Title	Discounted Cashflows Making them mainstream in real estate
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Type	Conference or Workshop Item
Publication title	
Publisher	
ISSN/ ISBN	
Publication Date	26 October 2023
Version	
DOI	
Repository link	https://ube.repository.guildhe.ac.uk/id/eprint/204/
Link to publication	

DISCOUNTED CASHFLOWS

MAKING THEM MAINSTREAM IN REAL ESTATE – SECTIONS E-G

26 October 2023

Agenda (9.30am – 1.30pm)

Introduction.

A. Scenario.

B. Basis of Appraisal.

C. Property & Market assessment using SWOT analysis.

D. Investment Categorisation.

Comfort Break (10 minutes)

E. The DCF Model.

F. Measuring Returns (NPV and IRR).

G. Analysing the 5 key variables:

1. ERV - Hierarchy of Rental Comparisons.
2. Hurdle Rate.
3. Exit Yield.
4. Rental growth rate.
5. Purchase Price.

Comfort Break (20 minutes)

H. Stress Testing Key Variables.

I. Conclusions / Recommendation.

DISCOUNTED CASHFLOWS – MAKING THEM MAINSTREAM IN REAL ESTATE

E. The DCF Model

Lets review the DCF model in Microsoft Excel.

F. 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.

G. 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

G. 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.

See example:

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%
Sytematic 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%
	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%**

G. 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	AEW	Reasonable comparable, larger in size and EPC rating B. Let to two good covnants. Recent refurbishment.
70 Marshall Street, London W1F 7EZ	125,000	£5.585,000	£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)

G. Analysing the 5 key variables

4. Rental growth rate.

Market intel

G. 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.

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