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# PROPERTY VALUATION

(BG3 ALT S6)

Section 15 –

Methods of Valuation –  
Investment Method Pt 1

## Real Estate Business Management Program

Year 3 – Work study program

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# Property Valuation (BG3 ALT S6)

## Agenda

1. Property Investment (overview).
2. Yields, Multipliers and Valuation.
3. The 'All Risks Yield'.
4. Additional Matters.
5. Rates of Return and Yields.

# Property Valuation (BG3 ALT S6)

## 1. Property Investment (overview)

There are 2 key elements to property investment: **Anticipated Return** & **Risk**.

- **Anticipated Return**: Spending now in order to receive future benefits.
- **Risk**: Uncertainty - there is a risk associated with investment.

Investment therefore represents “certain sacrifices for uncertain benefits”.

# Property Valuation (BG3 ALT S6)

## 1. Property Investment (overview)

Investors may be looking for some or all of the following:

- Security of capital.
- Security of income from the capital invested.
- Regularity of income'.
- Ease of purchase and sale of the investment.
- Low cost of purchase and sale of the investment.
- Divisibility which enables parts of the investment to be sold off if necessary; and
- Security in real terms, wherein the value increases at least in line with inflation.

# Property Valuation (BG3 ALT S6)

## 1. Property Investment (overview)

Commercial property – investment characteristics:

1. Commercial properties are of high value.
2. Property is not a standardised investment.
3. Property is not a pre-packaged investment.
4. Property is an investment that can be improved by active management.
5. Property investment can be created by finding sites, erecting buildings and finding tenants.
6. There is no single market for commercial property.
7. Market information is often imperfect.

# Property Valuation (BG3 ALT S6)

## 1. Property Investment (overview)

### Property Investment **Risks**

<b>Tenant:</b>	Non-payment of rent or other contractual obligations.
<b>Sector and geographical:</b>	The return characteristics of property sectors and regions varies across both. 'Lack of liquidity for property investment accentuates this type of risk.
<b>Structural:</b>	Obsolescence. Prime property is much less prone to this risk.
<b>Legal:</b>	Changes in legislation.
<b>Planning:</b>	Complex planning system.
<b>Ownership:</b>	Different types of title. Incomplete documentation.
<b>Location:</b>	Prime, secondary, tertiary – Is the neighbourhood changing?

# Property Valuation (BG3 ALT S6)

## 2. Yields, Multipliers and Valuation

### Income producing assets

- When a property is let it produces a **return (income/rent)** for the owner.
- **Rent** – landlord's reward, paid by the tenant for the use of the asset.
- If the landlord sells the interest, an investor will pay a capital sum for the right to receive that income.
- Therefore, there is a relationship between the **income (rent)** generated by the asset, and its **capital value**.
- This is the basic principle of the Investment Method of valuation:

$$\text{Capital Value} = \text{Income} \times \text{Multiplier.}$$



# Property Valuation (BG3 ALT S6)

## 2. Yields, Multipliers and Valuation

**Capital Value = Income x Multiplier**

- The multiplier is determined by our opinion of the yield for the property (traditionally this is the **All Risks Yield** – which we determine from our analysis of comparable properties). This yield represents the risks and benefits of the investment.
- At its very simplest, this multiplier is the '**Years Purchase in Perpetuity**' multiplier – commonly referred to as 'YP perp' or 'YP in perp'.
- Formula for years purchase in perpetuity =  $1 / i$ , where  $i$  is the yield, expressed as a decimal.
- For example, a Yield of 8%, would have a YP perp of  $1 / i = 1 / 0.08 = 12.5$ .
- The multiplier of income is 12.5 times the income.
- **Capital Value = income x 12.5.**

# Property Valuation (BG3 ALT S6)

## 2. Yields, Multipliers and Valuation

### Years Purchase in Perpetuity and Capital Value

If an investor receives a yield of 8 % (an 8% return on their investment), the total rent received each year represents 8 % of the purchase price of property. Accordingly at the yield of 8% it will take an investor 12.5 years to replace their original investment. This is referred to as Years Purchase in perpetuity (YP perp) and the formula is  $1 / i$ . Capital Value = Rent x YP in perpetuity.

Example:

A property with a market rental of £100,000 per annum and where recent comparable sales are indicating a yield of 8%, the capital value is:

- Capital Value = £100,000 x YP in perpetuity @ 8%
- Capital Value = £100,000 x  $1 / 0.08$
- Capital Value = £100,000 x 12.5000 = £1,250,000
- Capital Value is £1,250,000

# Property Valuation (BG3 ALT S6)

## 2. Yields, Multipliers and Valuation

### The relationship between yield and years purchase

Yield	YP perp	YP perp multiplier
5%	$1 / 0.05$	20.0000
6%	$1 / 0.06$	16.6667
8%	$1 / 0.08$	12.5000
10%	$1 / 0.10$	10.0000
12%	$1 / 0.12$	8.3333

Use a minimum of 4 decimals for these multipliers.

Yield indicates the level of risk attached to a rental income stream.

- **High yield** - means **high** risk and a **low** YP perp – so the investor will recoup their capital outlay in a short time.
- **Low yield** - means **low** risk and a **high** YP perp – so the investor is prepared to wait to recoup their capital outlay.

# Property Valuation (BG3 ALT S6)

## 2. Yields, Multipliers and Valuation

### The relationship between yield and years purchase

Example

For an income of £100,000 per annum, the Capital Values would be at these differing yields:

Yield	YP perp	YP perp Multiplier		Annual Income		Capital Value
5%	1 / 0.05	20.0000	x	£100,000	=	£2,000,000
6%	1 / 0.06	16.6667	x	£100,000	=	£1,666,670
8%	1 / 0.08	12.5000	x	£100,000	=	£1,250,000
10%	1 / 0.10	10.0000	x	£100,000	=	£1,000,000
12%	1 / 0.12	8.3333	x	£100,000	=	£ 833,330

Note the inverse relationship. As the **yield** increases, the **multiplier** and **capital value** decrease.

# Property Valuation (BG3 ALT S6)

## 2. Yields, Multipliers and Valuation

### The relationship between yield and years purchase

#### Example 1

A landlord of a shop receives an income of £11,000 per annum. What is the market (capital) value of the landlord's shop?

Comparison: Another very similar nearby shop was recently let and sold producing a yield of 8.5%. Assuming the two shops are almost identical, from the comparable, the yield to be used for the valuation is 8.5%

- Capital value = net income x YP in perp @ 8.5%.
- Capital value = £11,000 p.a. x 1 / 0.085.
- Capital value = £11,000 p.a. x 11.7647 = £129,411.70 , say **£129,400**.

# Property Valuation (BG3 ALT S6)

## 2. Yields, Multipliers and Valuation

### The relationship between yield and years purchase

#### Example 2

Value the freehold interest in an office let at **£160,000 per annum** (this is market rent and has just been agreed as a market letting).

#### Step 1: Analyse a comparison properties to establish the yield:

Usually we would have several comparable sales but only one is being used to show process.

A similar office which is slightly larger and has just been let at **£170,000 pa** and the investment has also sold recently for **£2,400,000**.

Analysing this sale to calculate the yield for the sale is as follows:

Yield =  $\text{£}170,000 / 2,400,000 = 0.07083 = \text{7.083\%}$ .

# Property Valuation (BG3 ALT S6)

## 2. Yields, Multipliers and Valuation

### The relationship between yield and years purchase

#### Example 2

Value the freehold interest in an office let at **£160,000 per annum** (this is market rent and has just been agreed as a market letting).

#### Step 2: Valuation of subject Property

Note we would not value a property using such a precise yield as 7.083%, so we adjust it to nearest 0.25%. The direction of adjustment depends upon whether this property is 'better' or 'worse', as an investment than the comparable. Assuming slightly less good (riskier), we can increase this and use a yield of 7.25% for the valuation.

- Capital value = net income x YP in perp @ 7.25%.
- Capital value = £160,000 p.a. x 1 / 0.0725
- Capital value = £160,000 p.a. x 13.7931 = £2,206,896 , say **£2,207,000**.

# Property Valuation (BG3 ALT S6)

## 2. Yields, Multipliers and Valuation

### The relationship between yield and years purchase

#### Income, Multiplier and Capital Value

If we know two of these three variables, then we can calculate the unknown.

- If a property just been sold for £4.2 million and was just let at a yield of 4.5%, what is the annual income?

Income = Capital Value x Yield = 4,200,000 x 0.045 = £189,000 per annum.

- A property that has just been let at £65,000 per annum and a sale has been agreed at £1,500,000. What is the yield for this transaction?

Yield = Income / Capital Value (Price) = 65,000 / 1,500,000 = 0.0433 = 4.33%.

- A modern office is let to a single tenant on FRI terms at a current rent of £55,000. Yields of similar investments are achieving a yield of 3.5%. Based on this yield, what would the capital value of this office be?

Capital Value = Income x Multiplier (YP perp) = 55,000 x (1/0.035) = 55,000 x 28.5714 = £1,571,427 say £1,570,000.



# Property Valuation (BG3 ALT S6)

## 2. Yields, Multipliers and Valuation

### The relationship between yield and years purchase

Try these examples

1. What is the capital value of the right to receive a rent of £700,000 per annum in perpetuity at a yield of 7%?
2. What is the capital value of the right to receive a net rent from a factory of £233,000 per annum, at yield of 11.5% in perpetuity?

# Property Valuation (BG3 ALT S6)

## 3. The 'All Risks Yield'

**All Risks Yield** – a figure which reflects within it the future benefits and risks of an investment and is derived from market evidence. Investors expect returns which compensate for risk and uncertainty.

In property, a lower yield represents a better investment - which seems counterintuitive. This is because the 'All Risks Yield' (ARY) reflects all of the risks and benefits (a key benefit is rental growth) of the investment.

The 'All Risks Yield' (ARY) is the yield that represents:

The market rent of a property

The capital value of a property

# Property Valuation (BG3 ALT S6)

## 3. The 'All Risks Yield'

ARY is a fully inclusive figure that implicitly acknowledges a range of variables- rental growth, depreciation, risk, tenant covenant etc.

ARY is derived from comparables – ideally a property with a recently agreed market rent and then sold immediately.

Do such comparables exist?

### **ARY adjustments**

A retail unit in London occupied by Apple, let on a 15-year lease subject to five yearly reviews at market rent has just been sold for a 3% yield.

The unit next door is let to a sole trader on a 7-year lease without review.

Remember - in property, a lower yield represents a better investment (prospects/lower risk).

**Is this a better or poorer investment than the Apple Store? and is the yield likely to be higher or lower? Why?**

Assuming the properties are similar, the factors that impact on the yield are negatives here (poorer quality tenant, longer period to review, shorter lease length) and so the yield will be higher, than the yield of the store occupied by Apple.

Note, the effect of these factors will vary according to the supply / demand for this type of property at the time of analysis.

# Property Valuation (BG3 ALT S6)

## 3. The 'All Risks Yield'

### Initial and reversionary yields

Not all properties are let a market rent.

For these properties, we can find the **initial** and the **reversionary yields**.

- **Initial Yield** =  $\text{current income} / \text{price or market value}$ .
- **Reversionary Yield** =  $\text{market rent or market rental value} / \text{price or market value}$ .

### Example

An office was **let three years ago** on a five-year lease at a rent of £64,000 per annum (p.a.). Comparable evidence in the area suggests a **current market rent** of £80,000 p.a. would be appropriate if the property was let now. The office has just been sold for £1m. Ignoring any costs of sale, **what is the initial yield?** And **what is the reversionary yield?**

Initial Yield =  $\text{current income} / \text{price or market value} = £64,000 / £1,000,000 = 0.064 = 6.4\%$ .

Reversionary Yield =  $\text{market rent} / \text{price or market value} = £80,000 / £1,000,000 = 0.08 = 8.0\%$ .

The income return that the investor owner will get for this property now is 6.4% and based on the current market rental value, we estimate that this will rise to 8.0% at the end of the lease in two years. **The 'All Risks Yield' is different from the Initial Yield, unless the property is let at market rent.**

# Property Valuation (BG3 ALT S6)

## 4. Additional Matters

### Purchasers Costs:

In the above valuation, if an investor wishes to receive a return of 8%, then they would make an offer at a level that is **net of their costs** to purchase the investment. These acquisition costs can add up to about 5.75% to 6% of the capital value.

**Example:** If the Capital Value is £1.5 million, then a buyer could offer  $£1,500,000 / 1.0575 = £1,418,440$  (net purchase price).

What might these purchaser's costs be:

- Taxes and Duties (Lands and Buildings Transaction Tax) 4.00%
- Legal and agent's fees 1.75 – 2.00%

### Use of the Valuation

This is normally carried out for fully let properties in the investment market where properties are bought and sold, however, they can also be used to calculate the capital value of owner-occupied property by assuming a notional rent equivalent to a market rent is passing and capitalising it at an appropriate market yield.

# Property Valuation (BG3 ALT S6)

## 4. Additional Matters

### Net Rents

The example above assumes that the rent arising is **net of any outgoings**, implying that the property is let on a lease with ‘**Full Repairing and Insuring**’ terms (FRI), where the tenant is responsible for all the repairs and insurance premiums. Where this is not the case, adjustments have to be made to the rent to convert it into a **net income**, which can then be capitalised. If a property is let on ‘**Internal Repairing**’ terms only – this would normally be let at a higher rent to reflect the more onerous obligations of the tenant.

### Example

Gross annual income		£372,313
<u>Deduct</u> for any landlord's outgoings		
• External Repairs @ 10% of Rent	-£ 32,375	
• Insurance @ 2.5% of rent	-£ 8,094	
• Management @ 2.5% of rent	<u>-£ 8,094</u>	
Total Outgoings	-£ 48,563	<u>-£ 48,563</u>
Net annual income (FRI equivalent)		£323,750

This is the rent we would capitalise as this represents the landlord's net income return from this investment.

# Property Valuation (BG3 ALT S6)

## 5. Rates of Return and Yields

Is there a difference between a **rate of return** and a **yield**? When commentators discuss the market, confusion may arise with the use of these terms. They are directly related, and tend, confusingly, to be used interchangeably.

### Rule of thumb:

- **Yield:** describes the return an investment produces (often at a single point in time). Usually this is just the income return.
- **Rate of return:** desired/expected overall return from an investment (income return and capital growth).

Yield is a present performance measure. It does not tell us about the total return we might expect.

# Property Valuation (BG3 ALT S6)

## 5. Rates of Return and Yields

Measures (metrics) of return are used to describe; past, present and future performance. Normally measured per annum.

### **Past measures:**

- Income return.
- Capital return.
- Total return.

### **Present measures:**

- Initial yield.
- Reversionary yield.
- Equivalent yield.

### **Future measures:**

- Expected rate of return from a prospective investment.



# Property Valuation (BG3 ALT S6)

## 5. Rates of Return and Yields

### Rental income and Yield

An investor considering a property investment is interested in:

- The **actual income** (quantity).
- Whether the **current income** represents **market rent**.
- The risks associated with the investment.
- Its **yield**.

Yield is a function of **risk and uncertainty**.

# Property Valuation (BG3 ALT S6)

## 5. Rates of Return and Yields

Property yields are influenced by:

- The wider investment market which includes equities and gilts.
- Cost and availability of borrowing.
- Anticipated growth in rents.
- Expectations on price increases.
- Security and risk of the subject property and its sector.
- Lease terms.

# Property Valuation (BG3 ALT S6)

## 5. Rates of Return and Yields

What do we mean by property yields '**hardening**' and '**softening**'? Property yields are influenced by capital markets and macroeconomic variables, as well as local property fundamentals. The complex influence of several factors playing a substantial role in affecting property yields. In property, a lower yield represents a better investment - which seems counter-intuitive.

**Hardening / yield compression** usually means getting lower (which is better for a property yield / investment). Yield compression is the changing perception of risk in an investment and is the market's decision that the growth and security of an income stream has become stronger. A stronger investment means a lower risk profile and therefore purchasing at a lower yield / return (which = higher multiplier = higher capital value).

**Softening / Moving out** means getting yields are getting higher (which means the investment is expected to do less well in future).

# Property Valuation (BG3 ALT S6)

## 5. Rates of Return and Yields

Some final thoughts: Calculating the return on a property investment can be considered to be a retrospective analysis of what an investment has **actually earned**. Yield can identify what an investment should earn and how it relates to its capital value;

- Yields are good for determining current performance.
- Property can be discussed and analysed using a number of yields – ‘Net Initial Yield’, ‘Reversionary Yield’, ‘Equivalent Yield’ and the ‘All Risks Yield’.
- To calculate the ‘Capital Value’ of a property investment you need:
  - Income (Net)
  - Multiplier (YP perp)
- There is a relationship between price, yield and risk.



## **Next Lecture**

Section 16 – Methods of Valuation – Investment Method Pt 2