



UCEM Institutional Research Repository

| | |
|----------------------------|---|
| Title | Lectures (20 hours) to international students in 2023 for Ecole Supérieure des Professions Immobilières, Paris Campus. |
| Author(s) | David Hourihan, David Hourihan, David Hourihan and David Hourihan |
| ORCID | https://orcid.org/0000-0003-1405-3130 ; https://orcid.org/0000-0003-1405-3130 ; https://orcid.org/0000-0003-1405-3130 ; https://orcid.org/0000-0003-1405-3130 |
| Type | Conference or Workshop Item |
| Publication title | |
| Publisher | |
| ISSN/ ISBN | |
| Publication Date | 6 November 2023 |
| Version | |
| DOI | |
| Repository link | https://ube.repository.guildhe.ac.uk/id/eprint/198/ |
| Link to publication | |

Copyright:

UCEM aims to make research outputs available to a broader audience via its digital [Repository](#). Where copyright permits, full text material held in the Repository is made freely available. URLs from GuildHE Research Repositories may be freely distributed and linked to. Please refer to each manuscript for any further copyright restrictions.

Reuse:

Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page, and the content is not changed in any way.

PROPERTY VALUATION

(BG3 ALT S6)

Section 19 –

Methods of Valuation (DCF) Pt 3

– Reviewing the DCF Model

Real Estate Business Management Program

Year 3 – Work study program

Présenter: David Hourihan MSc Prop Inv FRICS

10 November 2023

Methods of Valuation – Investment Method (DCF)

Agenda

- The DCF Model.
- Measuring Returns (NPV and IRR).
- Analysing the 5 key variables:
 - 1 ERV - Hierarchy of Rental Comparisons.
 - 2 Hurdle Rate.
 - 3 Exit Yield.
 - 4 Growth rate.
 - 5 Purchase Price.

Methods of Valuation – Investment Method (DCF)

- **The DCF Model**

Lets review the DCF model in Microsoft Excel.

Methods of Valuation – Investment Method (DCF)

- **Measuring Returns (NPV and IRR)**

Net Present Value

The net present value of the future return is obtained by discounting it at an appropriate rate, which is the discount rate. Usually discount rate is the target rate of return expected by the investor or it could equally reflect the cost of borrowing, return from alternative investment opportunities or the rate on government stock. **Any investment with positive net present value (present value of revenues less present value of costs) would be viable at that discount rate.** Earlier income is deemed more valuable as the effect of discounting would be less.

Internal Rate of Return

Whilst a positive NPV tells us whether an investment reaches its targeted rate of return or not, it does not tell us what the actual rate of return (or internal rate of return) of the investment is. **The internal rate of return is the rate at which the discounted cash flow of all incomes equals the discounted cash flow of all expenditures.** In other words, internal rate of return is the discount rate at which NPV becomes zero. The relationship between NPV and discount rate is non-linear and therefore it is either estimated by linear interpolation on paper or else, more usually, derived by iteration (trial and error) using a computer.

Methods of Valuation – Investment Method (DCF)

- Analysing the 5 key variables:

1. ERV

Market Comparisons.

- The principle of comparison lies at the heart of property valuation.
- Comparison is both a method and a principle.
- Comparative method is used as a basis in all methods of valuation and compares like-with-like.
- Works on the basic assumption that the price paid for a property at a given point in time is evidence of the market value for that property, and – all other factors being equal – is a good indicator of the market value of a similar property. Involves carrying out a valuation by directly comparing the subject property with similar properties which have been sold/leased in the past – and uses the evidence of those transactions to assess the value.
- It is important to understand how robust the evidence is that you have collated. The ability to weigh (or rank) evidence collected according to its relevance to the particular property being valued is an essential part of the valuation process. There are some additional factors to be considered for the **hierarchy of rental evidence** relating to the currency and nature of the agreement: open market letting, rent review and so on.

Comparable rental transactions in the London West End office submarket

| Address | Size (sq. ft.) | Rent (per annum) | Rent (per sq. ft.) | Tenant | Lessor | Asset | Relation to subject |
|--|----------------|------------------|--------------------|--------------------|-----------------|---|---|
| 1 Triton Square. NW1 | 312,000 | £31,574,400 | £101.20 | Facebook | Aegis | 1990s build, with recent sustainability driven refurb. | Significantly larger |
| 121-141 Westbourne Terrace. W2 | 59,530 | £3,125,325 | £52.50 | Future Publishing | WPP | Grade 2 listed, refurb in 2019 | Similar size, but lower fit-out specification. |
| Ingeni Building. 17 Broadwick Street. W1 | 28,000 | £2,660,000 | £95.00 | Cooper Co | Global Holdings | 2002 built, includes retail space on GF. | Significantly smaller but similar location. Likely more depreciation given age. |
| 62 Buckingham Gate. SW1 | 27,016 | £1,860,596 | £68.50 | Millennium Capital | Chime | 2013 completion, prime office space, with retail units at GF. | Smallest size of all comps. |
| 35-38 Chancery Lane, London WC2A 1LF | 65,638 | £4,332,108 | £66.00 | N/A | N/A | 2017 completion, contemporary Grade A space development | Most similar in terms of modern office build and location |

Methods of Valuation – Investment Method (DCF)

• Analysing the 5 key variables:

2. Hurdle Rate.

- When an investor undertakes a DCF appraisal they set a target (hurdle) rate of return that they require from the investment.
- This hurdle rate of return reflects levels of risk that the investor is prepared to accept.
- It is common to build-up a hurdle or target rate of return that is based upon 'specific' risks associated with the property being appraised and 'systematic' risks from the wider markets.
- A frequent criticism of this approach is that these allocations for risk are often arbitrary or subjective, and at the very best, based on experience and past performance, rather than this being an objective, criteria-based approach.

| Category | Risk Factor | Comment | Adjustment |
|-------------------------|---------------------------------|--|------------|
| Risk | Risk Free Rate and Risk Premium | With risk free rates predominantly based on government bond yields, the recent increase in government bonds has increased the risk premium (CNBC, 2022). | +3.5% |
| Specific Property Risks | Tenant Covenant | Analysis of the credit score rating of the tenants (Experian Delphi Score): Decathlon – 49/100 (average risk) Argos – 83/100 (low risk) Hobbycraft – 100/100 (very low risk) McDonalds – 97/100 (very low risk) The tenants are of good covenant strength, as they have either an average or low risk rating. | +0.25% |
| | WAULT Time | As of January 2023, the average WAULT for Units 1-4 is 10.40. For Decathlon there are 7 unexpired years on the lease, and Hobbycraft have 11 unexpired years, but with a break clause in 2029 (in 6 years), therefore there is risk of void of two of the units within the next 10-year period. | +1% |
| | Lease Terms | The leases are on Full Repairing and Insuring Leases (FRI) with upward only rent reviews every 5 years. This is beneficial to the landlord as minimal financial risk for repairing the units. | 0% |
| | Depreciation | Depreciation will likely occur over the 10-year holding period for the retail units, therefore this risk should be recognised in the hurdle rate. | +0.5% |
| | Obsolescence | It is assumed the retail units are of a medium to good quality at present, but sustainability improvements will be required over time. | +0.25% |
| | Sustainability | There are no sustainability certifications at West Way Retail Park. It is assumed the units meet the minimum EPC rating of E or higher. | +0.25% |
| | Access and Parking | The West Way Retail Park has excellent transport links, notably to the A40, and adequate parking facilities on site. | 0% |
| Systematic Risks | Stability of Market Rent | The Market Rent is stable, with current ERVs higher than Market Rent as shown in the rental comparables table. Market Rent have remained stable, however future growth of retail units is expected to be minimal due to the economic climate (Cluttons, 2022). | +0.5% |

| | | | |
|--------------------|--------------------------------|--|--------------|
| Hurdle Rate | Stability in Yield Performance | The yields are stable (Cluttons, 2022) and will be 7.5% as shown in the transaction comparable tables. | +0.25% |
| | Economic Climate | The UK is entering into an economic recession so consumer spending will reduce, and retailers will feel the impact of this reduced spending (EY, 2022). With Decathlon, Hobbycraft and Argos selling items not deemed 'essential', such as groceries or toiletries, these retailers could feel the impact of reduced household finances. | +1% |
| | Political Climate | Due to changes in the UK Conservative Government leadership, it has led to uncertainty, notably regarding international investment (Harford, 2022). Furthermore, the Ukraine-Russian War has led to increase in energy costs and therefore increases operational costs at retail parks (Smith and Race, 2022). | +0.25% |
| Hurdle Rate | | | 7.75% |

Methods of Valuation – Investment Method (DCF)

- Analysing the 5 key variables:

3. Exit Yield.

The exit value is the market value of the property at the end of the holding period when the property is assumed to be sold. An exit yield is usually derived by comparison with similar investments, as is usual valuation practice. However, an appraisal looks forward not backward and the exit value is at the extreme of the forecasting period.

It is therefore one of the most significant and yet most uncertain parts of the appraisal. Care should be taken to account for depreciation in property value, but double counting should be avoided, especially if depreciation is already accounted for, in the form of reduction in forecast rent or increase in exit yield.

Also, it is tricky to understand the rise and fall in property values at various stages of the life of the property. In cases where demolition is anticipated at the time of exit, then exit value may indicate the development land value.

Example of yield comparisons table with hierarchy of examples.

| Office Yield and Capital Value Comparable Evidence* | | | | | | | | |
|---|--------------|-------------------|----------------|-------------------|-------|------------------|------------|---|
| Address | Size (sq ft) | Passing Rent p.a. | Achieved Price | Price (per sq ft) | Yield | Transaction Date | Purchaser | Relation to Subject |
| 10 Lexington Street, London, W1F 02T | 145,000 | £10,800,000 | £228,000,000 | £1,572 | 4.74% | Jan-23 | Blackstone | Most comparable, closest in location and sq ft. Grade A office building with strong covenant. Most recent date. |
| 62 Regent Street, London, W1B 4AZ | 170,000 | £12,300,000 | £250,000,000 | £1,471 | 4.92% | Nov-22 | A&W | Reasonable comparable, larger in size and EPC rating B. Let to two good covenants. Recent refurbishment. |
| 70 Marshall Street, London W1F 7EZ | 125,000 | £9,585,000 | £208,000,000 | £1,664 | 4.61% | Aug-22 | Aviva | Least comparable, significantly smaller. Blue chip covenant. New building and oldest transaction. Tenant on lease for 20 years. |

Source: UCEM, Investment Appraisal P10690 (2)

Methods of Valuation – Investment Method (DCF)

- Analysing the 5 key variables:

4. Rental growth rate.

Market intel



Methods of Valuation – Investment Method (DCF)

- **Analysing the 5 key variables**

5. Purchase Price.

Having categorized the investment ie Core, Cor plus etc and then reviewed the first four key variables we should now consider the purchase price in the context of the IRR and NPV.

Does the purchase price make sense? Is it too high or perhaps can we purchase the property at a higher price?

Lets review the Excel DCF model so far.



Next Lecture

Section 20 - Methods of Valuation – Investment
Method (DCF) Pt 4 – Stress Testing & Conclusions