Westpac

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The plywood for the trees

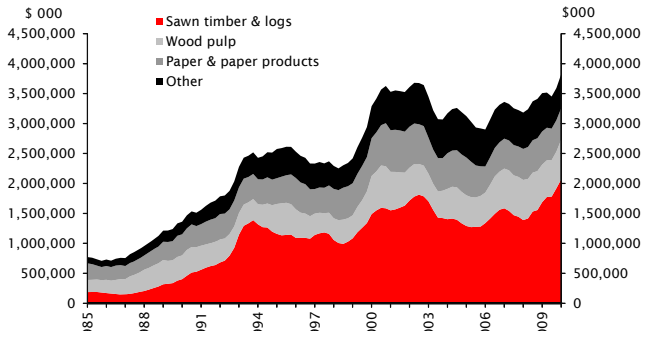
An overview of the forestry sector

In this quarter's Agribiz we thought we'd take a closer look at one of New Zealand's key primary industries – forestry. Boasting export earnings of around $4bn in 2010, the sector is influenced by both domestic policy and international developments. Recent developments in the forestry sector serve as a microcosm of international trends more broadly – in particular the diverging fortunes of commodity producers and manufactured exporters globally.

Forest owners and operators are commodity producers (in much the same way that sheep, beef or dairy farmers are). Presently, these operators are benefitting from soaring log prices as emerging market economies seek to satisfy their almost insatiable demand for commodities. In sharp contrast, wood processors are grappling with rising input costs, a high exchange rate and increasing competition from lower cost producers.

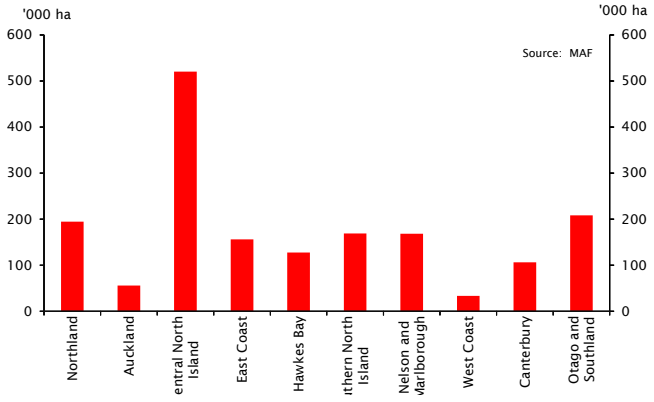
The introduction of the forestry sector into the Emissions Trading Scheme also has important implications for those in the sector and rural landowners alike. As we explain in more detail below, the introduction of the ETS has probably reduced the incentive to convert currently forested land into pasture, meaning NZ's rate of deforestation may slow.

Figure 1: Exports of forest products



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.

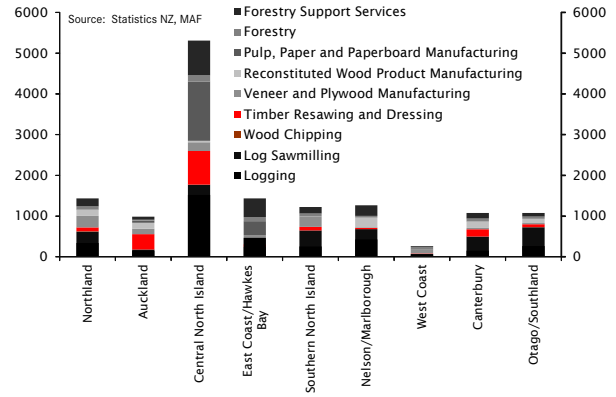
Figure 2: Forest Area by region (April 2010)



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 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

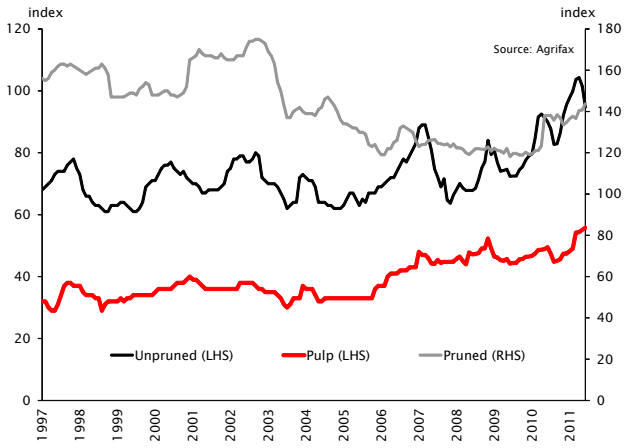
Figure 3: Forest sector employment by region (Feb 2010)



market economies, has also driven a change in composition of exports away from processed products toward unprocessed logs.

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 5% higher than a year ago, and up 49% 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

Figure 4: Log price index



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 (Figure 6). 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.

Figure 5: Forestry export values by main destination (Dec 2010)

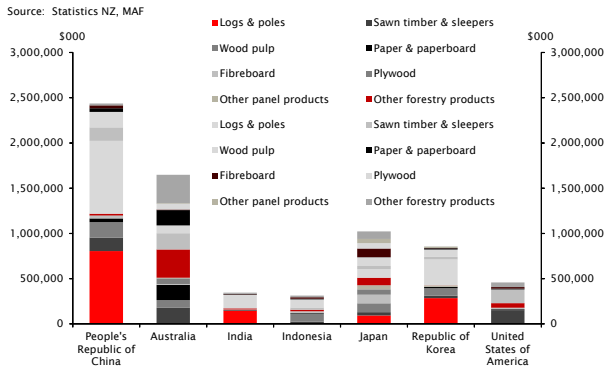
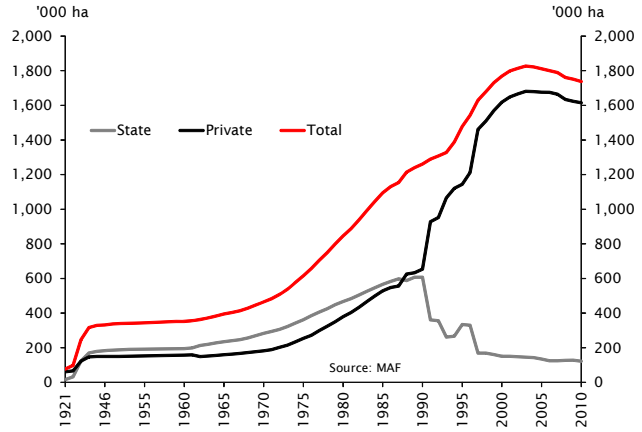


Figure 6: Planted forest area



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 credits). 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 34 after). Current market pricing has NZUs trading around $19.87. At this price, pre-1990 forest owners have been compensated by around $1,925 per hectare for the ETS ($775.13 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

Figure 7: NZ units price

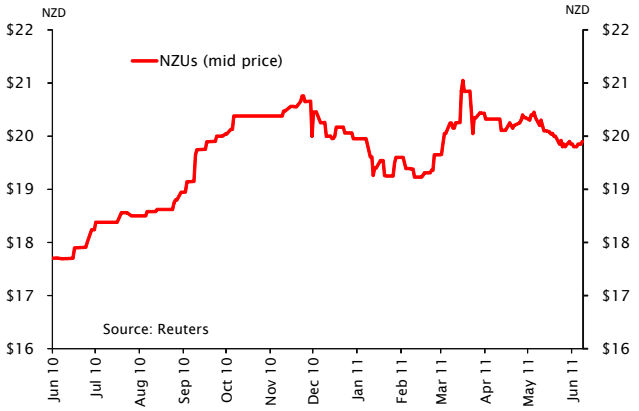
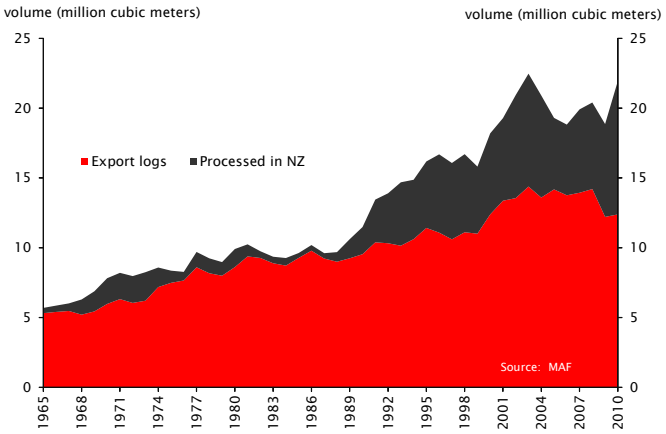


Figure 8: Plantation forest removals



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 the 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 Global Financial Crisis 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 Russia significantly reduce the tax when (and if) it enters the WTO.

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. The introduction of the ETS means the change in land use away from forestry toward alternate uses is likely to slow - leaving more land used for forestry than would otherwise have been the case. 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 slowdown in the Chinese economy later this year 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.

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

NEW ZEALAND DAIRY INDUSTRY AWARDS TRUST

Beyond the farm gate

The international environment is an important backdrop for developments in commodity markets. We expect to see a cyclical slowing of Chinese economic growth in the second half of 2011, and therefore we expect the strength of emerging market demand for commodities to moderate. In addition the recovery in the US economy is likely to stall as QE2 draws to a close. This backdrop, combined with improving global supply in some key markets, is expected to put downward pressure on prices. Lower commodity prices should also see the NZD depreciate, providing something of a buffer to farm gate returns.

Dairy

Global dairy prices have moderated in recent months - WMP recording the most significant falls. However cheese prices have continued to edge higher. Global dairy production is expected to improve modestly over the next year and this, combined with a slower pace of growth in emerging markets, is likely to put modest downward pressure on prices. However high feed costs will provide a headwind for northern hemisphere producers looking to lift production to take advantage of higher prices.

Lamb

Despite patchiness in consumer demand in key export markets, lamb prices improved sharply in the first half of 2011. In part, this was due to tight global supplies. Spring storms in NZ as well as an Australian flock at record low levels reduced the availability of traded Australasian product. Looking ahead, global supply should eventually improve, putting downward pressure on prices (the estimated 8% fall in lamb numbers this season should be largely reversed in the forthcoming production period) but the risk is that faced with sustained high prices, budget conscious consumers will substitute toward cheaper alternative protein sources.

Beef

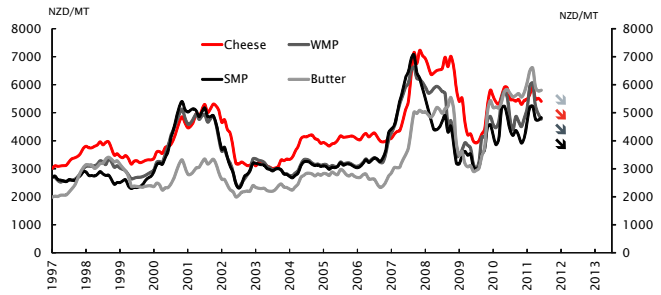
Beef prices have moderated in the last couple of months but remain at historically high levels on the back of high feed prices and relatively low stock numbers. Australia's decision to halt live cattle exports to Indonesia (New Zealand's second largest beef market) will be closely watched (although there may be some difficulties to simply substituting beef from alternate sources such as NZ). In the US herds are expected to grow modestly this year but high grain prices will limit expansion.

Wool

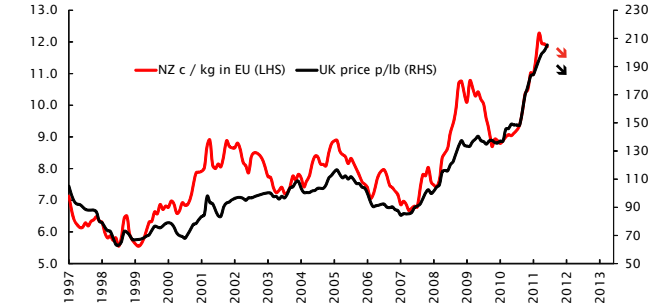
Wool prices have continued to strengthen in the first half of 2011. Globally, supplies have been tight as international flocks declined and inventories were run down following a strong pickup in global demand post-GFC. Further boosting demand for Australasian wool was China's ban on South African wool imports following an outbreak of Rift Valley fever in late 2010, and high cotton prices. Both factors should moderate over the next 12 months.

Forecast Key:
General pace and direction of prices expected over the next 12 months

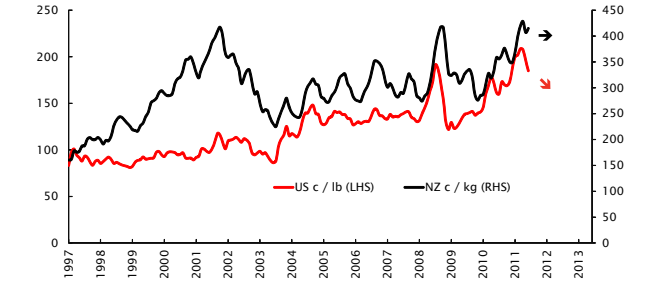
Dairy



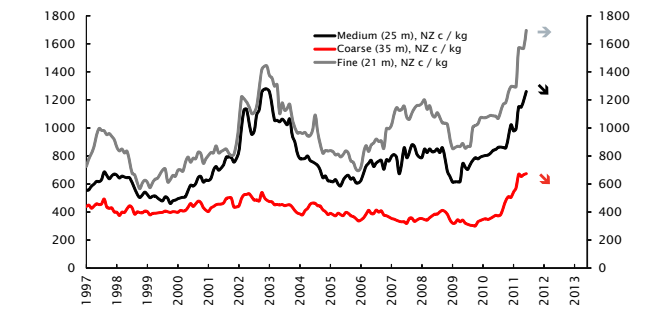
Lamb



Beef



Wool



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