

advice. Their theoretical "optimum" financial rotation length, for any particular discount rate, may be longer than is customarily thought.

#### A Lower Discount Rate

Which brings me on to the third radical concept: the application of portfolio theory where forestry is secondary to the agricultural business, and the effect that has on the appropriate discount rate. I can hear the yawns from here. Forestry on farms significantly reduces the farmer's risk. It not only provides a diversification of income source, but is ideally suited to complement farm revenue patterns

through its discretionary harvest ability. On top of that, there are significant intangible advantages ranging from saving weed control and fertiliser costs, through to protecting farm soil resources and sheltering man and beast, all by planting land that is not the best grazing. Sounds like the perfect land-use complement, which more and more farmers believe it is.

If you believe that the overall farm (read investment portfolio) risk is reduced, then the farmer (read investment analyst) can justifiably apply a "risk-free" discount rate of perhaps 3% to 4% real – or so the financial analysts would argue. That would result in a wider range of species

options, longer rotation lengths, higher stockings, and higher pruned heights. The irony here is that many farmers are applying these very options without a rational argument in sight. Whatever the reason they plant, long may it continue.

The editorial board did plan this issue's theme as forestry on farms. However, events such as the export log price rises, the passing of the Forests Amendment Act, and the East Coast kanuka debate, have provided a rash of comment. As Gerard Horgan suggests in his commentary, we do live in interesting times.

Chris Perley

## Forestry ownership – some implications of change

Throughout its relatively short history New Zealand has many times been the beneficiary of overseas capital strategically invested in a growing economy.

As a result we have advanced our technology, expanded our markets and increased both our exchange earnings and our job opportunities.

Unfortunately, in more recent years politicians driven to desperation by our balance of payments position have opted to induce further capital into the country by the indiscriminate sale of public assets.

Encouraged by the textbook economists of Treasury, they have placed a price tag on virtually every publicly-owned enterprise, and actively canvassed buyers. Cash in hand has been the major consideration. Scant attention has been given to the future worth of the assets.

The argument advanced has been that by taking the money now we reduce our overseas indebtedness and thus gain an ongoing benefit from the reduced pressure on the economy.

Many assets have been sold, regular sources of Government income traded away, and we have lost control of key industries and resources, but the overseas debt has continued to climb.

Often the value of the assets has escalated quite dramatically once the sale has been made. There is no better example of this than in the forestry sector.

If ever an industry has grown with the country, nurtured by New Zealand hands and resourced by New Zealand dollars, it has been the timber industry – particularly the development of exotic forests.

With a climate that produces year-round growth, both the radiata and Douglas

species have prospered particularly well.

On the technical side New Zealand has led the world in the treatment of radiata, giving it a far greater value than many had earlier dreamed possible. The country owned a resource rapidly increasing in both quantum and value.

There was, however, a myth generated that foreign capital was essential for the industry's development. That need has been grossly overstated and in the lumber industry is a complete fallacy. The necessary capital is available within New Zealand. It is a question of mobilisation, and the key to unlocking the necessary funds is to be found in security of supply and the ability of the processing industry to plan on a long-term basis.

Despite this, there emerged the Treasury-inspired scheme to sell 550,000 hectares of publicly-owned forest. The Government accepted the proposal. The sales were made without any provision for the future of New Zealand's on-shore timber-based industries. The balance between the public and private sectors of the industry, which had seen increasing innovation

and an increasing range of domestically based timber processing operations, now faced some risk of destabilisation.

As a country we had become acutely aware of the need to protect our native forests, and successive Governments increasingly intervened in the interests of conservation. When it comes to exotics, however, it is very much an economic free-for-all. Forest ownership has largely been determined by financial muscle and, not surprisingly, an increasing amount of this has been provided from off-shore. \*As countries throughout the Pacific Basin have acted to dedicate their timber resources exclusively to local processing, so has New Zealand become more attractive as a source of raw logs. Along with Chile, we seem to have become the variable factor in the supply equation and thus in danger of being manipulated to meet the processing needs of other Pacific countries. At least one international investor has bought into our forests for the sole purpose (inherited contracts aside) of shipping logs.

The export figures for the 1992 trading year show sawn timber at \$297 million but logs at \$369 million. Despite a very significant increase in investment by the New Zealand sawmilling industry, log sales are escalating at a much more rapid rate than those of sawn timbers.

Some overseas forest owners, Juken-Nissho for example, are evolving a significant on-shore processing programme. That, in itself, is a positive development. Such a move obviously recognises the value of our long-term sustainable resource, the skill of our work force, and the benefits of shipping a processed product rather

\* Forest acquisition by foreign companies 1990-92 included:

• Ernslaw One (Malaysia/Singapore)	23,801 hectares
• Juken-Nissho (Japan)	43,531 hectares
• Wenita (Hong Kong/China)	20,521 hectares
• Winstone Pulp International (Indonesia)	8,331 hectares
• Oji Paper & Sanyo Kokusaku Pulp (Japan)	30,232 hectares
• ITT Rayonier (USA)	97,453 hectares

This list does not include all companies deemed foreign under OIC definition.

than raw logs. These are, of course, the very reasons why we should have retained a much greater direct control of our own forests, or at least laid down ground rules to guarantee stability of supply and thus encourage the investment flow necessary to maintain our domestic processing industry at the cutting edge of technology.

Some forest owners argue that if sawmillers or any other timber processors wished to maintain a guaranteed supply of timber they should have bought directly into forest ownership when the State forests came on the market.

That simplistic argument of convenience ignores two important considerations.

The first relates to the question of financial muscle that I mentioned earlier. Even when independent mill operators were prepared to purchase forest and combined their resources to make a reasonable bid, they were invariably shut out by the corporates.

The second is a matter of commercial priorities. Many processors quite properly regard themselves as manufacturers and

not foresters. They see the plough-back of capital into their processing business as much more important than trying to participate in tree-growing ventures. They have also been conditioned to some extent by earlier experience when adequacy of log supply was not a significant problem. Now they often have to draw their needs from a combination of the new corporate owners and private woodlots. Most of the former own directly competing processing plants and have an understandable commercial reluctance to supply their opposition. In fact, if a number of the new owners weren't locked into contracts existing at the time of purchase, the processing industry would today be in even greater difficulty. Of course, these contracts won't last long and my experience is that, with one exception, there is a marked reluctance on the part of the corporates to consider contracts in the future, even if they were to be on a two-year basis with regular price reviews. That would appear to be a minimum if the milling industry is to be given a reasonable sense of stability.

One other factor that is distorting the local saw-log market is the tariff structure erected by our major trading partners. Logs suffer no duty barrier while processed timber attracts a range of tariffs according to the nature of the product. The New Zealand processor is often further disadvantaged by the fact that some overseas companies operating in New Zealand appear to be able to use their commercial connections within the purchasing country to gain a tariff and thus a price advantage.

In summary, the dramatic change in forest ownership – associated with a volatile international market – has significantly undermined the confidence of the milling industry. This in turn is costing both job opportunities and a chance to maximise export earnings. If the forest owners won't agree on a strategic plan that genuinely looks to the future, the Government should adopt the role of referee. Failure to act will cost the country a great deal.

**Rt Hon. Sir Wallace Rowling**

## Health and Safety – the profession's next challenge

The last two years have seen the passage of two very significant pieces of legislation affecting the forest industry:

- the Resource Management Act, effective October 1991,
- Health and Safety in Employment Act, effective April 1993.

Both Acts carry the principle of transferring significant responsibility to forest owners and contractors for care of employees and resources within their operations. There was considerable interest and some concern within the industry leading up to the implementation of the RMA. However, the industry is fundamentally friendly to soil, water and the public, and is one of the few sustaining and enhancing land-uses.

Not so with the HSEA. The industry's safety record is one of its few real weaknesses, a point of vulnerability which the new Act could expose. In fact, it has been suggested that logging work is a target of the Act.

The Occupational Safety and Health Service and various employer associations have produced a range of information and run seminars on the Act. It is hoped that by now all who work in our industry are fam-

iliar with the Act and its requirements. The intention of this article is to highlight the considerable legal liability that forest owners or managers and their staff face under the Act.

The Act sets incredibly high standards of duty, most of which are embodied in the obligation to take "all practicable steps" to avoid harm to not only employees but also the public, visitors and customers in the place of work. "All practicable steps" is a key phrase used throughout the Act and is defined in a Wellington Regional Employers Association booklet on the Act as:

"All steps that it is reasonably practicable to take to achieve any result in any circumstances, having regard to the nature and severity of the harm that may be suffered, the current state of knowledge regarding the nature and likelihood of occurrence of that harm, and the state of knowledge and cost of the means available to achieve the results.

"In practice this means that where there is a high risk of severe harm occurring, then it would be expected that the situation would be remedied, even at high cost,

whereas a similar high expenditure to remedy a low risk, low hazard situation could be considered unreasonable."

Given the relatively high risk of serious harm in many of our operations, such as tree felling and landing work, it would seem that high cost or lack of knowledge of say mechanised harvesting alternatives will not be a very effective defence to prosecution under the Act. The Act may provide additional incentive to the growing development of mechanisation of labour-intensive and hazardous work, where terrain and or changes in methods allow.

The Act crystallises the responsibilities of forest owners or manager in respect of their contractors' employees. Since the wholesale move to contractor operations in the mid 1980s companies have been coy in the extent of responsibilities to employees of their independent contractors; anxious to demonstrate independence to such interested parties as the IRD. In some cases the previous steady progress in training and awareness through the late 1970s, early 1980s, was compromised by this hands-off approach. The new Act clearly establishes the obligations of persons who control the place of work for the