DISCUSSION PAPER

ANNUAL RENTAL VALUATION BY THE RESIDUAL METHOD

One technique for determining land values, and used in conjunction with others, is the residual method. In principle, this deducts the value of the building from the total value of the property to give the value of the site. But because rental values are relatively stable but selling prices are volatile, the former figure is more reliable as a basis for the valuation. The value of the building must therefore be decapitalised and deducted from the total. This involves selecting a rate of decapitalisation which is a matter of judgement. It could lies between 3% and 7% and whichever figure is chosen will have a big influence on the land value finally established. The first example is worked at 4%, the second at 7%. Building costs are based on the RICS rebuilding cost index.

Consider two houses with an annual rental value of £14,000 ie £1,170 pcm, tenants responsible for payment of Council Tax.

EXAMPLE 1: 4% decapitalisation rate

Property 1 South-east, 105 sq metre floor area.	
Rent received	£12,000
Council Tax payable	£1,900
Gross annual value (GAV)	£13,900
Less	
Maintenance	£2,000
Net annual value (NAV)	**£11,900**
Rebuilding cost @ £1,000 per sq metre	£105,000
Risk free capitalisation rate	4%
Annual value of building	£4,200
Net annual site value	£7,700

Property 1 north-east, 160 sq metre floor area.

Rent received	£12,000
Council Tax payable	£1,900
Gross annual value (GAV)	£13,900
Less	
Maintenance	£2,500
Net annual value (NAV)	**£11,400**
Rebuilding cost @ £1,000 per sq metre	£160,000
Risk free capitalisation rate	4%
Annual value of building	£6,400
Net annual site value	£5,000

EXAMPLE 2: 7% decapitalisation rate

Property 1 South-east, 105 sq metre floor area.

Rent received	£12,000
Council Tax payable	£1,900
Gross annual value (GAV)	£13,900
Less	
Maintenance	£2,000
Net annual value (NAV)	**£11,900**
Rebuilding cost @ £1,000 per sq metre	£105,000
Risk free capitalisation rate	7%
Annual value of building	£7,350
Net annual site value	£4,550

Property 1 north-east, 160 sq metre floor area.

Rent received	£12,000
Council Tax payable	£1,900
Gross annual value (GAV)	£13,900
Less	
Maintenance	£2,500
Net annual value (NAV)	**£11,400**
Rebuilding cost @ £1,000 per sq metre	£160,000
Risk free capitalisation rate	7%
Annual value of building	£11,200
Net annual site value	£200

Discussion

In the first example, land values in the north-east appear to be almost half the total, which from observation of new construction is unrealistically high. In the second example, land values appear to be very low, to the point that new development in that locality would not be occurring. This suggests that the 4% figure figure for the decapitalisation rates is too low and the the 7% figure figure for the decapitalisation rates is too high.

Re-working at a 6% rate gives a more realistic land value of around 20% of the total for the north-east example.

Property 1 South-east, 105 sq metre floor area.

Rent received	£12,000
Council Tax payable	£1,900
Gross annual value (GAV)	£13,900
Less	
Maintenance	£2,000
Net annual value (NAV)	**£11,900**
Rebuilding cost @ £1,000 per sq metre	£105,000
Risk free capitalisation rate	6%
Annual value of building	£6,300
Net annual site value	£5,600

Property 1 north-east, 160 sq metre floor area.

Rent received	£12,000
Council Tax payable	£1,900
Gross annual value (GAV)	£13,900
Less	
Maintenance	£2,500
Net annual value (NAV)	**£11,400**
Rebuilding cost @ £1,000 per sq metre	£160,000
Risk free capitalisation rate	6%
Annual value of building	£9,600
Net annual site value	£1,800

CONCLUSION AND SUGGESTIONS FOR FURTHER DISCUSSION

The above discussions show that the residual method of land valuation depends for its accuracy on the selection of a reliable decapitalisation rate. One means of proceeding would be to establish the marginal location ie the worst location at which development is taking place.

Land values can be visualised as a three-dimensional landscape, with the tallest peaks in the City of London and lower peaks in the centres of the great cities. On the model, the rest of the country consists of foothills with residential development, and rolling lowlands, plains and wetlands, land of the lowest value, used for agriculture and forestry, or scarcely used at all.

Imagine now that the whole of this landscape was flooded, and the water slowly allowed to run away. At first, only the peaks would be exposed, but eventually, only the wetlands would remain under water. These “wetlands” on the land value

map are the areas where land is worth so little as to be almost marginal, even though in practice nobody gives this land away.

In practice, these are areas where just a trickle of development is taking place, in particular, places such as west Cumbria, and former mining districts such as the stretch of Durham coast between Seaham and Hartlepool and around Ashington and Blyth in Northumberland.

This model may be helpful in understanding the effect of a choice of decapitalisation rate. If the figure chosen is too high, ,and values will be under-estimated locations well above the margin will appear to have no land value. If the figure is too low, all land values will be over-estimated and sub-marginal locations will appear to have a spurious value. A correct choice of figure will correlate with other data that indicates where development is only just worth undertaking.

The choice of decapitalisation rate, then, is a matter of calibration in order to set a realistic zero point where land values can be taken as nil ie it is marginal and the land is therefore subject to no LVT.