

Graduate Diploma In Applied Finance & Investment

Property Investment Analysis - E133

Topic 2 - Property Valuation Techniques

Main Concepts

- **Valuation**
- **Valuers**
- **Purpose and Basis of Valuations**
- **Highest & Best Use**
- **Market Value**

Main Methods of Valuation

- Capitalisation of Net Income
- Discounted Cash Flow Techniques
- Summation Method
- Direct Comparison
- Hypothetical Development

Capitalisation of Net Income

Ideally suited to investment properties where **income** is an important component of return



Capitalisation of Net Income

Capitalisation Rate

- Crystallisation of all current & future expectations of benefits / income
- Basis Assumptions consistent (escalation of) revenue and risk expectation is unchanged
- Easily (widely) used and deduced from evidence
- Can then be compared with other investments

$$\text{Capitalisation Rate} = \frac{\text{Net Income (\$/pa)}}{\text{Market Value(\$)}}$$

Capitalisation of Net Income

Rental Equation

Gross Income

Less Outgoings (operational, sustainable)
exclude non cash items

Equals Net Income (before tax)

Capitalisation of Net Income

Market Rent

- Identify evidence through research
- Read lease (net or gross, outgoings, rent reviews, period of payment, other obligations)

Capitalisation of Net Income

Initial Yield & Reversionary Yield

Initial Yield = $\frac{\text{Net Income (\$pa)} \times 100}{\text{Market Value (\$)(or sale price)}}$

Reversionary Yield = $\frac{\text{Market Net Income (\$pa)} \times 100}{\text{Market Value (\$)(or sale price)}}$

Capitalisation of Net Income

Current Net Income	\$ 45,000
Market Net Income	\$ 70,000
Purchase Price	\$520,000

$$\begin{aligned}\text{Reversionary Yield} &= \frac{\$70,000 \times 100}{\$520,000} \\ &= \mathbf{13.46\%}\end{aligned}$$

$$\begin{aligned}\text{Initial Yield} &= \frac{\$45,000 \times 100}{\$520,000} \\ &= \mathbf{8.65\%}\end{aligned}$$

Capitalisation of Net Income

You have been asked to value an industrial property



Capitalisation of Net Income

Example 1

You have been asked to value an industrial property which is rented for \$621,300pa gross, this rent has recently been reviewed to market.

Market capitalisation rates are considered to be 8.5%.

You have been given the following outgoings schedule:
Land Tax - \$13,750; Council Rates - \$11,200; Water Rates - \$2,400; Insurance - \$7,755; Repairs & Maintenance - \$8,950; and Management - \$12,500.

Allow 2.0% for vacancies.



Capitalisation of Net Income

Reversions

- bringing to account rental variations
- passing rent differs from market rent (sustainable income)

Capitalisation of Net Income - Reversions

Example 2

You have been asked to value an industrial property at 1st March 2006. It is leased to one tenant, the current gross rent is \$978,500 which is payable monthly in advance, the next market rent review will be on 31st December 2007. The current gross market rent is \$1,100,000. Outgoings are \$115,000 pa.

Market capitalisation rates are 8.25%, use a vacancy factor of 2.0%.



Discounted Cash Flow Techniques

- Used by institutional investors - applied to larger, multi-tenant properties
- Determines “investment value” = in house market value based on:
 - subjective input data (capex, lease renewals,)
 - estimates of rental growth
 - discount rate (risk adjusted return)
- Requires experience and a large database & careful interpretation (ie. stated assumptions)
- NPV of future cash flows
- IRR for investment decision

Discounted Cash Flow Techniques

An office building is available for sale



Discounted Cash Flow Techniques

Example 3

An office building is available for sale at an asking price of \$3,120,000 and under the leases will have the following net income, payable annually in advance.

Year	Net Income
1	\$288,600
2	\$288,600
3	\$295,816
4	\$295,816
5	\$303,210

You anticipate that you can sell the property at the beginning of Year 5 for \$3,280,000 (net).

- (a) Calculate the Internal Rate of Return (IRR) for this property investment?
- (b) At what price would you need to purchase the property in order to achieve a desired hurdle rate of 11%?



Hypothetical Development

- Used for development sites
- Requires
 - end use to be readily determined
 - On completion value to be assessed (market rents identified)
 - cost of development is known (all costs and obligations)
 - profit and risk allowance to be quantified (analysis of comparable projects)

Hypothetical Development

How much should you pay for a development site



Hypothetical Development

Example 4

A friend who is a property developer has asked you to determine how much they should pay for a development site that has become available. The details on the site are as follows

Large suburban site suitable for development into residential units

Number of units	15
Estimated Selling price per unit	275,000
Agents and marketing fees on sale of completed units	2.25%
Legal fees on sale of units and purchase of land	1.50%
Profit and Risk Component	20.00%
Construction Costs including site preparation per unit	75,000
Consultants Fees % of construction costs	10.00%
Local Authority Contributions	10,000
Contingences, % of hard costs	10.00%
"Hard costs" in relation to a development are construction costs, consultants fees and local authority contributions	
Interest rate on development costs and land purchase	10.00%
Holding costs on the land during development	12,000
Stamp duty on purchase of land	5.50%

You estimate that it will take 3 months to get the necessary approvals and 7 months to build the units, after completion of construction it will take another 2 months to finish selling all the units



Summation Method



Summation Method

- Sum of constituent parts (eg. house)
- Land assessed by way of Direct Comparison
- Improvements assessed by way of depreciated replacement cost
- Used for specialised properties (rarely sold) assuming ongoing profitable use
- Understand limitations (depreciation, cost = value ?)

Direct Comparison



Direct Comparison

- Most commonly used as primary method for residences
- Identify benchmark rate which is widely recognised
- Other properties compared on benchmark rates
 - Strata investment; \$/sqm GLA
 - Residence ; \$ / sqm
 - Marina ; \$ / berth