

Stumpage trends in Western Australia

This market report examines trends in stumpage for native forest logs in Western Australia. It also presents prices of New Zealand radiata pine logs, and case studies of stumpage received by small-scale forest growers in Australia.

Stumpage trends in Western Australia

Stumpage data were available from Forest Products Commission of Western Australia (WA), but only for State-owned native forest logs. The Commission is responsible, among other things, for the sale of forest products from State's native forests and woodlands and from State-owned and State-managed plantations. The Commission is a State trading enterprise.

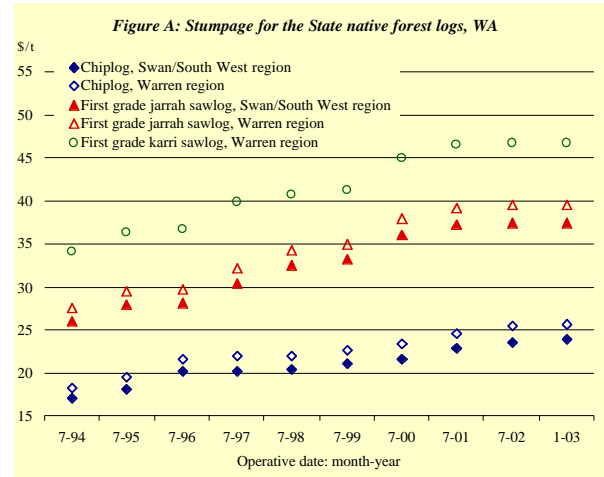
The stumpage data are for approximately ten years to 2003. They cover two key regions of the State and two major categories of native forest logs—chiplogs and first grade sawlogs. Sawlog species are jarrah (*Eucalyptus marginata*) and karri (*E. diversicolor*). Briefly and depending on the species, a first grade sawlog is generally 2.1–4 metres long, with the small end diameter of 200–300 millimetres.

The Commission's Annual Report gives total harvest of native forest logs in the State as 833,018 tonnes for the year ending 30 June 2002. Of the total, chiplogs account for 29 per cent and the jarrah and karri sawlogs together 56 per cent. The Annual Report did not segregate the data between the first and the second grades of sawlogs. However, the two grades jointly represent 90 per cent of the total harvest of sawlogs. These numbers indicate that the categories and species of logs covered by the stumpage data are among the principal types of logs harvested from State native forests.

The Commission, which was established in November 2000, and its predecessor government agency (CALM), have been virtually the sole supplier of native forest logs in WA, thus dominating the supply of these logs in the local market. Stumpage trends for government owned logs are therefore likely to reflect the trends in (if not the level of) stumpage for WA's private native forest growers.

With this background, figure A presents stumpage trends for the two categories of native forest logs, by region and species. Note that the stumpage is in dollars per tonne; it excludes the goods and services tax.

The figure shows that during the operative period from July 1994 to January 2003, stumpage for each category and species of log and the region has a rising trend. However, since July 2001, the increases in stumpage have been small; sawlog stumpage have hardly increased.



Stumpage in figure A are nominal; that is, they have not been adjusted for the effect of general price inflation on them. It raises a question: are the rising trends in stumpage simply an illusion because the trends may simply be reflecting the inflation? In a similar vein, another question is: how do the stumpage trends compare with trends in prices of wood products produced from chiplogs and sawlogs?

Table 1 attempts to answer these important questions. The upper section of the table gives stumpage for the operative dates of July 1994 and January 2003, and average annual percentage changes in stumpage for the whole period.

The lower section of the table gives, for quarters corresponding with stumpage operative dates, the average annual percentage changes in the following three sets of prices.

- The consumer price index for Perth, capital city of the State: A measure of general price inflation in WA.
- The average 'free on board' price of hardwood chips exported from WA: A general measure of hardwood chip prices in the State. The chiplogs produce woodchips for domestic use and exports.
- The price index of structural timber for Perth: A measure of sawnwood prices in WA. Structural timber is a major class of sawnwood produced from sawlogs.

It is evident from table 1 that the stumpage rose at average rates of 3.6 to 4.5 per cent a year, whereas the inflation rate was only 2.4 per cent a year. The comparatively smaller rise in the inflation means that the rising trends in stumpage were not an illusion; the stumpage did increase in real terms, and this increase was at an average rate of around 1 per cent a year for chiplogs and 2 per cent a year for sawlogs.

Continuing with table 1, the average annual increases in the prices of export hardwood chips and

structural timber were practically equal to zero. Obviously the increases in stumpage also exceeded the increases in prices of these two further value-added products made from the logs. However, a note of caution is in order due to limitations in the data. The data on export hardwood chips includes chips from not only native forest chiplogs, but also from hardwood sawmill residues and recently from hardwood plantation chiplogs. Similarly, structural timber is a mix of both hardwood and softwood. Although the data sources are reliable, the data published by them are highly aggregated. Hence the comparisons of the stumpage with the woodchip and timber prices must be regarded as rough. Nonetheless, in absence of better data, the comparisons offer helpful clues to how log prices have increased relative to the prices of the two major further value-added products of those logs.

Outlook

The above-mentioned findings are a useful history. However, a consideration of the possible future would also be useful. The question therefore is: what will the future stumpage trends look like?

A media release of 28 August 2002 by the WA government minister responsible for forestry states, 'A review has confirmed the current method of pricing of native forest hardwood logs is the most appropriate in today's environment. ...[The review] has recommended there should be no change to the current method of setting the base price on the cost of growing. The current method ensures that the Forest Products Commission meets its obligations under the Forest Products Act and National Forest Policy Statement.' In the light of this commendation of the

review by the minister, it is reasonable to expect that stumpage for State native forest logs in future would continue to be set as in the past. General trends in stumpage of the past ten years may therefore continue over the next ten years.

However, the WA government policy of 'Protecting Our Old-growth Forests' may well overshadow the recommendations of the log pricing review. The policy aims to end harvesting of logs in as much as 99 per cent of old-growth State forests, thus significantly reducing the supply of native forest logs. But the policy also provides for giving adjustment assistance to native forest sawmills, their workers and the communities; assisting greater value-adding by furniture and other wood-using industries; encouraging plantation forests; fostering interstate and international marketing; creating new national parks and reserves; promoting eco-tourism and recreation; etc. Obviously the scope and depth of the policy consequences are far reaching. Furthermore, implementation of the policy is a work-in-progress at present. As a result it is not practicable to predict what the stumpage will be like in future.

Main summary points

- Stumpage of State native forest chiplogs and first grade sawlogs have had rising trends for the last ten years.
- The stumpage increased in real terms by an average of 1 to 2 per cent a year.
- Indications were that stumpage of native forest chiplogs increased relative to the price of export hardwood chips. Similarly, the price of first grade sawlogs increased relative to the price of structural timber.

1: Changes in stumpage of native forest logs and in other prices, Western Australia

	July 1994	January 2003	Average increase #
Stumpage; FPC:	\$/t	\$/t	% per year
Chiplogs, Swan/South West region	17.04	23.91	3.6
Chiplogs, Warren region	18.34	25.74	3.6
First grade jarrah sawlogs, Swan/South West region	26.14	37.52	4.5
First grade jarrah sawlogs, Warren region	27.58	39.52	4.5
First grade karri sawlogs, Warren region	34.09	46.80	3.9
	September quarter 1994	March quarter 2003	Average increase #
			% per year
Consumer price index, Perth (base: 1989-90 = 100); ABS	110.1 index	137.4 index	2.4
Average FOB value of export hardwood chips, WA; ABARE	\$146.15/bdt	\$155.06/bdt	0.0
Structural timber price index, Perth (base: 1989-90 = 100); ABS	111.7 index	108.4 index	0.0

Average percentage increase per year was calculated by the least squares regression method, using all data points of a series rather than the first and the last data points only. For chips and timber, the average annual increases were statistically equal to zero. FOB, free on board. bdt, bone dry tonne.

Sources: FPC, Forest Products Commission of Western Australia; ABS, Australian Bureau of Statistics; ABARE, Australian Bureau of Agricultural and Resource Economics.

Correction

ANU Forestry Market Report, number 24, released in early June 2003 had two errors in it. To correct them, please replace 'Radita' with 'Radiata' in figure A on page 1; and the number '1.3' with '2' on page 3, in the second paragraph of the section titled, Price outlook.

Trends in New Zealand radiata pine log prices

NZ is a leading world producer and exporter of radiata pine logs. Hence, for Australian radiata pine growers, the NZ log market prices are a window on the world market situation.

The NZ Ministry of Agriculture and Forestry (NZMAF) collects the NZ price data from major NZ log suppliers and releases them quarterly as a range for each grade of logs.

NZMAF quotes prices in NZ dollars. They have been converted in this report into Australian dollars, using the exchange rates published by Reserve Bank of Australia. The average exchange rate for the June quarter 2003 was NZ\$1.1290 = \$1.00.

Based on the NZMAF data, table 2 shows the prices for the June quarter 2003. The numbers in brackets in the table are small end diameters (SED) of logs. SED and other features of a log determine its grade. More information on NZ log grades is available from U.N. Bhati. His contact details are at the end of the report.

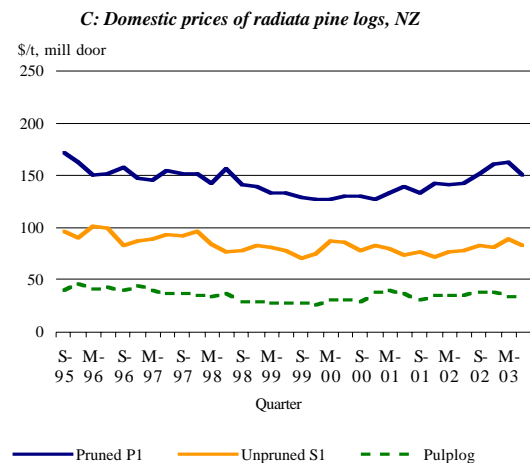
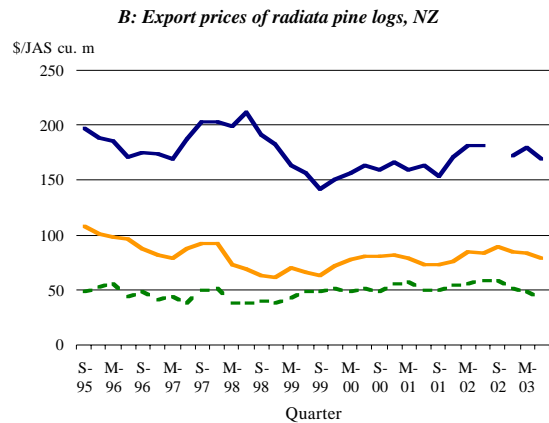
2: NZ radiata pine log prices: June quarter 2003

Export, FOB	\$/JAS cu. m
Pruned peeler (300+ mm)	136–204
Unpruned A grade (200–340 mm)	77–94
Unpruned J grade (200–260 mm)	68–90
Unpruned K grade (200–260 mm)	62–76
Pulplog (100+ mm)	35–46

Domestic, mill door	\$/t
P1 pruned (400+ mm)	131–168
P2 pruned (300–399 mm)	97–135
S1 unpruned (400+ mm)	73–93
S2 unpruned (300–399 mm)	74–83
L1 & L2 unpruned (300+ mm)	44–63
S3 & L3 pruned/ unpruned (200–299 mm)	44–69
Pulplog (100 mm)	30–34

Export prices are per Japanese Agricultural Standard (JAS) cubic metre on a free on board (FOB) basis. Domestic prices are per tonne delivered at mill door. The prices are indicative.

To show the June quarter 2003 prices in a longer time frame perspective, figures B and C, respectively, show trends in the NZ export and domestic prices for selected grades of logs from September quarter 1995 to June quarter 2003. The trend line for each grade is based on the middle points of its quarterly price range.



Stumpage for small-scale growers

The ANU Forestry Market Report project has collected information on actual stumpage prices received by six Australian small-scale forest growers. As the collected information was insufficient for deriving averages and trends, it is presented in case

study format in table 3. Users should exercise due care in using this information for assessing stumpage for a particular situation, and should not take stumpage as the sole indicator of current or future profitability.

3: Stumpage case studies

Region/ State	Period	Type of log	Stumpage	Comments
S-W, Western Australia	April 2002	Mixed eucalypt species: Pulplogs	\$12.60/t	418 t; thinnings; 60 km to mill; mill door price \$42.70/t +GST; average cost of harvesting \$19/t and cartage \$10.20/t

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Region/ State	Period	Type of log	Stumpage	Comments
S-W, Western Australia	September 2002	Planted forest: <i>E. globulus</i> chiplogs	\$27.50/t	675 t; area thinned 7.6 ha, from 708 to 150 trees/ ha
	March- May 2003	Planted forest: <i>E. globulus</i> chiplogs	\$25.43/t	8,541 t; 56 ha, clear felled at age 10; 25 km to mill; mill door price \$47.73/t
	May 2003	Planted forest: Spotted gum, sawlogs	\$23/t	8 cu. m; pruned thinnings, small end diameter of sawlogs, 200 mm; age 9; mill door price \$55/t; 40 km to mill
Western Australia	June 2003	Radiata pine:		Destined for domestic market
		Sawlogs	\$26-\$47/cu. m	2,000 cu. m, 100 km to mill
		Pulplogs	\$10.24/ cu. m	2,000 cu. m, 100 km to mill
Gippsland, Victoria	April-May 2003	Pine:		
		Large sawlogs	\$37.40/cu. m	
		Small-medium sawlogs	\$31.52/cu. m	
		Second grade sawlogs	\$27.80/cu. m	
		Post logs	\$17.20/cu. m	
		Pulplogs	\$12.20/cu. m	
		Hardwood:		
Pulplogs D grade	\$13.26/cu. m			

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