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Westpac Institutional Bank

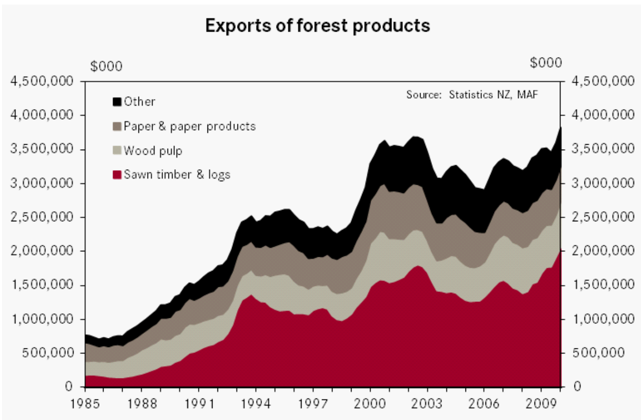
The plywood for the trees

An overview of the forestry sector

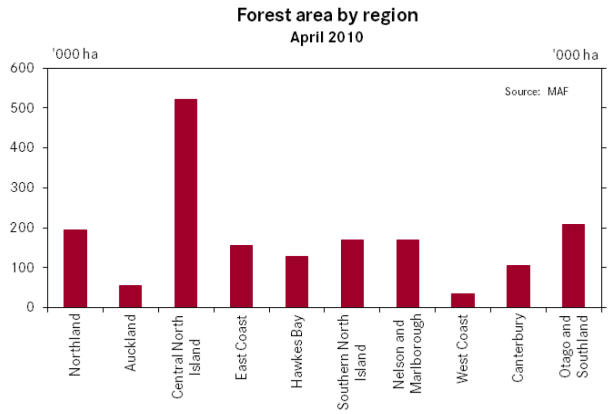
- **The forestry sector is one of New Zealand's key primary industries.**
- **Presently, forest growers are benefitting from surging emerging market demand for raw commodities including logs, but wood processors are being squeezed by rising input costs and the strong NZD.**
- **International factors will play an important role in future prospects for this externally focused sector.**

Boasting earnings of around $4bn in 2010, forestry is New Zealand's third largest export industry – and it's set to get bigger. MAF forecasts predict export earnings will climb to over $6.2bn by 2014. The sector can roughly be split into two parts – forest owners and operators, and wood processors. The outlook for each of these groups is quite different. While forest owners are benefitting from soaring log prices and strong demand for commodities from emerging markets, processors are grappling with a high exchange rate, rising input costs and competition from lower cost producers.

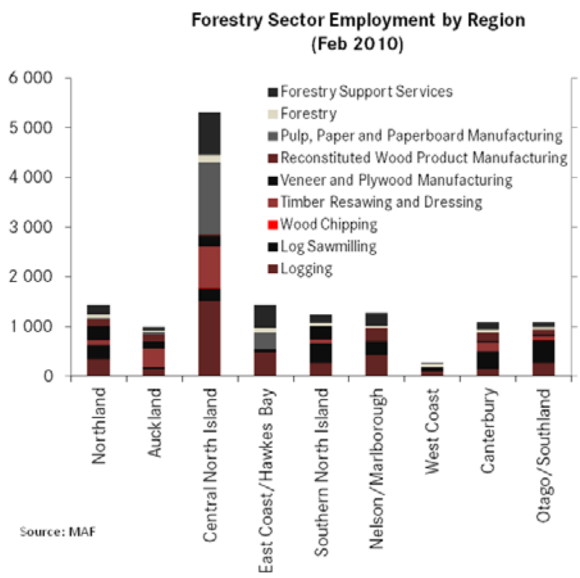
The forestry sector's external focus and integration into the global economy, combined with its unique attributes as a carbon recycler means issues including the Emissions Trading Scheme (ETS), transportation costs and international trade developments will all impact on the sector. This article provides an overview of the sector and explores these issues in more detail.



New Zealand planted forest plantations are concentrated in pinus radiata which makes up over 90% of plantations. Having such a high concentration of forests in one species offers some advantages: it allows research and development to be more focused, and processing capabilities to be integrated. But it also carries risks. Perhaps most importantly, without diversification of species there is increased vulnerability to any introduced biological hazard.



Forests and wood processors are concentrated in the central North Island where 30% of plantings and 39% of forestry jobs are found.



Traditionally, Australia, Japan and Korea have been the key markets for NZ forestry exports. But since 2007, growth in exports to China has accelerated rapidly. By value, China is now by far the largest single importer of New Zealand forestry products – mainly logs. The growth in NZ log exports to China in

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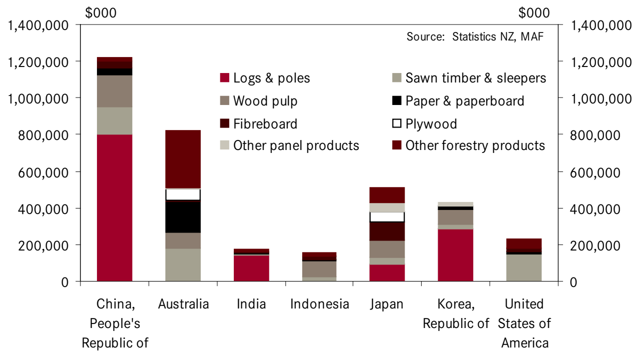
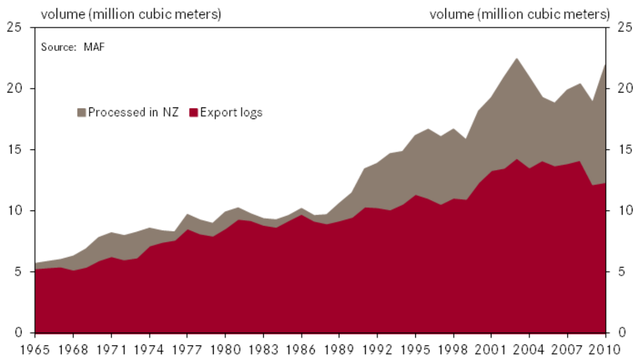
recent years has been unprecedented - volumes climbed 64.6% in the year to December alone (a combination of strong demand and constrained log supply from Russia, see below for more detail). The growing importance of China and, to a lesser extent other emerging market economies, has also driven a change in composition of exports away from processed products toward unprocessed logs.

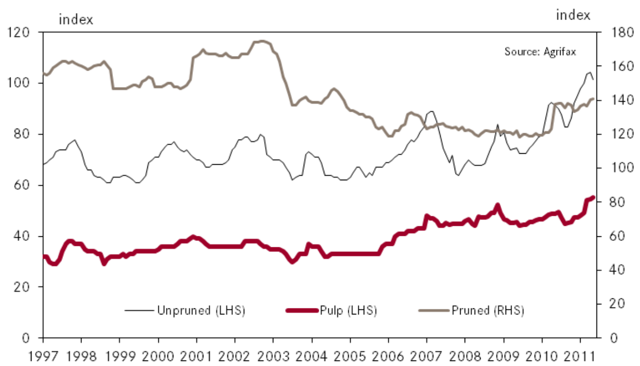
Forestry export values by main destination
December 2010



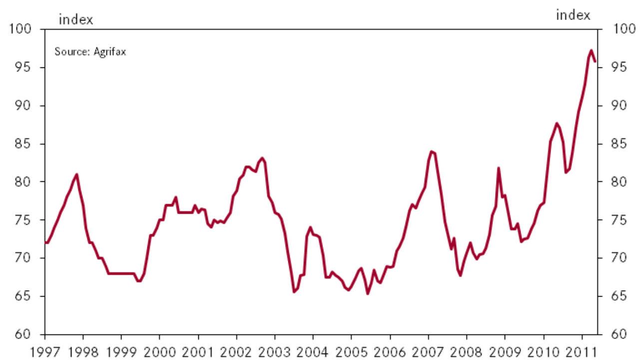
Plantation forest removals



Log price index



Composite log price index

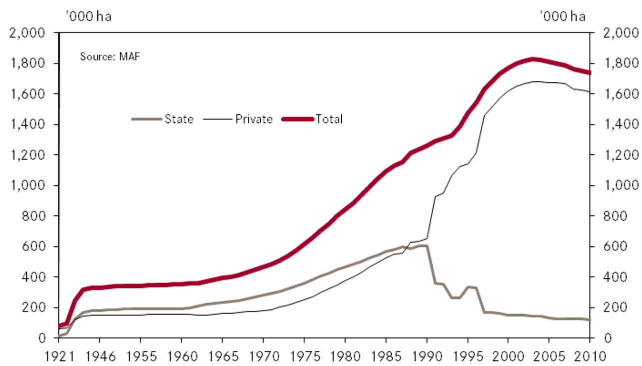


Strong emerging market demand for raw materials is a familiar theme in many commodity markets at present and logs are no exception. The good news for foresters is that this demand has seen prices skyrocket – Agrifax's NZD un-pruned log price index is 11.2% higher than a year ago, and up 40.3% up from its 2007 lows. But rising log prices squeeze processors and sawmill operators. Higher log prices boost input costs, squeezing operating margins. When high log prices go hand in hand with a strong New Zealand dollar (like now) the competitiveness of manufactured wood product exporters is further reduced, while at the same time, imported products become more competitive. In response to the increasing pressure, at least two saw mills announced a scaling down of operations and one closed in the December quarter.

Forested area has been declining

After rising steadily for many decades, the total area of planted forest has been declining since 2004 (down 5.6% from its peak) as land has been converted to alternative uses – primarily into dairying but also into sheep and beef farms and lifestyle blocks. Rapidly rising rural land prices during the mid-2000s (led by a boom in dairy prices) pushed forestry toward more remote, less productive land. However by increasing the cost of deforestation, the introduction of the ETS is expected to slow this trend by reducing the return from converting land use away from forestry.

Planted forest area



ETS - New Considerations

Forests act as carbon sinks. Through growth, they reduce New Zealand's liability under the Kyoto protocol and therefore form an integral role in the Emissions Trading Scheme (ETS) (New Zealand's chosen method of meeting its commitments under the Kyoto protocol). The forestry sector was the first sector to enter the scheme in 2008.

Under the scheme forest growth earns the forest owner New Zealand Units (NZUs) - essentially carbon credit). But these NZUs must then be surrendered to Government if carbon stocks fall (i.e. when the forest is harvested).

Participation in the ETS is compulsory for owners of pre-1990 forests but optional for owners of forests planted later. The Government gave owners of pre-1990 forests a one-off allocation of NZUs (based on the size of their forested area) to compensate them for this cost. Those who purchased forests prior to 2002 are to eventually receive 60 units per hectare (23 of these transferred before Dec 2012, with the remainder after Dec 2012) while those purchased after 2002 to receive 39 units (split 15 before Dec 2012 and 24 after). Current market pricing has NZU's trading around $19.80. At this price, pre-1990 forest owners have been compensated by around $1,188 per hectare for the ETS ($772.20 for those forest owners who purchased after 2002).

Although compensation may be appropriate on average, it is also likely to over-compensate some owners and under-compensate others. Owners of more recently planted forests can choose to opt in to the ETS, or opt out. Because of this choice, owners of post-1990 forest, weren't given an initial allocation of NZUs.

The ETS has reduced the return that can be expected from converting forests to farm land in two ways. First, by requiring forest owners to permanently surrender their NZUs when they trees are felled. And second, under the proposed latter stages of the scheme, by requiring livestock farmers to surrender NZUs for animal emissions, increasing the costs of farming. Both factors imply that less land is less likely to be converted away from forestry, slowing the rate of decline in tree planting (indeed the Government forecasts that under the ETS, tree planting is expected to increase to 15,000 hectares p.a. by 2015 and to 30,000 hectares p.a. by 2020)[1] .

Note also that the ETS has probably reduced the market price of land that could potentially be used for livestock grazing, including such land that is currently covered in forest. However, the price of land that is suitable only for forestry will not be greatly affected by the ETS (since a permanent forest is carbon neutral).

Transport Costs

Forestry is an externally focused sector and transport and shipping availability and costs are key considerations for operators. Domestically, transport infrastructure can vary widely between regions. Some roads are not ideally suited for logging trucks and some ports aren't suited to large ships. This means added costs of production for some foresters. Anecdotal evidence suggests there is little competition between ports, meaning restricted competition on international freight rates and limited space on ships and onshore storage facilities at wharfs. In recent years, high international shipping costs have been an impediment for the sector. However, following the GFC shipping costs fell dramatically due to sharply lower demand and increased capacity. From now, the global recovery, increasing trade volumes and rising oil prices are likely to put upward pressure on shipping costs.

International competition and trade

Given its external focus the New Zealand forestry industry is vulnerable to offshore developments. In recent years, changes to Russia's export policies have had a significant impact on the NZ industry. In July 2007 Russia hiked its tax on unprocessed softwood log exports to 20%, raising it to 25% in July 2008. This has reduced the volume of Russian logs exported to China, benefitting New Zealand producers who have stepped in to help fill the gap.

More recently developments have become rather more uncertain. Reports suggest the Russian Government has flip-flopped from planning to significantly increase the export tax (to 80%) to planning to reduce (though perhaps not eliminate) the tax as it seeks to remove barriers to World Trade Organisation (WTO) membership where Russia is the only major economy currently on the outer. Reports suggest Russia signed an agreement with the EU which satisfied European concerns on log export duty and should see them significantly reduce the tax when (and if) they enter the WTO. Indeed, Russian log exports increased noticeably in the first quarter of 2011 after declining for 4 years prior.

Although uncertainty remains about the timing of any change, the removal, or substantial reduction of the log export tax would undoubtedly increase global supply and put downward pressure on world log prices. Potentially providing some offset to increased global supply could be ongoing growth in demand from China, combined with reduced domestic supply (the Chinese Government has halted harvesting for 10 years in the country's largest forest to protect the environment and reduce carbon emissions). In addition, supply chains may have found new ways to deal with a lack of Russian logs. Russian policy makers are also clearly still keen to develop the domestic wood processing industry.

Industry Outlook

The forestry industry is clearly split into two camps - foresters and processors – and the outlook is quite different for each.

In our view, the outlook for forest owners appears bright. There is increased demand for building materials in the wake of natural disasters at home and abroad and growth in emerging markets (and consequently demand for raw materials) is strong. This should mean log prices remain well supported in the near term. Further out, a second half 2011 slowdown in the Chinese economy could see prices dip.

Processors too are likely to see demand boosted by reconstruction requirements. However they also face structural headwinds. Rising input prices, an elevated New Zealand dollar and increasing competition from lower cost manufacturing centres abroad all mean the outlook for this part of the forestry sector is much more challenging.

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1. PM's keys to forestry sector growth, National Business Review, 13 October 2010