.8835 percent) Standard Error of Est. = 27.117 Mean absolute error = 17.9206

In the second case (the inspected properties), the regression equation is derived from Tables 5.17 and 5.18:

## Table 5.17: Regression Coefficients for Inspected Properties

Parameter	Least Squares	Standard Error	P-Value
	Estimate		i i
Intercept	13830.7	2511.91	0.0000
Slope	0.576715	0.0242064	0.0000

Source: Author's Analysis, 2008

Thus, P = 13830.7 + 0.58V ....Eqn. 5.2 where P value = 0.00; the ANOVA results on the above equation are as follows:

# Table 5.18: Analysis of Variance of the Inspected Properties

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value	
Model	2.03978E11	1	2.03978E11	567.62	0.0000	
Residual	4.56378E10	127	3.59353E8			
Total (Corr.)	2.49615E11	128				

Source: Author's Field Survey and Analysis, 2008 Correlation Coefficient = 0.903973 R-squared = 81.7167 percent (R-squared (adjusted for d.f.) = 81.5728 percent) Standard Error of Est. = 18956.6

For Equation 5.1, since the P-value in the ANOVA table is less than 0.05, there is a statistically significant relationship between Sale Price and Reserved Price at the 95.0% confidence level. The P value for Equation 5.2 is also 0.00 meaning that there is a statistically significant relationship between sale price and reserved price (valuation estimate).

The R-Squared statistics for the first and second equations indicated that the models as fitted explain 84.44% and 81.7167% respectively of the variability in Sale Price. The correlation coefficients indicate a relatively strong relationship between the variables. The respective standard errors of estimate show the standard deviation of the residuals are 27.117 and 18956.6 respectively.

The two equations show that whether valuers inspected the properties or not, valuations in the study area are not accurate. To be accurate, the intercepts of the equations should be statistically indistinguishable from zero and the slope should be statistically indistinguishable from one. In both equations, the intercepts and slopes do not fulfill the accuracy criterion, though the second equation (for privatized properties) shows a considerably higher level of accuracy than the equation for the sampled properties.

(b) Accuracy Results using the Student's T-Test

The Student's T-test was employed for both the properties not physically inspected and the privatized properties. With respect to the uninspected properties, the results are in Table 5.19 as follows:

Variation N	df				
s					
				No.	Range
				of	(000,00
				Value	0)
				rs	
Prop	erty 1			Prope	Propert
				rty 2	у З
0 *	2	1			
		No. of	Range	Inter-	-quartile Range
		Valuers	(000,000)	(000,0	000)
A	В	C	D	E	
Property 1	200	45	550	80	
Property 2	20	45	91	9.75	
Property 3	18	45	170	8.5	
Property 4	35	45	77	9.5	
Property 5	26	45	108	12	
Property 6	20	45	66	7	
Property 7	65	45	78	14.5	
Property 8	55	45	82	15.5	
Property 9	180	45	690	58.50	
Property 10	2.5	45	8.80	0.5	
Property 11	3	45	11.50	1.15	
Property 12	52	45	117.50	24.5	

 Table 5.19: T-Test of Valuation Estimates and Market Prices

Source: Author's Field Survey and Analysis, 2008.

i) The ranges in Table 5.22 above clearly showed an extremely wide disparity between the lowest and highest valuation estimates. For instance the analysis of the valuation estimates given by the 45 respondent valuers in respect of Property 9 gave a range of N 690 million while Property 1 shows a range of N550 million and Properties 3, 12 and 5 showed ranges of N 170 million, N 117.5 million and N 108 million respectively. These ranges are quite wide and significant. It is only Property 10 that shows a range of only one (1) digit of N 8 million while the ranges of valuation estimates of all other properties were very wide and significant. We would recall that Hager and Lord in their 1985 study in UK observed that ranges of valuation estimates varied from £150,000.00 for office property to £205,000.00 for commercial property. Based on this finding, Hager and Lord

went ahead to query the reliability of valuation estimates. The above results from Lagos are much more compelling in their inconsistency level than the Hager and Lord results, and it is evident that property valuers cannot be relied on to produce uniform or consistent results in the study area.

ii) Table 5.22 shows at a glance the inter-quartile ranges of valuations of the 12 properties (inter quartile range refers to the more accurate fifty per cent of the valuations). With regard to Property 1, the semi inter-quartile range (Q) is

N 80 million, Property 2 shows semi inter-quartile range (Q) of N9.75 million, Property 3 too shows semi inter-quartile range of N 8.5 million while Property 4 indicates semi interquartile range of N9.5 million (see Table 5.28 for detail of inter-quartile ranges). This shows that even the more accurate fifty per cent of valuations evince very wide disparity in the valuation estimates among respondent valuers which made the extent of consistency in valuation estimates among valuers in Nigeria suspect.

(b) Consistency (Variance) Results using Mean Deviations

In an attempt to further ascertain the consistency/variance level of the respondent valuers, the standard deviation of the valuations of 12 properties by 45 valuers calculated. Table 5.23 below shows the respective means and standard deviations calculated.

# Table 5.23: Means and Standard Deviations of Valuations of 12 properties by 45Valuers inLagos

S/N	Property		Mean	Standard	SD in % terms	
				Deviation		
1	Property 1	-	280.29	115.18	41.10%	
2	Property 2	2	34.38	18.39	53.50%	
3	Property 3	3	37.34	25.86	69.25%	
4	Property 4	Ł	47.07	13.94	29.60%	
5	Property 5	5	50.31	19.42	38.60%	
6	Property 6	5	29.76	12.20	41.00%	
7	Property 7	7	97.53	20.61	21.13%	
8	Property 8	3	84.82	20.51	24.30%	
9	Property 9	)	223.78	111.25	49.71%	
10	Property 1	.0	3.21	1.39	43.30%	
11	Property 1	.1	4.74	2.27	47.90%	
12	Property 1	.2	44.52	29.65	66.60%	

Source: Author's Field Survey and Analysis, 2008

The standard deviations in the Table 5.23 above are extremely high. They are certainly far in excess of the  $\pm 10.2317\%$  maximum margin of error established earlier. Certainly, much needs to be done to bring valuations to within an acceptable margin of consistency.

The Table that follows provides some more details of the deviations vis-à-vis different margins of error. The intention is to examine the number of valuations that are able to fall within 5% intervals of margin of error, starting from  $\pm 1$ .

Table	e 5.24: Deviation from Mean van	uation Estin	nales by 45 va	iuers in L	agus		
Margin of		Pi	roperties				
error				Total	8		
(%)				(540)			
	Property 1			Propert	Prope		
				y 2	rty 3		
0* 0					1	0	
1	L						
Prop	perty 1				Prope	Proper	
					rty 2	ty 3	
		1	2				
Clients so	ometimes influence valuers	70	12				
to alter	valuation estimates	(85%)	(15%)				
I believe	that other Estate Surveying	66	16				
Firms have	e been influenced by Clients	(80%)	(20응)				
My own Est	ate Surveying Firm has been	60	22				
approached	l for valuation assistance	(73%)	(27%)				
by Clients	3						

Table 5.24: Deviation from Mean Valuation Estimates by 45 Valuers in Lagos

Source: Author's Field Survey and Analysis, 2008.

The results in the Table 5.31 confirmed the existence of client influence with a surprising 85% of respondents agreeing to the fact that the practice is real in the Nigerian valuation industry. 73% of valuation firms even confirmed that their own valuation firms had been approached for assistance in modifying estimates. The practice of influencing issues by clients is a common occurrence in all professions as found in the literature (Poneman (1992), Rushmore (1993) and Kinnard et al (1997)) thus suggesting the need for educating professionals on strict adherence to professional ethics.

# 5.6.1 Sources of Client Influence

Table 5.32 examines the different categories of client that engage in the act of influencing valuers' estimates.

#### Table 5.32 Clients in the habit of Influencing Valuers' Valuation Opinion

Statement	Yes	No
Private Individuals/companies attempting to	76	6
influence values upwards (where the client is the	(93%)	(7%)
seller or trying to take a loan) or attempting to		
influence values downwards (where the client is a		
purchaser)		
Commercial Banks, and Primary Mortgage Institutions	32	50
trying to influence values downwards while	(39%)	(61%)
Insurance companies try to influence values upwards		
to minimize risks		
Government Institutions and agencies attempting to	15	67
influence values upward (in the case of valuations	(18%)	(81%)
for taxation) or influence values downward (in the		
case of compensation valuation)		

Source: Author's Field Survey and Analysis, 2008.

The responses in the Table 5.32 showed that individuals/companies are the major category of clients that indulges in the act of influencing valuation estimates. Banks and insurance companies also influence values (39%). While banks and PMIs try to influence valuation estimates downward in an attempt at minimizing risk the insurance companies on the other hand attempt to influence replacement/reinstatement cost values upward in order to ensure adequate insurance coverage in case of the unexpected. However, a larger number (61%) of banks and insurance companies believe they do not try to influence values in any way.

Table 5.33 examined the degree of client influence for different purposes of valuation.

Common Always				Most	Some N	ever	
Valuation				of	time		
Purposes				the s	s		
				time	Í		
	Always	Most of	Sometimes	Never			
		the time					
Removal of the firm's	8	17	26	31	2.02	5th	
name from approved	wf=32	wf=51	wf=52	wf=31			
valuers' list							
Reduction of the number	5	19	36	22	2.84	2nd	
of future Valuation	wf=82	wf=57	wf=72	wf=22			
assignments							
Engaging other firms to	13	26	23	20	1.78	9th	
do the job	wf=52	wf=28	wf=36	wf=20			
Refusal to pay the	3	18	31	30	1.93	6th	
agreed professional fee	wf=12	wf=54	wf=62	wf=30			
Loss of future	8	17	33	24	2.11	4th	
patronage	wf=32	wf=51	wf=66	wf=24			
Withholding of vital	6	12	32	24	1.80	7th	
information	wf=24	wf=36	wf=64	wf=24			

### Table 5.33: Frequency of Clients' Influence for Various Valuation Purposes

Emphasize only the	28	24	20	9	2.84 2nd
positive attributes of	wf=112	wf=72	wf=40	wf=9	
the subject property of					
valuation					
Withdrawal of supplied	6	10	12	54	1.61 10th
information	wf=24	wf=30	wf=24	wf=54	
Manipulation of the	65	5	3	9	3.54 1st
supplied information	wf=260	wf=15	wf=6	wf=9	

Key: WF = Weighted Frequency

Source: Author's Field Survey and Analysis, 2008.

Table 5.35 showed that clients resort to a variety of techniques to influence valuers ranging from suggestions on valuation inputs to outright threats. Manipulation of information supplied by clients was ranked 1<sup>st</sup> (RII = 3.54) by the respondent valuers amongst the various types of influence often adopted by clients in achieving their desire valuation estimates. This means that clients would usually quoting high or low rental or capital values to the valuer depending on whether they want to influence values up or down. The second ranked mode of influence involves emphasizing the positive aspects of the property (RII = 2.84) and threats of reduction in future valuation assignments (RII = 2.84). Other threats adopted by clients are loss of patronage (RII = 2.11), removal of the firm from the approved list of valuers (RII = 2.02) and refusal to pay fees (RII = 1.93). To guide against negative effect of client influence on the valuation outcome in New Zealand the New Zealand Institute of Valuers (1996) in their Code of Ethics specified in Article 1.7b & c that:

- A member must maintain the strictest independence and impartiality in the performance of his professional duties. To this end no member shall
- b) allow the performance of that members' professional duties to be improperly influenced by the preferences of clients and others as to the result of their professional work
- c) rely improperly on information supplied by clients or others in the performance of their professional duties"

However, Levy and Schuck (1998) in a study conducted in the same New Zealand through interviews of five registered valuers, revealed the adoption of information power by sophisticated clients in their mode of influence while unsophisticated clients usually resort to employing either reward or coercive technique in their attempts to influence valuation estimates.

# **5.7 Discussion of Results**

This section provides an examination of the data analyzed in the previous sections of the chapter vis-à-vis the objectives that the study set out to examine. The subsequent sections of the chapter are accordingly structured according to the objectives.

# **1.** Ascertaining the Perception of Stakeholders Maximum Acceptable Margin of Error in Valuation Estimates

The results of analysis undertaken by means of relative importance indices, mean and standard deviation showed that Estate Surveyors and Valuers, Courts and clients favoured a range of  $\pm 11.683\%$ ,  $\pm 10.813\%$  and  $\pm 10.232\%$  respectively. Obviously, the valuation profession, their clients and the court can not afford to have three different rates. The issue is how to determine a uniform rate for valuation stakeholders. Although the court is the final arbiter in case of a dispute between the valuer and the client yet there would be no need of going to court if the client is satisfied with the valuation estimate of the valuer. For this reason, the acceptable margin of error ( $\pm 10.2\%$ ) by the client, if adopted, would eliminate disagreements between the client and the valuer thus upholding the sanctity of the claim of professionalism by the valuer.

# 5.7.2 Examination of Valuation Estimates as Proxy for Open Market Sale Prices of Real Properties

The study showed that valuation estimates were far from being good proxies for realized sale prices of real properties. The implication of this kind of result is that except the valuers are put on check by the regulatory institutions (NIESV and ESVABON), professionalism will be thrown overboard. This phenomenon is not good for the image of the profession in the face of stiff competition from other professionals interested in valuation jobs (insurance valuation by Quantity Surveyors; Plant and machinery valuation by Nigerian Society of Engineers; Bankers and Accountants on Investment and asset valuation.)

The study has also shown that the causes of inaccuracy are traceable to inappropriate and inconsistent use of valuation inputs (gross incomes, outgoings and capitalization rates). This raises various implications on the quality of academic and professional training received by most practicing estate surveyors and valuers.

# 2. Examination of whether Valuation Estimates of one firm are Proxies for Valuation Estimates of other firms

The study found that valuation estimates were far from being proxies for valuation estimates of other firms. The implication of this is that given any valuation assignment, different valuation firms will arrive at widely diverse valuation estimates thereby making the profession to loose its integrity. Such a development casts doubts on the ability of techniques employed by valuers to produce consistent results in investment valuation assignments. This development also raises doubts as to the existence of any valuation standard in the country and if such a valuation standard exists, questions too can be raised as to the enforcement of such by the regulatory bodies (NIESV and ESVABON) performing the role assigned to them.

# 5.7.4 Identification and Examination of Clients' modes of Influence on Valuation Estimates

There are three major sources of clients influence identified in the study area (reward, coercive and manipulation of information). Within the study area, manipulation of information is the principal mode of clients influence often employed. This is followed by coercive power. This raises a moral issue and casts doubt about the claim of valuers professional bodies control of members. A valuer faced with pressure from clients should not go beyond a minimum or maximum valuation estimate he can reasonably defend.

#### 5.8 Chapter Summary

In this Chapter, an analysis of data gathered from the field was carried out by means of various statistical techniques earlier on discussed in this study.

First, the chapter examined the five a-priori expectations. The above result shows that the first apriori expectation was not entirely confirmed. Contrary to the expectation that valuers will have the least need for valuation accuracy followed by courts and clients, the results showed that Courts have the least need for accuracy followed by valuers and clients. This is probably because courts rely on valuers to determine the level of accuracy required in negligent cases.

Regarding the second a-priori expectation, the results negated the expectation that margins of error for all stakeholders would not exceed  $\pm 10$  % of market price. All the stakeholders posited margins of error in excess though all the posited margins of error are within the same narrow range of 10.23% and 11.6827% Clients had the lowest expected margin of error ( $\pm 10.2317$ ; SD = 0.81944) courts ( $\pm 10.8127$ ; SD = 2.36833) and then by valuers ( $\pm 11.6827$ ; SD = 2.51342).

The third a-priori expectation that the higher the stakeholders need for accuracy, the lower the maximum acceptable margin of error was justified.

The fourth a-priori expectation that valuations are a good proxy for sale pries was not confirmed. The various tests showed that whether valuers inspected the properties or not, valuations in the study area are not accurate relative to sale prices.

The same result was obtained regarding a-priori expectation five. Based on various tests, it was evident that property valuers cannot be relied on to produce uniform or consistent results in the study area.

The Chapter then examined causes of the identified inaccuracy and inconsistency by looking into the manner of determining investment valuation inputs. to do this, the chapter looked into the consistency and uniformity of determining the gross income, outgoings and capitalization rates in the valuations conducted earlier. It was seen that there was no uniformity in the rates adopted. Reasons for this were identified by inquiring into the manner in which valuers determine the inputs. It was seen that there was a widely varying manner of determining the inputs.

The Chapter also looked into the issue of client influence with a view to determining the potent factors on the subject matter of client influence on valuation accuracy and it was confirmed that there is substantial influence in this regard. Individuals/companies are the major category of clients that often indulges in the act of influencing valuation estimates and the valuation purpose for which client influence is most prominent is mortgage. Clients resort to a variety of techniques to influence valuers ranging from suggestions on valuation inputs to outright threats, manipulation of information supplied by clients, loss of patronage and removal of the firm from the approved list of valuers.

The next section concerns discussions arising from the analysis of data while the last Chapter summarizes the study, provide recommendations and concluding comments.

# CHAPTER SIX SUMMARY, RECOMMENDATIONS AND CONCLUDING REMARKS

### **6.1 Introduction**

The preceding Chapter was devoted to refinement of findings from this research work and discussion of the policy implications. In this concluding Chapter, the study endeavours to provide a closing summary of the research, followed by recommendations, to address some of the problems highlighted in the preceding Chapter. An attempt is also made to highlight relevant areas for future research.

## 6.2 Summary

This study has its genesis in the increasing criticisms from within and outside the real estate profession on the inaccuracy and inconsistency in the professionally produced investment valuations in Nigeria. The major aspects of the criticisms centered on the inability of estate surveyors and valuers to predict or interpret accurately the market value of property. The study was therefore designed to investigate veracity or otherwise of these criticisms with a view to finding way(s) of improving the quality of investment property valuation practice in the country.

To achieve the aim and objectives of the study, the study took time to review relevant literature considered germane to the aim and objectives of the study. In the process, earlier relevant research works to the study in countries like UK, US, Australia and Nigeria were reviewed.

Arising from the literature review, the conceptual issues pertaining to determination of factors relating to valuation accuracy and variance that falls within the scope, aim and objectives of the study, were discussed in Chapter Three. The conceptual issues then served as the basis of the empirical research and questionnaires design.

In the next Chapter (Chapter Four), which dealt with the research methodology for the study, an attempt was made to configure an appropriate methodological approach. The study critically examined several methodological approaches employed by the various journal papers and articles discussed in the reviewed literature. Upon reflection, the study adopted survey method and focused valuation stakeholders consisting estate surveyors and valuers, courts and clients (banks and property investment companies) as the study population. Data were collected from the respondents with the use of self administered questionnaires backed-up by interviews where necessary. Respondents valuers, in addition to filling the appropriate questionnaires, were requested to carry out valuations of twelve selected residential properties while secondary data in respect of Federal Government landed properties within Lagos metropolis sold in 2007 were collected for analysis. Various statistical techniques such as frequencies, mean, mean deviation, standard deviation, range, inter-quartile range relative importance indices as well as regression and correlation analysis were used.

It was established that investment valuations were not good proxies for market prices in Lagos metropolis. The result also showed that estate surveyors and valuers in Lagos were not interpreting the property markets as was the case with valuers operating in developed countries such as UK. The result of the analysis of the reserved prices (valuation estimates) and eventual sale prices of Federal Government sold properties within Lagos metropolis, showed that only 16% of the valuations carried out were within  $\pm 10\%$  of the selling price as against  $\pm 30\%$  probability

founded by Blundell and Ward (1997) or 70% probability observed by Baum et al (2001). The result of the analysis of the valuations of twelve sample properties selected for the study undertaken by forty five estate surveyors and valuers revealed wide disparity between the sale prices of the properties and valuation estimates came up with by the valuers.

# **6.3 Summary of Findings**

Based on the analysis of data collected for this study, the major highlights of the results obtained are as follows:

(i) The study showed that the overall acceptable margin of error for valuation estimates should be  $\pm 10.2\%$ .

(ii) The results of both the standard and mean deviations showed high level of valuation estimates inaccuracy as none of the mean values fall within thirty (30%) per cent of the selling prices. The mean deviation from market price for all the twelve sampled properties stood at  $\pm$ 32.44% while the mean deviation from market price for all the 131 privatized properties stood at  $\pm$ 38.62%. This showed that valuers within Lagos metropolis were not interpreting market prices with any appreciable degree of accuracy.

(iii) The study showed that valuers were in the habit of adopting different approaches at determining capitalization rates/yields for investment valuation purposes and the use of different ways to determine capitalization rates by valuers is bound to produce different results hence inconsistencies in valuation estimates amongst the valuers.

(iv) Lack of uniformity in the way estate surveyors and valuers in Lagos metropolis interpret property market information was largely responsible for variances in the valuation estimates amongst and between the valuers in the metropolis which in effect was responsible for valuation estimates of one firm not serving as good proxy for the valuation estimates of contemporaneous (other) firms in the metropolis.

(v) There is strong evidence to conclude that valuation estimates from estate surveyors and valuers in the Lagos metropolis cannot be described as good proxy for market sale prices.

(vi) The study has confirmed the existence of malpractices through client influence in the Nigerian valuation industry. This practice has the tendency of eroding estate surveyors and valuers objectivity in property valuation exercises in the country

# 6.4 Recommendations

Based on the outcome of the study, the following recommendations are made:

(i) It is recommended that a  $\pm 10.2\%$  margin of error for valuation estimate be adopted by the two regulatory bodies (NIESV and ESVARBON) and incorporated into future editions of Guidance Notes. This is desirable because once a valuer is fully aware of the existence of such an accuracy benchmark; he would be less inclined to hide under the cloak of a valuation estimate being an opinion of value. He would be more under strict obligation to ensure a thorough valuation procedure and processes so as not to run foul of the law. It is also recommended that the Courts and the Professional and Ethics Committee of NIESV should adopt the  $\pm 10.2\%$  benchmark in the adjudication of negligence cases brought before them.

(ii) It is recommended that NIESV should make it mandatory for all Estate Surveyors and Valuers to submit relevant data (sales figures, rental values, outgoings, yield rates, etc) on

all transactions with respect to property sales and lettings compulsorily for the purpose of building and regularly updating a data bank. Each State Chapter of NIESV should be mandated to establish such a property data bank and review periodically to make such data continuously relevant. Such information so collated could serve as a reference point for comparison between States and among States for Nigerians who may wish to invest in any State within the country.

Such property databank would assist researchers in producing property market indices for performance measurement and accuracy test especially in the application of the investment method of valuation.

(iii) It is recommended that a more rigorous training and retraining of estate surveyors and valuers should be embarked upon on periodic basis. This can be achieved through University administrators working in close association with the Nigerian Institution of Estate Surveyors and Valuers on one hand and the Estate Surveyors and Valuers Registration Board of Nigeria so as to enjoin University lecturers on sabbatical leave to interact closely with their colleagues in practice and vice versa thereby ensuring a cross fertilization of ideas and experiences among lecturers and estate surveyors in public and private practices in the hope of producing graduates who can go into the business world and survive.

(iv) Emphasis should be placed on members' specialization in the valuation practice. Specialization guarantees efficiency as against the current prevalent one-man estate surveying and valuation firms' show wherein a valuer becomes a jack of all trades.

(v) It is recommended that the latest edition of NIESV valuations standards (2006) be widely distributed and enforced. Valuation standards are meant to enhance accuracy, rationality and uniformity in valuation reports. The discovery in this study that valuations are inaccurate and inconsistent implies a failure in use of valuation standards.

(vi) To stem the tide of clients influence, the carrot and stick strategy should be put in place whereby stiff penalty should be imposed on erring members while letters of commendation and other relevant forms of reward should be given to those who uphold the ethics of the valuation profession.

# 6.5 Opportunities for Further Research

Very little research efforts have been undertaken in Nigerian universities in the area of valuation accuracy and consistency. It is intended that this work will be updated by other researchers across other geo-political zones of Nigeria to ascertain the applicability of the present research findings and generate new ideas that can move the valuation profession forward. Moreover, the present study focuses on valuation accuracy and consistency with regards to residential properties, there is a need to undertake other studies which will focus on commercial, industrial and specialized properties.

# 6.6 Concluding Remarks

The study has shown that the margin of error of valuations beyond which a valuer should be considered as operating in negligence should not exceed  $\pm 10.2$  per cent. However, it was shown that practicing estate surveyors and valuers operating in Lagos metropolis are not predicting the property market within this margin of error. In fact, the results from all the statistical tests showed that valuation estimates are not good proxies either for market prices of valuations of other firms. It is hoped that the recommendations put forward for ameliorating the problems of inaccuracy and inconsistency in valuations would show the needed way forward from the present shortcomings in

the profession to the achievement of client confidence. Optimistically, these suggestions should improve the level of accuracy and consistency of investment valuation estimates in the country at large.

The contribution of the study to investment valuation literature is in the area of establishing the margin of error for valuation practice from valuation stakeholders. There is also a methodological contribution which has to do with the comparison of valuations and sale prices under circumstances where the valuers actually inspected the properties and were paid. Prior studies such as Ogunba (1997), Ogunba & Ajayi (1998), Ogunba (2003) etc were undertaken under circumstances in which the valuers did not actually inspect the properties and were not paid, and such studies have for this reason been open to criticism.

#### References

- Abrams, J.B. (2004) Accuracy of Your Valuation. Unpublished Article Available Online at www.abramsvaluation.com/pdf/ch10.pdf
- Adair, A., Berry, J. and McGreal, S. (1996) Valuation of Residential Property: Analysis of Participant Behaviour. Journal of Property Valuation and Investment, Vol. 14 No.1.
- Adegoke, O.J. (2006) A Study of Valuer Heuristic Behaviour and Valuation Reliability in Lagos Metropolis. Unpublished M.Sc. Thesis Submitted to the Department of Estate Management, Obafemi Awolowo University, Ile-Ife.
- Adegoke, O.J. (2008) Behaviour of Valuers when Valuing Properties in Localities where they Lack substantial Prior Experience. Real Estate and Best Economics Journal Vol. 1 No. 1 pp30-45
- Ajayi, C.A. (1990) An Analysis of Default Factors in Residential Mortgages of the Federal Mortgage Bank of Nigeria and Oyo State Property Development Corporation.

Unpublished PhD Thesis, Obafemi Awolowo University, Ile-Ife.

- Ajayi, C.A. (2006) Towards New Directions for Property Paradigm A Paper Presented at the International Conference Organized by the College of Science and Technology; Covenant University; Ota; on the theme: The Built Environment: Innovation Policy and Sustainable Development; Pp.126-129.
- Ajayi, C. A. (2003) The Income Approach to Valuation: The Preference of the Investor. Being the text of an invited paper presented at the Continuing Professional Development Workshop organized by the Lagos State Branch of the Nigerian Institution of Estate Surveyors and Valuers on the 3<sup>rd</sup> of December 2003. Pp.1-24
- Ajibola, M.O. (2006) The Accuracy of Investment Method of Valuation in Nigeria: A Case Study of Lagos. An M.Sc Thesis Submitted to the Department of Estate Management, Faculty of Environmental Sciences, University of Lagos, Akoka, Yaba.
- Allan G.J. (2000), The Blackwell Dictionary of Sociology: A User's Guide to Sociological Language 2nd Edition; Blackwell Publishing, 350, Main Street, Malden; USA.
- Aluko, B.T. (1998) Property Valuation: Are Estate Surveyors and Valuers Interpreters or Creators of Value? Journal of the Nigerian Estate Surveyors and Valuers Pp. 9-15.
- Aluko, B.T. (2000) A Study of Appropriateness of Mortgage Valuation for Institutional Lending in Nigeria. Unpublished PhD thesis submitted to the Department of Estate Management, Obafemi Awolowo University, Ile-Ife.
- Aluko B.T. (2004) Market Data for Better Valuation/Pricing: The Holy Grail of the Valuation Profession. The Estate Surveyor and Valuer, Vol. 27, No.1, March, pp. 54-63.
- Amidu, A. (2006) A Study of Client Influence on Residential Property Valuations in Lagos Metropolis. An M.Sc.Thesis Submitted to the Department of Estate Management, Faculty of Environmental Design and Management, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Association of Housing Corporation in Nigeria, (2006) Directory of the Top Shakers and Movers in Nigeria Housing/Building Industry An Official Publication of the Association of Housing Corporation in Nigeria.
- Babawale, G.K. (2008) An Evaluation of Factors Influencing Inaccuracy in Residential Property Valuation in Lagos Metropolis. Unpublished PhD Thesis Submitted to the Department of Estate Management, Faculty of Environmental Sciences, University of Lagos, Akoka, Yaba.
- Bain, J.S; (1968): Industrial Organization John Wiley and Sons Inc, N.Y. 2nd Edition.
- Baum, A. and Crosby, N. (1988) Property Investment Appraisal Routlege, London.
- Baum, A., Crosby, N., Gallimore, P., Gray, A. and McAllister, P. (2000); The Influence of Values and Valuations on the Workings of Commercial Investment Market, London, IPF/RICS Research Founation/ Jones Landsalle.
  - Bretten, J. and Wyatt, P. (2002): Variance in Property Valuations for Commercial Lending Vol.
    4 No. 9, RICS Foundation May 2002 Electronic Reference PS0409 (WWW.rics-foundation.org).
- Brown, G. (1985) Property Investment and Performance Measurement: A Reply, Journal of Valuation, Vol. 4, pp 33-44.
- Brown, G. (1991) Property Investment and the Capital Markets, E & FN Spon, London.
- Brown, G. (1992) Valuation Accuracy: Developing the Economic Issues Journal of Property Research, 9:199-207.
- Brown, G. and Matysiak, G. (2000) Real Estate Investment: A Capital Market Approach. FT

Prentice-Hall, 708 pp.

- Cole, R; Guilkey, D and Miles, M (1986) Towards an Assessment of the Reliability of Commercial Appraisals, Appraisal Journal, July, pp. 442-432.
- Crosy, N. (2000) Future Directions and Challenges for Valuation Research and Practice ,Keynote Address Presented at Pacific Real Estate Society's 6<sup>th</sup> Annual Conference, Sydney, Australia.
- Crosby, N; Devaney, S; Key, T. and Matysiak, G. (2003) Valuation Accuracy Reconciling Timing of the Valuation and Sale. European Real Estate Society, Helsinki-Finland
- Crosby, N; Lavers, A. and Murdoch, J. (1998) Property Valuation Variation and the Margin of Error Journal of Property Research, Vol. 15 No. 4 pp 305-330
- Crosby, N; Lavers, A. and Murdoch, J (1999) Performance of Expert Witnesses in Valuation Disputes. Paper Presented at the Cutting Edge 1999 Property research Conference of the Royal Institution of Chartered Surveyors, University of Cambridge, September
- Crosby, N; French, N. and Ward, C. (1993) Valuation Accuracy: A Self Fulfilling Prophesy. The City Edge pp 1-11
- Cullen, I. (1994) The Accuracy of Valuation Re-Visited, A Paper Presented at RICS Cutting Edge Research Conference, London
- Descombe, M. (2003) The Good Research Guide for Small Scale Social Research Projects. (Second Edition), Open University Press. Maidenhead, Philadelphia
- Diaz, J.III (1990a) How Appraisers Do Their Work: A Test of the Appraisal Process and the Development of A Descriptive. Model Journal of Real Estate Research, Vol. 5 No.1.
- Diaz, J.III (1990b) The Process of Selecting Comparable Sales The Appraisal Journal 58:4, pp. 33-40
- Diaz, J. III (1997) An Investigation into the Impact of Previous Expert Value Estimates on Appraisal Judgement Journal of Real Estate Research, Vol.13 No. 1.
- Diaz, J. III and Wolverton, M.I.; (1998) A Longitudinal Examination of the Appraisal Smoothing Hypothesis Real Estate Economics, Vol. 26, No.2; pp.349-358.
- Esubiyi, A.O. (1994) Obsolescence and Property Values: A Case Study of Lagos. Unpublished B.Sc Dissertation Submitted to the Department of Estate Management, Obafemi Awolowo University, Ile-Ife.
- Evans, A.W. (1989) House Prices and Land Prices in the South East A Review House Builders Federation; London
- Fletcher, S. and Diskin, B.A. (1994) Agency Relationships In Appraising for Institutional Asset Managers The Appraisal Journal, Vol. 62 No.1.pp.103-12
- Fraser, R.R. and Worzala, E.M (1994): An insight into the idea of Professor James A
- French, N. (2007) Valuation Uncertainty: Common Standards and Methods 13th Pacific-Rim Real Estate Society Conference Fremantle, Western Australia, 21 to 24 January, 2007.
- Gallimore, P. and Wolverton, M. (1997) Price Knowledge Induced Bias: A Cross-Cultural Comparison Journal of Property Valuation and Investment, Vol. 15 (3), 261-273.
- Gallimore, P.(1994) Aspects of Information Processing in Valuation Judgement and Choice Journal of Property Research, Vol.11, pp.97-110.
- Gallimore, P. (1996) Confirmation Bias in the Valuation Process: A Test for Corroborating Evidence Journal of Property Research; Vol. 13(4), 261-274.
- Geltner, D. (1993) Estimating Market Values fro Appraisal Value Without Assuming an Efficient Market Journal of Real Estate Research, Vol.8 No.3, Summer, pp.325-345.
- Glover, T. (1985) Cutting Out the Educated Guesswork Accountancy Vol. 69, No. 1098

- Graaskamp, J.A.(1988) US 100<sup>th</sup> Congress, Transcription of Testimony in Support of HR 3675, With Reference to the Real Estate Reform Act of 1987, Committee of Governing Operations, 25<sup>th</sup> February.
- Hager, DP and Lord, DJ (1985) The Property Market, Property Valuations And Performance Measurement, Institute Of Actuaries, London.
- Havard, T.M., (1999) "Valuer Behaviour and the Causes of Excessive Variance in Commercial Property Valuation, PhD thesis Submitted to Manchester University, Institute of Science and Technology; Manchester
- Havard, T.M. (2001) An Experimental Evaluation of the Effect of Data Presentation on Heuristics Bias in Commercial Valuation Journal of Property Research, Vol.18, No. 1, pp.51-68.
- Hendrickson, H. and Espahbodi, R. (1991) Second Opinion, Opinion Shopping and Independence The CPA Journal, Vol. 61 No.3, pp.26-29
- Herd, G. and Lizieri, C. (1994) Valuing and Appraising New Lease Forms: The Case Of Break Clauses In Office Markets, RICS 1994 Cutting Edge Conference, City University Business School, London, September.
- Hutchison, N; Macgregor, B and Nanthakumaran, N. (1995) Variations In The Capital Valuations Of UK Commercial Property: Do Valuers Get It Right?. RICS 1995 Cutting Edge Conference, Aberdeen, September.
- Ifediora, B.U. (2005) Valuation Mathematics For Valuers and Other Financial and Investment Analysis, Immaculate Publications Limited, Enugu.
- Igboko, N.P.(1992) A Research Project on Valuation Methods in Nigeria With Special Reference to Years Purchase (Y.P.) A Research Report Carried out for and on behalf of the Nigeria Institution of Estate Surveyors and Valuers. Pp.1-43.
- IPD/DJ (1988) The Variance In Valuations, Drivers Jonas, London.
- IPD/DJ (1990) The Variance In Valuations 1990 Update, Drivers Jonas, London.
- IPD/DJ (2004) The Variance In Valuations 2004 Update, Drivers Jonas, London.
- Iroham, O.C. (2007) Influence of Valuers and Valuation in the Workings of Commercial Property Investment in Lagos Metropolis An M.Sc. Thesis Submitted to Covenant University, Ota, Ogun State.
- IVSC (2002), International Valuation Standards 2001, London International Valuation Standards Committee.
- Kahneman, D and Tversky, A. (1972) Subjective Probability: A Judgement of Representativeness, Cognitive Psychology Vol. 3 No.2 pp.430-545.
- Kinnard, W.N., Lenk, M.M. and Worzala, E.M (1997) Client Pressure in the Commercial Appraisal Industry: How Prevalent is it? Journal of Property Valuation and Investment, Vol. 15 (3), 233-244.
- Kohli, A. (1989) Determinants of Influence in Organizational Buying: A Contingency Approach, Journal of Marketing, Vol.53 No.3, pp.50-65.
- Levy, D. and Schuck, E. (1999) The Influence of Clients on Valuations Journal of Investment & Finance, Vol.17 No.4
- Lizieri, C. and Venmore-Rowland, P. (1991) Valuation Accuracy: A Contribution To The Debate Journal of Property Research Vol 8, pp. 115-122..
- Lizieri, C. and Venmore-Rowland, P. (1993) Valuations, Prices and The Market: A Rejoinder Journal of Property Research Vol. 10 pp. 105- 112.
- Mainly for Students (1985), Accuracy In Valuation, Estate Gazette, 20th April, Vol. 274, p295
- Mallison, M. and French, N. (2000) Uncertainty in Property Valuation: The Nature and

Relevance of Uncertainty and how it Might be Measured and Reported Journal of Property Investment and Finance, Vol.18: No.1.

Martin, M. M.(1997): "The Ethics of Desire" The Appraisal Journal, 65(3) pp.227-231.

- Matysiak, G. & Wang, P. (1995) "Commercial Property Market Prices and Valuations: Analyzing the Correspondence" Journal of Property Research Vol. 12, No. 3 pp. 181-202.
- McAllister, P. (1995) Valuation Accuracy: A Contribution to the Debate. Journal of Property Research Vol. 12 (3) pp.181-202.
- Miller, T.(1992) Do We Need to Consider the Individual Auditor When Discussing Auditor Independence? Accounting Auditing and Accountability Journal, Vol.5 No.2 pp.74-84.
- Millington, A.F. (1979) An Introduction To Property Valuation, The Estate Gazette Limited, London
- Millington A.P. (1985) Accuracy and the Role of the Valuer Estate Gazette, 9<sup>th</sup> November, Vol.276, pp 603
- Mokrane, M. (2002) Valuations: Standards, Accuracy and Consistency IPD European Property Strategies Conference, May, 2002 pp.20
- Newell, A. and Simon, H. (1972) Human Problem Solving, New Jersey; Prentice Hall.
- Newell, G. & Kishore, R. (1998) The Accuracy of Commercial Property Valuations. School of Land Economy, University of West Sydney
- NIESV (2002) The Directory of the Estate Surveyors and Valuers; The Official Publication of the Nigerian Estate Surveyors and Valuers.
- Norris, K and Joyce, L. (1994) Valuers Liability, AIVLE, Deakin.
- Nwana, O.C. Introduction to Educational research for Students-Teachers (1981) Hienemann Educational Books, (Nig.) Ltd., Ibadan
- Ogunba, O.A. (1997) A Study of Valuation and Pricing Methods in the Residential Property Market In Lagos Metropolis An Unpublished M.Sc. Dissertation Submitted to the Department of Estate Management, Obafemi Awolowo University, Ile Ife.
- Ogunba O.A. and Ajayi, C.A. (1998) An Assessment of the Accuracy of Valuations in the Residential Property Market of Lagos The Estate Surveyor and Valuer; Vol.21, No.2: Pg.19-23
- Ogunba, O.A. (2002) Predevelopment Appraisal and Risk Adjustment Techniques for Property Investment in South Western Nigeria An Unpublished PhD Thesis Submitted to the Department of Estate Management, Obafemi Awolowo University, Ile Ife.
- Ogunba, O.A. (2004) Implementation Hurdles in the Search for Rationality in Investment Valuation in Nigeria Journal of Property Research and Construction (1) 14-28.
- Ogunba, O.A and Ojo, O. (2007) Resolving Reliability, Consistency and Rationality Problems of Professionally Prepared Valuations in Nigerian Practice, Journal of The Nigerian Institution of Estate Surveyors and Valuers; Vol. 30, pp. 39-48.
- Ojo, O. (2004) Reliability, Consistency and Rationality of Professionally Prepared Valuations: Suggestions for Resolving the Problems in Nigeria Practice" A Paper presented a the 2004/2005 CPD Training Workshop on Asset Valuation Organized by The Nigerian Institution of Estate Surveyors ad Valuers and holding in Lagos, Kaduna and Enugu.
- Okoror, S. (1995) Mortgage Financing Mechanism as a Strategy for the Operation of Staff Housing Loan Scheme in Obafemi Awolowo University An Unpublished M.SC. Dissertation Submitted to the Department of Estate Management, Obafemi Awolowo University, Ile Ife.
- Oladimeji E.O. (1995) An Analysis of the Pattern of Residential Property Location in Lagos

Metropolis An Unpublished M.Sc Dissertation Submitted to the Department of Estate Management, Obafemi Awolowo University, Ile Ife.

- Olaleye, A. (2005) A Study of Real Estate Portfolio Diversification Strategies in the Nigerian Property Market A PhD Dissertation Submitted to the Department of Estate Management, Faculty of Environmental Design and Management, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Oloyede, S.A. (2005) A Study of the Performance of Mortgage Financing Institutions in Southwestern Nigeria A PhD Dissertation Submitted to the Department of Estate Management, Faculty of Environmental Design and Management, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Osuala, E.C. (1987) Introduction to Research Methodolgy, Africana- Feb. Pub. Ltd; Onitsha.
- Otte, J. (2006) Sample Size Considerations FAO Corporate Document Repository
- Parker, R.R.P. (1998) Valuation Accuracy-An Australia Perspective 4th Pacific Real Estate Society Conference, Perth, 19-21 January 1998.
- Parker, D.R; (1993) Aspects of a Depressed Property Market; Some Issues facing Valuers The Valuer and Land Economist; February Vol. 1; Pp. 183-197
- Paserwark, W.R. and Wilkerson, J.E. (1989) Introducing the Power of Quintuplets: Client Power and Auditor Independence. Woman Cpa, Vol. 17 N0. 3 & 4 pp 13-17
- Peterson, G.E; Kingsley, G.T. and Telgarsky, J.P. (1990) Urban Economics and National Development; Office of Housing and Urban Programs, U.S. Agency for International Development, Washington, D.C
- Poneman, L.A. (1992 Ethical Reasoning and Selection-Socialization in Accounting Organization and Society, Vol. 17 No.3, 4, pp.239-258
- Ratcliff, R (1979) Readings on Appraisal and Bits Foundation Economics, Landmark Research, Madison
- Reid, I. (1985) A Response To Hager And Lord Estates Gazette, 274:19-21.
- RICS (1996): RICS Appraisal and Valuation Manual. Royal Institution of Chartered Surveyors, London
- Roberts, J. and Roberts, E. (1991) The Myth about Appraisals The Appraisal Journal, Vol. 59 (2), 212-220.
- RICS (1998): Royal Institution of Chartered Surveyors Appraisal and Valuation Manual.
- Rushmore, S. (1993) Ethics in Hotel Appraising The Appraisal Journal, 61(3), pp 357-363
- Smolen, G.E. and Hambleton, D.C.(1997) Is the Real Estate Appraisal's Role Too Much to Expect Appraisal Journal, Vol. 65 No. 1.
- Soludo, C.C., (2006) The Outcome of the Banking Sector Recapitalization and the Way Forward for the Undercapitalized Banks in Nigeria Central Bank of Nigeria Conference of 16<sup>th</sup> January.
- .Tversky, A. and Kahnerman, D. (1994) Judgement under Uncertainty: Heuristics and Biases Science.Vol. 185, pp. 1124-1131.
- Udechukwu, C.E. (2006) Principles of Valuation; Treem Nigeria Limited, Lagos.
- Udo-Akagha, S. (1985) Guidance Note on Property Valuation" Foreword to the Nigerian Institution of Estate Surveyor and Valuers 1st Edition
- Waldy, B. (1997) Valuation Accuracy 64<sup>th</sup> FIG Permanent committee Meeting and International Symposium, Singapore, May

## APPENDICES

# **APPENDIX 1**

## (ESTATE SURVEYING AND VALUATION FIRMS QUESTIONNAIRE)

# DEPARTMENT OF ESTATE MANAGEMENT COLLEGE OF SCIENCE & TECHNOLOGY COVENANT UNIVERSITY OTA OGUN STATE

Dear Sir,

# LETTER OF INTRODUCTION

I am a postgraduate student of the Department of Estate Management in the College of Science and Technology at the Covenant University, Ota; Ogun State and I am currently pursuing my Doctoral Study on the topic: *Reliability and Consistency of Investment Valuations : A Study of Lagos Metropolis.* 

The attached questionnaire is meant to collect data that would help in the completion of the project which is meant to determine whether or not the professional valuers in Nigeria are correctly interpreting the property market information/data and by extension predicting the market prices of such properties correctly.

I hereby solicit your assistance in filling the questionnaire or ticking the appropriate spaces as the case may be. Your response to the questions shall be treated with utmost confidentiality.

Thank you.

Yours faithfully,

**C.A. AYEDUN** 1<sup>st</sup> April, 2008.

> QUESTIONNAIRE (Estate Surveyors & Valuers)

#### **SECTION A:**

1. Name of Firm..... 2. Location of Firm..... 3. What is your position in the firm? A) Principal/Managing Partner {1} (B) Partner {2} (C) Associate Partner {3}(D) Head of Department {4} (E) Senior Surveyor {5} (F) Pupil Surveyor {6} 4. Sex: (A) Male (B) Female (A) Below 30 yrs {1} (B) 31-40yrs {2} (C) 41-50 yrs 5. Age: {3} (D) 51-60 yrs {4} (E) 61 yrs & Above {5} 6. Educational qualification (A) OND {1} (B) HND {2} (C) B.Sc {3} (D) M.Sc. (E) PhD  $\{5\}$  (F) Others  $\{6\}$ .... {4} 7. What is your professional qualification(s)? (A) ANIVS {1} (B) FNIVS {2} (C) PPNIVS {3} (E) ARICS {4} (F) FR ICS {5} Probationer {6} (G) Others (Specify)..... 8. Years of professional qualification (A) 1-10 yrs {1} (B) 11-20 yrs {2} (C) 21-30 yrs {3}(D) 31yrs & above {4} 9. Age of the firm (A) 1-10 yrs {1} (B) 11-20 yrs {2} (C) 21-30 yrs {3} (D) 31yrs & above {4} 10. Number of estate surveyors in the service of the firm? (A) 1-5 {1} (B) 6-10 {2} (C) 11-15 {3} (D) 16-20 {4} (E) 21 and above {5} 11. Number of registered estate surveyors? (A) 1-5 {1} (B) 6-10 {2} (C) 11-15 {3} (D) 16-20 {4} (E) 21 and above {5} 12. Firm's areas of specific specialization? (A) Valuation {1} (B) Agency {2} (C) Management {3} (D) Property Development {4} (E) Feasibility and Viability Appraisal (F) General Practice {6} 13. Number of conferences, workshops or seminars on property valuation issues attended between 2002 and 2008. (A) None {1} (B) 1-5 {2} (C) 6-10 {3} (D) 11-15 {4} (E) 16 and above {5}

#### **SECTION B**

14. Rank the following statements. (5 for "Strongly Agree" while 1 connotes "Strongly

Disagree").

S/No	Statements	1	2	3	4	5	
.							
A	If a prior Valuation is not 100% equa	1					
	to the sale price of the property, th	e					
	Valuation is worthless						
B	A Valuation should be a close						
	approximation of the market price						
C	Valuation estimate is a subjective						
	opinion of the valuer undertaking the						
	valuation assignment, as such, it						
	needs not be very close to the sale						
	price						
D	Valuation can never be close to the						
	sale price because of the volatility						
	in the property market and the						Í
	economy.						

15. Assume your firm is asked to value a property for sale and the property is put in the market immediately after, what is the maximum acceptable variation between your valuation estimate and the sale price beyond which, in your opinion, your firm should be held liable for negligence? (Tick as appropriate)

Percentage .	Acceptable	Unacceptable {2}	
1	{1}		
a. 0-10%			
b. 11-20%			
c. 21-30%			
d. 31-40%			
e. 41-50%			
f. 51% & Above			

16. Assume your firm is asked to value a particular property for sale and another firm is asked to carry out the valuation of the same property at the same period, what is the maximum acceptable variation between your valuation estimate and that of the other firm could you described as the acceptable variation between the two figures? (Tick as appropriate)

Percentage 	.  Acceptable  {1}	Unacceptable {2} 	
a. 0-10%			
b. 11-20%			
c. 21-30%			
d. 31-40%			
e. 41-50%			
f. 51% & Above			

17. What is the approximate number of valuation clients you have worked for in the last one (1) year? (Tick as appropriate)

(A) 1-5	{1}	(B)	6-10	{2}	(C) 1	-15	{3}
(D) 16-20	<b>{4}</b>	(E)	25-30	{5}	(F)	31 & Above	<b>{6}</b>

18. What method of valuation do you usually adopt to value the following types of property? (Tick as appropriate)

S/No 	Types of  Property	Methods 					
		Investment	Comparative	Contractor	Residual	Profi	
				s		t	
A	Residential						
B	Offices/Shop						
	s						
C	Industrial						
D	Special						

19. Clients at one time or another influence values produced by valuation firms generally all over the world. To what extent is your firm under such pressure from clients?

(A) Never	{1} (B) Sometimes	{2}	
(C) Most of the time	{3} (D) Always		{4}

20. Approximately, how many times in percentage terms have your clients asked for the modification of valuation estimates in the past 10 years?

(A) Never {1} (B) 1- 10 {2} (C) 11 - 20 {3} (D) 21 - 30 {4} (E) 31 & Above {5}

21. From your experience, how often do clients influence the following types of valuation?

Types of valuation	Always	Most of the	Sometimes	Never	
	{1}	time	{3}	$ \{4\}$	
		{2}			
(a) Sale/Purchase					

(b) Insurance		
(c) Mortgage		
(d) Balance sheet		
(e) Probate		
(f) Rating &		
Taxation		

22. From your personal experience, which types of clients are more prominent in the habit of influencing valuation estimates?

Types of Clients 	Always {1} Most of the   time{2}	Sometimes  {3}	Never    {4}
(a) Individuals			
(b) Mortgage			
Institutions			
(c) Insurance Companies	5		
(d) Corporate			
organizations			
(e) Govt.			
agencies/Parastatals			

23 How often is any of the under listed approaches adopted by clients to influence the valuers estimates? (Tick as many as applicable)

Approach   	Always  {1}	Most  time 		Sometimes    {3}	Never    {4}
(a) Threat of a possible removal		i -			
of firm from approved valuers'	Ì	i			i i
list		ĺ		Ì	i i
(b) Threat of a reduction in the					
number of future valuation					
assignments					
(c) Threats of engaging another					
firm to do the job					
(d) Threat of refusal to pay the					
professional fees					
(e) Threat of total loss of future	e				
patronage by a client					
(f) Withholding vital information					
(g) Manipulate supplied					
information					
(h) Emphasize only positive					
attributes of the property					
(i) Threat of Blackmail					
(j) Blackmail					

24. Where a valuation is amenable to different values in a range does that in your experience increase the susceptibility of the valuation estimate to client influence?

(A) Always	(1) (B) Most of the time	{2}
© Sometimes	$\{3\}$ (D) Never	<b>{4}</b>

25. How often do you normally resort to any of the following in determining the yields while adopting Investment Method for your valuation?(Tick as appropriate).

Method of determining Yields	Always	Most of	Sometimes	Never	
	(1)	the time	(3)	(4)	
		(2			
Use of a predetermined rate for					
different property types					l
Use of a predetermined rate for		ĺ		Ì	ĺ
each of different sections/zones		ĺ		Ì	ĺ
of Lagos	ĺ	ĺ	ĺ	Ì	İ
Use of subjective assessment	ĺ	ĺ	ĺ	Ì	İ
based on past experience of the	ĺ	ĺ	ĺ	Ì	İ
market	ĺ	ĺ	ĺ	Ì	İ
Use of intuition at determining	ĺ	ĺ	ĺ	Ì	İ
the most appropriate yield of	ĺ	ĺ	ĺ	Ì	İ
the subject property		ĺ		Ì	ĺ
An explicit calculation from		ĺ		Ì	ĺ
available market evidence and		ĺ		Ì	ĺ
data	ĺ		ĺ	Ì	İ
Use of a rate obtained either	İ	İ	ĺ	İ	İ
from your firm or other	ĺ			İ	İ
valuers/firms	ĺ			İ	İ
	Use of a predetermined rate for different property types Use of a predetermined rate for each of different sections/zones of Lagos Use of subjective assessment based on past experience of the market Use of intuition at determining the most appropriate yield of the subject property An explicit calculation from available market evidence and data Use of a rate obtained either from your firm or other	(1) Use of a predetermined rate for different property types Use of a predetermined rate for each of different sections/zones of Lagos Use of subjective assessment based on past experience of the market Use of intuition at determining the most appropriate yield of the subject property An explicit calculation from available market evidence and data Use of a rate obtained either from your firm or other	(1)the timeUse of a predetermined rate fordifferent property typesUse of a predetermined rate foreach of different sections/zonesof LagosUse of subjective assessmentbased on past experience of themarketUse of intuition at determiningthe most appropriate yield ofthe subject propertyAn explicit calculation fromavailable market evidence andUse of a rate obtained eitherfrom your firm or other	(1)       the time (3)         (2)       (2)         Use of a predetermined rate for       (2)         Use of a predetermined rate for       (3)         (2)       (2)         Use of a predetermined rate for       (1)         (1)       (1)         (2)       (2)         Use of a predetermined rate for       (2)         (2)       (2)         Use of a predetermined rate for       (2)         (2)       (2)         (3)       (2)         (4)       (4)         (5)       (4)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (5)       (5)         (6)       (6)         (7)       (7)         (7)       (7)         (7)       (7)	(1)the time (3)(4)Use of a predetermined rate for(2)Use of a predetermined rate for(2)use of a predetermined rate for(3)each of different sections/zones(4)of Lagos(1)Use of subjective assessment(1)based on past experience of the(1)market(1)Use of intuition at determining(1)the most appropriate yield of(1)the subject property(1)An explicit calculation from(1)available market evidence and(1)Use of a rate obtained either(1)from your firm or other(1)

26. How often do you resort to any of the following in determining the Gross Rent to be used in Investment method of valuation? (Tick as appropriate please)

S/N	Method of determining Gross Rent	Always	Most of	Sometimes	Never
		(1)	the time	(3)	(4)
			(2		
1	Seeking of guidance from other				
	firms				
2	Adjust old rental evidence with				
	inflation rate				
3	Use of old rental evidence for the				
	valuation				
4	Rental evidence is always being				
	kept from which relevant data can				
	be easily got				
5	Determining rental value through				
	asking of prices of vacant				
	properties to be let or lease in				
	the market				

27. How

often do you use the following approaches in deducting for Outgoings when adopting Investment method for your valuations?

S/N	Method of determining Outgoings	Always	Most of	Sometimes	Never	
		(1)	the time	(3)	(4)	
			(2			

1	Use of a conventional defined			
	rate for all properties (Rule of			
	thumb)			
2	Use of conventional rate for			
	different property types			
3	Subjective assessment based on			
	the age and state of repair of			
	the subject property			
4	Use of actual expenditure by the			
	Landlord as contained in the past			
	record			
5	Adoption of defined rate for			
	different areas/parts of Lagos			
6	Use of records of expenditure of			
	comparable properties			
7	Use of rate based on tenant			
	population and intensity of use			

# **SECTION C**

### SIMULATED VALUATIONS

You are humbly requested to value the underlisted properties using investment method of valuation. The properties are meant for sale under open market conditions. You are required to advise on the likely selling prices of the properties.

- 1. A 5-bedroom detached house with 2-bedroom guest chalet and 2-room boys' quarters on 2644 square metres of land. The property is about 20 years old but in good state of structural and decorative repairs. The property is located at Cameron Road, Ikoyi, Lagos State.
- 2. A property consisting of 5-bedroom detached house, 2-bedroom boys quarters and a security gate house built on 821.74 square metres of land at Peace Lane, off Cypstolu Obusez Street, Goodwill Estate, Ojodu, Lagos State. The property is about 12 years old and well maintained.
- 3. A 3-storey block of 6No. 3-bedroom flats with master bedroom ensuite; 2 toilets and 1 bath is built on a plot of land measuring 684.30 square metres. The property is about 15 years old but in good state of repairs. It is situated at Omu Avenue, off Ojodu Abiodun Road, Ojodu, Lagos State.
- 4. A tastefully finished 4-bedroom detached house with 2-bedrooms ensuite and a toilet to be

shared by the remaining 2-bedrooms is located within a well laid out estate of 54 apartments comprising townhouses, semi-detached and detached houses. The roof covering is of corrugated longspan aluminum. Other facilities and services provided within the estate include:

- > Gymnasium and sit-out recreation area.
- > Dedicated transformers
- > Generator and diesel storage tanks
- > Borehole with overhead and underground storage tanks and a water treatment plant
- > Car parking spaces
- > Gate House
- > Estate Office; Etc

Each building consists of Ante Room, Living Room, Dining room, Guest Bedroom, Kitchen, Laundry, and Visitor's Toilet on the Ground Floor while the First Floor comprises of Family Living with a Terrace, 2Nos. Bedroom (Shared facilities) and Master Bedroom ensuite.

The building is less than 2-years old and built on an approximate area of 600 square metres of land with an unexpired interest of 87 years.

The estate is within Amuwo-Odofin Residential Scheme in the Ojo area of Lagos State.

- 5. A tastefully finished 4-bedroom Semi-detached House built in Amuwo-Odofin Residential Scheme in the Ojo area of Lagos State. Roof covering is of corrugated longspan aluminum. Other facilities and services provided within the estate include:
  - > Gymnasium and sit-out recreation area.
  - > Dedicated transformers
  - > Generator and diesel storage tanks
  - > Borehole with overhead and underground storage tanks and a water treatment plant
  - > Car parking spaces
  - > Gate House
  - > Estate Office; Etc

built on land area of 720 square metres. The Ground Floor of the house consists of Main Lounge, Guest Bedroom, Kitchen, Dining and Visitor, s Toilet while the First Floor comprises of Family Lounge, Master Bedroom ensuite and 2No. Bedrooms with shared facilities

- 6. A 3-bedroom Terrace House consisting of Living Room, Kitchen/Store, Dining and Visitor's Toilet at Ground Floor while the First Floor consists of Family Living Room, Master Bedroom and 2Nos. Bedroom (Shared facilities) built on land area of 240 square metres. The roof covering is of corrugated longspan aluminum. Other facilities and services provided within the estate include:
  - > Gymnasium and sit-out recreation area.
  - > Dedicated transformers
  - > Generator and diesel storage tanks
  - > Borehole with overhead and underground storage tanks and a water treatment plant
  - > Car parking spaces
  - > Gate House
  - > Estate Office; Etc

7. A 4-bedrrom terrace apartment consisting of Ante Room, Living Room, Dining Room, Kitchen/Store, Entrance Porch and Kitchen Yard, on the Ground Floor, while the First Floor consists of a big Master Bedroom ensuite, 2No. Bedroom with Shared facilities and Family Lounge; built on approximate land area of 700 square metres. The property is located within Romay Gardens, an estate facilitated by the popular UACN Property Development Company PLC at Lekki Axis of Lagos State. The 78-unit estate consists of 26 units of semi-detached houses, 40 units of Terrace Houses and 2-blocks of 6No.3-bedroom flats each in serene environment.

Rosemary Gardens within which the property is located offers its residents a variety of services and amenities including the following amongst others:

- > Swimming Pools
- > Club Houses
- > Lawn Tennis Courts
- > Borehole/Water Treatment
- > Good Road Network
- > Street Lighting
- > Security,
- > Ample Parking Spaces, Etc

The unexpired interest subsisting on the property is 95 years and the construction of the structures within the estate was completed 3- years ago.

- 8. A 4- bedroom Semi-Detached apartment consisting of Main Lounge, Ante Room, Dining, Kitchen/Store, Guest Bedroom and Visitor's Toilet on the Ground Floor while the First Floor consists of Family Lounge, Master Bedroom ensuite, 2 No. Bedrooms ensuite with Toilet/Baths and Box Room. The property is built in the same estate described above, hence all other facilities enjoyed by the above property is equally enjoyed by this property.
- 9. A block of 6No. 3-bedroom tastefully finished flats consisting of Master Bedroom ensuite with Dressing room, 2 No bedrooms ensuite with Toilets/Baths, Living Room, Dining Room, Kitchen/Store located in the above described estate as in Question 8 above.
- 10. A 2-Bedroom flat on the first floor of a block of 6No. 2-bedroom flats, within Lagos State Development and Property Corporation (LSDPC) Housing Estate, Ojokoro, Lagos/Abeokuta expressway Lagos. The flat is provided with 1 toilet and 1 bathroom. The interest subsisting on the property is that of Lagos State Building Investment Corporation (LBIC) Certificate.
- 11. A 3-Bedroom flat located within a block of 8No. Flats on the first floor within LSDPC Estate, Ojokoro, Lagos/Abeojuta expressway Lagos. The flat is provided with 1 toilet and 1 bathroom. The Interest subsisting on the property is that of Lagos State Building Investment Corporation (LBIC) Certificate.

12. A block of 4No. 4-bedroom flats each of which consist of Living/ Dining room, Master bedroom (en-suit Toilet/Bath), Visitors' bedroom (en-suit Toilet/Bath), and 2No. Bedrooms with shared facilities, Kitchen, passage/lobby; verandah and Courtyard within a well planned and serviced Ijaiye Medium Income Housing Estate, Ogba, Lagos State. The estate was established and developed in 1989 by the Lagos State Development Property Corporation. Hence, the property is about 20 years old but well maintained. The property is covered by Leasehold interest with 89 years unexpired interest.

Any comment or suggestions which may assist the researcher in his efforts at determining whether or not the professional valuers in Nigeria are correctly interpreting the property market information/data and by extension predicting the market prices of such properties correctly is welcomed

.....

Thank you so much for sparing your valuable time in attending to the numerous questions.

### **APPENDIX II**

# (PROPERTY DEVELOPMENT COMPANIES' QUESTIONNAIRE)

### DEPARTMENT OF ESTATE MANAGEMENT

COLLEGE OF SCIENCE & TECHNOLOGY COVENANT UNIVERSITY OTA. OGUN STATE.

Dear Sir,

## LETTER OF INTRODUCTION

I am a postgraduate student of the Department of Estate Management in the College of Science and Technology at the Covenant University, Ota; Ogun State and I am currently pursuing my Doctoral Study on the topic: *Reliability and Consistency of Investment Valuations : A Study of Lagos.* 

The attached questionnaire is meant to collect data that will help in the completion of the project, which is meant for purely academic purpose and has nothing to do with Government or taxation.

I hereby solicit and plead for your assistance in filling the questionnaire or ticking the appropriate space as the case may be. Your response to the questions shall be treated with utmost confidentiality.

Thank you for spending your precious time in completing the questionnaire.

Yours sincerely, C.A. AYEDUN

# QUESTIONNAIRE

# (Property Development Companies)

### **SECTION A:**

- 1. Name of Company.....
- 2. Location of Company.....
- 3. Sex: (A) Male  $\{1\}$  (B) Female  $\{2\}$
- 4. Age: (A) Below 30 years {1} (B) 31-40 years {2} (C) 41-50 years {3}(D) 51-60 years {4} (E) 61 years & Above {5}
- 5. How many years of professional qualification have you? (A) 1-5 yrs {1} (B) 6-10 yrs {2} (C) 11-15 yrs {3}(D) 16-20 yrs {4} (E) 21-25 yrs {5} (F) 26-30 yrs {6} (F) 31 yrs and Above {7}

6. When was your Company established? (A) 1-5 yrs ago {1} (B) 6-10 yrs ago {2} (C) 11-15 yrs ago {3} (D) 16-20 yrs ago {4} (E) 21-25 yrs ago {5} (F) 26-30yrs ago {6} (G) 31yrs and Above {7}

7. What is yo	our educatio	nal qualific	ation? (A) O	ND {1} (E	B) HND {2	2} (C) B.Sc {3	3} (D)
M.Sc.	{4}	(E)	PhD	<b>{5}</b>	(F)	Others	<b>{6}</b>
[Specify].							
[Specify] 8. What is your professional qualification(s)? (A) Probationer {1} (B) ANIVS {2} (C)							

- FNIVS {3} (D) PPNIVS {4} (E) ARICS {5} (F) FR ICS {6} Others {7} [Kindly Specify]....
- 9. What is your position in the organization? (Kindly specify).....
- 10. How many surveyors do you have in the organization? (A) 1-5 {1} (B) 6-10 {2} (C) 11-15 {3} (D) 16-20 {4} (E) 21-25 {5} (F) 26-30 {6} (G) 31 and Above {7}
- 11. How many of the employed surveyors in the organization are professionally qualified? (A) 1-5 {1} (B) 6-10 {2} (C) 11-15 {3} (D) 16-20 {4} (E) 21-25 {5} (F) 26-30 {6} (G) 31 and Above {7}

### **SECTION B**

12. Rank the following statements with 5 being the Strongly Agree while 1 connotes Strongly Disagree with.

210481						
S/No.	Statements	1	2	3	4	5
A	If a prior Valuation is not					
	100% equal to the sale price					
	of the property, the Valuation					
	is worthless					
В	A Valuation should be a close					
	(but not 100% accurate)					
	approximation of the market					
	price					
C	Valuation estimate is a					
	subjective opinion of the					
	valuer undertaking the					
	valuation assignment and as					
	such need not be very close to					
	the sale price					
D	Valuation can never be close					
	to the sale price because of					

the volatility in the property		
market and the economy.		

h. Assume your organization asked a firm of Valuers to value a property for sale and the property is put in the market immediately after. What the maximum tolerable variation between valuation estimates is as prepared for your organization and the sale price beyond which in your opinion the valuation firm should be held liable for negligence? (Tick as appropriate)

Percentage .	Acceptable	{1}	Unacceptable {2}
a. 0-10%			
b. 11-20%			
c. 21-30%			
d. 31-40%			
e. 41-50%			
f. 51% & Above			

13. Assume your organization asked two or more firms of estate surveyors and valuers to value a particular property for sale at the same period, what percentage of variation between the valuation figures could you accept as reasonable from the valuers? (Tick as appropriate)

Percentage .	Acceptable	{1}	Unacceptable {2}	
0-10%				
11-20%				
21-30%				
31-40%				
41-50%				
51% & & Above				

15. What is the approximate number of valuation firms have you engaged for valuation assignments in the last one (1) year? (Tick as appropriate)

(A) 1-5 {1} (B) 6-10 {2} (C) 11-15 {3} (D) 16- 20 {4} (E) 21-25 {5}

(F) 26-30 {6} (G) 31 & Above {7}

16. From your personal experience does the closeness/gap between their initial judgement and the final valuation figure widen in less familiar markets to the valuers as against where they are quite familiar with?

(A)Always	{1} (B) Most of the time	{2}
© Sometimes	{3} (D) Never	<b>{4}</b>

17. In your own estimation, would you consider it a good valuation practice on the part of the valuers to adjust (upward/downward) their previously done valuation of a similar or same property or would you rather prefer that they discard such prior valuation opinion in favour of

fresh market survey? (Tick whichever is appropriate)	
(A)Always prefer that they adjust prior valuation	{1}
(B)Sometimes prefer that they adjust prior valuation	{2}
©Never support the idea of adjusting prior valuation	{3}
(D)Always prefer that they use fresh evidence	{4

18. What method(s) of valuation do they usually adopt to value the following type of properties? (Tick as appropriate)

Types of  Property			Methods		
	Investment  {1}	Comparative  {2}	Contractors  {3}	Residual  {4}	Profit    {5}
a. Residential					
b.					
Offices/Shops					
C. Industrial					
d. Special					

19. Clients at one time or other influences values produced by valuation firms generally all over the world. Has your organization for any reason whatsoever had cause(s) to try to influence the valuation figure(s) emanating from any of your valuers before?

(A) Never	{1}	(B) Sometimes	{2}
© Most of the time	e {3]	(D) Always	{4}

20. Approximately, how many times have your organization had cause to try to influence the valuation estimate(s) emanating from your valuers in the last 5 years?

(A) Never		{1}	(B) 1 – 10	{2}
© 11 – 20	{3}		(D) 21 – 30	{4}
(E) 31 & Above	<b>{5}</b>			

21. From your own personal experience, what type(s) of valuation does your organization often try to influence?

Types of	Never	{1} Sometimes	$\{2\} Most o$	f the time	Always $\{4\}$
valuation			{ 3 }		
a. Sale/Purchase					
b. Insurance					
c. Mortgage					
d. Balance sheet					
e. Probate					
f. Rating &					
Taxation					

22. What manner or approach do your organization often resort to in influencing the valuer's

estimates to suit the purpose for which you might have needed the valuation for? (Tick as many as applicable)

Weapon	Never	Sometimes	Most of the	
	{1}	{2}	time {3}	{ 4 }
(a) Removal from approved				
valuer list				
(b) Decrease in number of				
future valuation assignments				
(c) Engaging other firm to do				
the job				
(d) Refusal to pay the agreed				
fees				
(e) Supply additional				
information				
(f)Withdraw supplied				
information				
(g) Manipulate supplied				
information				
(h) Emphasize positive				
attributes of the property				
(i) Threat of Blackmail				
(j) Blackmail				

23. Where a valuation is amenable to different values in a range does that in your experience increase the susceptibility of the valuation estimate to client influence?

(A) Never	{1} (B) Sometimes	{2}
(C) Most of the time	{3} (D) Always	<i>{</i> 4 <i>}</i>

Thank you so much for sparing your valuable time in attending to the numerous questions.

#### **APPENDIX III**

#### (COMMERCIAL BANKS' QUESTIONNAIRE)

#### DEPARTMENT OF ESTATE MANAGEMENT COLLEGE OF SCIENCE & TECHNOLOGY COVENANT UNIVERSITY OTA. OGUN STATE.

Dear Sir,

#### **LETTER OF INTRODUCTION**

I am a postgraduate student of the Department of Estate Management in the College of Science and Technology at the Covenant University, Ota; Ogun State and I am currently pursuing my Doctoral Study on the topic: *Reliability and Consistency of Investment Valuations: A Study of Lagos Metropolis.* 

The attached questionnaire is meant to collect data that will help in the completion of the project, which is meant for purely academic purpose and has nothing to do with Government or taxation.

I hereby solicit and plead for your assistance in filling the questionnaire or ticking the appropriate space as the case may be. Your response to the questions shall be treated with utmost confidentiality.

Thank you for spending your precious time in completing the questionnaire.

Yours sincerely, C.A. AYEDUN

#### QUESTIONNAIRE

#### (Commercial Banks)

SECTION A:

1. Name of Bank (Optional)
2. Location of Head Office (Optional)
3. Your Sex: (A) Male {1} (B) Female {2}
4. Your Age: (A) Below 30 years {1} (B) 31-40 years {2} (C) 41-50 years {3} (D) 51-60 years
{4} (E) 61yrs & Above {5}
5. How many years of professional qualification have you?
a. 1-5 yrs {1} (B) 6-10 yrs {2} (C) 11-15 yrs {3}(D) 16-20 yrs {4} (E) 21-25 yrs {5}
(F) 26-30 yrs {6} (F) 31 yrs and Above {7}
6. When was your bank established? (A) 1-5 yrs ago $\{1\}$ (B) 6-10 yrs ago $\{2\}$ (C) 11-15 yrs
ago {3} (D) 16-20 yrs ago {4} (E) 21-25 yrs ago {5} (F) 26-30yrs ago {6} (G) 31yrs
and above {7}.
7. What is your educational qualification? (A) OND {1} (B) HND {2} (C) B.Sc {3} (D) M.Sc.
$\{4\} \qquad (E) \qquad PhD \qquad \{5\} \qquad (F) \qquad Others \qquad \{6\}$
[Specify]
8. What is your professional qualification(s)? (A) Probationer {1} (B) ANIVS {2} (C) FNIVS
{3} (D) PPNIVS {4} (E) ARICS {5} (F) FR ICS {6} (E) ACA {7}
(F) FCA $\{8\}$ (G) ACIB $\{9\}$ (H) FCIB $\{10\}$ Others $\{11\}$ (Kindly
Specify]
9. How many years did you spent at acquiring academic training? (A) 1-2 yrs {1} (B) 3-4 yrs {2}

(C) 5-6 yrs {3} (D) 7-8 yrs {4} (E) 9 yrs & Above {5}

10. How many years did you spent in acquiring the prerequisite professional training that qualifies you for this your present assignment in the organization? (A) 1-2 yrs {1} (B) 3-4 yrs {2} (C) 5-6 yrs {3} (D) 7-8 yrs {4} (E) 9 yrs & Above {5}

- 11. What is your position in the organization? (Kindly specify). .....
- 12. How many surveyors do you have in the organization?
  (A) 1-5 {1} (B) 6-10 {2} (C) 11-15 {3} (D) 16-20 {4} (E) 21-25 {5} (F) 26-30 {6} (G) 31 and Above {7}
  - 13. How many of the employed surveyors in the organization are professionally qualified?
    (A) 1-5 {1} (B) 6-10 {2} (C) 11-15 {3} (D) 16-20 {4} (E) 21-25 {5} (F) 26-30 {6} (G) 31 and Above {7}

14. How many conferences, workshops or seminars on property valuation or related topical issues have you attended within the last five years?

(A) None {1} (B) 1-5 {2} (C) 6-10 {3} (D) 11-15 {4} (E) 16 & Above {5}.

#### **SECTION B**

15. Rank the following statements with 5 being the Strongly Agree while 1 connotes Strongly Disagree with.

S/No.	Statements	1	2	3	4	5	
a.	If a prior Valuation is not						
	100% equal to the sale price						
	of the property, the Valuation	n					

	is worthless			
b.	A Valuation should be a close			
	(but not 100% accurate)			
	approximation of the market			
	price			
c.	Valuation estimate is a			
	subjective opinion of the			
	valuer undertaking the			
	valuation assignment and as			
	such need not be very close to			
	the sale price			
d.	Valuation can never be close			
	to the sale price because of			
	the volatility in the property			
	market and the economy.			

16. Assume your organization asked some firms of valuers to value a property for sale and the property is put in the market immediately after. What the maximum tolerable variation between valuation estimates is as prepared for your organization and the sale price beyond which in your opinion the valuation firm should be held liable for negligence? (Tick as appropriate)

Percentage	. Acceptable	{1}	Unacceptable {2}
0-10%			
11-20%			
21-30%			
31-40%			
41-50%			
51% & Above			

17. Assume your organization asked an external firm of Estate Surveying and Valuation to value a property for mortgage purposes and the property is put in the market at some future date due to the failure of the mortgagor to repay the loan granted. What is the maximum tolerable variation between valuation estimate prepared for your organization and the sale price beyond which in your opinion the valuation firm should be held liable for professional negligence? (Tick as appropriate

Percentage	. Accept	able {1}	Unacceptable	{2}
0-10%				
11-20%				
21-30%				
31-40%				
41-50%				
51% & Above				

18. What is the approximate number of valuation firms have your organization engaged for valuation assignments in the last one (1) year? (Tick as appropriate)

(A) 1-5	{1}	(B) 6-10	{2}
(C) 11-15	{3}	(D) 16-20	{4}
(E) 25-30	<b>{5}</b>	(F) 31 & Above	<b>{6}</b>

19. Assume your bank asked two or more firms of estate surveyors and valuers to value a particular property for sale at the same period, what percentage of variation between the valuation figures could you accept as reasonable from the valuers? (Tick as appropriate)

Percentage .	Acceptable	{1}	Unacceptable {2}	
0-10%				
11-20%				
21-30%				
31-40%				1
41-50%				1
51% & Above				

20. In the course of your organization engaging external valuation firms for valuation assignments, have you discovered from the valuers the habit of guessing and voicing out what the eventual valuation estimate(s) is going to be right at the point of giving them the assignment/instructions and prior to the inspection of the property?

(A) Never	{1} (B) Mo	st of the time	{2}	
(C) Most of the time S	Sometimes	{3} (D) <i>I</i>	Always	{4}

21. If the above is found to be the case, from your own personal to what extent does their final valuation estimates tallies with their initially formed/conceived judgement?

(A) Never	{1} (B) Sometimes	{2}
(C) Most of the time	{3} (D) Always	{4}

- 22. From your personal experience does the closeness/gap between their initial judgement and the final valuation figure widen in less familiar markets to the valuers as against the ones they are quite familiar with?
  - (A) Never  $\{1\}$  (B) Sometimes  $\{2\}$
  - (C) Most of the time  $\{3\}$  (D) Always  $\{4\}$
- 23. To what extent do you think a valuer with office in Lagos Island can value a property in Ikeja accurately? (Tick as appropriate).
  - (A) 0-25% accurate {1} (B) 26-50% accurate {2} (C) 51-75% accurate {3}
  - (D) 76-100% accurate. {4}

24. To what extent do you think a valuer in Lagos Island can value a property in Ibadan accurately? (Tick as appropriate)

(A) 0-25% accurate {1} (B) 26-50% accurate {2} (C) 51-75% accurate {3} (D) 76-100% accurate {4}.

25. Assuming that a valuer has done a valuation of a property say 5 years ago, and you require him to do a re-valuation of the same property, in your own opinion, would you consider it a good valuation practice on the part of the valuers to adjust (upward/downward) their previously done valuation of a similar or same property or would you rather prefer that he

discard such prior valuation opinion in favour of fresh market survey? (Tick whichever is appropriate)

(A) Never support the idea of adjusting prior valuation	{1}
(B)Sometimes prefer that they adjust prior valuation	{2}
(C) Always prefer that they adjust prior valuation	{3}
(D)Always prefer that they use fresh evidence	{4}

26. What method(s) of valuation do your outside consultants usually adopt to value the following type of properties? (Tick as appropriate)

		· • • • •	· · · · · · · · · · · · · · · · · · ·			
Types of	Methods					
Property						
	Investment	Comparative	Contractors	Residual	Profit	
	{1}	{2}	{3}	$ \{4\}$	{5}	
a. Residential						
b.						
Offices/Shops						
c. Industrial						
d. Special						1

27. Clients at one time or other influences values produced by valuation firms generally all over the world. Has your organization for any reason whatsoever had cause to try to influence the valuation figure(s) emanating from any of your valuers before?

(A) Never	{1} (B) Sometimes	{2}
-----------	-------------------	-----

(C) Most of the time {3} (D) Always {4}
28. Are you aware of other clients trying to influence valuers to increase valuation estimates to secure higher loans? (A) Yes {1} No {2}
29. If yes to (28) above, what do you do about it? (Please specify)....

.....

30. Approximately, how many times have your organization had cause to question the valuation estimate(s) emanating from your external/outside valuers in the last 5 years.

(A)Never	{1}	(B) 1- 10	{2}
(C) 11 – 20	{3}	(E) 21 – 30	{4}
(E) 31 & Above	{5}		

31 From your own experience, what type(s) of valuation do clients try to influence?

Types of	Always	$\{1\} Most$	of the	time	Sometimes	{3} Never	$\{4\} $
valuation		{2}					
a. Sale/Purchase							
b. Insurance							
c. Mortgage							
d. Balance sheet							
e. Probate							

f. Rating &				
Taxation				

32. What manner or approach are you aware that clients often employ in influencing the valuer's estimates to suit the purpose for which they need the valuation? (Tick as many as applicable)

Weapon	Always  {1}	Most of the  time {2}	Sometimes  {3}	Never    {4}
(a) Removal from approved				
valuer list	Ì			i i
(b) Decrease in number of	ĺ			i i
future valuation assignments				
(c).Engaging other firm to do				
the job				
(d) Refusal to pay the agreed				
fees				
(e) Supply additional				
information				
(f) Withdraw supplied				
information				
(g) Manipulate supplied				
information				
(h)Emphasize positive				
attributes of the property				
(i) Threat of Blackmail				
(j) Blackmail				

33. Where a valuation is amenable to different values in a range (for example value could be between =N=1Million to =N=2Million depending on market volatility), does that in your experience increase the susceptibility of the valuation estimate to client influence?

(A) Never	{1} (B) Sometimes	{2}
(C) Most of the time	{3} (D) Always	{4}

Thank you so much for sparing your valuable time in attending to the numerous questions.

#### **APPENDIX IV**

#### Sale Prices and Valuation Estimates of the 12 Uninspected Sampled Properties

Tables IV.1-12 below indicates the relationship between sale prices and valuation estimates of the 12 uninspected sampled properties. The tables contain the prices of the properties as shown in Columns 2 of the tables and the valuation estimates of each of the 45 valuers for each of the 12 properties as shown in Columns 3. Columns 4 of the tables contain the differences between the sale prices of the properties and valuation estimates while Columns 5 contains the percentage differences.

#### **Table IV.1: Property 1**

	Table IV.1: Property 1						
	Valuer	Sale	Valuation	Difference	Difference		
	S	Prices	Figures	s	s		
		(′000,000	(′000,000)	('000,000)	(%)		
İ		)					
i							
i	1	200	170	30	15		
i	2	200	650	-450	-225		
i	3	200	360	-160	-80		
İ	4	200	206	-6	-3		
İ	5	200	150	50	25		
i	б	200	137	63	32		
i	7	200	145	55	28		
i	8	200	195	5	3		
i	9	200	115	85	43		
i	10	200	205	-5	-3		
i	11	200	300	-100	-50		
i	12	200	255	-55	-28		
i	13	200	185	15	8		
i	14	200	200	0	0		
i	15	200	225	-25	-13		
i	16	200	350	-150	-75		
İ	17	200	365	-165	-83		
İ	18	200	506	-306	-153		
İ	19	200	450	-250	-125		
	20	200	435	-235	-118		
	21	200	380	-180	-90		
	22	200	285	-85	-43		
	23	200	385	-185	-93		
	24	200	400	-200	-100		
	25	200	285	-85	-43		
	26	200	315	-115	-58		
	27	200	330	-130	-65		
	28	200	275	-75	-38		
	29	200	185	15	8		
	30	200	410	-210	-105		
	31	200	270	-70	-35		
	32	200	400	-200	-100		
	33	200	325	-125	-63		
	34	200	255	-55	-28		
	35	200	365	-165	-83		
	36	200	320	-120	-60		
	37	200	200	0	0		
	38	200	110	90	45		
	39	200	235	-35	-18		
	40	200	100	100	50		

41	200	250	-50	-25
42	200	125	75	38
43	200	296	-96	-48
44	200	208	-8	-4
45	200	300	-100	-50

### Table IV.2: Property 2

Valuer	Sale	Valuation	Difference	Differenc
s	Prices	Figures.	s	es
	('000,000	('000,000)	('000,000)	(
	)			
	ĺ			
1	20	13	7	35
2	20	23	-3	-15
3	20	35	-15	-75
4	20	9	11	55
5	20	100	-80	-400
6	20	42	-22	-110
7	20	40	-20	-100
8	20	30	-10	-50
9	20	25	-5	-25
10	20	20	0	0
11	20	15	5	25
12	20	18	2	10
13	20	50	-30	-150
14	20	27	-7	-35
15	20	19	1	5
16	20	26	-6	-30
17	20	16	4	20
18	20	10	10	50
19	20	14	6	30
20	20	35	-15	-75
21	20	32	-12	-60
22	20	22.5	-2.5	-13
20	20	50	-30	-150

24	20	33	-13	-65
25	20	40	-20	-100
26	20	25	-5	-25
27	20	34	-14	-70
28	20	60	-40	-200
29	20	42	-22	-110
30	20	55	-35	-175
31	20	80	-60	-300
32	20	18	2	10
33	20	25	-5	-25
34	20	22.5	-2.5	-13
35	20	47	-27	-135
36	20	30	-10	-50
37	20	35	-15	-75
38	20	18.5	1.5	8
39	20	32.5	-12.5	-63
40	20	45	-25	-125
41	20	36	-16	-80
42	20	42	-22	-110
43	20	35	-15	-75
44	20	50	-30	-150
45	20	70	-50	-250

# Source: Author's Field Survey and Analysis, 2008 Table IV.3: Property 3

		14		
Valuer	Sale	Valuation	Differences	Differences
S	Prices	Figures		
	(′000,000	(′000,000)	(′000,000)	(%)
	)			
1	18	31.5	-13.5	-75
2	18	17	1	6
3	18	33	-15	-83
4	18	19.5	-1.5	-8.3
5	18	90	-72	-400
6	18	35	-17	-94
7	18	50	-32	-178
8	18	44	-26	-144
9	18	25	-7	-39
10	18	45	-27	-150
11	18	52	-34	-189
12	18	26	-8	-44
13	18	30	-12	-67
14	18	18	0	0
15	18	50	-32	-178
16	18	45	-27	-150
17	18	18.5	-0.5	-3
18	18	26	-8	-44
19	18	15.5	2.5	14
20	18	10	8	44
21	18	14	4	22
22	18	35	-17	-94
20	18	32.5	-14.5	-80
24	18	22.5	-4.5	-25
25	18	50	-32	-178

26	18	33	-15	-83
27	18	40	-22	-122
28	18	25	-7	-39
29	18	34	-16	-89
30	18	60	-42	-233
31	18	42	-24	-133
32	18	55	-37	-205
33	18	80	-62	-344
34	18	18	0	0
35	18	25	-7	-39
36	18	22.5	-4.5	-25
37	18	47	-29	-161
38	18	30	-12	-67
39	18	35	-17	-94
40	18	18.5	-0.5	-3
41	18	32.5	-14.5	-80
42	18	45	-27	-150
43	18	36	-18	-10
44	18	42	-24	-133
45	18	35	-17	-94

### Source: Author's Field Survey and Analysis, 2008 Table IV.4: Property 4

		1 a.	ic 1 / 1 1 0 pci (	uy T
Valuers	Sale	Valuation	Differences	Differences
	Prices	Figures	(′000,000)	
	('000,000	(′000,000)		(%)
	)			
1	35	33	2	6
2	35	43	-8	-23
3	35	50	-15	-43
4	35	23	12	34
5	35	100	-65	-186
6	35	62	-27	-77
7	35	55	-20	-57
8	35	65	-30	-86
9	35	70	-35	-100
10	35	46	-11	-31
11	35	50	-15	-43
12	35	45	-10	-29
13	35	33	2	6
14	35	35	0	0
15	35	40	-5	-14
16	35	47	-12	-34
17	35	52	-17	-49
18	35	47	-12	-34
19	35	56	-21	-60
20	35	36	-1	-3
21	35	30	5	14
22	35	45	-10	-29
20	35	35	0	0
24	35	42	-7	-20
25	35	56	-21	-60
26	35	62	-27	-77

2	27	35	43	-8	-23
2	28	35	53	-18	-51
2	29	35	60	-25	-71
3	30	35	63	-28	-80
3	31	35	50	-15	-43
13	32	35	55	-20	-57
3	33	35	45	-10	-29
3	34	35	40	-5	-14
3	35	35	36	-1	-3
3	36	35	25	10	29
3	37	35	30	5	14
3	38	35	46	-11	-31
3	39	35	35	0	0
4	10	35	55	-20	-57
4	11	35	28	7	20
4	12	35	62	-27	-77
4	13	35	44	-9	-26
4	14	35	38	-3	-9
4	15	35	52	-17	-49

## Source: Author's Field Survey and Analysis, 2008 Table IV.5: Property 5

	Table IV.5: Property 5			rty 5
Valuer	Sale'	Valuation	Differences	Differences
S	Price	Figures	('000,000)	
	('000,000	(′000,000)		(%)
	)			
1				
1	26	24	2	8
2	26	38	-12	-46
3	26	48	-22	-85
4	26	12	14	54
5	26	120	-94	-362
б	26	26	0	0
7	26	36	-10	-38
8	26	28	-2	-8
9	26	60	-34	-131
10	26	45	-19	-73
11	26	20	6	23
12	26	50	-24	-92
13	26	45	-19	-73
14	26	55	-29	-112
15	26	35	-9	-35
16	26	55	-29	-112
17	26	65	-39	-150
18	26	48	-22	-85
19	26	52	-26	-100
20	26	62	-36	-138
21	26	68	-42	-162
22	26	72	-46	-177
20	26	65	-39	-150
24	26	47	-21	-81
25	26	38	-12	-46
26	26	95	-69	-265
27	26	46	-20	-77

	28	26	50	-24	-92
i	29	26	60	-34	-131
Í	30	26	44	-18	-69
	31	26	53	-27	-104
	32	26	26	0	0
	33	26	35	- 9	-35
	34	26	48	-22	-85
	35	26	25	1	4
	36	26	52	-26	-100
	37	26	63	-37	-142
	38	26	71	-45	-173
	39	26	54	-28	-107
	40	26	50	-24	-92
	41	26	46	-20	-77
	42	26	60	-34	-130
	43	26	72	-46	-177
	44	26	65	-39	-150
	45	26	35	- 9	-35

## Table IV.6Property 6

Valuers	الاعام		Differences	 Differences
varuers	Prices	Figures	DITTELENCES	DILLELENCES
			('000,000)	(%)
	[('000 <b>,</b> 000)	[(*000,000)	(*000,000)	(6)
  1	20	18	2	10
2	20	25	-5	-25
3	20	28	-8	-40
4	20	9	11	55
5	20	75	-55	-275
6	20	30	-10	-50
7	20	20	0	0
8	20	25	-5	-25
9	20	26	-6	-30
10	20	18	2	10
11	20	15	5	25
12	20	13	7	35
13	20	20	0	0
14	20	21	-1	-5
15	20	35	-15	-75
16	20	32	-12	-60
17	20	30	-10	-50
18	20	25	-5	-25
19	20	32	-12	-60
20	20	35	-15	-75
21	20	30	-10	-50
22	20	40	-20	-100
20	20	28	-8	-40
24	20	25	-5	-25
25	20	20	0	0
26	20	42	-22	-110
27	20	65	-45	-225
28	20	32	-12	-60
29	20	35	-15	-75
30	20	40	-20	-100
31	20	22	-2	-10
		-	-	•

32	20	25	-5	-25
33	20	30	-10	-50
34	20	33	-13	-65
35	20	18	2	10
36	20	20	0	0
37	20	34	-14	-70
38	20	16	4	20
39	20	24	-4	-20
40	20	32	-12	-60
41	20	40	-20	-100
42	20	35	-15	-75
43	20	42	-22	-110
44	20	33	-13	-65
45	20	46	-26	-130

#### Source: Author's Field Survey and Analysis, 2008 Table IV.7Property 7

		l abl	e IV./Proper	ty 7
Valuer	Sale'	Valuation	Difference	%Difference
s	Prices	Figures	S	s
	(′000,000)	(′000,000)	('000,000)	(%)
1	65	57	8	12
2	65	105	-40	-62
3	65	63	2	3
4	65	83	-18	-28
5	65	85	-20	-31
6	65	100	-35	-54
7	65	80	-15	-23
8	65	76	-11	-17
9	65	84	-19	-29
10	65	95	-30	-46
11	65	110	-45	-69
12	65	82	-17	-26
13	65	96	-31	-48
14	65	120	-55	-85
15	65	100	-35	-54
16	65	92	-27	-42
17	65	115	-50	-77
18	65	135	-70	-108
19	65	125	-60	-92
20	65	102	-37	-57
21	65	100	-35	-54
22	65	122	-57	-88
20	65	80	-15	-23
24	65	95	-30	-46
25	65	108	-43	-66
26	65	112	-47	-72
27	65	125	-60	-92
28	65	90	-25	-38
29	65	105	-40	-62
30	65	135	-70	-108
31	65	125	-60	-92
32	65	111	-46	-71
33	65	100	-35	-54

34	65	102	-37	-57
35	65	96	-31	-48
36	65	80	-15	-23
37	65	82	-17	-26
38	65	75	-10	-15
39	65	72	- 7	-11
40	65	57	8	12
41	65	65	0	0
42	65	85	-20	-31
43	65	107	-42	-65
44	65	120	-55	-85
45	65	135	-70	-108

		Table	e IV.8: Propert	ty 8
Valuer	Sale	Valuation	Differences	Differences
S	Prices	Figures		
	('000,000)	('000,000)	('000,000)	(%)
1	55	67	-12	-22
2	55	113	-58	-105
3	55	72	-17	-31
4	55	51	4	7
5	55	90	-35	-64
б	55	65	-10	-18
7	55	70	-15	-27
8	55	75	-20	-36
9	55	60	-5	-9
10	55	100	-45	-82
11	55	115	-60	-109
12	55	76	-21	-38
13	55	85	-30	-55
14	55	50	5	9
15	55	65	-10	-18
16	55	120	-65	-118
17	55	55	0	0
18	55	62	-7	-13
19	55	65	-10	-18
20	55	75	-20	-36
21	55	80	-25	-45
22	55	92	-37	-67
20	55	102	-47	-85
24	55	100	-45	-82
25	55	82	-27	-49
26	55	86	-31	-56
27	55	95	-40	-73
28	55	104	-49	-89
29	55	110	-55	-100
30	55	85	-30	-55
31	55	75	-20	-36
32	55	100	-45	-82
33	55	85	-30	-55
34	55	101	-46	-84
35	55	90	-35	-64

36	55	115	-60	-109	
37	55	122	-67	-122	
38	55	105	-50	-91	
39	55	75	-20	-36	
40	55	40	15	27	
41	55	65	-10	-18	
42	55	75	-20	-36	
43	55	112	-57	-104	
44	55	105	-50	-91	
45	55	85	-30	-55	

#### Source: Author's Field Survey and Analysis, 2008 Table IV.1.9: Property 9

		Table	IV.I.9: Propert	t <b>y 9</b>
Valuers	Sale	Valuation	Differences	
	Prices	Figures	('000,000)	Differences
	('000,000)	('000,000)		
				(%)
				İ İ
1	180	285	-105	-58
2	180	60	120	67
3	180	300	-120	-67
4	180	115	65	36
5	180	70	110	61
6	180	200	-20	-11
7	180	245	-65	-36
8	180	205	-25	-14
9	180	180	0	0
10	180	115	65	36
11	180	220	-40	-22
12	180	250	-70	-39
13	180	305	-125	-69
14	180	250	-70	-39
15	180	118	62	34
16	180	100	80	44
17	180	195	-15	-8
18	180	210	-30	-17
19	180	315	-135	-75
20	180	350	-170	-94
21	180	750	-570	-317
22	180	300	-120	-67
20	180	190	-10	-6
24	180	282	-102	-57
25	180	225	-45	-25
26	180	215	-35	-19
27	180	86	94	52
28	180	196	-16	-9
29	180	275	-95	-53
30	180	300	-120	-67
31	180	320	-140	-78
32	180	125	55	31
33	180	230	-50	-28
34	180	330	-150	-83
35	180	188	- 8	-4
36	180	125	55	31

37	180	250	-70	-39	
38	180	310	-130	-72	
39	180	215	-35	-19	
40	180	185	-5	-3	
41	180	280	-100	-55	
42	180	95	85	47	
43	180	135	45	25	
44	180	210	-30	-17	
45	180	165	15	8	

#### Table IV.10: Property 10

1701.000			Differences	
Valuer			Differences	
S		Figures	(′000,000)	Differenc
	('000,000	(′000,000)		es
	)			(%)
1	2.5	3	-0.5	-20
2	2.5	3	-0.5	-20
3	2.5	1.7	0.8	32
4	2.5	1.8	0.7	28
5	2.5	10	-7.5	-300
б	2.5	2.5	0	0
7	2.5	1.8	0.7	28
8	2.5	1.2	1.3	52
9	2.5	2.8	-0.3	-12
10	2.5	5	-2.5	-100
11	2.5	3.5	-1	-40
12	2.5	4	-1.5	-60
13	2.5	3	-0.5	-20
14	2.5	2.7	-0.2	-8
15	2.5	6	-3.5	-140
16	2.5	2.6	-0.1	-4
17	2.5	2.5	0	0
18	2.5	4.5	-2	-80
19	2.5	3	-0.5	-20
20	2.5	3	-0.5	-20
21	2.5	3.7	-1.2	-48
22	2.5	2.5	0	0
20	2.5	1.8	0.7	28
24	2.5	2	0.5	20
25	2.5	2.2	0.3	12
26	2.5	2.5	0	0
27	2.5	3	-0.5	-20
28	2.5	5	-2.5	-100
29	2.5	4	-1.5	-60
30	2.5	3.2	-0.7	-28
31	2.5	2.8	-0.3	-12
32	2.5	3.5	-1	-40
33	2.5	2.5	0	0
34	2.5	3	-0.5	-20
35	2.5	4	-1.5	-60
36	2.5	2.7	-0.2	-8
37	2.5	3.5	-1	-40

38	2.5	4	-1.5	-60	
39	2.5	2.5	0	0	
40	2.5	3.2	-0.7	-28	
41	2.5	3.1	-0.6	-24	
42	2.5	3	-0.5	-20	
43	2.5	2.5	0	0	
44	2.5	2.7	-0.2	- 8	
45	2.5	3.8	-1.5	-52	

## Source: Author's Field Survey and Analysis, 2008 Table IV.11: Property 11

		Table	IV.11: Prope	rty 11
Valuer	Sale	Valuation	Difference	Differenc
S	Prices	Figures	s	es
	('000,000)	('000,000)	('000,000)	. (%)
1	  3	3.75	-0.75	  -25
2	3	3.5	-0.5	-17
3	3	2.5	0.5	17
4	3	3	0	0
5	3	14	-11	-367
6	3	5	-2	-67
7	3	5.5	-2.5	-83
8	3	4	-1	-33
9	3	2.7	0.3	10
10	3	3.6	-0.6	-20
11	3	3.25	-0.25	-8
12	3	6.5	-3.5	-117
13	3	5	-2	-67
14	3	3.2	-0.2	-7
15	3	4.2	-1.2	-40
16	3	7.5	-4.5	-150
17	3	6.2	-3.2	-107
18	3	2.7	0.3	10
19	3	3	0	0
20	3	4.5	-1.5	-50
21	3	5.5	-2.5	-83
22	3	8	-5	-167
20	3	5.3	-2.3	-77
24	3	4.5	-1.5	-50
25	3	3.5	-0.5	-17
26	3	2.5	0.5	17
27	3	5	-2	-67
28	3	3	0	0
29	3	3.6	-0.6	-20
30	3	2.75	0.25	8
31	3	3	0	0
32	3	2.5	0.5	17
33	3	4	-1	-33
34	3	4.5	-1.5	-50
35	3	7.5	-4.5	-150
36	3	10	-7	-233
37	3	6.5	-3.5	-117
38	3	5	-2	-67
39	3	3.5	-0.5	-17

40	3	8.5	-5.5	-183	
41	3	6.3	-3.3	-110	
42	3	4.5	-1.5	-50	
3	3	3.5	-0.5	-17	
44	3	2.7	0.3	10	
45	3	4	-1	-33	

#### Source: Author's Field Survey and Analysis, 2008 Table IV 12: Property 12

		Table IV	7.12: Propert	ty 12
Valuers	Sale	Valuation		Differences
	Prices	Figures	es	
	('000,000)	(′000,000)	('000,000	( % )
			)	
1	52	21	31	60
2	52	15	37	71
3	52	7.5	44.5	86
4	52	16	36	69
5	52	45	7	13
6	52	30	22	42
7	52	14	38	73
8	52	18	34	65
9	52	45	7	13
10	52	10	42	81
11	52	15	37	71
12	52	61	-9	-17
13	52	25	27	52
14	52	16	36	69
15	52	15	37	71
16	52	50	2	4
17	52	46	6	12
18	52	28	24	46
19	52	77	-25	-48
20	52	17	35	67
			2	-
21	52	50	1	4
22	52	65	-13   26	-25
20	52	16	36	69
24	52	10	42	81
25	52	8	44	85
26	52	65	-13	-25
27	52	32	20	38
28	52	32	20	38
29	52	15	37	71
30	52	43	9	17
31	52	72	-20	-38
32	52	70	-18	-35
33	52	20	32	62
34	52	95	-43	-83
35	52	76	-24	-46
36	52	125	-73	-140
37	52	115	-63	-121
38	52	65	-13	-25
39	52	75	-23	-44.23
40	52	48	4	7.69

41	52	55	-3	-5.80	
42	52	60	-8	-15.38	
43	52	75	-23	-44.23	
44	52	80	-28	-53.85	
45	52	65	-13	-25	

#### **APPENDIX V**

## Table V.1: Analysis of Valuation Variances in terms of Range of Values Amongst the Forty Five (45) Valuers Involved in the Valuation of Twelve Properties

Table V.1 below shows the differences between the sale prices of the 12 sampled properties and valuation estimates of each of the valuers for each of the properties. The intention was to show at a glance the performances of the

respondent valuers.

r	espon	dent v	aluei	rs.			
	S/N	Valı	ler	Properties			
		S					
				Property 1			
	1		1				-75
	1		280		170	110	39
	2		280		650	-370	-132
	3		280		360	-80	-28
	4		280		206	74	26
	5		280		150	130	46
	6		280		137	143	51
	7		280		145	135	48
	8		280		195	85	30
	9		280	)	115	165	59
	10		280		205	75	27
	11		280		300	-20	-7
	12		280		255	25	9
	13		280	)	185	95	34
	14		280		200	80	28
	15		280		225	55	20
	16		280		350	-70	-25
	17		280		365	-85	-30
	18		280	)	506	-226	-81
	19		280	)	450	-170	-60
	20		280		435	-155	-55
	21		280		380	-100	-36
	22		280		285	-5	-2
	20		280		385	-105	-37
	24		280		400	-120	-43
	25		280		285	-5	-2
	26		280		315	-35	-12
	27		280		330	-50	-18
	28		280		275	5	2
	29		280		185	95	34
	30		280		410	-130	-46
	31		280		270		4
	32		280		400	-120	-43
	33		280		325	-45	-16
	34		280		255	25	9
	35		280		365	-85	-30
	36		280		320	-40	-14
	37		280	)	200	80	28

38	280	110	170	61	
39	280	235	45	16	
40	280	100	180	64	
41	280	250	30	11	
42	280	125	155	55	
43	280	296	-16	-б	
44	280	208	72	26	
45	280	300	-20	-7	

#### Table VI.2: Property 2

		Table	• 1.2. I Toper	.y 2	
Valuers	Mean	Valuation	Diff.	% Diff.	
	Valuation	Fig.	('000,000)		
	(in Millions)	(in			
		Millions)			
1	34	13	21	62	
2	34	23	11	32	
3	34	35	-1	-3	
4	34	9	25	74	
5	34	100	-66	-194	
6	34	42	-8	-24	
7	34	40	-6	-18	
8	34	30	4	12	
9	34	25	9	26	
10	34	20	14	41	
11	34	15	19	56	
12	34	18	16	47	
13	34	50	-16	-47	
14	34	27	7	21	
15	34	19	15	44	
16	34	26	8	24	
17	34	16	18	53	
18	34	10	24	71	
19	34	14	20	59	

20	34	35	-1	-3
21	34	32	2	6
22	34	22.5	11.5	34
20	34	50	-16	-47
24	34	33	1	3
25	34	40	-6	-18
26	34	25	9	26
27	34	34	0	0
28	34	60	-26	-76
29	34	42	-8	-24
30	34	55	-21	-62
31	34	80	-46	-135
32	34	18	16	47
33	34	25	9	26
34	34	22.5	11.5	34
35	34	47	-13	-38
36	34	30	4	12
37	34	35	-1	-3
38	34	18.5	15.5	46
39	34	32.5	1.5	4.41
40	34	45	-11	32.35
41	34	36	-2	-5.90
42	34	42	-8	-23.53
43	34	35	-1	-3.00
44	34	50	-16	-47
45	34	70	-36	-106

2	······	~-~,		-	
	Table VI	.3: ]	Prop	erty	3

Valuers	Mean	Valuation	Diff.	° ∦ Diff.
	Valuation	Fig.	('000,000)	
	(in Millions)	(in		
		Millions)		l l
1	37	31.5	5.5	15
2	37	17	20	54
3	37	33	4	11
4	37	19.5	17.5	47
5	37	180	-143	-386
6	37	35	2	5
7	37	50	-13	-35
8	37	44	-7	-19
9	37	25	12	32
10	37	45	-8	-22
11	37	52	-15	-41
12	37	26	11	30
13	37	30	7	19
14	37	18	19	51
15	37	50	-13	-35
16	37	45	-8	-22
17	37	18.5	18.5	50
18	37	26	11	30
19	37	15.5	21.5	58
20	37	10	27	73
21	37	14	23	62

22	37	35	2	5
20	37	32.5	4.5	12
24	37	22.5	14.5	39
25	37	50	-13	-35
26	37	33	4	11
27	37	40	-3	-8
28	37	25	12	32
29	37	34	3	8
30	37	60	-23	-62
31	37	42	-5	-14
32	37	55	-18	-49
33	37	80	-43	-116
34	37	18	19	51
35	37	25	12	32
36	37	22.5	14.5	39
37	37	47	-10	-27
38	37	30	7	19
39	37	35	2	5.40
40	37	18.5	18.5	50.0
41	37	32.5	4.5	12.16
42	37	45	- 8	-21.62
43	37	36	1	2.70
44	37	42	-5	-14
45	37	35	2	5

Table VI.4: Property 4					
Valuers	Mean	Valuation	Diff.	& Diff.	
	Valuation	Fig.	('000,000)		
	(in Millions)	(in		İ İ	
		Millions)		i i	
1	47	33	14	30	
2	47	43	4	9	
3	47	50	-3	-6	
4	47	23	24	51	
5	47	100	-53	-113	
6	47	62	-15	-32	
7	47	55	-8	-17	
8	47	65	-18	-38	
9	47	70	-23	-49	
10	47	46	1	2	
11	47	50	-3	-6	
12	47	45	2	4	
13	47	33	14	30	
14	47	35	12	26	
15	47	40	7	15	
16	47	47	0	0	
17	47	52	-5	-11	
18	47	47	0	0	
19	47	56	-9	-19	
20	47	36	11	23	
21	47	30	17	36	
22	47	45	2	4	
20	47	35	12	26	

24	47	42	5	11
25	47	56	-9	-19
26	47	62	-15	-32
27	47	43	4	9
28	47	53	-6	-13
29	47	60	-13	-28
30	47	63	-16	-34
31	47	50	-3	-6
32	47	55	- 8	-17
33	47	45	2	4
34	47	40	7	15
35	47	36	11	23
36	47	25	22	47
37	47	30	17	36
38	47	46	1	2
39	47	35	12	25.53
40	47	55	- 8	-17.02
41	47	28	19	40.42
42	47	62	-15	-32
43	47	44	3	6.38
44	47	38	9	19
45	47	52	-5	-11

#### Source: Author's Field Survey and Analysis, 2008 Table VI 5: Property 5

		Table VI.5: Property 5			
Valuers	Mean	Valuation	Diff.	% Diff.	
	Valuation	Fig.	('000,000		
	(in Millions)	(in	)		
		Millions)			
1	50	24	26	52	1
2	50	38	12	24	1
3	50	48	2	4	1
4	50	12	38	76	1
5	50	120	-70	-140	
б	50	26	24	48	
7	50	36	14	28	
8	50	28	22	44	
9	50	60	-10	-20	
10	50	45	5	10	
11	50	20	30	60	
12	50	50	0	0	
13	50	45	5	10	
14	50	55	-5	-10	
15	50	35	15	30	
16	50	55	-5	-10	
17	50	65	-15	-30	
18	50	48	2	4	
19	50	52	-2	-4	
20	50	62	-12	-24	
21	50	68	-18	-36	
22	50	72	-22	-44	
20	50	65	-15	-30	
24	50	47	3	6	
25	50	38	12	24	

$ \begin{vmatrix} 27 & 50 & 46 & 4 & 8 \\ 28 & 50 & 50 & 0 & 0 \\ 29 & 50 & 60 & -10 & -20 \\ 30 & 50 & 44 & 6 & 12 \\ 31 & 50 & 53 & -3 & -6 \\ 32 & 50 & 26 & 24 & 48 \\ 33 & 50 & 35 & 15 & 30 \\ 34 & 50 & 48 & 2 & 4 \\ 35 & 50 & 25 & 25 & 50 \\ 36 & 50 & 52 & -2 & -4 \\ 37 & 50 & 63 & -13 & -26 \\ 38 & 50 & 71 & -21 & -42 \\ 39 & 50 & 54 & -4 & -8 \\ 40 & 50 & 50 & 0 & 0 \\ 41 & 50 & 46 & 4 & 8 \\ 42 & 50 & 60 & -10 & -20 \\ 43 & 50 & 72 & -22 & -44 \\ 44 & 50 & 65 & -15 & -30 \\ \end{vmatrix} $		26	50	95	-45	-90
$ \begin{vmatrix} 28 &   50 &   50 &   0 &   0 \\   29 &   50 &   60 &   -10 &   -20 \\   30 &   50 &   44 &   6 &   12 \\   31 &   50 &   53 &   -3 &   -6 \\   32 &   50 &   26 &   24 &   48 \\   33 &   50 &   35 &   15 &   30 \\   34 &   50 &   48 &   2 &   4 \\   35 &   50 &   25 &   25 &   50 \\   36 &   50 &   52 &   -2 &   -4 \\   37 &   50 &   63 &   -13 &   -26 \\   38 &   50 &   54 &   -4 &   -8 \\   40 &   50 &   50 &   50 &   0 &   0 \\   41 &   50 &   46 &   4 &   8 \\   42 &   50 &   60 &   -10 &   -20 \\   43 &   50 &   72 &   -22 &   -44 \\   44 &   50 &   65 &   -15 &   -30 \\ \end{vmatrix} $	i					
$ \begin{vmatrix} 29 &   50 &   60 &   -10 &   -20 \\   30 &   50 &   44 &   6 &   12 \\   31 &   50 &   53 &   -3 &   -6 \\   32 &   50 &   26 &   24 &   48 \\   33 &   50 &   35 &   15 &   30 \\   34 &   50 &   48 &   2 &   4 \\   35 &   50 &   25 &   25 &   50 \\   36 &   50 &   52 &   -2 &   -4 \\   37 &   50 &   63 &   -13 &   -26 \\   38 &   50 &   71 &   -21 &   -42 \\   39 &   50 &   54 &   -4 &   -8 \\   40 &   50 &   50 &   50 &   0 &   0 \\   41 &   50 &   46 &   4 &   8 \\   42 &   50 &   60 &   -10 &   -20 \\   43 &   50 &   72 &   -22 &   -44 \\   44 &   50 &   65 &   -15 &   -30 \\ \end{vmatrix} $	i					
$\begin{vmatrix} 30 &   50 &   44 &   6 &   12 \\   31 &   50 &   53 &   -3 &   -6 \\   32 &   50 &   26 &   24 &   48 \\   33 &   50 &   35 &   15 &   30 \\   34 &   50 &   48 &   2 &   4 \\   35 &   50 &   25 &   25 &   50 \\   36 &   50 &   52 &   -2 &   -4 \\   37 &   50 &   63 &   -13 &   -26 \\   38 &   50 &   71 &   -21 &   -42 \\   39 &   50 &   54 &   -4 &   -8 \\   40 &   50 &   50 &   50 &   0 &   0 \\   41 &   50 &   46 &   4 &   8 \\   42 &   50 &   60 &   -10 &   -20 \\   43 &   50 &   72 &   -22 &   -44 \\   44 &   50 &   65 &   -15 &   -30 \\ \end{vmatrix}$	i		1			
$ \begin{vmatrix} 31 &   50 &   53 &   -3 &   -6 \\   32 &   50 &   26 &   24 &   48 \\   33 &   50 &   35 &   15 &   30 \\   34 &   50 &   48 &   2 &   4 \\   35 &   50 &   25 &   25 &   50 &   \\   36 &   50 &   52 &   -2 &   -4 \\   37 &   50 &   63 &   -13 &   -26 &   \\   38 &   50 &   71 &   -21 &   -42 &   \\   39 &   50 &   54 &   -4 &   -8 &   \\   40 &   50 &   50 &   0 &   0 &   \\   41 &   50 &   46 &   4 &   8 \\   42 &   50 &   60 &   -10 &   -20 &   \\   43 &   50 &   65 &   -15 &   -30 &   \\ \end{vmatrix} $	i					
$\begin{vmatrix} 32 &   50 &   26 &   24 &   48 \\   33 &   50 &   35 &   15 &   30 \\   34 &   50 &   48 &   2 &   4 \\   35 &   50 &   25 &   25 &   50 \\   36 &   50 &   52 &   -2 &   -4 \\   37 &   50 &   63 &   -13 &   -26 \\   38 &   50 &   71 &   -21 &   -42 \\   39 &   50 &   54 &   -4 &   -8 \\   40 &   50 &   50 &   0 &   0 \\   41 &   50 &   46 &   4 &   8 \\   42 &   50 &   60 &   -10 &   -20 \\   43 &   50 &   72 &   -22 &   -44 \\   44 &   50 &   65 &   -15 &   -30 \\ \end{vmatrix}$	i					
$ \begin{vmatrix} 33 \\ 34 \\ 50 \\ 34 \\ 50 \\ 48 \\ 2 \\ 44 \\ 2 \\ 4 \\ 35 \\ 50 \\ 25 \\ 25 \\ 25 \\ 50 \\ 36 \\ 50 \\ 52 \\ -2 \\ -4 \\ 4 \\ 37 \\ 50 \\ 63 \\ -13 \\ -26 \\ -4 \\ -4 \\ -8 \\ 40 \\ 50 \\ 50 \\ 54 \\ -4 \\ -8 \\ 40 \\ 40 \\ 50 \\ 50 \\ 50 \\ 50 \\ 60 \\ -10 \\ -20 \\ 43 \\ 50 \\ 72 \\ -22 \\ -44 \\ 44 \\ 50 \\ 65 \\ -15 \\ -30 $	i					
$\begin{vmatrix} 34 &   50 &   48 &   2 &   4 \\   35 &   50 &   25 &   25 &   50 \\   36 &   50 &   52 &   -2 &   -4 \\   37 &   50 &   63 &   -13 &   -26 \\   38 &   50 &   71 &   -21 &   -42 \\   39 &   50 &   54 &   -4 &   -8 \\   40 &   50 &   50 &   0 &   0 \\   41 &   50 &   46 &   4 &   8 \\   42 &   50 &   60 &   -10 &   -20 \\   43 &   50 &   72 &   -22 &   -44 \\   44 &   50 &   65 &   -15 &   -30 \\ \end{vmatrix}$	i					
$ \begin{vmatrix} 35 &   50 &   25 &   25 &   50 \\   36 &   50 &   52 &   -2 &   -4 \\   37 &   50 &   63 &   -13 &   -26 \\   38 &   50 &   71 &   -21 &   -42 \\   39 &   50 &   54 &   -4 &   -8 \\   40 &   50 &   50 &   0 &   0 \\   41 &   50 &   46 &   4 &   8 \\   42 &   50 &   60 &   -10 &   -20 \\   43 &   50 &   72 &   -22 &   -44 \\   44 &   50 &   65 &   -15 &   -30 \\ \end{vmatrix} $	j					
$ \begin{vmatrix} 36 &   50 &   52 &   -2 &   -4 \\   37 &   50 &   63 &   -13 &   -26 \\   38 &   50 &   71 &   -21 &   -42 \\   39 &   50 &   54 &   -4 &   -8 \\   40 &   50 &   50 &   0 &   0 \\   41 &   50 &   46 &   4 &   8 \\   42 &   50 &   60 &   -10 &   -20 \\   43 &   50 &   72 &   -22 &   -44 \\   44 &   50 &   65 &   -15 &   -30 \\ \end{vmatrix} $	i	35	50	25		
$ \begin{vmatrix} 38 \\ 39 \\ 50 \\ 54 \\ -4 \\ -8 \\ \end{vmatrix} \begin{vmatrix} -42 \\ -8 \\ -8 \\ -8 \\ -8 \\ -8 \\ -8 \\ -8 \\ -$	j	36	50	52		
39       50       54       -4       -8         40       50       50       0       0         41       50       46       4       8         42       50       60       -10       -20         43       50       72       -22       -44         44       50       65       -15       -30	i	37	50	63	-13	-26
40       50       50       0       0       1         141       50       46       4       8       1         142       50       60       -10       -20       1         143       50       72       -22       -44       1         144       50       65       -15       -30       1	j	38	50	71	-21	-42
41        50        46        4        8          42        50        60        -10        -20          43        50        72        -22        -44          44        50        65        -15        -30	ĺ	39	50	54	-4	-8
42        50        60        -10        -20                  43        50        72        -22        -44                  44        50        65        -15        -30	Í	40	50	50	0	0
43          50          72          -22          -44                      44          50          65          -15          -30	ĺ	41	50	46	4	8
44 50 65 -15 -30	ĺ	42	50	60	-10	-20
	Ì	43	50	72	-22	-44
		44	50	65	-15	-30
		45	50	35	15	30

Table VI.6: Property 6

		Table	v I.o. I Toperty	U
Valuers	Mean	Valuation	Diff.	% Diff.
	Valuation	Fig.	('000,000)	
	(in Millions)	(in		
		Millions)		
1	30	18	12	40
2	30	25	5	17
3	30	28	2	7
4	30	9	21	70
5	30	75	-45	-150
6	30	30	0	0
7	30	20	10	33
8	30	25	5	17
9	30	26	4	13
10	30	18	12	40
11	30	15	15	50
12	30	13	17	57
13	30	20	10	33
14	30	21	9	30
15	30	35	- 5	-17
16	30	32	- 2	- 7
17	30	30	0	0
18	30	25	5	17
19	30	32	- 2	- 7
20	30	35	-5	-17
21	30	30	0	0
22	30	40	-10	-33
20	30	28	2	7
24	30	25	5	17
25	30	20	10	33
26	30	42	-12	-40
27	30	65	-35	-117

28	30	32	-2	-7
29	30	35	-5	-17
30	30	40	-10	-33
31	30	22	8	27
32	30	25	5	17
33	30	30	0	0
34	30	33	-3	-10
35	30	18	12	40
36	30	20	10	33
37	30	34	-4	-113
38	30	16	14	47
39	30	24	6	20
40	30	32	-2	-7
41	30	40	-10	-33
42	30	35	-5	-17
43	30	42	-12	-40
44	30	33	-3	-10
45	30	46	-16	-53

Table VI.7: Property 7					
Valuers	Mean		-	% Diff.	
	Valuation	Fig.	('000,00	ĺ	
	(in Millions)	(in	0)	ĺ	
		Millions)		ĺ	
1	97	57	40	41	
2	97	105	-8	-8	
3	97	63	34	35	
4	97	83	14	14	
5	97	85	12	12	
6	97	100	-3	-3	
7	97	80	17	18	
8	97	76	21	22	
9	97	84	13	13	
10	97	95	2	2	
11	97	110	-13	-13	
12	97	82	15	15	
13	97	96	1	1	
14	97	120	-23	-24	
15	97	100	-3	-3	
16	97	92	5	5	
17	97	115	-18	-19	
18	97	135	-38	-39	
19	97	125	-28	-29	
20	97	102	-5	-5	
21	97	100	-3	-3	
22	97	122	-25	-26	
20	97	80	17	18	
24	97	95	2	2	
25	97	108	-11	-11	
26	97	112	-15	-15	
27	97	125	-28	-29	
28	97	90	7	7	
29	97	105	-8	- 8	

30	97	135	-38	-39	
31	97	125	-28	-29	
32	97	111	-14	-14	
33	97	100	-3	-3	
34	97	102	-5	-5	
35	97	96	1	1	
36	97	80	17	18	
37	97	82	15	15	
38	97	75	22	23	
39	97	72	25	25.77	
40	97	57	40	41.23	
41	97	65	32	33.0	
42	97	85	12	12.37	
43	97	107	-10	-10.31	
44	97	120	-23	-24	
45	97	135	-38	-39	

Table VI.8: Property 8				
Valuers	Mean		-	& Diff.
İ	Valuation	Fig.	('000,000	i i
İ	(in Millions)	(in	)	i i
İ		Millions)		i i
1	85	67	18	21
2	85	113	-28	-33
3	85	72	13	15
4	85	51	34	40
5	85	90	-5	-б
6	85	65	20	24
7	85	70	15	18
8	85	75	10	12
9	85	60	25	29
10	85	100	-15	-18
11	85	115	-30	-35
12	85	76	9	11
13	85	85	0	0
14	85	50	35	41
15	85	65	20	24
16	85	120	-35	-41
17	85	55	30	35
18	85	62	23	27
19	85	65	20	24
20	85	75	10	12
21	85	80	5	6
22	85	92	-7	-8
20	85	102	-17	-20
24	85	100	-15	-18
25	85	82	3	4
26	85	86	-1	-1
27	85	95	-10	-12
28	85	104	-19	-22
29	85	110	-25	-29
30	85	85	0	0
31	85	75	10	12

32	85	100	-15	-18
33	85	85	0	0
34	85	101	-16	-19
35	85	90	-5	-6
36	85	115	-30	-35
37	85	122	-37	-44
38	85	105	-20	-24
39	85	75	10	11.76
40	85	40	45	52.9
41	85	65	20	23.53
42	85	75	10	11.76
43	85	112	-27	-31.76
44	85	105	-20	-24
45	85	85	0	0

#### Source: Author's Field Survey and Analysis, 2008 Table VI 9: Property 9

able	V I.9:	Property 9	

Valuers	Mean	Valuation	Diff.	% Diff.
	Valuation	Fig.	(′000,000	
	(in Millions)	(in	)	
		Millions)		
1	224	285	-61	-27
2	224	60	164	73
3	224	300	-76	-34
4	224	115	109	49
5	224	70	154	69
6	224	200	24	11
7	224	245	-21	- 9
8	224	205	19	8
9	224	180	44	20
10	224	115	109	49
11	224	220	4	2
12	224	250	-26	-12
13	224	305	-81	-36
14	224	250	-26	-12
15	224	118	106	47
16	224	100	124	55
17	224	195	29	13
18	224	210	14	6
19	224	315	-91	-41
20	224	350	-126	-56
21	224	750	-526	-235
22	224	300	-76	-34
20	224	190	34	15
24	224	282	-58	-26
25	224	225	-1	0
26	224	215	9	4
27	224	86	138	62
28	224	196	28	13
29	224	275	-51	-23
30	224	300	-76	-34
31	224	320	-96	-43
32	224	125	99	44
33	224	230	-б	-3

34	224	330	-106	-47	
35	224	188	36	16	
36	224	125	99	44	
37	224	250	-26	-12	
38	224	310	-86	-38	
39	224	215	9	4.02	
40	224	185	39	17.41	
41	224	280	-56	-25	
42	224	95	129	57.59	
43	224	135	89	39.73	
44	224	210	14	6.25	
45	224	165	59	26	

Table VI.10: Property 10				rty 10
Valuers	Mean	Valuation	Diff.	% Diff.
Í	Valuation	Fig.	('000,000	i i
Ì	(in Millions)	(in	)	i i
Ì	ĺ	Millions)		i i
1	3	3	0	0
2	3	3	0	0
3	3	1.7	1.3	43.33333
4	3	1.8	1.2	40
5	3	10	- 7	-233.333
6	3	2.5	0.5	16.66667
7	3	1.8	1.2	40
8	3	1.2	1.8	60
9	3	2.8	0.2	6.666667
10	3	5	-2	-66.6667
11	3	3.5	-0.5	-16.6667
12	3	4	-1	-33.3333
13	3	3	0	0
14	3	2.7	0.3	10
15	3	6	-3	-100
16	3	2.6	0.4	13.33333
17	3	2.5	0.5	16.66667
18	3	4.5	-1.5	-50
19	3	3	0	0
20	3	3	0	0
21	3	3.7	-0.7	-23.3333
22	3	2.5	0.5	16.66667
20	3	1.8	1.2	40
24	3	2	1	33.33333
25	3	2.2	0.8	26.66667
26	3	2.5	0.5	16.66667
27	3	3	0	0
28	3	5	-2	-66.6667
29	3	4	-1	-33.3333
30	3	3.2	-0.2	-6.66667
31	3	2.8	0.2	6.666667
32	3	3.5	-0.5	-16.6667
33	3	2.5	0.5	16.66667
34	3	3	0	0
35	3	4	-1	-33.3333

36	3	2.7	0.3	10
37	3	3.5	-0.5	-16.6667
38	3	4	-1	-33.3333
39	3	2.5	0.5	0.1667
40	3	3.2	-0.2	-6.66666
41	3	3.1	-0.1	-3.333
42	3	3	0	0
43	3	2.5	0.5	16.6666
44	3	2.7	0.3	10
45	3	3.8	-0.8	-26.6666

#### Source: Author's Field Survey and Analysis, 2008 Table VI.11: Property 11

		Table V	I.11: Propert	ty 11
Valuers	Mean	Valuation	Diff.	% Diff.
	Valuation	Fig.	('000,000)	
	(in Millions)	(in		
		Millions)		
1	5	3.75	1.25	25
2	5	3.5	1.5	30
3	5	2.5	2.5	50
4	5	3	2	40
5	5	14	- 9	-180
6	5	5	0	0
7	5	5.5	-0.5	-10
8	5	4	1	20
9	5	2.7	2.3	46
10	5	3.6	1.4	28
11	5	3.25	1.75	35
12	5	6.5	-1.5	-30
13	5	5	0	0
14	5	3.2	1.8	36
15	5	4.2	0.8	16
16	5	7.5	-2.5	-50
17	5	6.2	-1.2	-24
18	5	2.7	2.3	46
19	5	3	2	40
20	5	4.5	0.5	10
21	5	5.5	-0.5	-10
22	5	8	-3	-60
20	5	5.3	-0.3	-6
24	5	4.5	0.5	10
25	5	3.5	1.5	30
26	5	2.5	2.5	50
27	5	5	0	0
28	5	3	2	40
29	5	3.6	1.4	28
30	5	2.75	2.25	45
31	5	3	2	40
32	5	2.5	2.5	50
33	5	4	1	20
34	5	4.5	0.5	10
35	5	7.5	-2.5	-50
36	5	10	-5	-100
37	5	6.5	-1.5	-30

38	5	5	0	0	
39	5	3.5	1.5	30	
40	5	8.5	-3.5	-70	
41	5	6.3	-1.3	-26	
42	5	4.5	0.5	10	
43	5	3.5	1.5	30	
44	5	2.7	2.3	46	
45	5	4	1	20	

		Table VI.12: Property 12		
Valuers	Mean		Diff.	° %
	Valuation	Fig.	('000,000	Diff.
	(in Millions)	(in	)	
		Millions)		
1	44	21	23	52
2	44	15	29	66
3	44	7.5	36.5	83
4	44	16	28	64
5	44	45	-1	-2
6	44	30	14	32
7	44	14	30	68
8	44	18	26	59
9	44	45	-1	-2
10	44	10	34	77
11	44	15	29	66
12	44	61	-17	-39
13	44	25	19	43
14	44	16	28	64
15	44	15	29	66
16	44	50	-6	-14
17	44	46	-2	-5
18	44	28	16	36
19	44	77	-33	-75
20	44	17	27	61
21	44	50	-6	-14
22	44	65	-21	-48
20	44	16	28	64
24	44	10	34	77
25	44	8	36	82
26	44	65	-21	-48
27	44	32	12	27
28	44	32	12	27
29	44	15	29	66
30	44	43	1	2
31	44	72	-28	-64
32	44	70	-26	-59
33	44	20	24	55
34	44	95	-51	-116
35	44	76	-32	-73
36	44	125	-81	-184
37	44	115	-71	-161
38	44	65	-21	-48
39	44	75	-31	-70.45

#### 10

40	44	48	-4	-9.10	
41	44	55	-11	-25	
42	44	60	-16	-36.40	
43	44	75	-31	-70.45	
44	44	80	-36	-81.82	
45	44	65	-21	-47.73	

#### **APPENDIX VII**

## Table VII.1: Analysis of Sale Prices Versus Valuation Figures of the Federal GovernmentLanded Properties Sold in 2007 in Lagos Metropolis.

Lanucu I I	oper nes bolu in 20	or in Lagos men	opons.		
Properti	Actual Sale	Valuation	Difference	8	
es	Prices	Figures	S	Differences	
	('000)	('000)			
1	36,440	42,000	-5560	-15	
2	44,444	52,000	-7556	-17	
3	80,000	90,000	-10000	-13	
4	66,967	66,500	467	1	
5	34,465	45,555	-11090	-32	
6	31,049	49,000	-17951	-58	
7	91,683	40,000	51683	56	
8	59,925	71,200	-11275	-19	
9	60,350	83,100	-22750	-38	
10	83,785	93,380	-9595	-11	
11	75,055	90,000	-14945	-20	
12	66,428	30,000	36428	55	
13	93,477	101,000	-7523	-8	
14	58,546	100,055	-41509	-71	
15	77,471	102,000	-24529	-32	
16	82,741	80,500	2241	3	
17	56,270	69,500	-13230	-24	
18	71,500	24,900	46600	65	
19	62,608	68,405	-5797	-9	
20	71,535	67,414	4121	6	
21	38,640	38,890	-250	-1	
22	32,785	45,000	-12215	-37	
23	35,383	40,000	-4617	-13	
24	30,536	40,000	-9464	-31	
25	90,620	130,000	-39380	-43	
26	77,339	71,970	5369	7	
27	59,500	85,000	-25500	-43	
28	118,391	171,000	-52609	-44	
29	41,007	48,950	-7943	-19	
30	41,007	45,000	-3993	-10	
31	41,650	60,000	-18350	-44	
32	40,765	43,656	-2891	-7	
33	41,132	47,500	-6368	-15	
34	43,840	47,500	-3660	-8	
35	41,536	14,341	27195	65	
36	42,135	45,000	-2865	-7	
37	42,640	48,000	-5360	-13	
38	44,681	54,000	-9319	-21	
39	43,619	56,000	-12381	-28	
40	41,575	45,500	-3925	-9	ļ

	41	46,509	55,000	-8491	-18
	42	42,703	44,100	-1397	-3
ĺ	43	30,206	90,900	-60694	-201
	44	45,769	66,000	-20231	-44
	45	45,769	66,000	-20231	-44
	46	54,856	70,000	-15144	-28
	47			-12895	-31
		42,105	55,000		
	48	46,164	74,500	-28336	-61
	49	38,351	81,500	-43149	-113
	50	112,425	150,000	-37575	-33
	51	45,000	50,000	-5000	-11
	52	45,000	56,000	-11000	-24
	53	15,000	22,000	-7000	-47
	54	25,000	27,400	-2400	-10
	55	26,000	24,000	2000	8
	56	32,900	40,000	-7100	-22
	57	26,138	26,250	-112	0
	58	26,231	27,250	-1019	-4
	59	26,485	27,250	-765	-3
ĺ	60	25,610	40,000	-14390	-56
	61	26,880	38,850	-11970	-45
	62	69,915	77,201	-7286	-10
	63	48,000	48,651	-651	-1
	64	35,000	46,000	-11000	-31
	65	30,000	31,000	-1000	-3
	66	19,500	23,000	-3500	-18
	67	17,550	25,000	-7450	-42
	68	17,640	25,000	-7360	-42
	69	17,190	24,150	-6960	-40
	70	30,936	30,000	936	3
	70	65,167	70,000	-4833	-7
			60,000		
	72 72	31,957		-28043	-88
	73	27,409	60,000	-32591	-119
	74	64,720	120,000	-55280	-85
	75	26,660	35,000	-8340	-31
	76	109,273	115,000	-5727	-5
	77	80,116	86,000	-5884	-7
	78	136,239	142,000	-5761	-4
	79	87,000	142,730	-55730	-64
	80	66,000	123,750	-57750	-88
	81	70,000	85,000	-15000	-21
	82	66,000	68,000	-2000	-3
	83	103,000	55,000	48000	47
	84	101,830	125,000	-23170	-23
	85	105,096	112,000	-6904	-7
	86	95,445	100,800	-5355	-б
	89	101,830	180,000	-78170	-77
	90	101,830	107,100	-5270	-5
	91	101,830	173,418	-71588	-70
	92	62,330	58,000	4330	7
	93	57,727	68,100	-10373	-18
	94	55,911	60,000	-4089	-7
	95	65,911	65,000	911	1
	96	56,254	86,253	-29999	-53
	97	66,388	73,000	-6612	-10
	98	52,662	80,000	-27338	-52

	99	51,758	80,000	-28242	-55
	100	56,306	58,500	-2194	-4
103 $67,974$ $70,140$ $-2166$ $-3$ $104$ $58,190$ $86,000$ $-27810$ $-48$ $105$ $61,171$ $85,000$ $-23829$ $-39$ $106$ $42,730$ $75,000$ $-32270$ $-76$ $107$ $42,230$ $61,570$ $-19340$ $-46$ $108$ $42,230$ $61,570$ $-19340$ $-46$ $109$ $39,600$ $36,000$ $3600$ $9$ $110$ $39,000$ $42,130$ $-3130$ $-8$ $111$ $56,630$ $60,000$ $-3370$ $-6$ $112$ $64,970$ $70,000$ $-5030$ $-8$ $113$ $56,000$ $70,000$ $-14000$ $-25$ $114$ $48,540$ $64,100$ $-15560$ $-32$ $115$ $65,000$ $67,200$ $-2200$ $-3$ $116$ $45,000$ $55,750$ $-10750$ $-24$ $117$ $45,000$ $63,750$ $-18750$ $-42$ $118$ $473,000$ $701,010$ $-228010$ $-48$ $119$ $45,000$ $67,500$ $-22500$ $-50$ $120$ $39,000$ $50,000$ $-10300$ $-26$ $122$ $38,500$ $90,850$ $-52350$ $-136$ $123$ $35,700$ $111,010$ $-75310$ $-211$ $124$ $36,340$ $99,010$ $-62670$ $-172$ $125$ $74,904$ $187,010$ $-1123078$ $-199$ $127$ $74,659$ $187,010$ $-123078$ $-199$ $127$	101	61,821	63,000	-1179	-2
$ \begin{vmatrix} 104 &   58, 190 &   86, 000 &   -27810 &   -48 \\   105 &   61, 171 &   85, 000 &   -23829 &   -39 \\   106 &   42, 730 &   75, 000 &   -32270 &   -76 \\   107 &   42, 230 &   61, 570 &   -19340 &   -46 \\   108 &   42, 230 &   61, 570 &   -19340 &   -46 \\   109 &   39, 600 &   36, 000 &   3600 &   9 \\   110 &   39, 000 &   42, 130 &   -3130 &   -8 \\   111 &   56, 630 &   60, 000 &   -3370 &   -6 \\   112 &   64, 970 &   70, 000 &   -5030 &   -8 \\   113 &   56, 000 &   70, 000 &   -14000 &   -25 \\   114 &   48, 540 &   64, 100 &   -15560 &   -32 \\   115 &   65, 000 &   67, 200 &   -2200 &   -3 \\   116 &   45, 000 &   55, 750 &   -10750 &   -24 \\   117 &   45, 000 &   63, 750 &   -18750 &   -42 \\   118 &   473, 000 &   701, 010 &   -228010 &   -48 \\   119 &   45, 000 &   50, 000 &   -11000 &   -28 \\   121 &   39, 700 &   50, 000 &   -10300 &   -26 \\   122 &   38, 500 &   90, 850 &   -52350 &   -136 \\   123 &   35, 700 &   111, 010 &   -75310 &   -211 \\   124 &   36, 340 &   99, 010 &   -62670 &   -172 \\   125 &   74, 904 &   187, 010 &   -112106 &   -150 \\   126 &   61, 932 &   185, 010 &   -123078 &   -199 \\   127 &   74, 659 &   187, 010 &   -112351 &   -150 \\   128 &   78, 474 &   187, 010 &   -108536 &   -138 \\   129 &   101, 537 &   255, 010 &   -153473 &   -151 \\ \end{vmatrix}$	102	69,145	100,000	-30855	-45
105 $61,171$ $85,000$ $-23829$ $-39$ $106$ $42,730$ $75,000$ $-32270$ $-76$ $107$ $42,230$ $61,570$ $-19340$ $-46$ $108$ $42,230$ $61,570$ $-19340$ $-46$ $109$ $39,600$ $36,000$ $3600$ $9$ $110$ $39,000$ $42,130$ $-3130$ $-8$ $111$ $56,630$ $60,000$ $-3370$ $-6$ $112$ $64,970$ $70,000$ $-5030$ $-8$ $113$ $56,000$ $70,000$ $-14000$ $-25$ $114$ $48,540$ $64,100$ $-15560$ $-32$ $115$ $65,000$ $67,200$ $-2200$ $-3$ $116$ $45,000$ $55,750$ $-10750$ $-24$ $117$ $45,000$ $63,750$ $-18750$ $-42$ $118$ $473,000$ $701,010$ $-228010$ $-48$ $119$ $45,000$ $67,500$ $-22500$ $-50$ $120$ $39,000$ $50,000$ $-10300$ $-26$ $122$ $38,500$ $90,850$ $-52350$ $-136$ $123$ $35,700$ $111,010$ $-75310$ $-211$ $124$ $36,340$ $99,010$ $-62670$ $-172$ $125$ $74,904$ $187,010$ $-1123078$ $-199$ $127$ $74,659$ $187,010$ $-123373$ $-150$ $128$ $78,474$ $187,010$ $-108536$ $-138$ $129$ $101,537$ $255,010$ $-153473$ $-151$ <td>103</td> <td>67,974</td> <td>70,140</td> <td>-2166</td> <td>-3</td>	103	67,974	70,140	-2166	-3
	104	58,190	86,000	-27810	-48
	105	61,171	85,000	-23829	-39
10842,23061,570-19340-4610939,60036,0003600911039,00042,130-3130-811156,63060,000-3370-611264,97070,000-5030-811356,00070,000-14000-2511448,54064,100-15560-3211565,00067,200-2200-311645,00055,750-10750-2411745,00063,750-18750-42118473,000701,010-228010-4811945,00050,000-10300-2612039,00050,000-10300-2612238,50090,850-52350-13612335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-1123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	106	42,730	75,000	-32270	-76
	107	42,230	61,570	-19340	-46
	108	42,230	61,570	-19340	-46
111156,63060,000-3370-611264,97070,000-5030-811356,00070,000-14000-2511448,54064,100-15560-3211565,00067,200-2200-311645,00055,750-10750-2411745,00063,750-18750-42118473,000701,010-228010-4811945,00067,500-22500-5012039,00050,000-11000-2812139,70050,000-10300-2612238,50090,850-52350-13612335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	109	39,600	36,000	3600	9
	110	39,000	42,130	-3130	- 8
	111	56,630	60,000	-3370	-б
	112	64,970	70,000	-5030	-8
11565,00067,200-2200-311645,00055,750-10750-2411745,00063,750-18750-42118473,000701,010-228010-4811945,00067,500-22500-5012039,00050,000-11000-2812139,70050,000-10300-2612238,50090,850-52350-13612335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-1123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	113	56,000	70,000	-14000	-25
11645,00055,750-10750-2411745,00063,750-18750-42118473,000701,010-228010-4811945,00067,500-22500-5012039,00050,000-11000-2812139,70050,000-10300-2612238,50090,850-52350-13612335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	114	48,540	64,100	-15560	-32
11745,00063,750-18750-42118473,000701,010-228010-4811945,00067,500-22500-5012039,00050,000-11000-2812139,70050,000-10300-2612238,50090,850-52350-13612335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-108536-138129101,537255,010-153473-151	115	65,000	67,200	-2200	- 3
118473,000701,010-228010-4811945,00067,500-22500-5012039,00050,000-11000-2812139,70050,000-10300-2612238,50090,850-52350-13612335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	116	45,000	55,750	-10750	-24
11945,00067,500-22500-5012039,00050,000-11000-2812139,70050,000-10300-2612238,50090,850-52350-13612335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	117	45,000	63,750	-18750	-42
12039,00050,000-11000-2812139,70050,000-10300-2612238,50090,850-52350-13612335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	118	473,000	701,010	-228010	-48
12139,70050,000-10300-2612238,50090,850-52350-13612335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	119	45,000	67,500	-22500	-50
12238,50090,850-52350-13612335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	120	39,000	50,000	-11000	-28
12335,700111,010-75310-21112436,34099,010-62670-17212574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	121	39,700	50,000	-10300	-26
12436,34099,010-62670-17212574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	122	38,500	90,850	-52350	-136
12574,904187,010-112106-15012661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	123	35,700	111,010	-75310	-211
12661,932185,010-123078-19912774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	124	36,340	99,010	-62670	-172
12774,659187,010-112351-15012878,474187,010-108536-138129101,537255,010-153473-151	125	74,904	187,010	-112106	-150
12878,474187,010-108536-138129101,537255,010-153473-151	126	61,932	185,010	-123078	-199
129  101,537  255,010  -153473  -151	127	74,659	187,010	-112351	-150
	128	78,474	187,010	-108536	-138
130  14,300  20,000  -5700  -40	129	101,537	255,010	-153473	-151
	130	14,300	20,000	-5700	-40
131  64,400  87,000  -22600  -35	131	64,400	87,000	-22600	-35

\_\_\_\_\_

Conduct of the Valuation Procedure

Performance (Accuracy/Inaccuracy) of the Valuation Industry

Valuers Use of Investment Valuation Inputs.

(i)Gross Income

- (ii) Mode of Deductions for Outgoings.
- (iii) Determination of Yield (Capitalization Rate).

Characteristics of Valuers

- (i) Education Background of the Valuer
- (ii) Organizational type of the Valuation Firm.
- (iii) Location of the Valuation Firm/Organization
- (iv)Experience/Inexperie-nce in Valuation Practice.
- (v) Ability/Inability to translate Valuation Theory into Practice.
- (vi) Ability/Inability to Source for Market Indices

Valuers Ability at Interpreting the Market Reliably and Consistently

Problem of Relevant Data

Problem of Imperfect Property Market

**Client Influence** 

Unreliability of Valuation Techniques in Unstable Markets

Value Estimation And Value Prediction

Skill, Experience And Judgement

**Unrealistic Valuation Assumptions** 

Reverse Yield Gap Use of Different Methods of Valuation

Use of Different Valuation Inputs

Valuation Irrationality

Heuristics in Valuation and Client Influence

Inaccuracy, Variance and Irrationality in Valuation.

Representative heuristics (a form of stereotyping, whereby decision makers make decisions out of their experience of similar objects and events)

Sub-optimal valuation estimates (inaccuracy/ inconsistency)

Anchoring and adjustment heuristics (the tendency of decision makers to adopt an initial estimate before evidence is considered)

Positivity heuristics (Previously held beliefs could lead to a rigid mindset which could resist contrary evidence)

Availability heuristics (the tendency to perceive a problem in a prescribed way once essential components have been recognized from past experience).

Figure 3.4: Model of Heuristic Influences on Valuation Accuracy

Valuations deliberately Adjusted ultimately result into Inaccuracy

Coercive Power

#### Client Misled

Expert Power

Reward Power

Characteristics of the individual or organization providing the service.

\*Integrity of service provider/ethical culture of company

\*Importance of client to income, to the firm or the individual service provider etc. (do they need to please the client?)

\*Are they carrying out other work for the client?

\*Prior involvement in the client's assets

\*\* Style of decision making-accommodating/pragmatic-responsive to client management.

Characteristics of the Client.

\* Type of client

- \* Size, Strength and market power
- \* Personality
- \* Prior involvement with the client's assets

\* Importance of service outcome to them i.e. salary related/peer recognition, pride i9n outcome etc

[pic] 8——" . = @ œ ? +,ÆÉÊËÝ

è

)<§ÊËãäí&45FTVmw'f'``¶ÈV^y^üøòã×ãËòÅò¿ò¹ò³òªò¤?¤ò'ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò‰ò%òbhC(;h¬\µ^JhçV…h¬\µ^JhDrCh¬\µ6?]?^Jh´^Jh}^~^Jh\éh¬\µ^Jhýr

#### ^Jhhn $^Jh_5\tilde{a}Jh^{tJh}$ zh¬\µ5?\?^Jh¬\µOJQJ^JaJ\* Client's financial condition

#### Influence

\* Type of client

\*Reward/Coercive power- (opinion shopping, decrease in the number of assignment and patronage)

- \*Expertise/expert power
- \* Information power

**External Characteristics** 

\*Regulatory framework, effective/ineffective peer review

\*Marklet conditions- Competitiveness

\* Perceive integrity of the industry.

Characteristics of the service provider.

\*Range of defensible values-is there a point of estimate? \* Type/purpose of the service \*Techniques/procedures \*Complexity \*Size of transaction \*Prior involvement \*Amount of discretionnary/subjective judgement \*Adjustment size.

Sxy

?(Sx2)(Sy2)

#### CLIENT INFLUENCE \*Coercive/Threat Power \* Reward Power \*Information Power \* Expert/Expertise Power

EXPECTATION Accuracy/Consistency expected by Stakeholders to fall within+/-10% of Sale Price/Others Valuation figures

#### VALUER

Inaccurate Valuation: Valuation Figures falling Outside +/-10% of Sale Price

Inconsistent Valuation: Valuer's Figure falling outside +/-10% of others' Valuation Figures

Consistent Valuation: Valuer's Figure falling within +/-10% of others' Valuation figures

Accurate Valuation: Valuation Figures falling within +/-10% of Sale Price/other Valuation firms