

VALUATION DISCUSSION PAPER

Treatment of Land in Forest Valuations



1.1 Treatment of Land in Forest Valuations

A variety of land tenure mechanisms are demonstrated in planted forests. Broad categories include:

1. Leasehold
2. Forestry Right
3. Freehold

Under the Leasehold and Forestry Right mechanisms there may be an annual rental, or rent may be deferred and paid as a share of stumpage.

Under either of the first two options, there is an explicit demonstration that the tree-growing venture is paying for its use of the land. With freehold land the situation is not so immediately clear. Two schools of thought are demonstrated:

- The first approach observes that the presence of the tree crop means that the land cannot be used for any other purpose until the trees are removed. Under this concept the land is “encumbered” and must accordingly have a lower value than if it was bare and available for other uses.
- The second approach proposes that even though there is no explicit rent, it is readily feasible to recognize a notional rent. Such a rent means that the land has a conceptual income stream. Its value is therefore maintained rather than diminished. The tree crop is correspondingly charged with the same rent, and its value is reduced as a result.

Both approaches lead to the inconvenience of having to explain and quantify the effects. A third school of thought therefore asks why it is necessary to separate land value and tree crop value at all - can they not be kept together, undifferentiated? Accounting standards preclude this option as they require a separation of trees and land. Further, the ample evidence from the rental tenure systems confirms that the tree crop and land can be separately owned and can therefore be readily identified as distinct assets.

It is Pöyry’s impression that most valuers of planted forests have opted for the second school of thought. It is less clear to what extent land valuers have adopted the approach.

While forest valuers may be generally comfortable with the principles of the second approach, in recent years they have faced some challenges in the execution. For freehold land, a common method of applying a holding cost has been the ‘land-in/land out’ approach. Essentially the land’s value is treated as an input at the start of the projected cash flows. The same value is then recovered as the modelled rotation ends. This has the equivalent effect to charging the tree crop with a rental based on the product of land market value and the discount rate.

The two difficulties with this treatment are that the discount rate is characteristically higher than typical rental rates, and the value of the land to which

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the rate is applied has also been increasing rapidly¹. The result is that the tree crop is charged with a high cost of servicing the land it occupies.

There are various alternative bases for attributing a land charge and these are discussed in an exposure draft released by the Forest Valuation Working Group of the New Zealand Institute of Forestry². Pöyry's general preference has been to link rental rates to those demonstrated in the market. The process must be conducted cautiously as the forestry rental market is neither as populous nor as pure as might be hoped. Use of market rentals may nonetheless lead to less anachronistic values for the tree crop than other methods may produce.



¹ This was the case until 2008, when evidence suggested that the market for some classes of rural real estate was beginning to level off.

² See NZIF website: <http://www.nzif.org.nz/> under Policies and Statements