Andrew Baum • David Mackmin • Nick Nunnington

Sixth Edition

The Income Approach To Property Valuation

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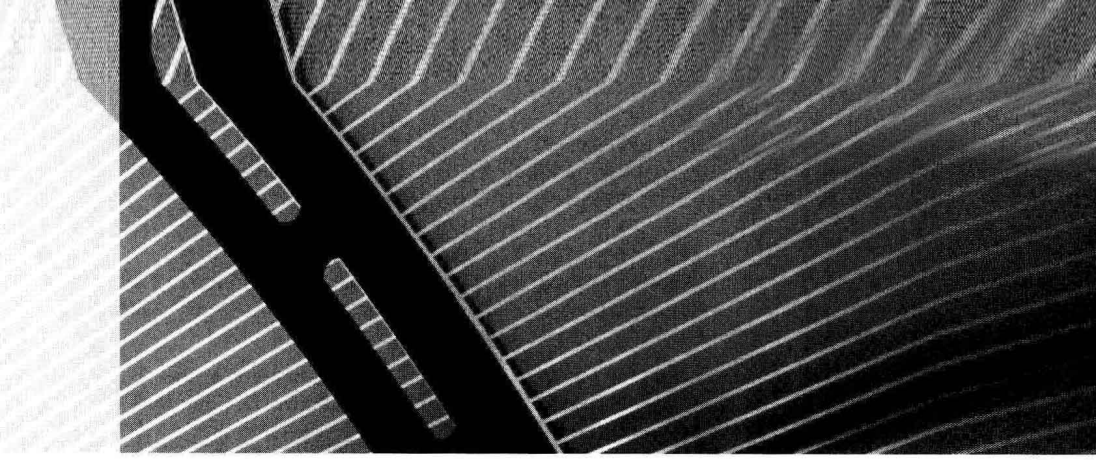

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Preface to Sixth edition

This edition of the book begins with an introduction and a quick start to the income approach; this is followed by a consideration of the investment arithmetic which underpins the income approach and a review of the basic principles of valuation. The application of the approach to the assessment of the market value of freehold and leasehold investments is then considered, before looking at the impact of legislation on what would otherwise be a relatively unfettered market. Finally, the book covers a number of specialist areas of valuation relating to the use of the profits version of the income approach, development properties and investment analysis. Throughout the book it is assumed that the reader has some knowledge of who buys property, why they buy it and what alternative investment opportunities there are, and also that the reader will have some knowledge of the nature of property as an investment. The reader should have some awareness of the social, economic and political factors that influence the market for and the value of property. For further consideration of these issues readers are referred to the sister publication, *Principles of Valuation*, also by EG Books (an imprint of Elsevier).

In preparing the sixth edition, we have taken note of comments and reviews submitted to our editor at Elsevier. In particular, we have reflected on the dual rate battle and have removed almost all reference to a method which we have always had concerns over. Those who miss it will find support in the Appendices for their teaching and learning. We have tried to enhance the material so as to leave readers with fewer puzzles of 'how did they do that' or simply 'why that'? We have extended some of the spreadsheet material and uses of standard software; but left much to the reader to discover for his or herself as finding Excel® solutions to valuation tasks is, in itself, a powerful learning tool. Leasehold Enfranchisement, which kept growing, has gone to where it belongs in the main statutory valuation text books. One weakness has been our consideration of the Profits Method. This has been addressed in this edition with a new chapter by Howard Day of Howard Day Associates Ltd, Chartered Surveyors providing property advice to the leisure sector.

We have sought to use terminology which is consistent with the Royal Institution of Chartered Surveyors' (RICS) *Valuation Standards* (the Red Book) and which reflects the international use of the income approach. A particular change is the adoption, for the most part, of the internationally recognised Present Value of £1 per annum (PV£1 pa) in place of the UK valuers' Years' Purchase. Whilst valuers in the United Kingdom do use the 12th edition of *Parry's* Valuation and Investment Tables, most students now use calculators, Excel® and valuation software; to conform to this we refer to the financial functions rather than to tables.

As in previous editions, all examples are for illustration only and are not intended to be a reflection of current market rents and yields.

The art or science of valuation has developed since the first edition and our purpose now is to provide a comprehensive review of the income approach in as simple a style as possible, exploring the wide range of opinions and views that have been expressed about the how, why and when of the methodology. For practitioners, we would ask that if you see an approach which appears to be a new technique to you then please keep an open mind; try it and see, but remember market value is your opinion, not just the mathematical result of the income approach you chose to use.

Andrew Baum
David Mackmin
Nick Nunnington.
Reading, Sheffield, Abu Dhabi
2011

Acknowledgements

Malcolm Martin BSc, FRICS, FNAEA provided much needed assistance in the fifth edition on leasehold enfranchisement which has now gone, but we have made use of the revisions he made to the section on residential valuation. However, if we now have it wrong please blame us, not Malcolm.

Andrew and David still recall the enthusiasm for their ideas in 1979 from Peter Byrne and David Jenkins and will continue to say thank you.

A major change in this edition has been the recognition of the growth in the leisure sector of the market and the coming of age of the profits approach. We have responded with a much enlarged chapter on this method which has been written for us by Howard Day BSc (Hons.) FRICS, MAE, MCIArb, FAVLP of Howard Day Associates Ltd, Liberty House, London W1B 5TR, Chartered Surveyors providing property advice to the leisure sector.

Extracts from the RICS Valuation Standards (2011 edition), the Red Book, are RICS copyright and are reprinted here with their permission. Readers are advised that the 7th edition of the Red Book is effective from 2nd May 2011.

Argus Developer software has been used in Chapter 10 and Appendix C to illustrate various aspects of development appraisal.

Contents

Chapter 1

Introduction and Quick Start to the Income Approach

Introduction

Cairncross (1982), in his *Introduction to Economics*, expresses his view that 'economics is really not so much about money as about some things which are implied in the use of money. Three of these - exchange, scarcity and choice - are of special importance'. Legal interests in land and buildings, which for our purposes will be known as property, are exchanged for money and are scarce resources. Those individuals fortunate to have surplus money have to make a choice between its alternative uses. If they choose to buy property they will have rejected the purchase of many other goods, services, alternative investments such as stocks and shares, or of simply leaving it in a savings account or doing nothing. Having chosen to use their surplus money to purchase property, they will then have to make a choice between different properties. Individuals investing in pension schemes, endowment or with profits life assurance policies are entrusting their money to others to make similar choices on their behalf.

Valuation is the vocational discipline within economics that attempts to aid that choice in terms of the value of property and the returns available from property. Value in this context can mean the market value in exchange for property rights, as well as value to a particular person or institution with known objectives, currently referred to as an appraisal, or assessment of worth, or investment value. Valuation was defined in the Royal Institution of Chartered Surveyors (RICS) *Valuation Standards* (The Red Book) (2010) as:

> A valuer's opinion of the value of a specified interest or interests in a *property*, at the *date of valuation*, given *in writing*. Unless limitations are agreed in the *terms of engagement* this will be provided after an inspection, and any further investigations and enquiries that are appropriate, having regard to the nature of the *property* and the purpose of the *valuation*.

A valuer in the context of this book would be a member of the RICS or Institute of Revenues Rating and Valuation (IRRV) who meets the qualification requirements specified in Valuation Standard (VS) 1.4 and has the knowledge and skills specified in VS 1.6, and who acts with independence, integrity and objectivity as specified in VS 1.7.

The RICS Valuation Standards adopt the International Valuation Standards (IVS) definition of market value, namely:

> The estimated amount for which an asset or liability should exchange on the *valuation date* between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion. (RICS VS 3.2).

It also adopts investment value as:

> The value of an asset to the owner or a prospective owner. (May also be known as worth.) (RICS VS Glossary)

At the time of preparing this edition, the International Valuation Standards Council (IVSC) has a consultation draft out for a new edition of the IVS and the RICS 7th edition of The Red Book, which is compliant with IVS, is scheduled for publication in April 2011 with an effective date of 2nd May 2011. Readers are advised to refer to the new edition after publication as it is compulsory reading for valuers and there may be changes which, as yet, we have not been able to incorporate. The 7th edition is different; for example the word property in the definition of MV has been replaced with asset as MV should be defined consistently for all asset classes not just property.

Property is purchased for use and occupation or as an investment. In both cases the purchaser measures the expected returns or benefits to be received from the property against the cost outlay. The valuer's task is to express these benefits in monetary terms and to interpret the relationship between costs and benefits as a rate of return, thus allowing the investor to make a choice between alternative investment opportunities.

Since 1945, the property and construction industries have grown in importance; investing in property has been indiscriminately considered to be a 'safe' investment. The position post the banking crisis in 2007 aptly illustrates how dangerous it can be to make such an assumption. The growth in pension schemes, life funds, property unit trusts, as well as direct investment by individuals, has completed the transition of the property market into a multi-billion pound industry. As a result, there has been a growth in demand for property to be valued in order to establish market value and for it to be re-valued for portfolio and asset management purposes.

Property as an investment is different to other forms of investment. The most obvious difference is its fixed location geographically, hence the importance of the quality of that location for the land's current or alternative uses as determined by its general and special accessibility, and its interrelationship with other competing and complementary buildings, locations and land uses. Once developed, the quality of the investment is influenced by the quality of the permitted planning use and the quality of the physical improvements (buildings) on the site. In addition and essential to the assessment of exchange value is the quality of the legal title. Is it freehold or leasehold? The owner of a freehold title effectively owns all the

land described in the title deeds in perpetuity, including everything below it to the centre of the earth and everything above. Freehold rights may be restricted by covenants in the title and/or by the rights of others, such as rights of way. A leaseholder's rights are limited in time (the length of the lease) and by the terms and conditions (covenants) agreed between landlord and tenant and written into the lease, or implied or imposed by law or statute. The market value of a tenanted freehold property will also be affected by the quality of the tenant in terms of their covenant strength and the quality of the lease in terms of the appropriateness of the lease conditions to that type of property used for that purpose in that location.

To be competent, the valuer must be aware of all the factors and forces that make a market and which are interpreted by buyers, sellers and market makers in their assessment of market price. In an active market where many similar properties with similar characteristics and qualities are being exchanged, a valuer will, with experience, be able to measure exchange value by comparing that which is to be valued with that which has just been sold. This direct or comparative method of valuation is used extensively for the valuation of vacant possession, freehold, residential property; for the valuation of frequently sold and easily compared commercial and industrial property and to assess the market rent of all property. Differences in age, condition, accommodation and location can all, within reason, be reflected by the valuer in the assessment of value. Differences in size can be overcome by adopting a unit of comparison such as price per hectare, price per square metre or rent per square metre.

The more problematic properties are those for which there is no ready market, those which display special or unique characteristics, those which do not fully utilise the potential of their location and are therefore ripe for development, redevelopment or refurbishment, those that are tenanted and are sold as investments at prices reflecting their income generating potential; and leasehold properties.

For each of these broad categories of property, valuers have developed methods of valuation that they feel most accurately reflect the market's behavioural attitude and which may therefore be considered to be rational methods.

In the case of special properties such as oil refineries, glassworks, hospitals and schools, the usual valuation method is the cost or contractor's method. It is the valuer's method of last resort, and is based on the supposition that no purchaser would pay more for an existing property than the sum of the cost of buying a similar site and constructing a similar building with similar utility written down to reflect the physical, functional, environmental and locational obsolescence of the actual building. This approach is sometimes referred to as a Depreciated Replacement Cost approach, or DRC for short.

Properties with latent development value are valued using the residual or development (developer's) method (see Chapter 10). The logic here is that the value of the property (site) in its current state must equal the value of the property in its developed or redeveloped

state, less all the costs of development including profit but excluding the land. In those cases where the residual sum exceeds the value in its current use, the property is considered ripe for development or redevelopment and, in theory, will be released for that higher and better use.

All property that is income producing or is capable of producing an income in the form of rent, and for which there is both an active tenant market and an active investment market, will be valued by the market's indirect method of comparison. This is known as the investment method of valuation or the income approach to property valuation and is the principal method considered in this book.

The income approach and the income-based residual approach warrant special attention if only because they are the valuer's main tools for valuing the most complex and highly priced investment properties.

Real estate (property) is an investment. There are three main investment asset classes – stocks and corporate bonds, equity shares, and property.

An investment can be described as an exchange of capital today for future benefits, generally in the form of income (dividends, rent, etc.) and sometimes in the form of capital. The investment income from property is the net rent paid by tenants. The market price of an investment is determined in the market by the competitive bids of buyers for the available supply at a given point in time under market conditions prevailing at that time. Short supply and high demand that is scarcity will lead to price (value) increases, whilst low demand and high supply will lead to falls in prices and values.

The definition of market value requires the valuer to express an opinion of the market price that the valuer believes would have been achieved if that property had been sold at that time under the market conditions at that time.

The unique characteristics of property make property investment valuation more complex an art and science than that exercised by brokers and market makers in the market for stocks and shares. In the stock market, sales volume generally allows for price (value) comparison to be made minute by minute. As stocks, shares and property are the main investments available, there is bound to be some similarity between the pricing (valuation) methods used in the various markets and some relationship between the investment opportunities offered by each. A basic market measure is the investment yield or rate of return. The assessment of the rate of return allows or permits comparison to be made between investments in each market and between different investments in different markets. There is a complex interrelationship of yields and patterns of yields within the whole investment market. In turn these yields reflect market perceptions of risk and become a key to pricing and valuation methods. Understanding market relationships and methods can only follow from an understanding of investment arithmetic.

The income approach – a quick start

The income approach or investment method of valuation is an internationally recognised method of assessing market value of property. Buyers of property require an acceptable return or yield on their invested money. The yield must be sufficient to compensate for the risks of exchanging money now with today's purchasing power for future income with a future uncertain purchasing power.

The initial yield is a simple measure of the income/capital relationship.

$$\frac{Income(I)}{Purchase\ Price(P)} \times 100 = Yield\ (r\%)$$

If a buyer pays £2,000,000 for a property producing a net rent of £100,000 which is considered to be the market rent, then this sale price can be analysed to find the yield on money invested.

$$\frac{£100{,}000}{£2{,}000{,}000} \times 100 = 5\%$$

The market yield reflects all the risks perceived by the players in the market at the time of the purchase. These market yields provide the valuer with a key measure of an investment and a key tool for the income approach.

The experienced valuer with market knowledge of the risks associated with investing in property in general and with those of a specific property can arrive at an opinion, by comparison, of the yield that buyers would require from a given property in order for a purchase to occur. Risks to be considered will relate to: the legal title; the physical construction and condition of the property; the location of the property; the use of the property; the quality of the occupying tenant, i.e. their covenant strength; the length of the lease; the lease covenants and many other factors.

Given that $\frac{I}{P} \times 100 = r\%$ *then* $\frac{I}{\left(\frac{r}{100}\right)} = P$ and so the value of a similar property let at its market rent of £59,500 could be calculated as

$$\frac{£59{,}500}{\left(\frac{5}{100}\right)} = \frac{£59{,}500}{0.05} = £1{,}190{,}000$$

In the income approach this is called capitalising the income or the capitalisation approach. The value of £1 of income will vary with the yield and the yield will vary with the perceived investment risks. The importance of the yield can be seen in the following table; here a fall of 1% from 12% to 11% is a 9.12% increase in the present value of £1 pa in perpetuity, but a 1% fall from 5% to 4% increases the present value of £1 in perpetuity by 25%.

Income	Yield r% (100/r)*†	Present Value of £1 pa in perpetuity (PV£1 pa in perp).	Change in value per 1% fall in yield
£1	4% (25.00)	£25	25%
£1	5% (20.00)	£20	19.98%
£1	6% (16.67)	£16.67	16.66%
£1	7% (14.29)	£14.29	14.32%
£1	8% (12.50)	£12.50	12.51%
£1	9% (11.11)	£11.11	11.10%
£1	10% (10.00)	£10.00	10.01%
£1	11% (9.09)	£9.09	9.12%
£1	12% (8.33)*	£8.33	–

*These figures are rounded to two decimal places but for valuation need to be calculated to four decimal places.
†UK valuers use the term Years' Purchase (YP) for the product of (100/r) or (1/*i*) which is then used as a multiplier to turn income in perpetuity into its present value equivalent.

Capitalisation in its simplest form where income can be assumed to be perpetual is simply Income ÷ i% where i% is (r ÷ 100). So at 4% it is £1 ÷ 0.04 = £25 or £1 × (1 ÷ 0.04) = £1 × 25YP = £25. Capitalisation is a market-based method of valuation which requires knowledge of market rents derived from analysis of lettings of property and of market yields derived from analysis of market sales.

Valuation mathematics is not always this simple. In many situations the rent being paid is not the market rent and account must be taken of the rent actually being paid and for how long, plus the reversion to market rent at the next rent review or lease renewal.

Capitalisation is a short-cut discounted cash flow (DCF) or present value calculation. Where the income changes over time, the valuer needs to reflect the time value of money through the use of present values.

Investors can save money or invest money. Money saved earns interest, and interest compounds over time if not withdrawn. The general equation for compound interest is $(1 + i)^n$ where i is the rate of interest expressed as a decimal, i.e. in respect of £1 not as a percentage (£100) and n is the number of interest earning periods. So:

$$£1000 \times (1 + 0.10)^{10} = £2{,}593.74$$

[Note that]

$$(1.10)^{10} = (1.10) \times (1.10) \times (1.10) \times (1.10) \times (1.10) \times (1.10) \times (1.10) \times (1.10) \times (1.10) \times (1.10)$$

A thousand pounds saved today and left to earn interest at 10% a year will compound over 10 years to £2,593.74. In which case