

document, the expected price increases are stated per annum in both percentage terms and in fixed dollars. These two increases are not equal. Fixed dollar increases distort the long-term trends, if those trends are actually constant percentage increases. Fixed dollar increases add much more weight to the value of harvests in the immediate future than do percentage increases. When entered into a valuation formula, they provide a much higher present value than does a percentage increase. Since BERL's final recommendations are stated in percentage terms, it is misleading²⁴ to present long-term price increases in per annum dollar terms within the document.

The Report Contains No References

- The authors failed to document their work. There is no references section. This alone is enough to discredit the entire document.
- The entire document was filled with statements which should have been referenced. Reports were quoted vaguely and referred to without giving the exact sources or dates. This made it impossible to query any of the authoritative support BERL referred to.²⁵
- Projections were given without noting either the sources (if they were based on others' work) or the basis for the projections. Lines were drawn through graphs without giving any details on goodness of fit or how the projections were made.
- Figures were shown without noting the sources for the data on which they were based. In addition, there were no supporting data in appendices. Tables were also shown without noting their sources.

Summary

- This report fails as an unbiased report on valuation prices for New Zealand's exotic forests. The report was written as if its purpose was to justify a high price for the Forestry Corporation's plantations. However, even in this biased sense, it fails. The authors did not critically examine the implications of their projections. They naively accepted the forecasts in other reports without examining the assumptions and weaknesses in them. They failed to document their work. To produce a report such as this, they should have at least mentioned and

²⁴ If they knew what they were doing, it would be irresponsible, but, to their credit, it appears as if they didn't realise the implications of their actions.

²⁵ See for example: p. 29: "Studies have shown . . ." p. 29: "Predicted real export prices . . . given by Hansard and Horgan . . ."

dismissed the shortcomings of their projections. As it is, their projections may or may not be justifiable, but they did not provide solid evidence to defend them.

- The problem of what to use for future prices for the wood in New Zealand's exotic plantations is critical in determining a valuation for them. It is understandable that Treasury should want a credible report supporting high prices. They did not get one.
- The BERL report raised a host of questions which deserve more research. This report addressed in a preliminary manner some of the topics which should be examined. The valuation of the State exotic plantations is an important enough issue that such research should be undertaken. The BERL report failed to examine the issue in a critical manner.
- For the sake of the New Zealand economy, I hope the BERL projections are correct. However, their report does nothing to support the use of higher log prices in the valuation of New Zealand's exotic forests.

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Response to E.M. Bilek critique

by Kel Sanderson, Director,
Business and Economic Research Ltd

I have received a copy of the article "Valuation Prices for Wood in New Zealand Exotic Forests: A critique by E.M. Bilek" and as main author of the subject report I am very grateful for the opportunity to respond.

The critique does not directly question and refute the two main pricing conclusions of the BERL report, namely the underlying trend of free market prices for wood in New Zealand at April 1, 1987, and the projected increase in prices over the valuation period by an average of about 2% per annum in real terms. The critique appears to accept the April 87 price levels, and in relation to increasing real prices concludes only that it is arguable whether the data support the BERL conclusion. Unfortunately, having adopted the critique form, Bilek did not have to include his own analyses, projections or forecasts of wood prices.

The BERL/Treasury report documents a series of analyses and investigations undertaken during 1987 and in

1988 in the course of various discussions and negotiations between Treasury and the NZ Forestry Corporation in an attempt to place the most realistic value on the Government's forests. The report describes only the work on wood prices, and only that on the Treasury side. In a time of fundamental structural change it was necessary to explore possible change in most industry parameters and to obtain reasonable indications of the likely direction and extent of change in each area. We had to rely on much overseas published material. There is a dearth of such material for New Zealand, which says little for the quality and extent of research into these areas to date. We certainly did not have the time or resources to fully investigate for ourselves, in the field, all of the areas of change identified, nor did we have the time or desire to convert this working document into an academic treatise.

Dr Bilek's main concerns are now mentioned.

Benefits from Productivity Gains

The critique discusses mill technology improvements, processing productivity, port charges and freight improvements and says "it is indefensible . . . to say that all benefits should flow through to stumpage". The BERL report nowhere says all benefits will flow through to stumpage. The sharing of the benefits will depend on marketing strengths, price elasticities of different products in different markets and the like. Accepting that there will be productivity gains, as Bilek and most commentators do, means accepting that there can be some of these real gains passed back to the tree for some products in some markets and thus real stumpage prices can rise over time, depending on productivities and marketing achievements.

Income Elasticity of Demand

Bilek notes the quote "wood products . . . have a relatively high income elasticity of demand over a broad range of income internationally" and attempts to refute this by reference to three specific examples. The first two relate to mature markets, namely consumption in roundwood equivalent in the US since 1950, and to sawn timber consumption in New Zealand. These two statements by no means prove that there are no wood-based products which have a relatively high income elasticity of demand in US and New Zealand. In the third example he then states "most of the world's wood is consumed in developing countries", and "if their real incomes rise . . . this would . . . probably (be) accompanied by an increase in demand for paper and reconstituted wood products." This third opinion agrees with the BERL statement.

Price Trends and Projections

The critique states that BERL should have questioned the bias of its sources. An alternative is to provide a range of sources and on Page 60 BERL quotes a total of six analyses. It is unlikely that all of these analyses are biased upwards, and in fact the author of one paper, Roger Sedjo, is a self-professed pessimist on wood prices.

The Recent Price Track

In discussing the USFS material Bilek noted that real stumpage prices and prices for softwood lumber fell, between 1980 and 1986. This same point is made in relation to his Figures 4, 5 and 6. A reasonably logical interpretation of the main movements on these graphs (as with many series of prices for commodities etc denominated in US dollars over this period) is that there were price drops in 1975 and 1979, caused by the two oil shocks. Prices in US dollar terms did not

recover in the first half of the 1980s because monetarist policies maintained the US dollar exchange rate misaligned above its fundamental level. A continuation of these graphs beyond 1986 will generally show the price recovering as the US dollar moves toward a more fundamental level. The magnitude of the price recovery is indicated by the US Department of Commerce figures which show that on an FAS basis, the average US dollar value per MBF of all softwood logs exported from the US in calendar 1988 was 40.5% higher than the average value in 1986. (Wood Products: International Trade and Foreign Markets. USDA Foreign Agricultural Service WP1-89. Washington DC March 1989) This further confirms the upward trend overall.

Most other statements made in the critique lead to similar logical explanations, or questioning of the implied assumptions, e.g. that pulpwood must be physically exported for the NZ pulpwood price to reflect world trends.

My own main concern in terms of the future of the forest sector is with the negative bias shown by this critique and by some other main elements in the New Zealand industry. The bias is perhaps best illustrated by Bilek's discussion of the Southern Pine lumber price 1950 to 1986, in which he concludes: . . . "if the exceptionally high prices of the late 1970s and early 1980s were removed from the series, the slight upward trend could be eliminated completely". Why would the New Zealand forest sector wish to delude themselves as to the future of world wood prices by such unprofessional, not to say dishonest, analysis? By including the 1987 and 1988 figures in these series, the upward trend in prices since 1950 is confirmed, as

shown for example in Fig 11 of the BERL report.

Bilek does conclude in general that the BERL report raised a host of questions which deserve more research. Some people and groups in the industry are positively embarking on research and progress on some of these questions. One would hope that Dr Bilek, the School of Forestry, and readers of NZ Forestry in general will do likewise.

CONSULTANT RECOGNITION

Mr Ross Usmar, of Auckland, has received recognition as a General Forest Consultant.

PERMANENT WORK REQUIRED

I completed the Forestry Degree last year with a B average (grade).

Interested in harvesting/roading and marketing. Studying accountancy through Massey this year.

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