

Could we be selling our mid-rotation plantations too cheaply?

Wink Sutton

New Zealand is one of the best countries in the world to invest in plantation forestry. Our warm, wet, temperate climate and our young, generally fertile soils are ideal for tree growing. New Zealand is suited to growing radiata pine. We just take it for granted, but we have at least 125 years of plantation experience that is supported by more than 60 years of a very focused research effort. We have a very stable democracy and are one of least corrupt countries in the world.

Reluctance to invest in new plantations

We have few problems attracting, especially overseas, investors to buy our existing plantations. In spite of our plantation establishment know-how and our rapid rates of tree growth, investors (with a few exceptions) are very reluctant to invest in establishing new plantations. There has been almost no net increase in the area of plantations in the last 10 years.

Why are investors therefore so keen to purchase established stands but so reluctant to invest in establishing new plantations? It is my contention that a contributing factor to the investor's preference for standing trees is that our present valuation methods greatly favour buyers of existing plantations. This suggests that we could be selling our plantations too cheaply.

In the 21st century the global price of wood has greatly declined – a decline that was definitely not foreseen. It is the result of globalisation and the demand for cheaper and cheaper products by the very large international 'big box' retailers – the Home Depots, Lowe's, Walmarts, IKEAs and the Australasian equivalents of Mitre 10, Bunnings and Placemakers.

Influence of valuation methods

To illustrate that our present valuation methods greatly favour plantation buyers and discourage investments in new plantations, I will use the following theoretical example.

Let us assume an initial investment was for a plantation on a 30-year rotation. At age 20 the initial investors decide to sell their plantation and forestry consultants were employed to establish the selling price. The stand is not valued as if it were to be felled at age 20 but the projected harvest value at age 30 (assessed as \$100,000) is discounted for 10 years. The discount rate applied is assumed to be 10 per cent. The

20-year-old plantation is therefore valued at \$38,610 – (100,000 divided by 1.10¹⁰ or 2.594). In the following 10 years there could be changes in the final value of the plantation. For simplicity, let us assume three final harvest values:

- increases by 20 per cent i.e. the stand is now worth \$120,000
- remains at \$100,000, or
- declines by 20 per cent i.e. the stand is now worth \$80,000.

If the final harvest value is \$120,000 then the purchaser of the plantation, for which they only paid \$38,610, is rewarded with more than a three-fold return (120,000 divided by 38,610 or 3.1). This is an equivalent financial return of 12 per cent per year for their 10-year investment. If the value of the harvest is \$100,000, investors get the expected return of 10 per cent per year. If the final harvest value falls and only \$80,000 is realised, then the investor realises slightly more than double their initial investment (\$80,000 divided by 38,610 or 2.07). This is an equivalent of just under 8.0 per cent per year for that 10-year investment.

When the discount rate greatly exceeds the expected rate of return for the initial plantation investor, good financial returns are almost always guaranteed for buyers of immature plantations, even where final wood prices fall considerably. This explains why there are lots of buyers for immature plantations. By far the greatest risk is taken by investors establishing new plantations. Their investment will not see rewards for most of the next three decades. If they sell their plantations before harvest under the present system they will get minimal returns on their investment.

Suggested solution

My solution to this unreasonable situation is to reward the plantation owner with a return greater than the plantation buyer. This appears to be reasonable as the plantation establishers took a greater risk and for a longer period than the buyer of a maturing plantation. I recommend we do that by discounting the projected value at harvest by a rate 1.5 per cent lower than the calculated internal rate of return (IRR) using estimated projected returns and current costs i.e. the plantation investment using costs adjusted to the current year. This is not historic costs but costed as if the operations (planting, pruning and so on) were carried out in the

current year. If the current IRR is estimated to be 5.5 per cent then the final harvest value is discounted at 4.0 per cent.

Consultants' use of high discount rates is justified by quotes of the interest rate used in recent sales. The New Zealand discount rates are now high relative to those used to value forests elsewhere in the world.

Are not sales between willing buyers and willing sellers? They are, but both sellers and buyers consult forestry consultants for their advice. Is it any wonder that investors are so keen to buy our plantations when returns of 8.0+ per cent, probably plus inflation, are almost guaranteed? Plantation sellers are simply at the mercy of our forestry consultants who present themselves as valuation experts.

One of the justifications for a high discount rate is that plantations are risky investments. Is any investment, even one in a bank, without risk? An investment in established plantations is probably no more risky than similar investments in agriculture, horticulture, orchards or fishing. If plantation forestry

is a risky investment, the greatest risk is not taken by the buyer of an existing plantation but by the original investor who established the plantation. They did this when the eventual market was in the very distant future and when there was less certainty that there would even be an eventual market. Should not these earlier investors be entitled to a greater return on their investment than the subsequent purchaser of the established plantation?

A range of values

Plantation partnerships commonly have current valuations. Often, if not always, a single value is given and the discount rate used is not always disclosed. It is more informative to both sellers and buyers, as well as all plantation investors, if a range of values is given for discount rates of say 9.0, 7.0, 5.0 and 3.0 per cent. With computers, almost no extra work is required to calculate a range of valuations, but sellers and buyers would be better informed.

Wink Sutton is a retired Forester/Silviculturist.



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