ANU Forestry Market Report 3  
March 1998

Australia’s major trading partners in Asia are currently experiencing financial upheaval, low economic growth or both. It is justifiably a cause of much concern to primary producers and others in Australia. Although the situation is still unfolding, countries have emerged strongly from worse circumstances in the past. So perhaps it is not too inappropriate to look beyond the short term. Hence, …

Log and Agricultural Product Prices Beyond 2000

Before planting trees for commercial log production, farmers need a lot of information for assessing its profitability. So one of the questions they ask is ‘What log prices can they expect to receive when trees will be harvested in ten or more years’ time?’ As farm land has agricultural uses, farmers also ask ‘How will the log prices compare with agricultural product prices during that time?’ Log price relative to agricultural prices is therefore an important piece of information for them.

Relative price

It is useful to compare log and agricultural product prices in terms of relative price. Relative price is calculated by dividing log price with agricultural product price; the ratio may be multiplied by 100 to express it in percentage terms. Relative price is not quoted in dollars because it is a ratio or an index.

If the relative price goes up over time, it means that log price has in effect increased compared with agricultural product prices.

Past trends

Before looking at relative prices in future, it is helpful to first look at past relative prices.

Data on stumpage, that is, price of wood in a standing tree, are currently only available for Tasmania. Hence, past trends are examined here for Tasmania. The period is 1980-81 to 1996-97. Stumpages are from annual reports of Forestry Tasmania and refer to logs from public forests and plantations in the State. Stumpages represent weighted average prices for various log types, locations and markets. Table 1 shows recent average stumpages.

1: Stumpages, Forestry Tasmania

<table>
<thead>
<tr>
<th>Log type</th>
<th>1995-96</th>
<th>1996-97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native forest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawlog, $/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eucalypt veneer</td>
<td>49.26</td>
<td>51.06</td>
</tr>
<tr>
<td>Eucalypt category 1 &amp; 3</td>
<td>24.51</td>
<td>27.92</td>
</tr>
<tr>
<td>Eucalypt category 2 &amp; 8</td>
<td>17.16</td>
<td>17.87</td>
</tr>
<tr>
<td>Special species</td>
<td>45.34</td>
<td>46.37</td>
</tr>
<tr>
<td>Pulpwood, $/t</td>
<td>12.82</td>
<td>13.94</td>
</tr>
<tr>
<td>Plantation softwood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veneer, $/m³</td>
<td>83.87</td>
<td>84.45</td>
</tr>
<tr>
<td>Sawlog, $/m³</td>
<td>28.37</td>
<td>25.43</td>
</tr>
<tr>
<td>Pulpwood, $/t</td>
<td>7.87</td>
<td>8.90</td>
</tr>
</tbody>
</table>

The stumpage data used here for calculating relative prices refer to only native forest pulpwod and eucalypt sawlogs (excluding veneer and special species) and plantation softwood pulpwod and sawlogs.

Forestry Tasmania is a dominant supplier of logs in the State. Due to economies of size, Forestry Tasmania generally receives higher stumpage than small scale growers there. However, stumpages for both are expected to follow similar trend over time.

Australian Bureau of Agricultural and Resource Economics (ABARE) is the source of data on agricultural prices. The data are weighted index of current prices received by farmers in Tasmania for total crops and livestock — barley, oats, apples, potatoes, wool, milk and slaughter cattle, sheep, lambs, pigs, etc. Base for the index: 1987-88=100.

The relative price of logs is calculated in two steps. First, Forestry Tasmania stumpage is converted to separate indexes for each log type, with the base year as for the ABARE index. Next, stumpage index for each log type is divided by the ABARE index of total agricultural prices received by Tasmanian farmers, and expressed as a percentage. Figure A shows relative stumpages for four types of logs.

A: Relative stumpages, Tasmania

An examination of figure A reveals that:

◊ Relative stumpages for the four types of logs have tended to increase over the years, except for plantation softwood pulpwod that has a declining trend.
Relative stumpage of eucalypt sawlogs has tended to rise faster than that of softwood sawlogs.
Relative stumpage of eucalypt pulpwood rose sharply in 1988-89. It was due to a three fold rise in stumpage during the year.

Future trends
Many have made medium to long term projections of world agricultural prices. But only the World Bank has made projections of both timber and agricultural prices. Hence the World Bank data are used for looking at future trends in relative prices in the world market, of which Australia is an integral part.

The relative price is calculated by dividing projected timber price by agricultural commodity price and expressed as percentages. The World Bank specifies prices as follows.

‘Timber’ price is a weighted index of prices in current US dollars for Malaysian and West African logs, Southeast Asian plywood, Malaysian and Ghanian sawnwood and Swedish woodpulp.

Agricultural prices are weighted indexes of prices in current US dollars. ‘Grains’ price index is for the US grain sorghum and maize, Thai rice, and Canadian and US wheat. ‘Other foods’ price index is for Australian/New Zealand beef, New Zealand lamb, the US and world sugar, Central and South American bananas, Mediterranean oranges and fishmeal of any origin. ‘Total food’ price index represents fats and oils, grains and other foods groups.

Base for these indexes: 1990=100. Using the indexes, figure B presents world market price of timber relative to prices of grains, other foods and total food. It has actual values till 1996 and projections from 1997 to 2010.

The projections in figure B reveal that relative price of timber in world markets is likely to have a rising trend during 2000–2010. The trend works out to an average rise of 1.5 per cent a year, assuming the World Bank projections are correct.

Australia pursues freer trade in world markets. Also, State forest agencies are committed to setting stumpage for public forest logs based on market conditions. Hence, prices of logs and food commodities received by Australian growers are assumed to reflect more closely world market prices than has probably been the case in the past. On this basis, Australian farmers thinking of growing trees for commercial log production may expect relative prices of most types of logs to also rise during 2000–2010.

Main points
- In the past decade and a half in Tasmania, stumpages for major log types appear to have increased relative to total agricultural product prices.
- In the next ten to twelve years, world market prices for logs are projected to increase relative to food prices. In keeping with the world market trends, relative prices of most log types in Australia may also rise during the period.

This market report is a trial initiative of the ANU Department of Forestry. It follows consultations with the Australian Forest Growers and other groups. Continuation of the initiative beyond a trial period of one to two years will depend on support for it. The Department invites comments and suggestions on the initiative and the report. Please address them to Dr U.N. Bhati, Department of Forestry, The Australian National University, Canberra ACT 0200; alternatively, fax them on (02) 6249 0746 or email un.bhati@anu.edu.au. This and the previous issues of the market report can be found on the Department’s web page at: http://www.anu.edu.au/Forestry/info/marketreport/index.html.