Japanese woodchip import market

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Primarily for small-scale forest growers

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Revenue from exports of Australian woodchips improves the financial viability of log production in Australia. Japan is the world's largest importer of woodchips. In recognition of these facts, and following the 'Know your markets' advice, this report looks at selected features of woodchip trade between Australia and Japan. It also gives the stumpage received by forest growers in Australia (stumpage means price of wood in a standing tree).

Japan: the dominant market

In recent years, Australia has received $600–650 million annually in revenue from exports of some 4–4.5 million 'bone dry' tonnes (b.d.t.) woodchips. Hardwood chips contribute about three-quarters to the total export value and volume; softwood chips contribute the remainder.

Australia exports woodchips mainly to Japan, Korea, Taiwan and Indonesia. However, by far the most significant and consistent market is Japan; it buys around 95 per cent of the total Australian exports.

Clearly, Japan is overwhelmingly important to Australia. But Australia is not important to Japan to the same extent. Japan imports woodchips from more than a dozen other countries. USA has the largest share of the Japanese market at 34 per cent. Australia's share is about 28 per cent. (Some recent indicators hint at increases in Australian exports and share of the Japanese market.)

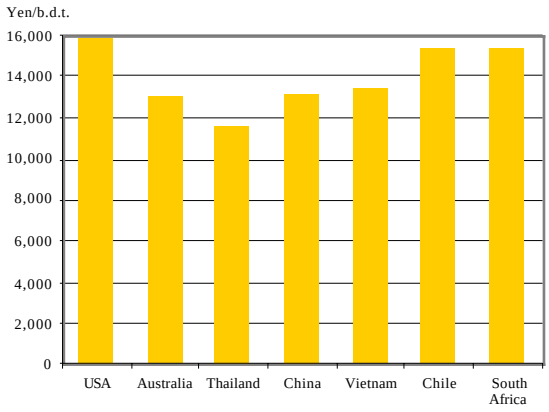
Nearly all imported woodchips in Japan are used as a source of fibre by its paper industry, the second largest in the world. But woodchips have to compete against other sources of fibre. Of the total fibre required by the Japanese paper industry, waste paper provides as much as 56 per cent; imported pulp and pulp from domestic sources 10 per cent each; pulp from imported woodchips provides only the remainder 24 per cent.

Woodchip prices

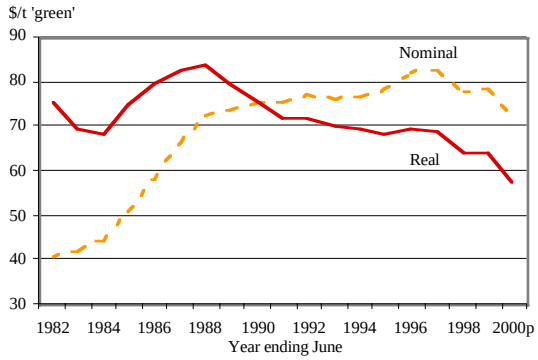
A number of supply-demand factors determine the landed prices of woodchips in Japan. As the factors vary between companies and countries and over time, the landed prices also vary. Figure A illustrates the variation in the landed price of woodchips for selected countries for January-June 2000. The prices are for hardwood chips in yen per b.d.t. on 'cost, insurance and freight' (c.i.f.) basis. The figure shows Australia has among the most competitively priced chips. If Australia can lift its overall competitiveness (in terms of quality, price and other aspects of supply of woodchips), the outlook for increasing the exports and share of the Japanese market will accordingly improve.

Turning to Australian prices over a longer period, figures B and C present 'free on board' (f.o.b.) prices of hardwood and softwood chips in dollars per 'green' tonne for the past 19 years. The figures show that in nominal terms the prices have tended to rise over time. But in real terms, that is, when adjusted for domestic inflation (as measured by consumer price index, with base year 1989-90), the prices have tended to fall—a characteristic of many internationally traded commodities.

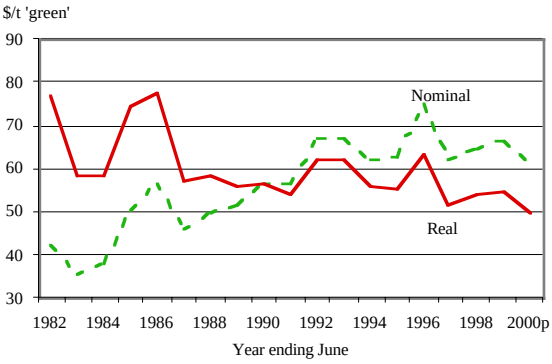
A: Average c.i.f. prices of hardwood chip imports in Japan, January–June 2000, by countries



B: Average f.o.b. prices of hardwood chip exports, Australia



C: Average f.o.b. prices of softwood chip exports, Australia



Woodchip prices and stumpage

As majority of the pulplogs processed in Australia is exported, price of export woodchips influences pulplog stumpage. Log producers naturally ask, 'What stumpage

can we expect for pulplogs from a given price of export woodchips?' Tree Note No. 28 of the Western Australian Departments of Agriculture and of Conservation and Land Management has attempted to answer the question. It estimates potential stumpage for blue gum pulplogs from f.o.b. price of 'green' hardwood chips. Assuming, chip mill is 100 km from the forest and 40 km from the port, it calculates stumpage by subtracting various costs. High and low levels of woodchip prices are also assumed. A summary of the calculations is in table 1.

1: Potential stumpage

	High	Low
	$/cu. m	$/cu. m
Price of export woodchips, f.o.b.	79.26	66.43
Less costs of log harvesting and transport, chipping, haulage and loading of chips	47.34	47.34
Less costs of coordinating log harvesting and marketing	5.35	3.20
Stumpage to grower	26.57	15.89
	($28.17/t)	($16.85/t)

Although the numbers in table 1 are for illustration only, they imply the stumpage to be between 24–34 per cent of the f.o.b. price of 'green' woodchips. The numbers also show how the potential stumpage changes with a change in woodchip price. However, actual stumpage received may differ markedly due to the particular circumstances of a grower and other factors.

Log prices

ANU Forestry has obtained a range of mill door prices of pine logs for September-October 2000 from mills in the Adelaide Hills of South Australia. The prices are in table 2.

2: Mill door prices, pine logs: South Australia

Class of logs	SED	Price range
	mm	$/cu. m
2	150–200	35–60
4	250–300	35–75
6	350–400	40–95
8	450–500	60–105
Case	over 250	10–85
Preservation (1–2.4 m lengths)	75–150	55–75

SED, Small end diameter of log.

ANU Forestry has also obtained information on actual stumpage prices received by small-scale growers. As the information was insufficient for deriving averages and trends, it is presented in case study format in table 3.

Readers should exercise due care in using the price data for assessing stumpage for a particular situation.

3: Stumpage case studies

Region/ State	Period	Type of log	Stumpage	Comments
N-E Victoria	July 2000	Pine:		Unthinned, age 40:
		Sawlogs	$14/t	75 t; 75 km to mill
		Pulplogs	$5/t	33 t; 320 km to wharf
Gippsland, Victoria	April-July 2000	Pine:		
		Sawlog	$30.22/cu. m	964 cu. m; 2nd and 3rd thinnings; 30 km to mill
		Preservation logs	$27/t	32 t poles; 2nd and 3rd thinnings; 15 km to mill
		Pulplogs	$15/t	997 t; 2nd and 3rd thinnings; 30 km to mill
	July-September 2000	Pine:		Excluding GST
		Sawlogs, large	$75–$83/t*	
		Sawlogs, small	$52–$56/t*	
		Preservation logs	$50–$53/t*	
		Pulplogs	$32/t*	
		Hardwood:		
		Sawlogs, case	$50–$55/t*	
		Pulplogs	$40–$42/t*	
S-W, Western Australia	March-June 2000	Planted eucalypts:	$20.57/t	613 t; 60–70 km to mill by roadtrain; $47.20/t*
		Pulplogs	$19.86/t	787 t; 60–70 km to mill by semitrailer; $47.20/t*
			$13.50/t	3,112 t; 170 to mill by semitrailer; $47.20/t*
Adelaide Hills – Mt Lofty, SA	September-November 2000	Pine:		
		Premium sawlogs	$41/cu. m	Clearfell, age 31; 1,700 cu. m; 20–25 km to mill; average $61/cu. m*
		Case logs	$27.50/cu. m	Clearfell, age 31; 700 cu. m; 80 km to mill; average $50/cu. m*
		Preservation logs	$10.80/cu. m	160 cu. m; age 15; 80 km to treatment plant; $60/cu. m*

* Mill door price.

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