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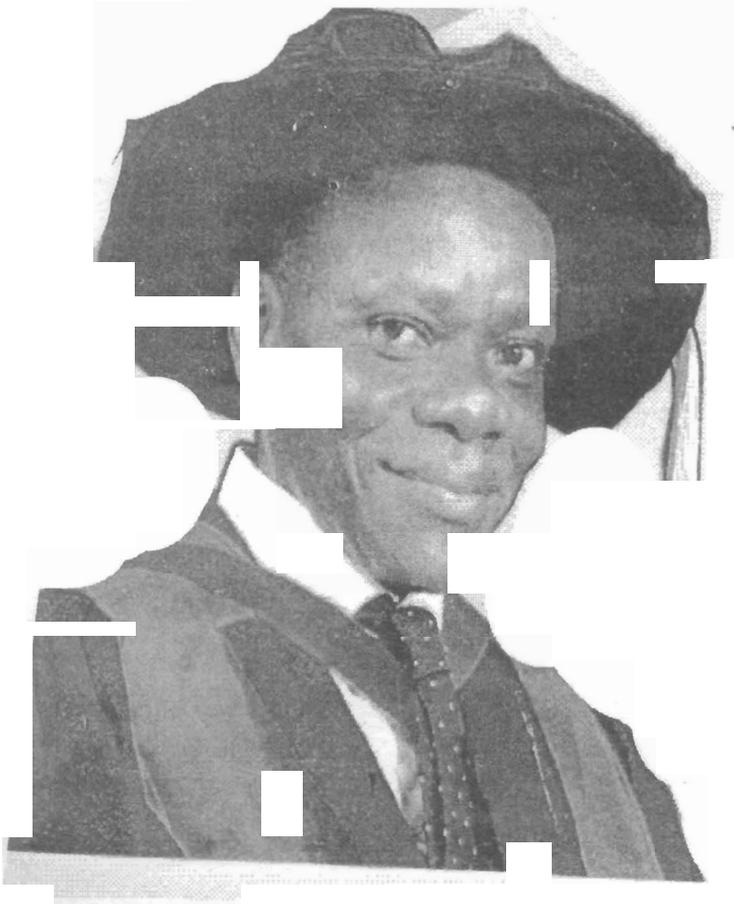
**PROPERTY MARKET DYNAMICS AND
PARADIGM SHIFTS IN PROPERTY
INVESTMENT VALUATION
METHODOLOGY**

By

Cyril Ayodele Ajayi
Professor of Estate Management



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**An Inaugural Lecture Delivered at Oduduwa Hall
Obafemi Awolowo University, Ile-Ife, Nigeria
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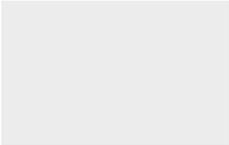
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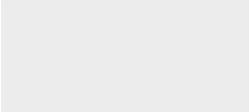
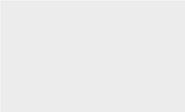
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Introduction

The Vice Chancellor Sir, the Registrar, the President of the Nigerian Institution of Estate Surveyors and Valuers, noble colleagues, distinguished scholars, ladies and gentlemen, it is with deep gratitude and thanks to God and indeed great honour that I stand before you today to deliver the 234th Inaugural lecture of the Obafemi Awolowo University Ile Ife. This is the second inaugural lecture from the Department of Estate Management since it was established 40 years ago. Incidentally, my academic career started with the establishment of the Department in 1970 as one of the 24 pioneering students that were offered direct entry admission. Out of the 12 that eventually graduated as the first set in 1974, I stood out as the only one that opted for the academic career. Today, I thank God that I became a Professor of Estate Management - the third in Nigeria - in 1999.

Mr. Vice Chancellor, the Chair of Estate Management, which I inaugurate today, is the first in Nigeria to focus on the core specialty in Estate Management – real property valuation (also known as real estate appraisal in the US). The art, science and discipline of property valuation lie at the very heart of the set of skills assembled by the estate surveyor and valuer or property consultant. Arguably, an expertise in this area is the only factor which sets the professional property adviser apart from other professionals in the related fields such as law, accountancy and engineering. In addition a grasp of valuation raises the property adviser above the professional practice of agency and brokerage. Finally, so much of a nation's wealth lies in its real estate assets that the valuer has a duty to contribute his expertise to efficiency in the use of scarce resources. (Ajayi, 1998)

The pioneering position in Nigerian valuation academics has thrust on me a leadership responsibility: first, that of setting the pace for the Nigerian academia and practitioners with regard to the paradigm shifts required of our property valuers by an increasingly sophisticated clientele and investment climate and the advances of technology and second, that of supervising research studies in this area which to date have produced 13 PhD holders and several Master of Science degree holders.

Miller and Markosyan (2003) remarked: “for every profession, it is useful to pause and reflect on developments over the past hundred years or so and who influenced these changes. Without taking the time to reflect on ‘change’, it becomes easy to believe that current practices are sufficient and that we can simply become more experienced at doing the same thing we did last month or last year. But viewed from a longer perspective, we see that business practices have changed dramatically and will likely continue to change. “Business as usual” will never last more than part of a single generation”. It has therefore been necessary to continually examine international valuation/appraisal trends in more developed property markets so as to determine where the Nigerian estate surveyor and valuer is coming from, where he presently is and where he ought to be heading, so that he can continue to be relevant as the property and allied investment climate evolves.

It is true to say that investment valuation methodology has seen a near-revolution in both theory and practice over the last 30 years to the extent that no longer are conventional valuation routines acceptable. (Ajayi, 1998) It is against this background that this lecture seeks to illustrate how professional investment valuation practice has had to adapt to keep pace with evolutionary changes over the past five hundred years and how it might change in the future. We will then draw some important lessons for investment valuation practice in Nigeria.

Evolution in this sense refers to the changes in first, the economic environment as seen in the contexts of investment dynamics, land law, property finance and second, technology. Investment valuation is a profession that has its roots in these disciplines. The economic environment, science and technology have been changing remarkably over the past five hundred years. The effect on real estate investment valuation has been quite dramatic. My goal has been to encourage real estate valuer in Nigeria not only to catch up with practice in more developed countries, but also to be at its cutting edge or else be left behind into the hands of anachronism. The preponderance of my research studies in the profession has focused on articulating how global changes in the investment climate require

paradigm changes in the theory and practice of investment valuation, and encouraging such required (and often radical) paradigm changes to a somewhat conservative profession that often may not see a need to change from what appear to be time tested techniques and practice.

The Investment Valuation Process

At one point or the other, everyone who invests in purchasing or building landed property or real estate will have to use the services of an estate surveyor and valuer. For example anyone who wants to take a loan from a bank (using landed property as collateral security), sell landed property, insure property, declare his assets, value company assets for balance sheet, merge companies, acquire property and such other purposes would need the services of a valuer to determine the value of the property assets involved. The process valuers go through in determining the value of property involves the use of econometric models, skill and judgement in prediction of worth (often a prediction of the most likely selling price of a property). The incorporation of skill and judgement means that valuations are opinions rather than the precise scientific determinations associated with calculations in the physical sciences. The combination of mathematical models with individual skill and judgement reflects the fact that a valuation is both an art and a social science. It is an art to the extent that it requires use of a valuer's skill, judgement and experience. However, it is also a social science because it requires the valuer to use scientific modeling of the behaviour of property market participants in determining values they would place on landed property. Such modeling involves quantification (by means of available science and technology) of the understanding of the market of local laws, physical constraints, town planning, availability of finance, demand and the general economy. One implication of being an art is that valuations might never exactly equal realized prices, even where such prices are contemporaneous. There is however an emerging maximum allowable range of error attached to valuation estimates relative to contemporaneous realized prices across the world. The maximum range of error is emerging to be within 10 to 15 per cent of realized prices.

Investment valuation is one of five methods of valuation (in the perception of the UK) or one of three approaches to appraisal (in the US perspective).

In the income or investment approach to valuation, the investor in income (rent) producing property is seen as purchasing an annuity. An annuity is a stream of payment inflows (in this case, rent) made through time. The most common annuity payment intervals are yearly (once a year), semi-annually (twice a year), quarterly (four times a year), and monthly (once a month). Market value in the investment method of valuation is taken to be a market's expectations of the total of the annuity (total future inflows of capital to his investment) over the period of the holder's interest. Investment valuation is simply a process of capitalizing rent streams to arrive at capital value.

In valuing such annuities or stream of payments, account is made in the income approach for the time value of money. What this means is that earnings are of more value to its holder today than if the same earnings were to be received in the future. The reasoning is that a person who is given an option between receiving a capital sum today or receiving the same sum in five years time (or even an annuity over five years), would almost certainly prefer the capital receipt today, first because he can invest the capital sum received today to secure a higher sum in five years time, and second, because inflation would have devaluing effects over five years. Following such reasoning, capital value in the income approach is the summative value of expected future returns (annuity), but each of the future returns are discounted (reduced) to a present equivalent sum based on the time value of money at an appropriate rate of interest. Conventionally, in the most basic form, the valuation works out as:

Rental value x a multiplier (which takes account of the time value of money at compound interest, called years purchase in the UK) = capital value

Evolution of Investment Valuation Models and Paradigm Shifts in the U.K

The current approach to the investment valuation of real estate investment income has evolved over the course of the last four centuries. Two separate valuation evolutions have developed, each with its adherents: the UK evolution is certainly the first evolution, and its present adherents include valuation practices in most of the Commonwealth countries. The US

evolution has its roots in the UK evolution, but developed its own unique evolution from about the end of the nineteenth century. It also has its present adherents, especially the close by countries such as Canada, Australia and New Zealand. Valuation in Nigeria has its roots in the UK evolution.

In discussing the history of the investment valuation evolutions, we must observe *ab initio* that the valuation of land was unnecessary before the sixteenth century because in the feudal economies of Europe, real estate was incapable of being traded. Real estate was incapable of being traded since it was vested in either the Church or the Crown and was occupied by vassals. Moreover, the medieval Church frowned upon the charging of interest (the charging of interest is a cornerstone of the income approach to valuation). Indeed, the church condemned the practice as usurious. The Church cited biblical texts to support a ban on the payment and receipt of interest. In particular, Exodus 22:25, Leviticus 25:35, 37, and Deuteronomy 23:19 were cited. The principal motive behind the Church's opposition to interest was to protect the poor and destitute who borrowed in times of need. However, the Church did at times permit interest to be charged on some forms of loan.

The ground-breaking paradigm shift was the permission of private ownership of land. The driving force for this change was the protestant reformation. In England particularly, Henry VIII broke away from the Catholic Church and required money to finance his extravagant wars. As a result, the assets of the Church came under increased threat from the English state. Matters came to a head with the dissolution of the Catholic monasteries between 1536 and 1539. The assets of these religious houses were expropriated by the state. Many of their real estate assets were then sold off to emerging landed interests that had become independent of the feudal system. The result was that real estate had become an asset capable of being traded; it had therefore acquired tangible value. At the time of the dissolution of the monasteries, the task of selling the former monastic lands on behalf of the Crown was given to the Court of Augmentations. The need for techniques to value interests in real estate had become apparent. I must state here that ideally, valuers/appraisers draw their investment

valuation assumptions from the behavior of property investors at their time. If the assumptions mirror the thinking and analysis of the investors, then, at that moment, the analysis is reasonably accurate. These earliest applications of the income approach to valuation were very rudimentary but tried to mirror the thinking of property investors of the time. The Court of Augmentations was charged with selling these and other Crown lands at what was called 'twenty one years' purchase'. What this meant was later described by a Sir Willian Petty in 1662, who showed that three generations were considered a reasonable time for a purchaser of land and his immediate descendants to enjoy the return from it. As "in England we equal three lives to one and twenty years". On this basis, the early valuers of the Court of Augmentations computed the capital value of land as being twenty-one years purchase of its annual rent. The capital value of land was therefore simply seen as the rent receivable for twenty one years without interest and without taking into account the time value of money. This rudimentary approach to investment valuation is understandable against the background of the Catholic restrictions on charging of interest which were still in force when the Court of Augmentations commenced its work.

But the economic environment of the latter part of the sixteenth century was changing, and the initial rudimentary investment valuation paradigm had to change with it. The next paradigm shift was the application of remunerative interest to the rent annuities and the development of a distinct class of professionals to do the laborious calculations involved. The driving force for the application of interest was again the protestant reformation and the need for money by Henry VIII which made him revoke church prejudices against the collection of interest. The financial pressures of his reign and the absence of Catholic restrictions prompted him to lift the taboo on interest. As a result, the Interest Act 1545 gave legal recognition to the charging of interest in business transactions. This in turn led to the application of interest calculations in real estate valuation thinking by the end of the 16th century. Investment valuation thinking now reflected the time value of money though this was initially calculated through simple (rather than compound interest). The profession of the property valuer was born at this time. 17th Century English manors who had bought land

from the Court of Augmentations began to employ estate management surveyors to determine the capital value of landlord (freehold) and tenant (leasehold) rent annuities. The surveyors determined the value by converting (capitalizing) rental income annuities to capital value by means of a multiplier (called Years Purchase) which now reflected simple or compound interest. Sometimes the multiplier was based upon compounded interest, but very early practice often favoured simple interest (Tipping, 2006).

The next paradigm shift was from simple to compound interest. The early use of simple interest was based on a wrong interpretation of how the financial environment compounds money invested. Simple interest assumes that when money is invested in any year and earns an interest, only the principal sum (not including the interest earned) is re-invested the next year. However, the more correct position as was increasingly apparent from both commercial lending and saving in the seventeenth century was that money invested accumulates by compound rather than simple interest, because both the principal and interest earned on it (and not principal alone) are normally reinvested at the beginning of new investment years. This understanding dawned gradually on valuers over the first one hundred years of use of interest rates. By the late seventeenth century, most estate management surveyors had fully adopted the understanding that compound interest rather than simple interest was the appropriate interest to reflect in investment valuations. In 1679 for example, Sir William Morland's table, give the first part of the lengthy title on his title page as:

“The Doctrine of Interest, Both Simple & Compound: Explained In a more exact and satisfactory Method then has hitherto been Published. Discovering The Errors of the Ordinary Tables of Rebate for Annuities at Simple Interest. And Containing....”

The next paradigm shift involved the development of valuation tables to reduce the laborious manual calculations involved in investment valuation. This development was based on advances in mathematics and technology. The advance in technology was the invention of mechanical movable type

of printing press in the fifteenth century which led to an explosion of printing activities in Europe. The second driver was the invention of logarithms which overcame the difficulty of undertaking complex calculations in the absence of calculators and computers. John Napier invented logarithms and presented this in his work, '*Mirifici logarithmorum canonis descriptio*', in Latin format in 1614. An English translation was produced by Edward Wright two years later. At the time, the invention of logarithms was seen as making a major contribution to astronomy. However, it was also a major breakthrough in the context of property valuation tables. Henry Briggs, through his *Arithmetica Logarithmica* published in 1624, demonstrated how logarithms could be used to calculate compound interest at nominal rates of interest whatever that rate of interest might be. To speed up valuations based on these compound interest figures, the more mathematically minded surveyors such as William Purser and Henry Phillips compiled the compound interest formulae into Ready reckoners (tables) called 'Compound Interest and Annuities' and 'The Purchasers Pattern' in 1634 and 1667 respectively. The first edition of William Webster's simple and compound interest tables in the form of *The True Valuation of Annuities, Leases, Fines and Reversions* had already been published in 1620 (Kopf, 1927). An abundance of interest tables including new editions appeared until the onset of the English Civil War. War had a tendency to stifle the development of investment valuation thought. It was not until the Restoration in 1660 that renewed interest in property annuity tables appeared. This renewed interest arose out of increased trade following the Restoration and out of an increase in transactions of property interests and the need to re-develop destroyed properties in London in the aftermath of the Great Fire of 1666. During the eighteenth century, several annuity tables capable of being applied to the valuation of real estate interests appeared. A number of these specifically applied themselves to property valuation. John Smart's tables, first published in 1707, were an important milestone. They appeared in new editions several times during the eighteenth century and later formed the basis of William Inwood's famous 'tables for the purchasing of estates', which appeared just over a century later in 1811. Inwood's tables were revised over the next eighty years and were the last tables to be used in both the UK and US income valuation practices

before the respective evolutions diverged at the turn of the century. The 21st edition of Inwood's tables was published in 1891 (Jefferies, 2009).

The subsequent major paradigm shift was the adoption of sinking funds into income valuations of leasehold interests. Sinking funds are annual amounts that are invested with insurance companies to accumulate to replace the amount invested in leaseholds when such leaseholds expire. The adoption of sinking funds in valuation effectively meant that the rent multiplier, (the years purchase) now contained two rates: the usual remunerative rate and a sinking fund accumulative rate. The UK was the first to fully inculcate this paradigm shift when it adopted the dual rate assumption which was hitherto considered a questionable premise of Inwood's tables. The paradigm shift occurred with the adoption of sinking funds in the Estates Gazette published Parry's valuation tables in 1913. (Parry's Tables have since become the UK's standard valuation tables and are still in widespread use today. All the subsequent revisions over the ninety years since Richard Parry, first principal of the College of Estate management published the first edition have continued with the use of sinking funds). The use of dual rate Years' Purchase tables was highly controversial when Parry's tables were first published. However, their adoption in Parry's first edition paved the way for their subsequent wide use by the UK valuation profession. From then on, UK valuation practice considered the use of dual rate tables the norm in leasehold valuations even though leasehold investors did not actually take out sinking fund policies. This is one of the instances where valuation practice adopted a questionable paradigm shift that did not reflect actual economic circumstances. The use of dual rate valuations persists till today in the UK and Nigeria, though there are several advocates (myself included) for its eradication.

Evolution of Investment Valuation Models and Paradigm Shifts in the U.S.

In the US, following independence, 18th & 19th Century American appraisers adopted investment models brought by colonial pioneer surveyors from Europe. However, they developed their own varied

terminology, such as ‘income approach to valuation (rather than UK use of the term investment method of valuation) and capitalization rate (instead of the UK term Years Purchase). By the end of the 19th century, the income approach was not much in use as there was a paradigm shift away, particularly between and 1875 and 1925. Rather the construction cost approach came into widespread use because the country was experiencing rapid immigration and expansion and population growth. Valuations were accordingly “almost entirely on the cost of the improvements and on the selling price of the land”. This was of course a wrong interpretation of economic situations (the high property demand of the day); it is conceptually incorrect to employ cost approaches to value income producing property (production cost is not the same thing as market value – it usually produces higher estimates than market value). The over-valuations of the cost approach which appeared to be justified when demand was very high were shown to be fake when by 1925, the population growth diminished, demand fell and some locations declined in value. The result was a paradigm shift to the simultaneous use of three approaches to valuation.

At that time (1930s and onwards), the conventional paradigm that emerged in the US was that appraisers should perform all three approaches (comparison, income and cost) and then “correlate” the results. Correlation often meant taking the average of the three approaches. However, this idea of averaging or of weighted correlation was not based on an interpretation of investors thinking. The three-approach formula was incorrect because correlation is illogical and because the cost method is suspect as a market valuation process for income producing property. By the late 1960s several leading appraisers such as Frederick M. Babcock, MAI, in 1970 began questioning the validity of the correlation of three approaches even though such criticism “flies into the face of a vested interest in our (US) literature. It confronts the sacred tenets of a generation of appraisers.” Despite Babcock’s influence, the appraisal profession continued with the concept for some thirty years, although recently this has been mainly confined to definitions in some law cases. US practice no longer mandates the use of three approaches—although there are fundamentalists who still believe that any appraisal using less than the three approaches is not a complete appraisal. In the majority of situations the

profession has moved to the concept of market value; the profession has traded correlation for reconciliation, with reconciliation designed to explain any measurable difference between approaches used and, based on that analysis, the conclusion of value. Moreover, presently, where only one approach is used no reconciliation is required (Hanford, 2007).

About the time the US profession was adopting the correlated use of these approaches, the use of the income approach itself began to diverge from the UK model by incorporating split remunerative rates for land and the buildings (improvements) on the land. The “Annuityists”, whose ideas were prevailing then, developed the idea of annuity capitalization in perpetuity using the split-rate capitalization arguing “that land because of its physical indestructibility has a constant earning value and may be capitalized at a low interest rate”, but “the physical value of an improvement (buildings) will always decline with the years”. Accordingly, when the income method was employed, it “meant to capitalize in perpetuity the building at 8% and the land at 6%”. A further development of this idea came through Thorson (1936), who successfully persuaded the profession that a capitalization rate should in addition reflect sinking funds added to the capitalization rate. This led to the adoption in the US, of sinking funds to recapture the entire building value from the rental stream (sinking funds were already in practice in the UK since 1913). In effect therefore, there were three rates in use in the US at this time to capitalize rental income: split remunerative rates (one for land, and another for buildings) and an accumulative (sinking fund) rate.

A further paradigm shift away from the UK approach to investment valuation modeling occurred in the US with the adoption of finance based “band of investment” models, attributed primarily to Ross (1937). I consider this paradigm shift appropriate as it was response to the growing importance of mortgage financing in the US economy at the time and the desire to reflect such financing in investment valuation. Mortgage finance was becoming very important to the US in the 1930s. The secondary mortgage market came about in the United States largely because of various public policy measures and programs aimed at promoting more widespread home ownership. Those efforts went as far back as the 1930s. Several

government-run and government-sponsored programmes began to play an important part in fostering home ownership, and are still important in the market today. Presently, the US Federal Housing Administration (FHA), for example, encourages private mortgage lending by providing insurance against default. The Federal National Mortgage Association (FNMA or Fannie Mae) supports conventional, FHA and Veteran's Administration (VA) mortgages by operating programs to purchase loans and turn them into securities to sell to investors. Most of the loans mortgage banks sell are originated under government-sponsored programmes. US appraisers therefore correctly reflected finance in their investment valuation modeling as the purpose of income property valuation is to duplicate the behaviour of average investors. In the band of investment capitalization model, the remunerative rate was split between equity and debt investment based on the loan to value ratio. In essence, the mortgage interest rate multiplied by the loan-to-value ratio added to the percentage of equity multiplied by the required return on equity, gave the overall capitalization rate. Kazdin (1944) improved the method by multiplying the mortgage loan constant by the loan-to-value ratio so that the mortgage portion would include an allowance for recapture. This model became the mainstay of income models in USA and set in place the groundwork for mortgage-equity models that Ellwood (1959, 1977) championed.

Ellwood's premise and tables were popular in the US in the 1960s and early 1970s. It was based on a rejection of the traditional split-rate capitalization with its assumption that property buildings require a different capitalization rate from land due to building depreciation. It was also a rejection of sinking funds being used to offset building depreciation. Ellwood's premise was that all purchasers of investment property invest in minimal equity, borrowing on a standardized mortgage term with a fixed interest rate at the "standard" mortgage-value ratio. He felt that property actually appreciated in value rather than depreciated, and this appreciation is seen in the build of equity as loans get amortized. Further, he incorporated the band of investment concept in his mortgage-equity model but on a short-term projection period of stabilized income; He postulated further that all investors' objectives were to gain overall property value appreciation and thus leveraged increase in equity at reversion rather than a depreciated

value. All these factors mathematically computed (by his model's formula) into a "correct" capitalization rate, to apply to the stabilized income stream. He provided precompiled tables to do the calculations and charts to show graphically the effect of these mortgage-equity assumptions over the projected ownership or holding period. The weakness of the US investment valuation paradigm was in the assumption that all investors invest in both equity and mortgage. It was a large scale representation of actual economic circumstances. However, not every investor in property takes out a mortgage policy. In the last years of the use of Ellwood's formula - the early 1980s, the need for the use of Ellwood Tables was eclipsed when Hewlett Packard introduced the HP-12C financial calculator in 1981. This calculator did everything Ellwood's tables could do and more. The HP-12C is still widely used by US appraisers, lenders, and real estate brokers.

Advances in the US economic (mortgage) environment led to a major paradigm shift: the gradual abandonment of Ellwood's model after his death in 1974. In particular, this was because the Ellwood model was unable to cope with changes in mortgage lending terms in the US which had become non-standard from the 1970s. Ellwood's band of investment capitalization weighted the debt service requirement and the equity return requirement and the amortization period. However, when the interest rate market became highly volatile in the late 1970s and early 1980s, it led to loan due dates substantially in advance of the date the loan would have been fully amortized. As a result, the debt/equity-developed capitalization rate lost a basis of support since it depended on the availability of long-term debt and a stable interest rate environment. Appraisers faced variable rate mortgages as well as other new dimensions of investment influences such as lender's participation or equity sharing mortgages. As the purpose of income property valuation is to duplicate the behaviour of average investors, and as the Ellwood approach could not adequately duplicate such behaviour, the US appraisal profession rightly jettisoned the approach as "only an interesting historical artifact that can be abandoned as a once important idea whose time is past."

By the 1980s, there was a paradigm shift in the US to fully explicit discounted cash flow (DCF) based valuations. DCF was the only approach flexible enough to accommodate all the increasingly complex mortgage requirements in its lease-by-lease spreadsheet analysis. Apart from the influence of changing economic circumstances in this paradigm shift, noteworthy is the parallel influence of calculator and computer technology in the late 20th Century in stimulating this paradigm shift in the US. The development of electronic calculators and computers greatly assisted the commencement in the 1970's of teaching and practical use of DCFs in property. When computers came on the scene, programmes were developed permitting sophisticated DCF analysis. These computer programmes were a major technological breakthrough because they allowed appraisers to precisely time charge in months and currencies with all cash flows, including the reversionary value, discounted to a present value. DCF analyses overcame the theoretical argument that the flaw in the direct capitalization model – capitalizing one year's net income into perpetuity. The influence of professional institutions in this transition is also noteworthy. The American Institute of Real Estate Appraisal (AIREA) had issued a DCF appraisal standard (SMTC) in which it stated that DCF analysis is an acceptable analytical tool and method of valuation within the income capitalization approach to value. By the mid 1990's fully explicit DCFs as an income valuation technique had become mainstream usage in investment grade building appraisal in the USA.

As these changes were going on in the US, the UK was following a very different route which also led to discounted cash flow paradigms. After the development of Parry's valuation tables, little changes occurred in the traditional UK valuation models over the first half of the 20th Century. The economic situation encouraged rents to be static. There were no rent reviews. This may well have been due to the effect of the great depression in the late 19th Century followed by two world wars. The reconstruction efforts after the First World War and the depression leading up to the Second World War saw scarce capital, labour and materials for building investment property. Most countries focused on housing the rapidly growing population and had various forms of rent and price controls which still

exist in a limited form in the UK residential leasehold market. Landlords therefore resorted to granting long leases with no rent reviews and this attitude was reflected in investment valuation methodology.

Influence of Changes in the Economic Environment

Two important alterations in the post 1960 economic environment in the UK led to a requirement for another paradigm shift. The first alteration was in rental inflation (rent increases). The first sign of rent increases occurred after the Second World War. However, at this time and up to 1960, investors had little faith in continuing rental growth (inflation). They felt that the marginal post war increases in rent would not last. That is why throughout the 1945 – 1960 period, investors (landlords) continued with the pre-war practice of granting tenants long leases (usually 21 years) at fixed rents. However, from 1960 onwards changes occurred in investors' expectations: The assumption of no growth in future rentals was replaced by the assumption of growth. To capture this growth, the normal rent review period changed from 21 years prior to 1960 to 5 years by 1980. To account for this growth, the multiplier applied to rental income (the capitalization rate) changed from being the equated yield (internal rate of return) that reflected no growth to a much lower "all risks" yield (or initial yield) that reflected growth potential. The yield of the multiplier of rent (the all risks yield) was now more akin to the yield from equities (shares) – a phenomenon called the reverse yield gap (Baum & Crosby, 1995).

The second alteration in economic circumstances occurred in the 1970s. Prior to this, in the 1960s, insurance companies, pension and superannuation funds buoyed by a constant flow of new money started looking at diversifying their investments beyond fixed securities, equities and mortgages. Also, stock market portfolio management and performance measurement had become formalized and funds were investing in diversified portfolios made up of shares and bonds. However, by the 1970s, property began to be included in such portfolios and the portfolio fund managers naturally required a basis of comparison between property assets and shares and bonds. This comparison was not possible because property valuers were using a different language (terminology, concepts, formulae

etc) from stock market language. The stock market measures return using internal rates of return (also called equated yields, or holding period returns or money-weighted rates of return), whereas the property market used a form of income return which it called the initial yield or all risks yield. The need for the development of property investment analysis as a distinct discipline gradually became obvious. Invariably, the development of modern finance and investment analysis was born and found its way into University curricula and in business world criticisms of valuation methodology. An early criticism in this regard is that of W. Greenwell & Co. (a firm of stockbrokers) in 1976, commonly referred to as "The Greenwell Report". The report contained a critique of property investment appraisals and was regarded by valuers as displaying substantial audacity in recommending a change in valuation techniques in the direction of DCF appraisal. The stockbrokers criticized the four conventional models of investment valuation as being incorrect, illogical and by deduction, capable of leading to inaccurate appraisals. The criticism of the Greenwells spurred the RICS to sponsor a research into all valuation methods. This research (Trott 1980) criticized the conventional valuation methods (term and reversion, equivalent yield, and layer methods) and reached similar conclusions as the Greenwell report in recommending equated yield techniques (a variant of Discounted Cash Flow Analysis). This changed economic situation (inclusion of property in investment portfolios) required valuation methodology to realign to stock market terminology and formulae (such as equated yields) so as to permit inter-asset portfolio performance measurement.

These two changes in economic circumstances called for a paradigm shift in investment valuation methodology towards discounted cash flow methodology which alone could accommodate required changes. However, none was immediately forthcoming because at some point in the mid twentieth century UK valuers had become something of creatures of habit rather than thinking men using valuation modeling that was non-adaptive to the changing economic environment. This was reflected in their conservative lack of response to the post 1960 change in the inflationary economic environment. The procedure for the income approach contained

in Parry's tables as revised continued to assume that rents were not subject to rental growth at reversion (rent review), while growth prone yields were used in capitalizing the term. It was only until the mid seventies that two PhD theses (Greaves, 1972; Wood, 1972) addressed the issue, albeit with complex mathematics that was beyond the understanding of typical practitioners. By the early 1980s these techniques were simplified into discounted cash flow techniques of Marshall and the short-cut discounted cash flow techniques of Sykes and Crosby.

Another paradigm shift that began to occur in the 1970s had to do with the assumption that rents were paid annually in arrears. Early editions of the standard Parry's valuation tables addressed the economic situation that was current in the UK in the early part of the twentieth century namely that rent was received annually in arrears. However, economic circumstances changed and in the United Kingdom, rents on most classes of property investment began to be receivable quarterly in advance in the mid twentieth century. Revisions of Parry's tables in the 1960s till the 1990s however continued with the assumption that rent was payable annually in arrears. Here again, the valuation community was conservative and did not respond quickly to changes required by the change in rent payment patterns. As earlier stated, the purpose of income property valuation is to duplicate the behaviour of average investors. The earliest calls for change were in the 1970s by Rose and Bowcock who produced rent in advance tables that better reflected the reality of rental payment patterns. Rose's tables were based on rent receivable quarterly in advance with interest credited annually. Bowcock's tables considered income receivable quarterly in advance and interest accredited half yearly. Yields based upon rents receivable annually in arrears were generally described as nominal. Those calculated for other payment patterns have been described by Rose and others as effective yields. However, the term True equivalent yield is now often used instead of effective yield. Advocacy for rents receivable quarterly in advance is beginning to have some lasting influence on UK valuation practice. The latest (2002) edition of Parry's Valuation & Investment Tables (Davidson, 2002) gives recognition to this by providing tables based upon the assumption of rent being receivable quarterly in advance. It also provides Yield Conversion tables to facilitate

conversion between nominal and effective yields, the latter otherwise known as true equivalent yields (TEYs).

A 'real value' model promoted in the 1970s stripped out the effects of inflation, which had proved a problem in the post WW II era. It used an inflation-risk-free-yield (IRFY) allowing separately for 'real growth'. This model was seen as very complex and too esoteric especially in the first formulation of it, as it required valuers to change their whole mind set and move to a new paradigm. It was rejected in a RICS research report on valuation methods in 1986 which stressed that "a valuation technique, if it is to be accepted by the profession, must be easily understood and easy to use – its theoretical soundness must be matched by a practical application". The report instead recommended a nominal 'equated yield' (EY) methodology to be adopted. Utilizing 'valuation tables' the EY model remains the 'backbone' of UK investment valuation practice into the 21st Century. A hybrid real value/equated yield 'short-cut' discounted cash flow (DCF) model which was developed to heal the breach between the traditionalists and the realists gained limited acceptance in the 1980s but succumbed to fully explicit nominal value computerized DCF models (somewhat similar to that in the US) in the last decade. There however are still some major differences in concepts and terminologies between UK and US evolutions.

Recently, as a result of the quickening pace in the globalisation of investment markets, there are two ongoing types of paradigm shift. The first is in the direction of standardizing investment valuation concepts and terminology internationally. The process of globalization is a convergence, though at differing speeds, of many institutional, legal, economic, social and cultural practices and processes across the borders of nations. It is obvious that investment valuation is also going to be globalised and gradually, whatever remains of the UK versus US valuation dichotomy will be eliminated. Globalization is an ongoing phenomenon that cannot easily be stopped or avoided. The 21st Century will be a globalized economy. Property investors are increasingly becoming international, and increasingly require the same standards of quality and uniformity from their professional agents that they receive in other economies of the world. In response to globalization,

international and regional valuation standards have been developed. In the European Union for example, the regional standards of the European Group of Valuers' Associations (TeGova a.k.a. the Blue Book) has been developed and is increasingly being adopted in Europe despite the initial conservative reluctance of some European countries (like Germany) to leave their traditional country based standards. Regional standards are in turn expected to fully give way to international standards, despite the present conservative reluctance of the US and Canadian appraisal foundations (the US was a founding partner of the International Valuation Standards Committee (IVSC) with the RICS), to adopt the International Valuation Standards (IVS). Across the world, real estate vocabulary, professional standards and practice are progressively evolving towards global culture. For example, there is now a unified definition of market value adopted by both UK and US valuation institutions. I would expect that before the middle of this century there will be a final triumph of the 'International Style' over UK or US style.

A second ongoing paradigm shift involves the incorporation of risk analysis into valuations. Unquestionably, risk return analysis is the fundamental focus of modern investment analysis and as always, valuation methods should adapt to capture the thinking of investors. Valuations have hitherto been expressed as a single unchallenged non-risk adjusted figure. However, sophisticated investors in both US and UK property markets are increasingly requiring downside risk analysis and adjustment from valuers/appraisers in valuation and investment analysis. This is because they have realized that valuers cannot accurately predict rental growth and obsolescence. Risk adjustment is required particularly for large client companies or institutions that are proposing to tie up large amounts of capital for long periods of time. Risk analysis would certainly be useful to such organizations wishing to balance high-risk projects with low-risk projects. One particular project may have a high chance of making a large profit, but an equally high chance of making a loss. Such projects may need to be balanced with those having a high chance of making a small profit, with little chance of a loss. The final decision will depend on the investor's/manager's attitude towards risk or the risk that his organization

can afford to take. The point is that client institutions require a well thought out range of alternatives and possible future results of their decisions which only risk adjusted capital values would provide. To advise on the purchase of a property or mortgage value based on non-risk adjusted past market trends is increasingly becoming inadequate advice to sophisticated clients because such deterministic (unadjusted) calculations ignore the other possible capital values, which could be derived if changes occur in rental income/growth rate/yield forecasts. This is why papers have advocated a risk inclusive paradigm shift since valuer/appraisers predictions are fraught with various degrees of dependability. Unfortunately, future uncertainty continues to be the reason given by most valuers in the UK and US, for restricting the amount of probabilistic risk adjustment provided to a minimum. However, there continues to be increasing interest in the topic among valuers in these countries.

Required Paradigm Shifts in Nigeria

One thing obvious from the above discussions on evolutionary transitions and paradigm shifts in the UK and US is the importance of valuation modeling adapting to the changing economic environment. It has been emphasized that the purpose of income property valuation is to duplicate the behaviour of average investors. Accuracy and reliability problems appear when valuation modeling no longer duplicates the behaviour of investors of changed investment markets. Unfortunately, it would appear that valuation practice in Nigeria has become rather non-adaptive, conservatively sticking to outdated models. Millington once asked a question: "Are valuers thinking men or creatures of habit"? Can this be said of the Nigerian estate surveyor and valuer?

To fully appreciate this, it is necessary to trace the origins of valuation practice in Nigeria. Professional Valuation practice as a profession was unknown in Nigeria before the 1940s. The growing need for the valuation of mortgage securities, land for development, sales, insurance and other purposes incidental to growing socioeconomic development in the colonial economy gave birth to valuation practice in colonial Nigeria in the 1950s. Such valuers were trained in the UK, obtaining the professional

qualifications in the RICS. By 1957, a sub-professional course leading to the Royal Institution of Chartered Surveyors intermediate qualification was established in the Nigeria College of Arts, Science and Technology, Enugu. At this time there was no substantive Nigerian academia. Later, in 1963, with the backing of reports by UK Professors Denman and Nichol, the first Department of Estate Management was established at the University of Nigeria, Nsukka. A second Estate Management Department was established first as a sub Department in the Department of Economics and later as a Department in the Faculty of Technology at the University of Ife, Ile-Ife in 1970. The first Conference of Estate Surveyors and Valuers - the Nigerian Chapter of RICS - was held in the southwestern city of Ibadan in 1969. By 1975, Nigeria's military government promulgated a Decree (Decree no. 24 of 1975) which formally recognized the right of estate surveyors and valuers to undertake valuations and established the Estate Surveyors and Valuers Registration Board (ESVARBON) of Nigeria. ESVARBON is entirely a governmental body and it was necessary to operate a non-governmental society of valuers, the Nigerian Institution of Estate Surveyors and Valuers (NIESV). In Nigeria, there is consequently a two-pronged valuation control system, which deviates comparatively from the unilateral control of the RICS in the UK. The Nigerian Institution of Estate Surveyors and Valuers (NIESV) is a non-governmental professional club that conducts examinations leading to the award of associateship membership and also organizes annual conferences. The other body, created by Decree (ESVARBON), is a governmental body that issues operating permits sequel to the passing of an interview. There is notwithstanding a strong and complementary relationship between the two bodies. Indeed, an associateship membership with NIESV is a pre-requisite for the ESVARBON interview.

The valuation academia has grown substantially over the years. As at today, there are nine Professors in the fourteen Universities and fourteen Polytechnics teaching Estate Management in Nigeria. Valuation teaching tended to depend entirely on UK textbooks until the late 1990s when Nigerian textbooks such as Ajayi (1998) and Ifediora (1999) came out. Professional practice flourishes with a focus on the large cities of Lagos, Abuja and Port Harcourt. The most recent Directory of membership of

the Nigerian Institution of Estate Surveyors and Valuers (NIESV 2009) shows that there are now about 800 practicing firms. The Nigerian Institution of Estate Surveyors and Valuers followed the trend of other valuation regulatory bodies such as the Royal Institution of Chartered Surveyors (RICS) and The International Valuation Standards Council (IVSC) in producing the maiden edition of its own valuation guidelines in 1985 known as "The Nigerian Institution of Estate Surveyors and Valuers Guidance Notes". A more recent edition (NIESV, 2006) is largely based on the International valuation standards.

The point to be made from the above history is that Nigerian valuation theory and practice is UK inherited. However, it has remained largely static in the inherited UK theory and practice of the

1950s and early 1960s. It has not kept pace with the paradigm shifts in the UK since then, and worse still, it has not considered its own unique economic environment where it diverges from UK practice. One such area of divergence is in the continued use of the rent in arrears assumptions in Parry's Valuation Tables of the 1960s and 1970s. Since 1913, Parry's Tables have addressed the situation in the UK where rent was paid annually in arrears. When UK valuation theory was being introduced to Nigeria in the 1950s, the assumption of rent in arrears was also introduced even though rent in Nigeria is paid annually in advance. Rent payment patterns in the UK have subsequently changed to quarterly in advance patterns and the most recent edition of Parry's tables in 2002 provide conversion from rent in arrears to quarterly in advance. However, the UK tables including the 2002 revision does not adequately address the position in Nigeria and other Commonwealth countries as Ghana where most often, income is receivable annually in advance and credited annually. This notwithstanding, Nigerian valuers and their regulatory Institutions still conservatively use rent in arrears assumptions of Parry's tables apparently because Nigerian valuation practice is UK originated and oriented, even though lease terms evince dissimilarity. There is presently no institutionalized move in Nigeria yet to rectify this abnormality. Some might argue that the present irrational practice (using rent in arrears tables) should continue in Nigeria, since if all valuers in a market employ the same methods, an

accurate valuation method tends to develop notwithstanding the irrationality of the adopted method (Crosby, 1992). On the other hand, my argument has been that accuracy based on rationality is always better than accuracy based on collective irrationality. My concern has been that it should be preferable, in the interests of valuation rationality, for all valuers in Nigeria to realign in the direction of employing formulae that are based on what actually happens in the economic environment. We note that in Nigeria several valuers have developed tables that employ formulae that address the payment in advance. However, these are not at all in popular usage and have not yet received any support from the Nigerian Institution of Estate Surveyors and Valuers. A research into the use of Years Purchase was sponsored by the Nigerian Institution of Estate Surveyors and Valuers in 1997 (NIESV, 1997). A report was published but failed to receive the needed acceptance.

A second paradigm shift required in Nigeria has to do with the preoccupation with cost-based methods of valuation for valuing income producing property. It would be recalled that the earlier romance of US appraisers with cost approaches between 1875 and 1925 was based on a wrong interpretation of the market situation, and this misguided romance was abandoned when it was seen that cost approaches over stated the market value about 1925. The present romance of Nigerian valuers with cost approaches for valuing income producing property is also based on a wrong interpretation of the present inflationary economic environment. Historically, the investment method of valuation was employed in Nigeria in accordance with the principle of anticipation, and without occasion for complaint for open market valuations in the relatively stable market conditions of 1960s and 1970s. A shift over to usage of replacement cost methods started with the recession times of the early eighties. This phenomenon that occurred then is known as the reverse yield gap which is similar to the reverse yield gap experienced in the 1960s in the UK. From the early 1980s, Nigerian valuation surveyors formed the opinion that the economy was too volatile and unstable to support investment method capital values, arguing that the investment method had begun to produce estimates lower than market prices. However it was the reverse

yield gap situation that was responsible for the invalidation of rule of thumb yields of stable market conditions and the resultant confusion of some valuers, which in turn led to their embracement of cost approaches. I have argued and still argue for a paradigm shift back to investment valuation since it invariably reflects the market better than the replacement cost method for open market valuations of income producing property. Cost represents only the supply side of the market. What is required to make the investment method more accurate in reverse yield situations is that valuers should revise the yields they employ in recession times regularly to compensate for changes in investors' expectations of income growth.

A third required paradigm shift is in terms of more rational and explicit valuations. The earlier discussion has shown that both the UK and the US are achieving this through a 500 year evolution towards DCF based investment valuations. A lot of my research has been focused on advocating for such a paradigm shift in Nigerian valuations. The effort in this regard has been twofold: first we have included the teaching of DCF techniques into the postgraduate and latter undergraduate curriculum at Universities such as those at Ife, Ota, Lagos and Akure. Second, we have been advocating DCF methods for investment valuations in Journals and Continuing Professional Development (CPD) workshops (for instance Ajayi 1994, 1998, 2003 etc). The effect of this has been to greatly increase the ability of post 1993 estate management graduates to use DCF techniques. However, for now, the profession as a whole continues to be conservative, using what appears to be time tested techniques that have been abandoned in the US and UK. They consider DCF techniques such as the equated yield model as exercises in academic wizardry. Perhaps when the post 1993 graduates become sufficiently influential in valuation practice, the effect of our efforts in the academia may have more effect. In the UK, the sluggishness of the influence of University teaching of DCF methodology on short term practitioner acceptance of DCF valuations was noted by Adair et al (1996, p. 45) who declared that "despite the teaching of modern methods of valuation in educational establishments over the last 20 years, traditional methods still dominate". More recent literature (Tipping, 2006) however shows that the majority of UK practitioners now use DCF techniques.

The influence of technology in the progress of paradigms is very significant. All these models developed in conjunction with changes in technology, originally printed books of valuation tables, then slide rules followed by mechanical calculators. Modern models assisted by the availability of electronic calculators and most recently computerization sped up the increasingly complex calculations and methods of presentation in valuation reports. The invention of the electronic calculator, computers and electronic communication, emails and worldwide internet web enabled the expansion of new model promotion and adoption.

A fourth required paradigm shift has to do with the use and implementation of international valuation standards in Nigeria. As earlier stated, the Nigerian Institution of Estate Surveyors and Valuers followed the trend of other valuation regulatory bodies such as the Royal Institution of Chartered Surveyors (RICS) and The International Valuation Standards Council (IVSC) in producing the maiden edition of its own valuation guidelines in 1985 known as "The Nigerian Institution of Estate Surveyors and Valuers Guidance Notes". A more recent edition was produced in 2006. The purpose of the guidance notes as stated in a prefatory note of the 1998 edition of the journal of the Institution was to address the haphazard style of carrying out valuation amongst most Nigerian valuers. However, despite twenty five years of use of the guidance notes, and despite the recent synchronizing of the 1985 valuation standards to the global format and guidelines in 2006, there is little evidence of consistency of uniformity in the basis, methods and reporting of valuations amongst most Nigerian valuers. This continuing problem is evidenced in the use of dissimilar bases and methods of valuation as well as dissimilar reporting styles for the same valuation assignment. There are various pieces of evidence which support the existence of the problem of use of dissimilar bases and methods despite the existence of valuation standards. Ogunba (1997) and Ajayi (2009) have referred us to several Bank Managers who have noted widely diverging mortgage values for the same property by different valuation firms partly due to the use by some of open market value bases and the use by others of depreciated replacement cost bases. In addition, Ogunba and Ojo (2007) cited reports from the Professional Practice Committee

of the National Council of the NIESV alleging two valuers expressing opinions of value on the same property with very wide margins which were being investigated. Bello and Bello (2007) also report that due to the application of varied methods in valuing a particular property, fifteen different firms arrived at different values with wide variations. The other dimension to the problem has to do with the lack of uniformity in the presentation of valuations despite relevant provisions in the valuation standards. Otegbulu (2001) reports that valuers in Nigeria who have been asked to carry out multimillion Naira valuation jobs ended up presenting such reports as mere write-ups which did not conform to the standards stated in the 1985 guidance notes, a situation which invariably became a source of embarrassment to the profession. Against this background there is hitherto no supervision of and implementation of the use of valuation standards by the Nigerian regulatory institutions. No enforcement mechanism exists in the IVS for its standards. The IVSC is not a regulatory body and it has no ability to sanction any entity or valuer for breach of its standards. Any enforcement of standards by sanctioning of valuers must be done by regulatory bodies of individual States, or by self-regulating professional organizations. The NIESV and ESVARBON do have enforcement capabilities and it is suggested that they use them

A fifth required paradigm shift has to do with incorporating risk analysis in valuations. A number of postgraduate theses I have supervised have pointed to investment valuations being inaccurate, and a major cause of this is volatility in the property market. Risk analysis provides a means for the valuer to frankly admit that his predictions are fraught with various degrees of dependability. It permits him to give his client (the investor) the benefit of his opinion of the degree of certainty of his findings, expressed as a probability qualification to the deterministic value figure in his report. It may be argued that investors in Nigeria are not yet sophisticated, but this notwithstanding, we live in an increasingly globalized investment world with a clientele that is increasingly global. The global clientele is risk conscious. A development of interest in valuation/investment analysis that incorporates risk analysis on the part of Nigerian valuers is strongly advocated, now that globalization is a reality. The Nigerian estate surveyor

and valuer of the 21st century must develop his interest in quantitative risk analysis to the point that it becomes a standard practice/teaching competency. It is hoped that the escalating knowledge of statistical techniques and use of computers in the country will render simple the type of analysis that was impractical decades ago.

Recommendations

We must note from the foregoing historical discussion the recurring parallel influences of technology and changing economic systems on income valuation methodology. If the Nigerian valuer is to be relevant, he must adapt to required changes in economic environment using available technology. To refuse to do so is to become irrelevant.

The way to do this is through research. The most apparent reason for the sharp contrast between the continuously evolving valuation paradigm sophistication in the UK and the relatively static position in Nigeria is that in the UK, the regulatory Institution – the Royal Institution of Chartered Surveyors (RICS) sponsors research into required paradigm shifts such as that earlier mentioned (Trott, 1980). This is not to suggest that the RICS itself has been as proactive as it could ideally be. We note that it came under severe pressure from client bodies institutions such as the British Bankers Association following crashes in the market and most of the research it did was reactive. Nevertheless, there was institutionalized sponsoring of paradigm changing research, (even if it was somewhat belated), and this greatly helped the development of new investment valuation paradigms that were more reflective of the changing economic environment. Nigeria and the rest of Africa should not however wait for banking or other market crises to spur the move towards maturity in its valuation processes, approaches and techniques. The way forward for Nigeria in my perception, must involve proactive research partnerships between the Nigerian Institution of Estate Surveyors and Valuers, the academia as well as with other research bodies (research partnerships such as the proposed RICS/IPD joint effort in the UK to provide property indices). The Nigerian Institution of Estate Surveyors and Valuers may wish to look into the development of such town-gown research

partnerships. It is important to have such research groups to identify changes in the economy and how best to harness technology to achieve the paradigm shifts required to respond to them.

It is also important to allow investment valuation and indeed all of what is now known as estate management to be finance based. This paper has emphasized that over the centuries, valuers/appraisers draw their investment valuation assumptions from the behavior of property investors of their time. The point has been made that modeling in investment valuation, to be reasonably accurate must always mirror the thinking and analysis of property investors. It follows that valuation should be more focused on investment and finance than on brick and mortar. A preoccupation with brick and mortar tends to dull the required paradigm responses to changes in the environment of finance and investment. The term 'estate management' itself is outdated in this sense as it suggests a preoccupation with the managing of brick and mortar. There is a need for change in nomenclature. Estate management and its core specialty (valuation) should ideally be based in faculties of business/finance. In the US, this is already the case (real estate as it is called there is a specialization in the field of finance). Several UK Universities are already following this trend. Nigeria should not be left out. The National Universities Commission (NUC) and National Board for Technical Education (NBTE) should seriously consider this recommendation.

It is also important to resolve valuation/appraisal differences across the world. Globalization poses this challenge to the diversified valuation streams of the US and UK each holding to its sphere of influence. Valuation/ Appraisal theory and their application must continue to evolve to reflect changing circumstances. 21st Century valuers and appraisers, under pressure of globalization, require unified methodologies across international borders. Future international valuation standards and guidance notes should mould valuation models to utilize similar uniform formulae and terminology, ease of calculation, common definitions, recognizable symbols, and notations. New generic unified income valuation models are overdue to meet the demands of globalization.

Concluding Remarks

Mr. Vice Chancellor Sir, by the grace of God, I have spent a greater part of my life in this Great University. I served as Head of the Department for five years and the Dean of the Faculty for two terms of four years. By virtue of these positions I have served on several statutory committees of this Great University. I have also served on several committees of The Nigerian Institution of Estate Surveyors and Valuers as well as The Estate Surveyors and Valuers Registration Board of Nigeria. I have served on several NUC bodies and as external examiner both at undergraduate and postgraduate levels in virtually all Universities and Polytechnics in this country. With a deep sense of humility and by the grace of God, I wish to state that I pioneered and initiated research in Property Investment Valuation and Analysis in Nigeria and to date I have successfully supervised several M.Sc. theses and 13 Ph.D. theses many of whom are here today. Mr. Vice Chancellor, I am proud and happy to state that one of these is now a Professor. I am talking about Professor B. T. Aluko who is currently the Head of the Department. Indeed this University has served as a platform for my academic achievement and with all sense of academic fulfillment; I thank God for locating me in this wonderful place. I thank the University for providing the necessary conducive intellectual atmosphere for teaching, research and service. The University also sponsored me at the postgraduate level and recommended me for the Commonwealth Fellowship tenable at the University of Reading, England in 1991 and which greatly enhanced my research potential in the field of Property Investment Valuation and Analysis. I owe a deep sense of gratitude to Professor Andrew Baum of the Department of Land Management at the University of Reading, who was my host and who supervised the writing of the first Nigerian textbook in the field.

I shall not fail to acknowledge with thanks and gratitude the contributions of Professor Kunle Ade Wahab who nurtured the Department to a fully fledged Faculty and mentored me at my formative years and contributed in no small measure in advancing my academic career. To my students both at the undergraduate and postgraduate levels, past and present, who have been co-travellers on this academic journey, I say thank you. I wish to express my profound appreciation and gratitude to all my colleagues in the Faculty and particularly my colleagues in the Department who took this Inaugural Lecture as a 'Departmental Project' and provided the necessary financial, moral and intellectual support. I wish to particularly register and appreciate the support and the presence at this lecture of the President of the Nigerian Institution of Estate Surveyors and Valuers, Chairman and Registrar of the Estate Surveyors and Valuers Registration Board of Nigeria, members of the Estate Management Department Alumni Association and noble colleagues. I also wish to appreciate the presence of my Father in the Lord, the Provincial Pastor of Osun Province 2 of the Redeemed Christian Church of God and all other Pastors and men of God. Thank you for your prayers.

I cannot but gratefully acknowledge my parents, late Chief David Balogun Ajayi and late Mrs Victoria Aduke Ajayi. May their souls rest in perfect peace. I want to thank God for the help meet God has given me, my partner in progress, my darling wife, Olufunke Abiodun Ajayi and the children God has given me, Seun, Tosin who are following my steps in the field of Estate Management, Tobi, and our only daughter Similoluwa. I thank you for your invaluable support and understanding. To all my siblings and friends, I am grateful. Above all, except the Lord build the house, they labour in vain that build it. Unto Him alone be the glory and honour Amen.

Mr. Vice Chancellor, distinguished ladies and gentlemen, I thank you for your great attention.

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