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PROPERTY VALUATION

(BG3 ALT S6)

Section 12 –

Methods of Valuation –
The ‘Cost Based’ Method of Valuation

Real Estate Business Management Program

Year 3 – Work study program

Présenter: David Hourihan MSc Prop Inv FRICS

7 November 2023

Property Valuation (BG3 ALT S6)

Agenda

1. The ‘Costs Based Method’ of Valuation.
2. What type of properties are valued using this approach?
3. Costs Based Method: Overview.
4. Costs based approaches: ‘Depreciated replacement Costs’ method and the ‘Contractor’s’ method.
5. Worked Examples.
6. Depreciation.
7. The issue with and the reliability of the ‘Costs Method of Valuation’.
8. Summary.

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1. The ‘Costs Based Method’ of Valuation

The cost-based method is one of the five methods of valuation and is used to value certain specialist properties.

This method has to be adopted for certain types of property which, due to their **unique situation and characteristics**, and the fact that they **rarely come to the market**, are not capable of valuation using the comparative, investment or profits methods.

These properties are not capable of earning revenue, so a value is ascribed to them based on the cost of constructing a similar building.

Challenge: **Cost ≠ Value**

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2. What type of properties are valued using this approach?

There are a number of categories of specialist property where there is no suitable comparable evidence and the cost-based method is used.

These include:

- Town halls.
- Libraries.
- Hospitals and other public buildings.

- Highly specialised properties such as:
  - Oil refineries.
  - Power stations.
  - Dockyards, etc.

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3. Costs Based Method: Overview

The basic approach for the cost-based method of valuation is:

Value of land and buildings.

Equals: cost of erecting the building (less a factor for depreciation).

Plus: value of the site.

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4. Costs based approaches: ‘Depreciated replacement Costs’ method and the ‘Contractor’s’ method

There are two approaches within this method:

1. **Depreciated Replacement Cost (DRC)**

   Used to provide a capital valuation of an asset for financial or other non-statutory purposes.

2. **Contractor’s method / basis.**

   Used when valuations are required for statutory purposes, typically for compulsory purchase or business rates.

Both are founded on the fact that there is no market for these properties and that value = cost.

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5. Worked Examples: 'Depreciated Replacement Cost' (DRC) Method of Valuation for a Hospital

The property to be valued is an old hospital and will bear no comparison with a new building, which would be of modern design and construction.

Estimated redevelopment Cost:	£10,000,000		
Site Value	£ 500,000		

Calculation

Present capital value of hospital		£10,000,000
Less		
Allowance for obsolescence at 70% of build cost		£ 7,000,000
Plus		
Value of site		£ 500,000
	DRC	**£ 3,500,000**

Notes

- A deduction for depreciation and obsolescence will have to be made from the cost of rebuilding (or reinstatement), which reflects the remaining life expectancy of the existing building. In this case a 70% deduction might be appropriate (very old existing hospital only 30% of its remaining useful life left).
- It is estimated that a well-designed hospital for the same number of patients would cost £10,000,000 to build today.
- The site has been valued at £500,000 (market value – existing use – from comparable sales evidence).

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5. Worked Examples: 'Contractors' Method of Valuation for a Town Hall

The rental value of a town hall is to be assessed for rating purposes.

Cost of construction of similar building:	£4,500,000	
Site Value	£ 800,000	

Calculation

Cost of construction of new town hall		£4,500,000
Less		
Allowance for obsolescence at 50% of build cost		£2,250,000
Plus		
Value of site		£ 800,000
		£3,050,000
De-capitalisation rate at 5.5%		0.055
	Annual Rental Value	**£ 167,750**

Notes

- The building was constructed 50 years ago with a life expectancy of approximately 100 years. Thus 50% of its useful life remains. To replace this town hall with a similar building providing the same net useable area of the same quality would cost £4,500,000 today. However, we are valuing the existing town hall and thus we have to make an allowance in the cost of the new building for the physical depreciation and/or functional obsolescence of the existing building. This allowance will reflect the remaining life expectancy of the existing building to the construction costs of the replacement building (50% allowance of the replacement construction costs).
- As this example is to determine rental value, then the capital value is decapitalised at the statutory rate 5.5%.

6. Depreciation

Depreciation refers to writing down of the cost of modern equivalent.

The depreciated cost reflects both **depreciation** and **obsolescence:**

- **Depreciation:** physical deterioration i.e. wear and tear of physical fabric of property. The asset is valued in its existing condition fully taking into account any physical deterioration arising from a lack of maintenance or other causes. Thus, depreciation caused by inadequate maintenance is to be reflected in the allowance made just as a deduction for disrepair would be made from a valuation based on sales comparison. In some markets and for some types of asset, a degree of physical deterioration will not adversely affect the value; in other cases it will. It would be inappropriate to determine the effect of physical deterioration on value depreciation only in purely mechanistic terms.

- **Obsolescence:** functional obsolescence / economic obsolescence:
  - **Functional obsolescence** arises where the design or specification of the asset no longer fulfils the function for which it was originally designed – for example advances in technology / building inefficiency.
  - **Economic obsolescence** caused by changing macro and or micro economy.

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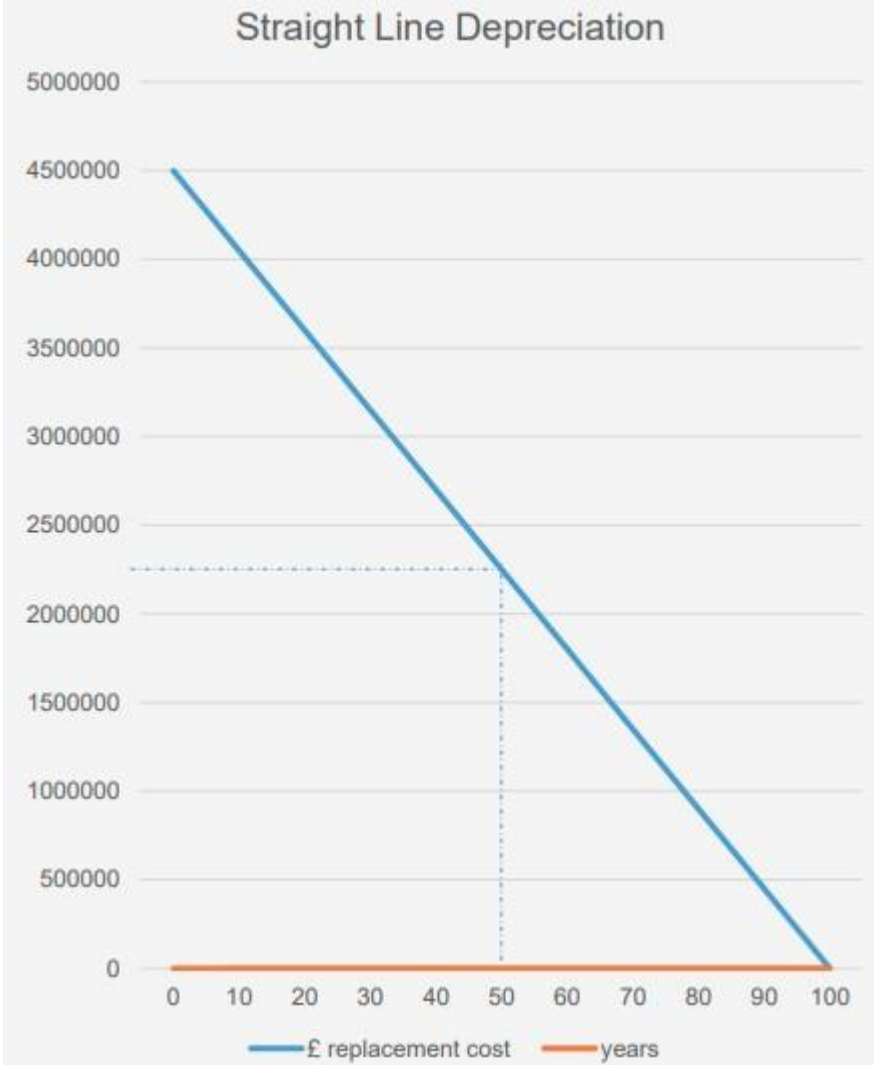
6. Depreciation

Allowing for Depreciation and obsolescence

- Straight line is most common approach to measuring depreciation.
- Method applies a straight-line percentage deduction.
- Percentage deduction based on proportion of estimated economic life of building.
- Graph shows straight line depreciation of replacement costs for contractors basis example in slide earlier:

$$\frac{\text{remaining life expectancy (years)}}{\text{total life expectancy (years)}} = \frac{50}{100} = 50\%$$

If current replacement cost - £4,500,000 then replacement costs after allowance for depreciation and obsolescence is 50% of 4,500,000 = 2,250,000.



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6. Depreciation

Allowing for Depreciation and obsolescence

Often, the distinction between the categories of depreciation and obsolescence may be blurred.

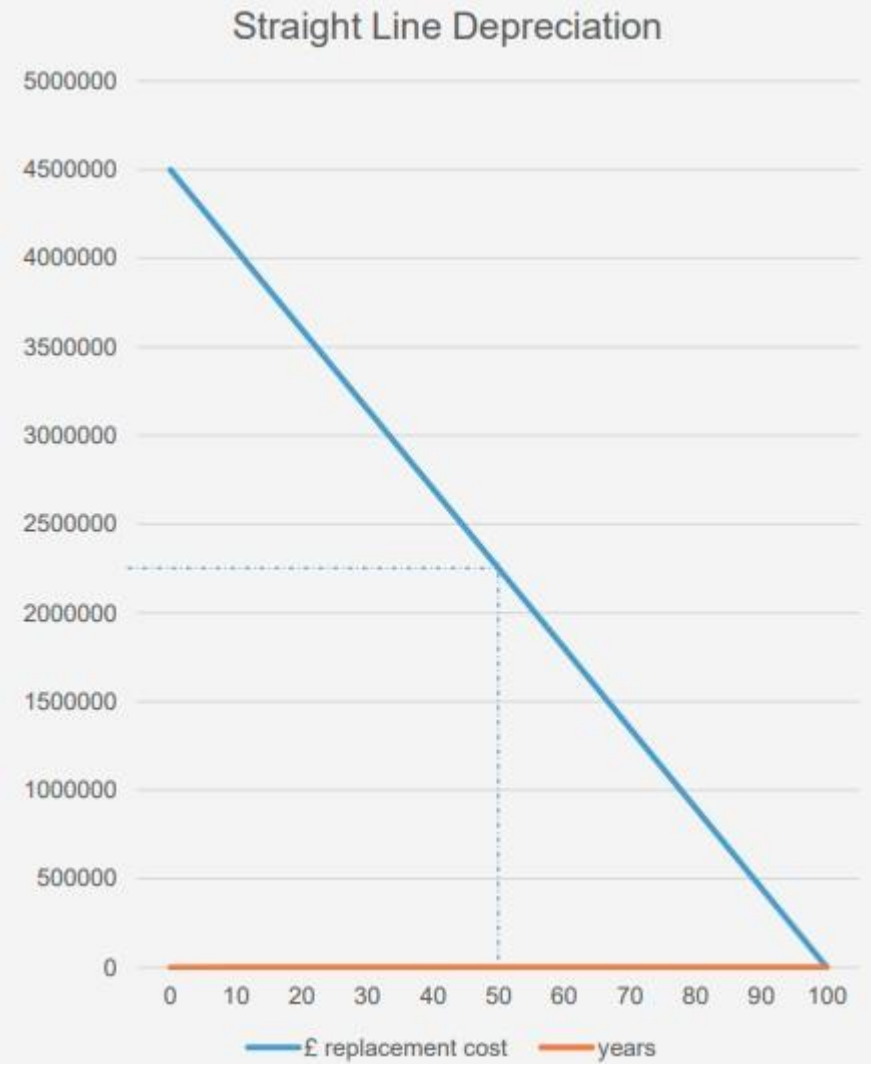
However, it is important to ensure that separate consideration of depreciation under each heading **does not result in double-counting**.

In the examples above, an allowance of 70% (DRC) and 50% (Contractor's method) were used to reduce the replacement building costs.

We used 70% in one and 50% in the other – but for either should this be 35%, 40%, 55%, 75% or some other figure? How can you evaluate this allowance? ……..with difficulty!

Important Note:

- An adjustment for obsolescence is only applied to the replacement cost of the building.
- Do not make any deduction for depreciation from the land value.



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7. The issue with and the reliability of the ‘Costs Method’ of Valuation

David Isaac and John O’Leary in ‘Property Valuations Principles’ comment on the Cost Method of Valuation as follows:

- It is a specialized cost-based approach to valuation, which is sometimes referred to as a method of last resort. This is because if there is a simpler alter-native method such as direct comparison or the investment method, the courts and the valuers’ professional body the RICS have shown their preferences for those methods to be used.
- However, because of the specialized nature of the properties involved and which includes infrastructure facilities and public buildings, it is seldom possible to use a conventional valuation technique. This is because there is no rental income passing to capitalize and neither is there an active market from which to analyse rental or capital sales data.
- At a fundamental level cost is not necessarily a good guide to value. For this reason, a number of assumptions and adjustments have to be made in the DRC method so that the cost of producing a modern equivalent building can be converted into the value of the subject building as it stands.
- Because the subject building may be many years old it is unlikely to have the same value as the modern replacement. This presents challenges and the need for judgements to be made at every stage.
- It is not surprising therefore that the DRC method has featured in court and tribunal cases over the years when various principles have been tested.

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8. Summary

The contractor’s basis:

- Is used in the absence of comparable sales evidence.
- Is normally applied to specialist properties for which there is no general market.
- Is applied primarily to find rateable values, but can be used to establish capital values.
- Is based on the thesis that the value of the property to an owner can be estimated by reference to the cost of suitable replacement premises or the ‘opportunity cost’ of the premises (where there is no market for the property).
- Is found particularly in valuation for rating of public buildings, schools, universities and specialist industrial premises.
- Consists of finding a site value and adding cost of replacement building with adjustment for depreciation and obsolescence.

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8. Summary

The contractor’s basis - The procedure:

1. Estimate the value of the land as if vacant, by using comparative evidence.
2. Estimate the replacement cost of the building at today’s cost.
3. Assess the (obsolescence) depreciation that has occurred to the building and deduct a % from the replacement cost of the building.
4. Add the land value to the adjusted building cost and the resulting figure will be an indication of the value of the property.

8. Summary

Depreciated replacement cost:

- Is used to calculate value of specialised properties for which there is no general market.
- Is used to determine replacement cost of existing property for financial statements.
- Consists in finding the market value for the existing use of the land, plus the current gross replacement costs of the improvements, less allowances for deterioration.

Next Lecture

Section 13 – Methods of Valuation – Comparison Method