

# Discount rates used for forest valuation

## Results of a pilot survey

The Terms of Reference of the NZIF Forest Valuation Working Party require it "To recommend to Council the desirability of, frequency and format for collection and publication of commonly applied valuation inputs including log price information, discount rates and costs." A quarterly survey of log prices is carried out by the Ministry of Forestry and published in the Forestry Report. There is every indication that this information will continue to be collected and published by the new Ministry of Agriculture and Forestry.

In the second quarter of 1997 a pilot survey was carried out to help determine

the feasibility and merit of the NZIF providing information on discount rates. Forest valuers in a range of forestry companies and consulting firms were surveyed and asked (i) What discount rate did they use to estimate the market value of a forest?; and (ii) What was their estimate of the discount rate implicit in the transaction price of recent forest sales? As assumptions about discount rate articulate closely with log price assumptions, the forest valuers were also asked what log prices they used — both the initial prices used and any growth assumptions.

Responses were:

### (i) Discount rate used to estimate the market value of a forest

Respondent	Discount rate applied to post-tax cashflows	Discount rate applied to pre-tax cashflows	Log prices based on	Log price growth (%)
1	8-9		current prices	0-1
2	8		current prices	1
3	8		current	0
4	8.5		average last 12Q	0
5	8		current prices	0.5
6		9-10	current prices	0
7		8.5-9.5	recent trend line	0
8		9	average last 6Q	0

### (ii) Estimate of the discount rate implicit in the transaction price of recent sales.

Forest	Implicit discount rate (applied to post-tax cashflows)
Forestry Corporation of NZ (1996)	8-9
Hikurangi (FCF sale - 1996)	7.4-8
South Auckland (FCF sale - 1997)	6-7.9
Small forests/partnerships (1997)	7.1-10.1 (average 8.8)

The results indicate a strong consensus on the discount rate used to estimate the market value of a forest but quite a range in discount rates inferred from transaction evidence (both between valuers and between sales). Discount rates being used may well have changed since the survey was carried out because of changes in the forest market.

Clearly the choice of the discount rate to be used in forest valuation will always require judgement on the part of the forest valuer. Readers are referred to the Exposure Draft of the NZIF Forest Valuation Standards for a discussion on the factors to be considered in deriving a discount rate.

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devoted to forestry. They admired the determination he brought to the organisation of the New Zealand Forestry Corporation, and the passion he brought to facilitating the changes which were made by many people who were formerly dependent in some way on the Forest Service. They respected the compassion he had for those whose adaptation to change was dominated by hardship. Not surprisingly, Kirkland's attitude to the developments of the late 1980s was marked by ambivalence, acceptance of intellectual arguments alternating with deep emotional rejection. There was never any doubt that Kirkland would always see both advantages and disadvantages in what was done, and his assessment of the net balances fluctuated. The sale of NZ Forestry Corporation was sometimes seen as a betrayal; the new Director-General of Social Welfare was optimistic about the chances of reconciling the claims of compassion and efficient use of resources. Sadly, the continued learning and constant reassessment of a very lively mind was cut short, uncompleted.

Berg was much less in the public eye and operated at less elevated heights, but this book suggests that his experience was not dissimilar in kind. The same must have been true for many in the Forest Service.

A Century of State-Honed Enterprise does not continue the search for balance. While it is not a simple polemic, it is dominated by nostalgia for the past, and it does not give a basis for exploring the argu-

## BOOK REVIEWS

### 'A Century of State-Honed Enterprise'

**A Century of State-Honed Enterprise: 100 Years of State Plantation Forestry in New Zealand. Andrew Kirkland and Peter Berg (Auckland: Profile Books, 1997).**

Andy Kirkland worked for the New Zealand Forestry Service and its successors from 1952 to 1990. He was later Director-General of the Department of Social Welfare until his untimely illness and premature death. Peter Berg worked for the New Zealand Forest Service from 1967 to 1987 and then moved with Kirk-

land to the New Zealand Forestry Corporation. He continues to be involved with forestry, and at the time this book was written he was General Manager Business Development for Rayonier NZ Ltd, the New Zealand arm of a North American forestry company which bought former State forests in 1992. This book is therefore a retrospective survey of public sector forestry in New Zealand by insiders.

Kirkland was the last Director-General of the New Zealand Forest Service and presided over the abandonment of "multiple-use forestry" which had been the ideology of that Service for many years. Those who knew Kirkland in the mid-1980s will remember the tremendous pressures on him as he came to terms with changed attitudes towards forestry — his reluctant acceptance of the argument for clarifying objectives and of the imperative of getting better returns from the resources