DETERMINATION OF BUY- OUT VALUE OF LEASEHOLD INVESTMENTS IN THE NIGERIAN RESIDENTIAL PROPERTY MARKET: ISSUES AND FUTURE DIRECTIONS

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Abstract: The determination of buy-out value of leasehold interest arises when the freeholder of a real property wants to acquire and integrate the interest of the leaseholder into his holding. This study examined the relevance of contemporary valuation technique in the determination of buyout value of leasehold properties in Uyo, Nigeria. Data for the study were collected from 348 residential investment properties and 18 registered valuers in the city through field survey, using multi - stage sampling technique. Results of data analysis show evidence of periodic rental reviews in the residential property market, the expected rent review pattern being 2.9366 years (say 3 years). In the market valuation of leasehold residential properties in the city, it was found that the buy-out value of leasehold interest obtained using contemporary technique was 7.31% higher than that obtained using the conventional valuation technique. The study recommends the adoption of contemporary valuation technique in the determination of buy-out value of leasehold properties in the city as the conventional valuation technique used by valuers in the city for such valuation is not sensitive enough to interpret the realities of the property market due to its inability to incorporate rental growth and rent review frequency in its computation.

Keywords: Buy-out Value, Conventional Technique, Contemporary Technique, Leasehold Properties, Valuation, Nigeria

Özet: Uzun vadeli kira sözleşmelerinde, kiracının uzun dönemde elde edeceği getiriyi mülk sahibinin kendi mülk değerine ekleme istemi emlak satış değerini belirlemektedir. Bu çalışmada, uzun vadeli kiralamalarda emlak değerinin güncel değerleme teknikleri ile nasıl belirlenebileceği Uyo, Nijerya örneği ile incelenmektedir.Çalışmada kullanılan veriler 348 yatırım mülkünden ve 18 değerleme uzmanından çok aşamalı örneklem yöntemi ile alan araştırması yapılarak elde edilmiştir. Veri analizi sonucunda taşınmaz

mülk piyasasında dönemsel olarak mülk değerinin değiştiği ve bu dönemsel değişimin yaklaşık 3 yıl sürdüğü görülmüştür. Uzun vadeli taşınmaz mülk değerinin belirlenmesinde güncel yöntemlerle yapılan hesaplamada, mülk değerinin geleneksel yöntemlere göre %7.31 daha yüksek olduğu saptanmıştır. Geleneksel yöntemler rant getirisindeki artışı ve değişen periodik değerlemenin mülk değerine dahil edilmesinde gerekli hassasiyete sahip olmadığından, çalışma güncel yöntemlerin uygulanmasını önermektedir.

Anahtar Kelimeler: Satış değeri, Geleneksel teknikler, Güncel teknikler, Kira Hakkı, Değerleme, Nijerya

1. INTRODUCTION

The value of an interest in real property may be taken as the amount of money which can be obtained for the interest at a particular time from persons able and willing to purchase it. It has also been defined as the present worth of the future benefits that accrue to real property ownership (Appraisal Institute, 2001). However, Hargitay and Yu (1993) and Baum and Crosby (1995) argued that property owned as an investment may be freehold, connoting effective superior ownership, or leasehold, connoting an inferior form of ownership subject to a superior landlord. Thus, the activity or the whole process of determining the value of property is known as valuation (Ifediora, 2005). Valuation is one of the essential functions of the valuer (Millington, 1982; Baum and Mackmin, 1989; Richmond, 1993; and Ifediora, 2005). In Nigeria, only persons duly registered as estate surveyors and valuers under the Estate Surveyors and Valuers (Registration, etc) Act No. 24 of 1975 can perform property valuation. Whenever the freeholder of a real property wants to acquire and integrate the interest of the leaseholder(s) into his holding, valuation is usually required. Such market valuation involves the determination of buy-out value of the leasehold interest(s) comprised in the real property. On this basis, are contemporary valuation techniques relevant in the determination of buy-out value of leasehold properties in Uyo, Nigeria? The answer to this research question forms the basis of this paper.

2. THE CONCEPT OF BUY-OUT VALUE

According to Ifediora (1993) and Egolum (1994), the freehold and leasehold interests can exist in a property at the same time, though with the leasehold interest existing for just a term of years. However, such a lease will only have market value where the lease is running at a profit rent (Millington, 1982; Egolum, 1994). In this situation, the freehold interest has a future reversion to the full rental value at the end of the lease term. In cases of this nature, the sum

of the market value of both the leasehold and reversionary freehold interests is generally lower than the market value of all the interests joined and taken as a single unencumbered freehold interest (Ifediora, 1993; Egolum, 1994). This phenomenon gives rise to the concept of marriage value. Ifediora (1993) defined marriage value as an extra value created by the merging of various interests in property. In other words, marriage value is the increase in the capital value of two or more interests in property resulting from the amalgamation of the interests into a larger single interest (Egolum, 1994). Such merger may be either vertically as in the case of leaseholder and a freeholder or horizontally, as in the case of freeholders of two or more adjoining small sites joining them together to have a better developable and more saleable large single site. The merger of interests in property sometimes gives rise to the determination of buy-out value. Egolum (1994) argued that the concept of buyout arises where either the freeholder or the leaseholder wants to acquire and integrate the interest of the other into his holding. Where the freeholder is so desirous, it is referred to as lease buy-out and where the leaseholder wants to take over the freehold interest, it is called freehold buy-out. The buy-out value of any interest cannot be determined without marriage valuation. Marriage value is determined using the investment method of valuation. The investment method of valuation is based on the principle that the value of a property to an investor depends on the benefits which he expects to derive from the property. Ifediora (2005) contended that by this method, the value of a property equals the sum of the present values of all the anticipated future net incomes from the property, discounted at the appropriate yield or yields. The determination of marriage value involves:

- a) Valuation of the leasehold interest or interests as the case may be
- b) Valuation of the reversionary freehold interest
- c) Valuation of the property as an unencumbered freehold

d) Deduction of the sum total of the value of leasehold interest(s) and that of the reversionary freehold interest from the value of the property as unencumbered freehold

Thus, Marriage Value = Value of Unencumbered Freehold Interest – (Value of Leasehold Interest(s) + Value of Reversionary Freehold Interest). The Buyout value of the leasehold interest is determined if the freeholder wants to integrate the leasehold interest into his ownership. That is, if he wants to buyout the interest of the leaseholder. The buy-out value of a particular leasehold interest is determined as follows:

Value of Leasehold Interest + Number of Separate Interests subsisting in the Property

3. CONVENTIONAL AND CONTEMPORARY TECHNIQUES OF PROPERTY INVESTMENT VALUATION

Property investment valuation involves the estimation of the future benefits to be enjoyed by the owner of a freehold or leasehold interest in land or property, expressing those future benefits in terms of present worth (Baum and Mackmin, 1989). Property investment valuation is also viewed by Baum and Crosby (198f5) as the prediction of the most likely selling price of a property, to distinguish it from property investment analysis, which is the estimation of investment worth, all of which constitute the totality of property investment appraisal. Udo (2003) holds the view that property investment valuation is an exercise which involves obtaining factual solution to the question of "how would a group of investors (representing the market) assess the present value" ...? This exercise involves the use of mathematical model (Udo, 2003) and coincides with the view of Baum and Mackmin (1989) that property investment valuation as a process requires careful consideration of a number of variables before figures can be substituted in mathematically proven formula. The formula or model used represents real-life situation. Property investment valuation basically requires the estimation of two major parameters. These parameters are the rental value and the capitalization rate applied to the current and projected cash flows (Sykes, 1983).

Property investment valuation is generally based on the thinking that there is a relationship between the net income of an investment property and its capital value and that the capital value of an investment property at a given period of time is the summation of the discounted values of its future income flows during the period. The relationship between the net income of an investment property and its capital value is expressed by a multiplier. Property valuers refer to this multiplier as the Years Purchase or Capitalization Factor (Millington, 1982; Enever, 1986; Baum and Mackmin, 1989; Ifediora, 1993; Richmond, 1993; Mackmin, 1995; Ajayi, 1998; Johnson, Davies and Shapiro, 2000; Kalu, 2001; Udo, 2003; Ifediora, 2005 and Wyatt, 2007). Based on the underlying assumptions of the conventional and contemporary valuation techniques of property investment valuation, there are two basic forms of property income multipliers. These are the Traditional Years' Purchase (Traditional YP) and the Discounted Cash Flow Years' Purchase (DCFYP).The Traditional YP is based on the logic of the conventional technique of property investment valuation and as such cannot handle rental growth and rent review explicitly in its computation. The DCFYP is based on the logic of the contemporary technique of property investment valuation. The DCFYP is derived from the Equated Yield and Real Value models (Baum and Crosby, 1995) and is given as follows:

$$DCFYP = \frac{YP t@e \times YPn@i}{YPt @i}$$

(1)

Where t = rent review frequency

n= total term of property interest

e = equated yield or target rate

i = inflation risk free yield, obtained as (1+e)/(1+g) - 1, where g is the annual rental growth rate.

Gane (1995) gave an alternative to the DCFYP model as

$$\frac{(1-r^n)}{(1-r)} \tag{2}$$

Where $r = (1+g)^{t}/(1+e)^{t}$

n = number of rent review periods in the term

t, g and e are as defined above.

Apart from incorporating rental growth and rent review in its computation, the DCFYP appraises property comparatively with other assets in the investment market through one of its inputs, the equated yield. The DCFYP is derived from the Equated Yield and Real Value models (Baum and Crosby, 1995). Thus, the inputs of the Traditional YP are initial yield and property term while those of the DCFYP are property term, initial yield, equated yield, rent review frequency, annual rental growth rate, and inflation risk free yield. The advent of inflation in the property market brought with it some attendant effects on property investors. This made it necessary for the appraisal of property investments to be in comparison with alternative investment vehicles such as index-linked gilts, fixed interest securities, bank deposits and equities or ordinary shares. The existence of inflation in the investment market had initially brought out the inherent qualities between inflation prone investments producing inflation-prone return and inflation proof investments producing inflation-proof return. In the property market, the effect of inflation gradually resulted in the introduction of rent reviews, a problem which could not be handled by the traditional property investment valuation models. These among other issues, necessitated research into investment valuation techniques appropriate for the valuation of property investments in times of inflation. Prominent among these research works are those of Greaves (1972); Wood (1972); Marshall (1976); Sykes (1981); and Crosby (1985). Conclusions drawn from these studies point to the fact that the yield used in conventional property investment valuation is growth implicit and cannot perform as a target rate or expected internal rate of return as it had performed prior to the advent of

inflation into the property market. Methods of property investment valuation which explicitly consider prospective future income flow generated by property investments, including rental and capital growth of the investment to reflect the treatment of future value changes due to the effect of inflation on the income flow, and which appraise property investments comparatively with other investment vehicles available in the investment market were proposed. These proposals resulted in the emergence of contemporary valuation techniques namely; Real Value Approach (Wood, 1972); Rational Approach (Greaves, 1972; Sykes, 1981; McIntosh, 1983); Equated Yield Technique (Marshall, 1976), and Real Value/Equated Yield Hybrid (Crosby, 1985; Crosby, 1986; Baum and Crosby, 1995). Contemporary Valuation models are doing the same thing in a different way. Baum and Crosby (1995) argued that they are Discounted Cash Flow (DCF) models, all of which are expressions of the same explicit cash flow projection and capitalization process. Contemporary valuation models have some common inputs, namely; expected future rental growth; the rent review pattern; equated yield and initial yield. The inflation risk free yield (i) is only common to real value models and can be determined given equated yield (e) and implied rental growth rate (g). A proper reconciliation of the logic of the models to the same basis clearly identifies this relationship. In Nigeria, the applicability of contemporary valuation techniques to the valuation of property investments has been explored by Udo (1989); Ajayi (1998); Ighodalo(2007);Ogunba and Ojo(2007) and Udoekanem (2009) and using model building techniques, contemporary models have been fully proposed for property investment valuation within the context of the Nigerian land tenure system (Udo, 1989; Udoekanem, 2009).

4. METHODOLOGY AND DATA

Data for the study were collected through field survey using multi - stage sampling technique. These stages include selection of residential estates within each residential zone, selection of property types within each estate and selection of occupiers within each property type for data collection. The study area was delineated into four residential zones for data collection. Zone A consists of bungalows, flats and maisonettes in Itiam/Ewet and Mbiabong lowdensity housing estates. Zone B comprises bungalows in medium - density Ebiye Haven. Zone C consists of bungalows and flats in Federal Housing Estate, Abak Road and Zone D consists of tenements in the high – density streets adjoining Ikot Ekpene, Oron and Nwaniba Roads. A total of 400 residential properties were selected randomly from the four respective zones in the ratio of 16: 12:8:4 commensurate with the sizes of the zones. To obtain data specific to property type, structured questionnaires were administered to the 400 property occupiers. To obtain data specific to valuation techniques, structured questionnaires were administered to 21 registered property valuers active in the residential property market in Uyo, selected through purposive

sampling. 348 questionnaires properly completed by property occupiers and 18 questionnaires properly completed by valuers were used for analyses. Property data collected for the study include data on rent review frequency in the properties as presented in Table 1.

| Residential Property Type | Rent Review Intervals observed and | | | | | |
|-------------------------------|------------------------------------|------|------|------|------|-------|
| | frequency of properties. | | | • | | |
| | 2yrs | 3yrs | 4yrs | 5yrs | 6yrs | Total |
| 1-Bedroom Semi-detached | 3 | 4 | 1 | - | - | 8 |
| bungalow | | | | | | |
| 2-Bedroom Semi-detached | 14 | 17 | 5 | 2 | - | 38 |
| bungalow | | | | | | |
| 2-Bedroom detached bungalow | 23 | 29 | 9 | 4 | 1 | 66 |
| 2-Bedroom Semi-detached | 8 | 10 | 3 | 1 | - | 22 |
| maisonette | | | | | | |
| 3-Bedroom flat | 4 | 5 | 2 | 1 | - | 12 |
| 3-Bedroom Semi-detached | 5 | 7 | 2 | 1 | - | 15 |
| maisonette | | | | | | |
| 3-Bedroom detached maisonette | 7 | 9 | 2 | 2 | 1 | 21 |
| 4-Bedroom flat | 9 | 11 | 3 | 1 | 1 | 25 |
| 4-Bedroom Semi-detached | 2 | 3 | 1 | - | - | 6 |
| bungalow | | | | | | |
| 4-Bedroom detached maisonette | 7 | 9 | 2 | 1 | - | 19 |
| 5-Bedroom detached maisonette | 1 | 1 | 1 | - | - | 3 |
| Tenements | 40 | 50 | 14 | 6 | 3 | 113 |
| Total | 123 | 155 | 45 | 19 | 6 | 348 |

Table 1: Rent Review Intervals Observed in Residential Properties in Uyo,Nigeria

Source: Author's Field Survey

Valuers were asked which multiplier(s) they use in capitalising rental incomes of residential investment properties in Uyo. These data are required to ascertain whether techniques used by valuers in the market valuation of residential investment properties in Uyo reflect the realities of the property market in the city. Responses given by them show that most valuers in the city use the Traditional Years Purchase in the capitalisation of rental incomes from investment properties as presented in Table 2.

| Income Multiplier | No. of Responses |
|----------------------------|---------------------|
| DCF Years Purchase | 2 |
| | (11.11%) |
| Traditional Years Purchase | 9 |
| | (50.00%) |
| Both | 7 |
| | (38.89%) |
| Total | 18 |
| | (100%) |

Source: Author's Field Survey

Valuers were also asked which methods they usually adopt in selecting capitalisation rate for market valuation. These methods were identified to include market analysis and intuition. Market analysis involves the analysis of comparable market transactions to obtain the capitalisation rate for market valuation. On the other hand, intuition entails determining market capitalisation rate based on the feelings of the valuer rather than considering the facts and realities in the property market. Responses given by valuers show that most valuers in the city select capitalisation rates for market valuation through market analysis as presented in Table 3.

| Table 3: Methods of Selecting Capitalization ra | ate for market Valuation |
|---|--------------------------|
| | NT C |

| Methodology | No of | | |
|-----------------|-------------|--|--|
| | Responses | | |
| Market Analysis | 11 (61.11%) | | |
| Intuition | 2 (11.11%) | | |
| Both | 5 (27.78%) | | |
| Total | 18 (100%) | | |
| Total | 18 (100%) | | |

Source: *Author's Field Survey*

5. RESULTS AND DISCUSSION

Results of data analysis reveal that most rent review in residential properties in the city are between 2 and 3 years, representing about 79.89% of the intervals observed. The expected rent review pattern is 2.9366 (say 3 years). The analysis for expected rent review pattern is presented in Table 4 as follows:

Table 4: Expected Rent Review Pattern in Residential Investment **Properties in Uyo, Nigeria**

| Rent | Frequency | Occurrence % | Probability | Expected Rent Review |
|--------|-----------|--------------|-------------|----------------------|
| Review | | | | Pattern |

| Pattern | | | | |
|---------|-----|-------|--------|--------|
| 2 years | 123 | 35.35 | 0.3535 | 0.7070 |
| 3 years | 155 | 44.54 | 0.4454 | 1.3362 |
| 4 years | 45 | 12.93 | 0.1293 | 0.5172 |
| 5 years | 19 | 5.46 | 0.0546 | 0.2730 |
| 6 years | 6 | 1.72 | 0.0172 | 0.1032 |
| Total | 348 | 100 | 1.0000 | 2.9366 |

Source:*Computed from Data in Table 1*

As shown in Table 4, rental values of residential investment properties in Uyo are reviewed at periodic intervals with short rent review frequency. This should be reflected in the methodologies adopted by valuers in the determination of buy-out value of property interests in the city. The Discounted Cash Flow Years Purchase (DCFYP) is the income multiplier that can incorporate issues of rental growth and rent review in the market valuation of property investments in times of inflation. Is market valuation of residential property investments in Uyo based on this multiplier? This is another important question which this study seeks to answer. In answering this question, the Chi-Square (χ^2) test statistic was used. Quantitatively,

$$\chi^2 = \sum (O - E)^2$$
E

Where χ^2 = Chi-Square value

O = Observed Frequency

E = Expected Frequency

The calculated χ^2 value was compared with the critical χ^2 value at degree of freedom of 2 and at 0.05 level of significance to determine whether market valuation of residential property investments in Uyo is based on the DCFYP. The calculation of χ^2 is based on data on income multipliers used by valuers in Uyo in capitalising rental incomes of residential property investments with growth prospects, extracted from responses to questionnaire completed by valuers in the city as presented in Table 3. The critical value of χ^2 at degree of freedom of 2 and at 0.05 level of significance is 5.99. This is greater than the calculated χ^2 value. Since the calculated χ^2 (4.34) is less than the critical χ^2 (5.99), market valuation of residential property investments in Uyo is not based on the DCFYP. This implies that the Discounted Cash Flow Years Purchase (DCFYP) is not the predominant income multiplier used by valuers in Uyo in the capitalisation of incomes from residential property investments with rental review prospects in the city.

6. VALUATION CASE STUDY

A block of 3No.Three-bedroom flats situated in Ewet Housing Estate in Uyo, Nigeria, is let on ground lease from the freeholder with 45 years unexpired term. The holder of the Certificate of Occupancy issued by the government pays a ground rent of \aleph 1,000 p.a which is subject to growth at 5% and 3 years reviews. Current ground rent is \aleph 1,500. p.a and next review of ground rent is due in 2 years. The property has a total rent of \aleph 450,000 p.a which is exclusive of all liabilities except repairs. Current rack rental value is \aleph 600,000. p.a. Rental history shows that the predominant review for similar properties is at 5 years interval. The current rent on the property is due for review in 3 years' time. Similar rack rented freehold properties sell for capitalization rate of 6% when let on the basis of 5 yearly rent reviews. Further details reveal that repairing liability is \aleph 30,000 and increases at a rate of 7% p.a. Redemption yield on gilt-edged stocks is 13%. Determine the Buy-out value of the leasehold interest.

7. APPLICATIONS

7.1.Conventional Technique

A. Valuation of Reversionary Freehold Interest

The equivalent yield model is adopted for the conventional reversionary freehold valuation as follows:

| Ground Rent YP 2yrs @ 6% Reversion to current ground rent | № 1,000 p.a 1.833 № 1,500 p.a | ₦ 1,833 | | |
|---|---|-------------------------|----------|---|
| YP 43yrs @6% PV 2 yrs @6% 22 250 | 15.3 0.89 | <mark>₩</mark> 20 | ,426 | N |
| 22,259 Reversion to estimated rental value (net) | ₩ 570,000 | 2.0 | | |
| YP Perp @ 6% | 16.667 | p.a | | |
| PV 45yrs @ 6% | 0.0727 | N 690,651 | <u>l</u> | |
| | Valuation | N 712, 910 | | |
| | S | ay N 713, 00 | 0 | |

B. Valuation of Leasehold Interest

A margin of 1% is added to the initial yield for the conventional valuation of leasehold interest as follows:

| Rent Received | ₦ 450,000 p.a | |
|--|-------------------|----------------------|
| Ground Rent | 1,000 p.a | |
| Repairs | <u>30,000 p.a</u> | |
| Profit Rent | ₩ 419,000 p.a | |
| YP 3yrs @7% & 2 ^{1/2} % tax 40% | 1.6345 | N 684,856 |
| Reversion to current rental value | ₦ 600,000 p.a | |

| Ground Rent | 1,000 p.a | |
|------------------------------------|-------------------|-------------------------|
| Repairs | <u>30,000 p.a</u> | |
| Profit Rent | ₩ 568,500 p.a | |
| YP 42yrs @8% & $2^{1/2}$ % tax 40% | 9.7276 | |
| PV 3yrs @ 8% | 0.7938 | <u>₩</u> 4, 389,826 |
| | Valuation | <u>₩ 5,074, 682</u> |
| | Say | N 5,075, 000 |

C. Valuation of Unencumbered Freehold Interest

| Estimated Net Rental Value | N 570,000 p.a |
|----------------------------|--------------------------|
| YP Perp @ 6% | 16.667 |
| Valuation | N 9, 500, 190 |

7.2 Contemporary Technique

The Real Value/Equated Yield hybrid model is adopted for the valuation. In order to get the inflation risk free yield (i), the equated yield (e) and the implied annual rental growth (g) must be determined. The equated yield is assumed to be 2% over yield on gilt-edged stocks and is 15%. The implied annual rental growth rate is calculated as follows:

$$\mathbf{k} = \mathbf{e} \left\{ \begin{array}{c} \mathbf{e} \\ \hline (1+\mathbf{e})^t - 1 \end{array} \right\} \mathbf{x} \qquad \mathbf{p}$$

Where k = initial yield e = equated yield p = rental growth over the whole review period t = rent review interval $0.06 = 0.15 - \left\{ \begin{array}{c} 0.15 \\ (1.15)^5 - 1 \end{array} \right\} p$

0.06 = 0.15 - 0.1483p0.1483p = 0.09p = 0.6069p = 60.69% (rental growth over 5 years) But $1 + p = (1+g)^t$ $g = {}^{t}\sqrt{1+g}$ $g = {}^{t}\sqrt{1+g} - 1$ $g = {}^{5}\sqrt{1.6069} - 1$ g = 0.0995 g = 9.95% (rental growth rate per annum) The inflation risk free yield on freehold interest is analyzed as follows: i = 1 + e - 11

$$\frac{1+g}{i=1.15} - \frac{1.0995}{i=4.59\%}$$

For capitalizing the annually rising repairing liability for the freeholder, the growth adjusted yield is analyzed as follows:

$$\frac{i = 1 + e}{1 + g} - 1$$

$$\frac{i = 1.15}{1.07} - 1$$

$$i = 7.48\%$$

The inflation risk free yield on ground rent is analysed as follows:

$$\frac{i = 1 + e}{1 + g} - 1$$

$$\frac{i = 1.15}{1.05} - 1$$

$$i = 9.52\%$$

A. Valuation of Reversionary Freehold Interest

| Ground Rent | ₩ 1,000 p.a |
|-----------------------------------|-------------------------------|
| YP 2yrs @15% | 1.6260 N 1,626 |
| Reversion to current ground ren | t N 1,500 p.a |
| YP 3yrs@ 15% x <u>YP 43 yrs@</u> | 9.52% |
| YP 3yrs @ 9 | .52% |
| = 9.3703 | |
| PV 2yrs @ 9.52% 0.8337 | 7.812 N 11,718 N 13,344 |
| Reversion to estimated rental va | lue N 600, 000 p.a |
| YP 5yrs@ 15% x <u>YP Perp @ 4</u> | <u></u> |

YP 5yrs @ 4.59% = 16.6667 PV 45yrs @ 4.59% 0.1327 2.2120 <u>₩1,</u> 327,200 Less: ₩1, 340,544 ₩ 30, 000 p.a **Repairing Liability** YP 1yr @ 15% x <u>YP Perp @ 7.48%</u> YP 1yr @ 7.48% 12.5 375,000 ₦ 965,544 Valuation Say N 966,000

B. Valuation of Leasehold Interest

To account for the extra risks in leasehold investments, an extra 2% is added to the freehold equated yield to arrive at the equated yield for leasehold interest. This has already been analyzed and proved (Gane, 1995).Thus, the inflation risk free yield on leasehold interest is analyzed as follows:

$$\frac{i = 1 + e}{1 + g} - 1$$

$$\frac{i = 1.17}{1.0995} - 1$$

$$i = 6.41\%$$

The inflation risk free yield on ground rent is analyzed as follows:

1

$$\frac{i = 1 + e}{1 + g} - 1$$

$$\frac{i = 1.17}{1.05} -$$

$$i = 11.43\%$$

For capitalizing the annually rising repairing liability for the leaseholder, the growth adjusted yield is analyzed as follows:

$$\frac{i = 1 + e}{1 + g} - 1$$

$$\frac{i = 1.17}{1.07} - 1$$

$$i = 9.35\%$$

Valuation

Term income (Repairs inclusive) ₦ 450,000 p.a N994, 230 YP 3yrs @ 17% 2.2094 Reversion to current rental value N600, 000 p.a YP 5yrs@ 17 % x YP 42 yrs@ 6.41% YP 5yrs @ 6.41% = 11.1007 PV 3yrs @ 6.41% 0.83 9.2136 N 5,528,160 Less: ₦ 6,522,390 Ground Rent ₦ 1,000 p.a YP 2yrs @17% 1.5853 **₩**1,585 Reversion to current ground rent N 1,500 p.a YP 3yrs@ 17% x <u>YP 43 yrs@ 11.43%</u> YP 3yrs @ 11.43% = 7.4609 0.8054 6.009 ₩9,014 PV 2yrs @ 11.43% Less: **Repairing Liability** N 30,000 p.a YP 1yr @ 17% x YP 45yrs @ 9.35% YP 1yr @ 9.35% 9.8179 ₩294, 537 305,136 ₦ 6,217,254 Valuation

Say ₦ 6, 217, 000

C. Valuation of Unencumbered Freehold Interest

| Estimated Rental Value | N600, 000 p.a | |
|------------------------------|---------------|--------------|
| YP 5yrs@ 15% x YP Perp @ 4.5 | <u>59%</u> | |
| YP 5yrs @ 4.59% | | |
| | = 16.6667 | N 10,000,020 |

Less:

 Repairing Liability
 № 30,000 p.a

 YP 1yr @ 15% x
 YP Perp @ 7.48%

 YP 1yr @ 7.48%
 12.5

 375,000

 Valuation

 № 9,625,020

Say N 9,625,000

The Buy-out value of the leasehold interest in the case study is determined as follows:

| Property | Valuation | | Differential |
|---|------------------------------|-----------------|------------------|
| Interest | Conventional(N) | Contemporary(N) | (N) |
| Reversionary Freehold | 713,000 | 966,000 | 253,000 |
| Leasehold | 5,075,000 | 6,217,000 | 1,142,000 |
| Unencumbered Freehold | 9,500,190 | 9,625,000 | 124,810 |
| Buy-out Value of Leasehold Interest | 6,931,095 | 7,438,000 | 506,905 |

 Table 6: Buy-out value of the leasehold interest comprised in the case study using Conventional and Contemporary Valuation Techniques

8. FINDINGS

Most rent review in residential investment properties in Uyo are between 2-3 years, representing about 79.89% of the intervals observed. The expected rent review frequency is 3 years. This expectation is based on the anticipation of growth in future rental values over present rental values by property investors in the city. Valuers in Uyo are not responding to current trends in the property market. This is reflected in the income multiplier which they use in market valuation. The Traditional Years Purchase is still the most preferred multiplier for the capitalization of rental incomes from property investments in Uyo instead of the Discounted Cash Flow Years Purchase (DCFYP), even when evidence from the property market shows periodic rent review intervals. In the determination of buy-out value of the leasehold interest comprised in the case study, the contemporary technique produced a differential of ¥ 506,905 over the valuation based on conventional technique, representing a difference of 7.41%. This difference arises as a result of the inadequacy of the conventional technique in handling complex valuation problems involving rental gearing and rent reviews. Hence, contemporary technique produces better buy-out value of leasehold investments in the Nigerian property market than the conventional technique.

9. CONCLUSION

The determination of buy-out value of leasehold interest arises when the freeholder of a real property wants to acquire and integrate the interest of the leaseholder into his holding. Property investment valuation techniques adopted for determination of buy-out value of leasehold properties in the residential property market in Uyo should reflect the realities of the property market in the

city. Data from the property market in Uyo analyzed for this study show among other things, the existence of periodic rent review intervals in the property market in the city. The traditional years purchase which is still the most preferred multiplier for the capitalization of rental incomes from property investments in the city cannot reflect these realities of the property market in the valuation process. This is because the multiplier cannot treat future value change in its computation. With short frequency of rent reviews on the building and provision for payment of ground rent in the Nigerian Land Use Act, which is subject to reviews, the traditional years purchase cannot handle complex rental gearing. This makes the use of contemporary property investment valuation techniques in the determination of buy-out value of leasehold properties in the residential property market in the city very necessary.

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