Log Market Analysis

June 2022



Photo 1: Harvesting has commenced in the Awadale Forest in Wairarapa. This photo of mechanised harvesting near Landing 15, May 2022

The content of this Log Market Analysis is produced quarterly as part of a suite of documents that comprise the regular reporting to forest owners during harvest. This standalone document is made available to other forest owners approaching harvest to keep them informed on market conditions.

We have included log price series separately for Wairarapa and Gisborne forests, as the price series differ for reasons including different customers, log specifications and locations.

Forest Enterprises (FE) is currently harvesting approximately 550,000 tonnes of logs per annum for Wairarapa, Gisborne and Hawkes Bay forest owners, plus a further 450,000 tonnes for a private impact investment fund manager in the same regions.

IMPORTANT

Every effort has been made to provide current accurate information in this document, which is for information purposes only. Any opinions and views expressed are those currently held by Forest Enterprises; however, the reader accepts that where they are opinions and views in respect of future prices, they may subsequently be proven incorrect. The nature of the international log market is that of price fluctuations, and these fluctuations can be material, and material changes can arise due to factors not previously able to be foreseen.



Overview

I was on holiday for a couple of weeks in July. Time away from work allows for new perspectives and time to think about strategy instead of application.

Forest investment value comes from the natural growth of the crop over many years, as well as appreciation of land value. When we get to the pointy end, we have to harvest the crop to make the returns to investors real. We find ourselves in a long-term and complex business that requires commitment to sustainable production levels to meet the demands of log customers and to obtain the harvesting and delivery resources needed to manage a complicated sales and distribution system. Flitting about within a 10-year harvest programme isn't efficient, so we focus on understanding our markets and customers to optimise revenue, and on managing our supply chain to reduce cost.

Log price has been poor in export markets recently; it seems to have bottomed out and be rising now. The mud season has been epic this year but spring is coming. We need to be ready to benefit from rising markets; that means maintaining the baseline productive capacity and retaining our local market share in sawmills who still pay well for good logs.

I remain optimistic.



Photo 2: Clean up on Mire Road in the Portview Forests after the storms in Gisborne, March 2022.



Wairarapa Log Prices Per Tonne

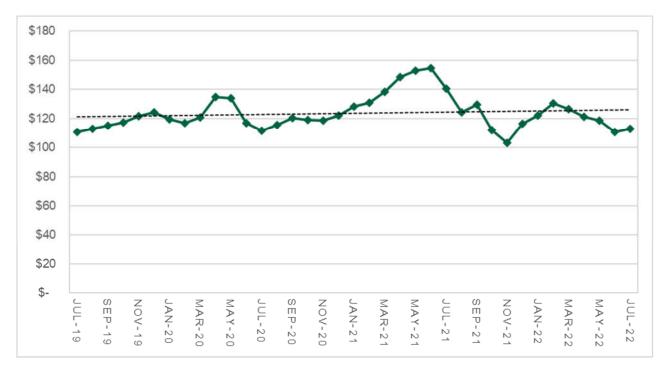
Grade	Forest Enterprises	Forest Enterprises	Current vs	Percentage of
	Jun-22	36 Month Average	36 Month Average	the 36mth Average
Export P40	\$152.75	\$174.80	(\$22.05)	87%
Export P30	\$126.40	\$149.75	(\$23.35)	84%
Export A	\$98.25	\$125.85	(\$27.60)	78%
Export K	\$87.65	\$111.60	(\$23.95)	79%
Export KI	\$77.45	\$101.90	(\$24.45)	76%
Export Pulp	\$63.40	\$88.30	(\$24.90)	72%
Domestic P35	\$187.00	\$178.70	\$8.30	105%
Domestic S30	\$127.00	\$122.85	\$4.15	103%
Domestic S20	\$112.00	\$107.85	\$4.15	104%
Domestic Pulp	\$31.00	\$31.00	\$0.00	100%

Export sales units are volumetric (JAS) while domestic sales units are paid per tonne. The Export JAS prices have been converted to tonnes. Refer to page 5 for more detail on the JAS to Tonne Conversion.

Index Log Price	\$110.76	\$123.85	(\$13.09)	89%

Index Log Price is calculated using inventory measurements from our Wairarapa forest crops and establishing an average log grade recovery for our typical Wairarapa Forest. Applying these estimates to our long run prices per grade has derived an Index Log Price. This index price helps to estimate the average logs sales predicted for a typical forest.

Index Log Price for our typical Wairarapa Forests





Gisborne Log Prices Per Tonne

Grade	Forest Enterprises	Forest Enterprises	Current vs	Percentage of
	Jun-22	36 Month Average	36 Month Average	the 36m Average
Export P40	\$153.45	\$175.25	(\$21.80)	88%
Export P30	\$107.70	\$139.15	(\$31.45)	77%
Export A	\$89.50	\$127.90	(\$38.40)	70%
Export K	\$76.35	\$113.65	(\$37.30)	67%
Export KI	\$72.35	\$105.75	(\$33.40)	68%
Export Pulp	\$58.95	\$95.15	(\$36.20)	62%
Domestic P35	\$175.00	\$184.65	(\$9.65)	95%
Domestic S30	\$135.00	\$137.85	(\$2.85)	98%

Export sales units are volumetric (JAS) while domestic sales units are paid per tonne. The Export JAS prices have been converted to tonnes. Refer to page 5 for more detail on the JAS to Tonne Conversion.

Index Log Price	\$97.86	\$131.70	(\$33.84)	74%
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Index Log Price is calculated using inventory measurements from our Gisborne forest crops and establishing an average log grade recovery for our typical Gisborne Forest. Applying these estimates to our long run prices per grade has derived an Index Log Price. This index price helps to estimate the average logs sales predicted for a typical forest.

Index Log Price for our typical Gisborne Forests





Factors Influencing Current Log Price

Key:

More Benefit to the Investor

Less Benefit to the Investor



Price, Costs and Logistics



Forex

Export logs are priced in USD. Exchange rates are often affected by merchandise exports as well as a general level of confidence in the New Zealand economy. We have seen a strengthening in the \$USD against all currencies, as usual in uncertain times. The current exchange rate position of about 62.6c is an improvement in trade terms for us compared with the recent trend.

FE takes no forward position or hedge in currency trading. Hedging imposes transaction costs without giving certainty of improved outcomes.



Shipping

Shipping in the last year had been hard and is getting harder. The most recent conditions have been improving for the log ship charter trade as global dry bulk demand fell; demand for shipping falls with that, which flows onto reducing cost levels. Significant costs in bunker fuel remain; although falling from recent highs, they remain elevated to trend levels. Delay issues at loading and discharge points have improved significantly, which has stemmed the bleeding arising from extra time charge for delay time. The position is improving from a low base.



JAS to Tonne Conversion

JAS-to-tonne conversion rates were unusual seasonally, rising from 97.9% in March 2022 to 99.2% in June 2022. This increases revenues from JAS sales units vs. cost of production incurred by weight in tonnes.

Export logs are sold in Japanese Agricultural Standard cubic metres (JAS). JAS is a measure of useable log volume rather than weight. Payments to most contractors are made based on weight, which is appropriate for handling heavy material. This means the return to the forest owner is affected strongly by the conversion of weight to volume in the logs.

Conversion has seasonal trends and varies between log grades, log length and log quality. Accounting for conversion is necessary to report comparable values from different sales options. Our convention is to report all prices in the 'per tonne basis', which accounts for the weight to mass conversion. Our harvest reports show monthly JAS/tonne conversion per forest.



Log Price, Export CFR

CFR (Cost and Freight) is the price in USD paid by the end user/buyer.

China Price reductions.

South Korea Matching China at low levels.

<u>India</u> Now largely supplied from Australia and South America.

<u>Japan</u> Pine imports being displaced by local Tsugi timber.

Log Demand



Export Log Inventory in Market

<u>China</u> Inventory of logs in China is a leading supply/price indicator. Inventory levels in China rose

to about 5 million JAS. Log supply reduced from about 93 days of supply to 81 days with current usage at about 62,000 JAS per day. The speed that logs turn to lumber and lumber

turns to cash drives market sentiment. This trend is flat for log price.

South Korea South Korea has a dramatic problem playing out with housing construction which is in

crisis. Demand and price are low.

India Very low usage of New Zealand logs currently due to supply from Australia and restrictions

on fumigation in New Zealand. Our export agents still supply Australian logs into this market which remains more complicated and smaller than the China option. Plastic packaging being phased out, possible increase of wood fibre-based substitute products,

<u>Japan</u> High construction costs have dampened timber demand, and local sawmills have converted

to domestic log supply from import pine.



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Pruned Log Grades

There is good, steady demand for pruned logs. We now supply five major sawmills with pruned logs as we have struck a favourable supply deal with Tenon sawmill in Taupo. We continue to prune in our forests and pruning is adding value to current stumpage returns while reducing log price volatility.



New Zealand Domestic

The domestic sawmill demand for logs remains strong but capped by sawmill capacity. Forest Enterprises is a major local supplier to sawmills. Our strategy to is support local log users to reduce our market concentration risk. Lumber demand for housing is rising. Some domestic mills are seeking moderate price reductions to be in line with export conditions, however this is not widespread.



Housing and Business

House construction in New Zealand remains strong, and I can see a lot of construction activity even as I drive to work. Availability of labour and lumber is holding down production and keeping construction costs high.



Domestic Construction

There is an increasing narrative that house prices will fall to match the tough economic conditions wage and salary earners are enduring. This can be seen in lower auction clearance rates and longer times to sell listings, as well as directly in house price.

Log Agency

We have seen large price reductions recently which affect recent log sales and result in reduced price achieved for previous months' shipping. Washups lag market conditions so that price falls take time to flow through to results. However, we believe that current sales may well be at better level than we have booked, so there is some hope that things are already improving.

Log Supply

New Zealand The recent low price levels and very wet site conditions have decimated

the small scale woodlot and log trading operations. This results in lower demand for log ships, lower wharf stocks, lower supply to sawmills and can result in business failure for some contractors. Log supply is falling:

this needed to happen in order for price to recover.

Australia Tough times in the Australian log trade.

<u>Europe and Russia</u>

An epic tragedy is unfolding in Europe. The sizeable impacts on trade and

food supply are at a lower order to the human suffering. Russian log and lumber supply have fallen considerably. Europe is also seeing a large

increase in forest fires recently.

Pacific Northwest (PNW) Inward focus for the North Americans; the US housing starts are healthy

and so Canadian timber flows south. Roundwood is scarce in Pacific Northwest, compared with large supplies in the Southeast regions.

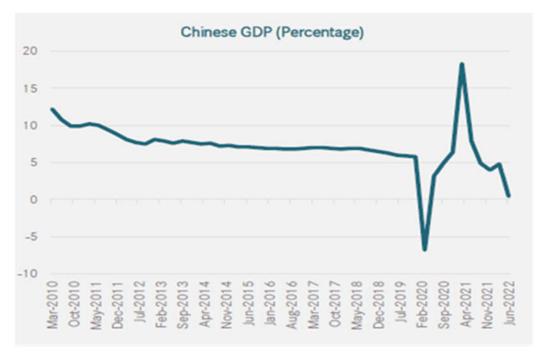
Other South American pine is considered less attractive than Radiata pine as it is

more resinous and less suitable for high-end uses. More woodchip is being

exported from South America to China and used locally.



Point of Interest

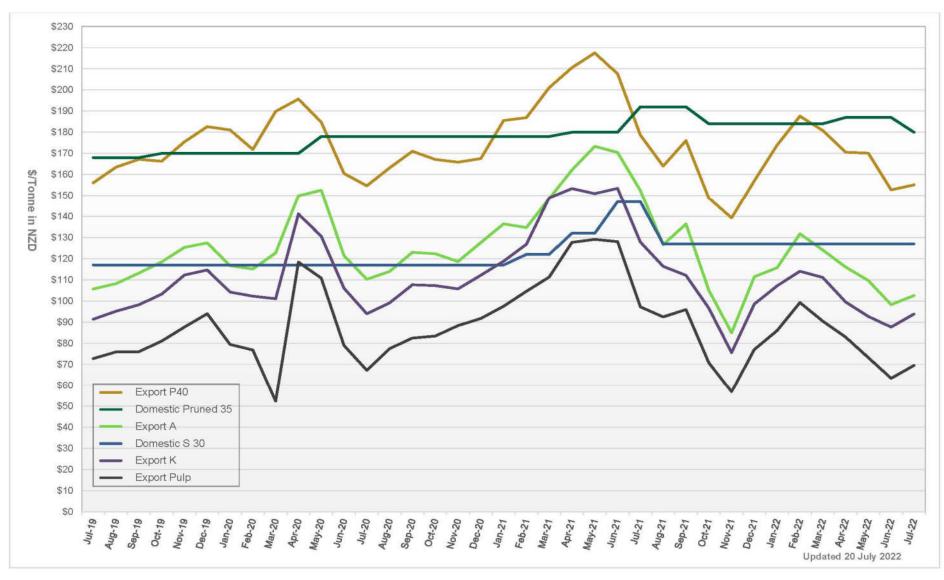


Productivity is the horse that pulls the cart. The dramatic drop in GDP in the China economy matters because the log trade supplies raw material for the growing economy. Growth or decline in economic activity immediately affects demand for raw materials and that flows on to price. China has vast but not limitless resources, so we wish them every success in their recovery from tough times.

The global economy is mutually dependent, and so crises of sickness, weather and war affect us all eventually. As they say, this too shall pass.



Lower North Island Log Price Graph per Tonne



Log Price Graph: Tracks the key log prices for a 37-month period. The first 36 months are the months which comprise the average referred to under Log Prices per Tonne above. The 37th month shows the indicative prices scheduled for the current month. Export sales units are volumetric (JAS) while domestic sales units are paid per tonne. The Export JAS prices have been converted to tonnes. These log price averages do not reflect any price adjustments that may occur following washups with our log export partners.

