

Log Market Analysis

October 2021



Photo 1: Blairlogie Forest, Wairarapa.

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 600,000 tonnes of logs per annum for Wairarapa and Gisborne 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.

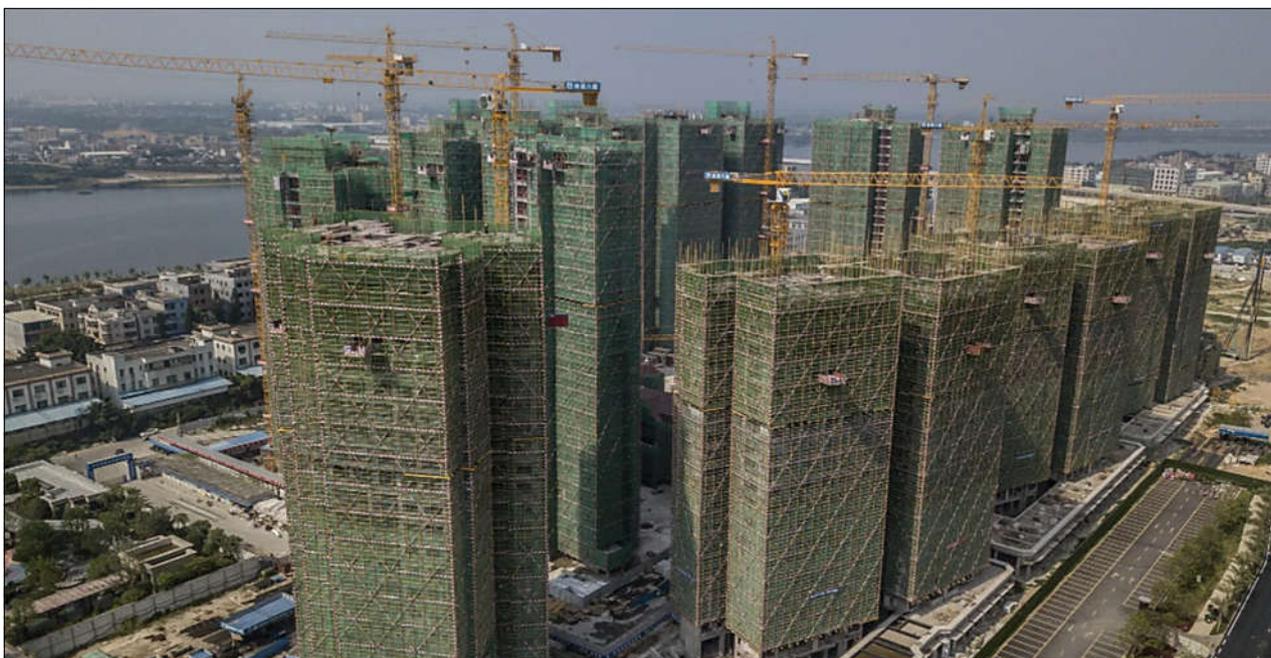
Overview

We are living in interesting times which is the classic old Chinese curse.

Business is exciting and sometimes frustrating as Covid-19 reshapes the global economy. Our export shipping providers are making out like bandits with the monopoly power they have in the short term, related to high demand for all forms of shipping service including container vessels delivering sawn lumber as well as bulk ships with logs. The balance is expected to turn back as economic activity returns to more traditional patterns.

Another confounding issue is Chinese construction giant Evergrande. It has taken substantial prepayments for uncompleted houses but is currently unable to complete the construction, leaving the homebuyers stranded. Evergrande may be in the hole as much as USD \$300 billion. The Chinese Government will not bail it out but may step in to complete the construction. In any situation, there is a serious multi-billion-dollar haircut for investors in Evergrande, and possibly the apartment market. So, construction activity has declined for now, albeit the Chinese do have a surplus of apartments currently.

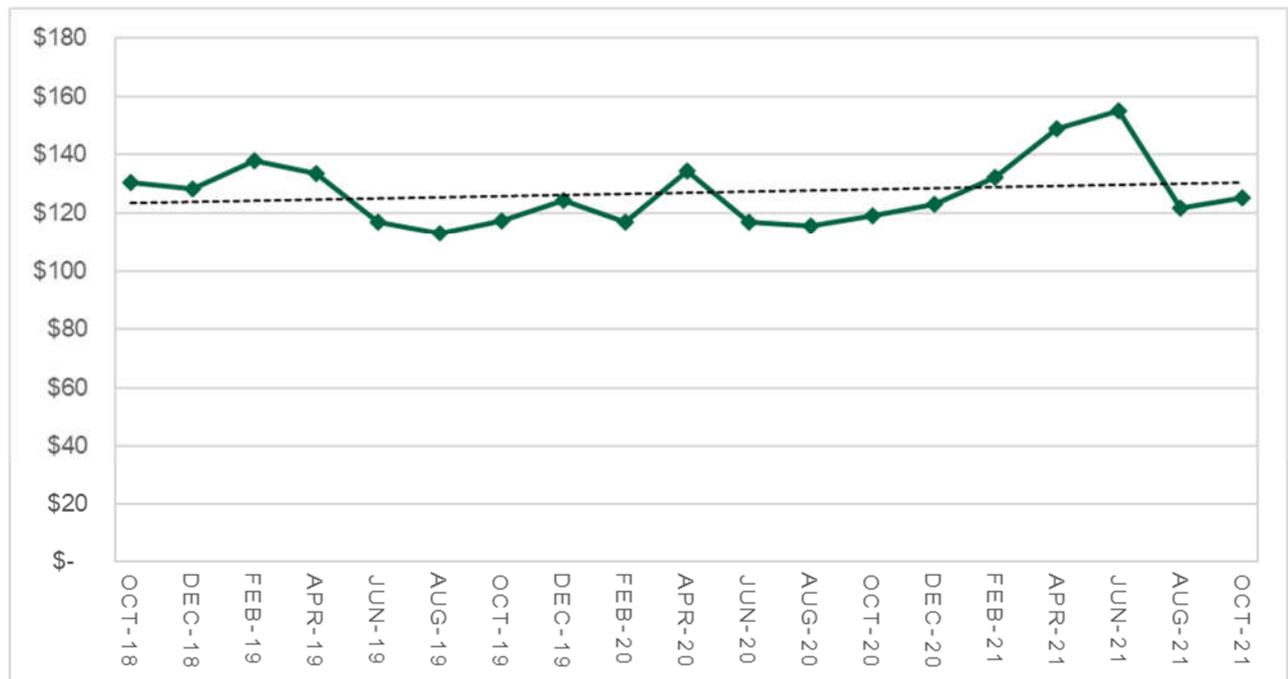
As we say in the Wairarapa, if you don't like the weather just wait a while because it will change. So, too, will the log markets. Change for the better will follow in due course.



Wairarapa Log Prices Per Tonne

Grade	Forest Enterprises Sep-21	Forest Enterprises 36 Month Average	Current vs 36 Month Average	Percentage of the 36m Average
Export P40	\$173.45	\$179.90	(\$6.45)	96%
Export P30	\$157.05	\$153.60	\$3.45	102%
Export A	\$130.20	\$132.85	(\$2.65)	98%
Export K	\$112.95	\$117.55	(\$4.60)	96%
Export KI	\$109.15	\$109.65	(\$0.50)	100%
Export Pulp	\$94.25	\$94.40	(\$0.15)	100%
Domestic P35	\$192.00	\$176.20	\$15.80	109%
Domestic S30	\$127.00	\$122.10	\$4.90	104%
Domestic S20	\$112.00	\$107.10	\$4.90	105%
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	\$127.50	\$127.25	\$ 0.25	100%
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.				

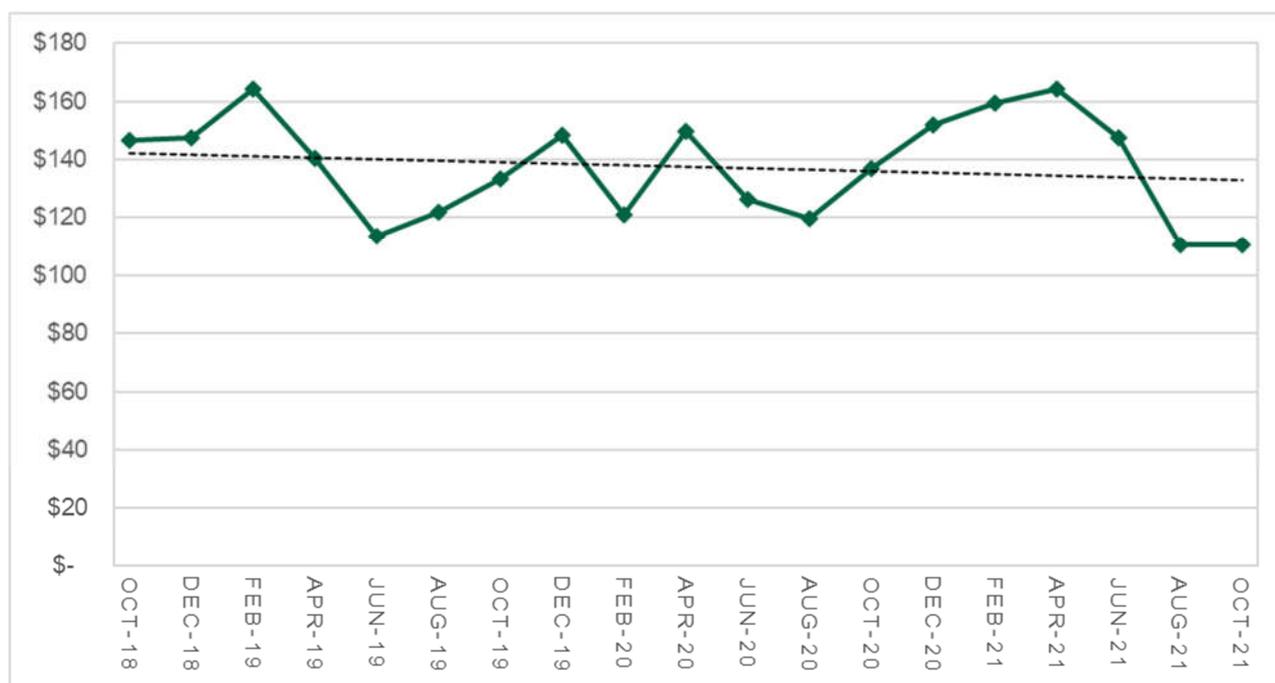
Index Log Price for our typical Wairarapa Forests



Gisborne Log Prices Per Tonne

Grade	Forest Enterprises Sep-21	Forest Enterprises 36 Month Average	Current vs 36 Month Average	Percentage of the 36m Average
Export P40	\$175.15	\$180.00	(\$4.85)	97%
Export P30	\$139.10	\$146.45	(\$7.35)	95%
Export A	\$121.45	\$137.10	(\$15.65)	89%
Export K	\$115.25	\$121.50	(\$6.25)	95%
Export KI	\$97.90	\$113.00	(\$15.10)	87%
Export Pulp	\$89.60	\$102.50	(\$12.90)	87%
Domestic P35	\$175.75	\$186.10	(\$10.35)	94%
Domestic S30	\$160.00	\$140.30	\$19.70	114%
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	\$128.45	\$139.35	(\$ 10.90)	92%
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

↔ Neutral

↔ Price, Costs and Logistics

Export logs are priced in USD. Exchange rates have moved around over the last quarter, without any material impact on pricing and settled back where we were 3 months earlier. This exchange rate level is normal and continues to fluctuate.

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

↓ Shipping

Shipping has become more difficult than I can recall, with a high level of friction in all parts of the process. Bunker fuel has risen in cost, congestion at load and unload ports has risen to extreme levels, ships are waiting for cargo and requiring hull cleaning at levels which are very unusual. All this delay and impost increases the time and cost involved in chartering, loading and running log ships.

↑ JAS to Tonne Conversion

JAS-to-tonne conversion rates were relatively steady in rising from 97% in June 2021 to 97.7% in September 2021. This increases revenues from JAS sales units vs. fixed cost incurred by weight in tonnes. Gisborne conversion is higher (99%) than Wellington (97%), however a large proportion of the better-quality Wellington logs are sold to sawmills by the tonne (not in JAS measurements).

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 converted to the 'per tonne basis', which would appear different if compared with a per cubic metre (JAS) series. Hence why 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.

<u>China</u>	Pricing uncertain with disparity of opinion between various market players
<u>South Korea</u>	Low price, slow market.
<u>India</u>	Price follows China.
<u>Japan</u>	Low.

Log Demand

↓ Export Log Inventory in Market

China Inventory of logs in China is a leading supply/price indicator. Inventory levels in China rose to about 4.9 million JAS. Log supply is about 70 days of supply with current usage at about 70,000 JAS per day. The speed that logs turn to lumber and lumber turns to cash drives market sentiment.

When we hear a range of opinion on price, demand and supply then I expect the market to be unsettled and unpredictable, and that's my opinion now. Mills are running on reduced hours due to power shortage from coal rationing, and uncertain lumber demand from construction industry contagion.

South Korea Lumber demand is sluggish; lots of Australian logs available; a slow period.

India India's Covid-19 situation is a train wreck; most log imports from Australia and South America rather than New Zealand.

Japan Log supply has been uncharacteristically peaky so some shortages of radiata pine; some Chilean lumber filling supply shortage.





Pruned Log Grades

Anything we can sell locally or that is used locally is holding up well. Container trade lumber into the US is suffering from the erratic nature of container lines activity as scheduled port calls are missed, for both loading and unloading, with Long Beach in California in particular being badly impacted.



New Zealand Domestic

Demand remains strong, and price has some downward pressure but remains a favorable option compared with export. We are starting to make forecasts for the year-end shut down, which can be driven by sawmill demand over the holiday period. This year may be a long break.



Housing and Business

House construction in New Zealand is cranking! But there are issues around raw material supply, as well as labour mobility from the Auckland lockdown.



Domestic Construction

Housing starts are strong; 2021 continues as being the biggest year for housing starts since 2000. There is a fundamental disconnect between property price and rental yield; over time this would be sorted out by either an increase in rents or decline in house prices. It seems that hardly anyone can afford to buy or rent houses on the current salary levels, but so far, the crash has not occurred

Log Agency

Washups were negative in this quarter as log prices fell from forecasted positions at the beginning of the month. Many log traders lost cash on forward positions in buying logs and have subsequently lowered price expectations for current offers to win back some losses.

Log Supply

New Zealand

We are seeing a few high-cost operators pull the pin, and woodlots decline to start operations at current price levels.

Australia

Tough times for the export market; diminishing supply after extensive fires.

Europe and Russia

Russian log sales slowing dramatically due to new export regulation; Europe surprisingly resilient and volume remains high.

Pacific Northwest (PNW)

Slow in the export markets. Logs mainly travelling South as lumber into USA.

Other

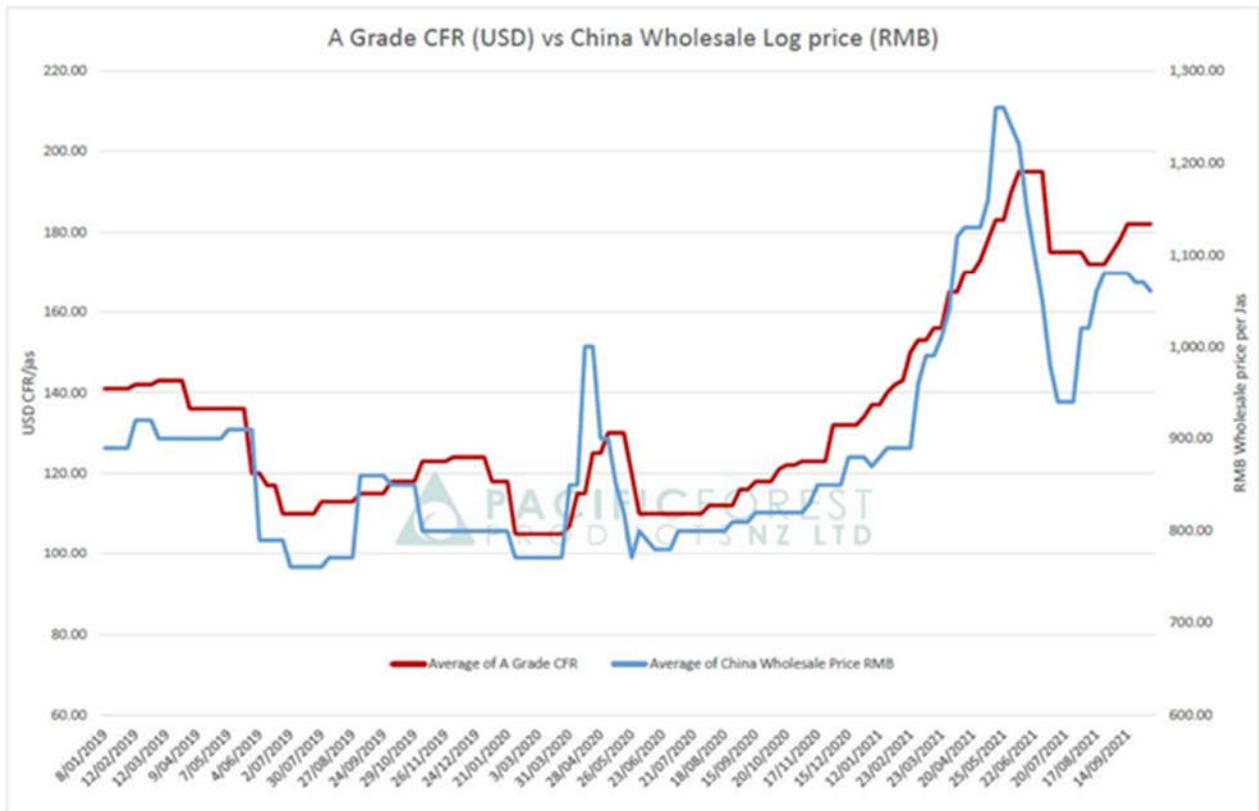
Uruguay logs out of the money due to rising shipping costs but haven't stopped producing yet.



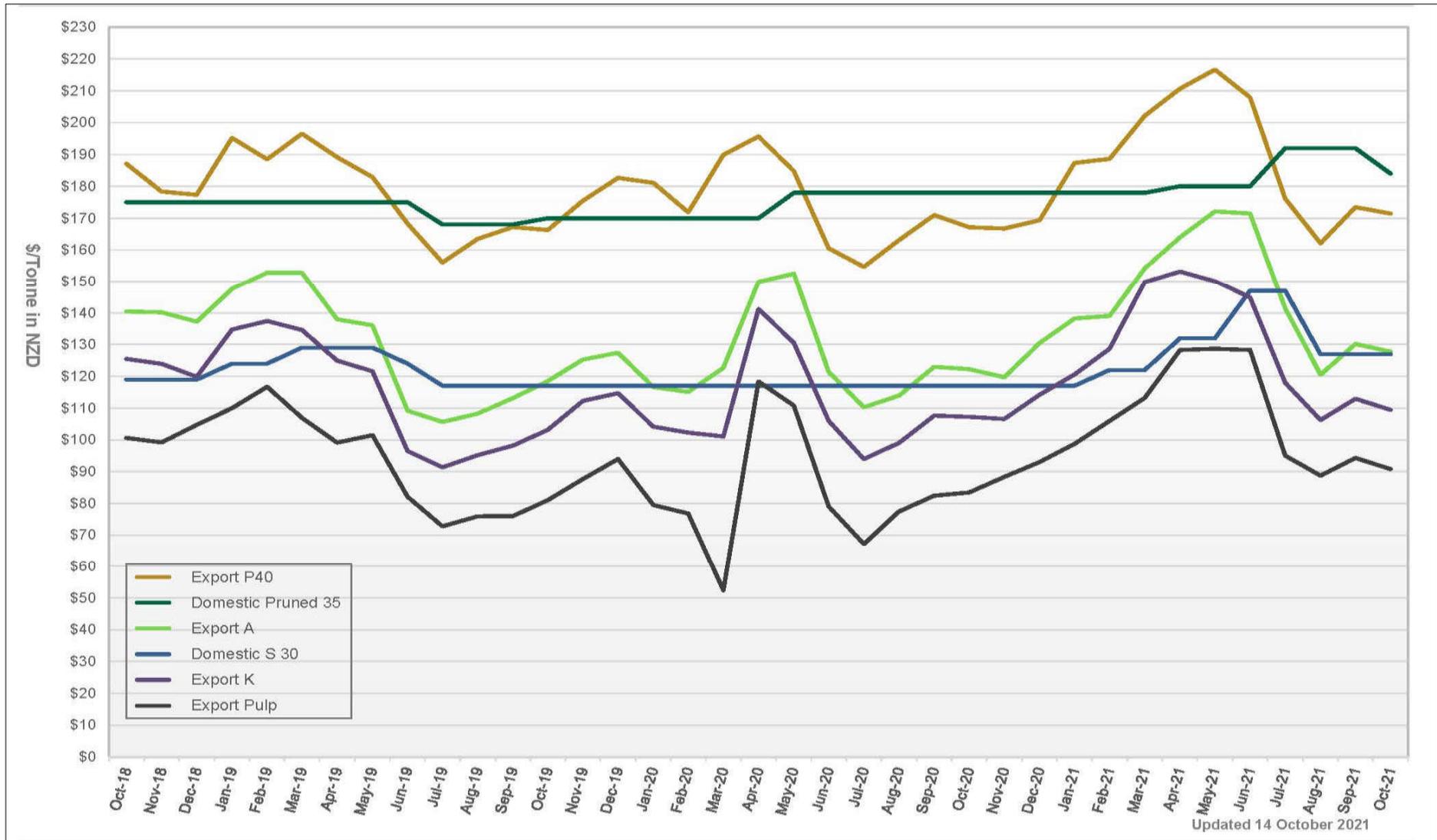
Point of Interest

Chinese customers buy in USD per JAS and sell in RMB at their own scale measure.

The market is soft, and price will decline until inventories decline substantially and the RMB price improves to return to stronger margins for the buyers.



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.

