Fortnightly Agri Update

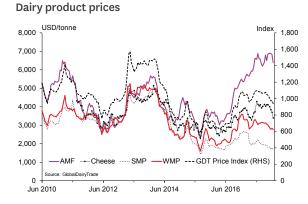
THE FIFTH HINGS IN THE COMPANY

20 December 2017



Changing political climate

- Dairy prices surprised most by falling at the last GlobalDairyTrade auction for 2017.
- With weakness expected in China's economy, we maintain our \$6.20/KgMs farmgate milk price forecast, lower than Fonterra's \$6.40/KgMs.
- The new Government is going to set a goal of net zero carbon emissions by 2050.
- They are likely to beef up the Emissions Trading Scheme, and bring Agriculture into the fold.
- Over time, this will change how land is used, and the structure of the economy.



GlobalDairyTrade Auction Results, 20 December 2017

	Change since last auction	Price index USD/Tonne
Anhydrous Milk Fat (AMF)	-6.7%	\$6,392
Butter	-2.3%	\$4,474
Butter Milk Power (BMP)	n.a.	n.a.
Cheddar	-7.9%	\$3,389
Lactose	n.a.	n.a.
Rennet Casein	-6.3%	\$4,506
Skim Milk Powder (SMP)	-4.8%	\$1,675
Whole Milk Powder (WMP)	-2.5%	\$2,755
GDT Price Index	-3.9%	-

Farmgate milk price forecasts

	2017/18		2018/19
	Westpac	Fonterra	Westpac
Milk Price	\$6.20	\$6.75	\$6.50

Dairy update:

The weather has been the wildcard for many farmers. From puddles to parched pastures, farmers have been challenged delivering on production expectations. Costs have risen, via sourcing supplementary feeds. As such, we have seen farms across New Zealand struggle to ramp up production relative to past years. Fonterra has lowered its forecast of milk production, and now thinks this season's volume will equal last season's. These concerns about New Zealand production may support dairy prices although prices actually fell at the latest auction.

Overnight the final GlobalDairyTrade auction for 2017 saw a 3.9% decline in the overall dairy price index. Whole milk powder prices fell 2.5% in stark contrast with dairy futures pricing, which suggested an increase of over 5% on the back of a softer outlook for this season's forecast milk collections. We have noted that over the past few months, demand has been showing signs of easing, despite concerns of lower production coming out of New Zealand. In addition, we expect that prices will ease further China's economy slows in 2018. Putting this together, we maintain our farmgate milk price forecast of \$6.20/KgMs compared to Fonterra's farmgate milk price forecast of \$6.40/KgMs for the 2017/18 season.

Emissions Trading Scheme (ETS):

In the Special Topic of our latest Quarterly Economic Overview, we explored the implications of the new Government's commitment to reduce New Zealand's net carbon emissions to zero by 2050. The likely outcome will be a beefed up Emissions Trading Scheme (ETS).

New Zealand's commitment to reducing greenhouse gas emissions (GHGs) with an ETS is not new. New Zealand was one of the first countries in the world to adopt an ETS, originally designed to include all sectors of the economy (with phased entry). However, since its inception in 2008, the ETS has undertaken numerous revisions, resulting in delays to the inclusion of the agricultural sector into its purview.

What is the ETS?

Under the previous Government, New Zealand committed to reducing net average GHG emissions to 5% below the 1990 level by 2020, and to 30% below 2005 levels by 2030.

The NZ ETS has long been the primary mechanism for achieving these targets. Government allocates a limited number of permits to emit called New Zealand Units (NZUs). Firms participating in the NZ ETS must acquire NZUs equivalent to their GHG emissions – either by receiving a free allocation, or by buying them on the market. Sellers on the market could be firms that have reduced their emissions and no longer need their initial allocation or forest owners who have acquired units as their trees sequester carbon.

The principle is user pays – firms pay the full cost to society of their emissions. Costs are passed on down supply chains, ultimately ending up as a different set of consumer prices, and in turn different consumption patterns. The end result should be structural change towards a lower carbon economy, involving the death of some high-emitting firms, the birth of new firms that would otherwise be uneconomic (think solar panels), and efficiency measures at yet other firms.

The process:

The new government intends to establish an independent Climate Change Commission based on one that is already operating in the UK. The Climate Commission will almost certainly recommend the inclusion within the ETS of agriculture, which is responsible for 50% of New Zealand's emissions. Leaving agriculture out while simultaneously attempting to achieve a zero carbon goal would be inefficient – there may be situations where the private profit on a farm is less than the cost to society of the carbon emissions.

The new Government has proposed that, at first, agriculture will receive a free allocation of NZUs equivalent to 95% of emissions. So the impact on farmers' bottom lines in the first instance will be small. But farmers that reduce their carbon emissions would be able to sell their surplus NZUs, so carbon reduction incentives would still be present.

What this means for dairy and meat:

An ETS that includes agriculture could see change in farming practices and land use. Over time, agriculture will presumably be allocated fewer free units and the price of NZUs will rise. The price for carbon has doubled since December 2015 from \$9.30/unit to around \$20.85/unit today. Notably, carbon prices are expected to rise further in the years ahead (unless the ETS is watered down again).

Rising costs to farmers are likely to have a direct effect on how dairy and meat farmers use their land. In particular, we could see farms commit planting more forests on their land to sequester carbon and minimise costs. Farms with a limited availability of suitable land could undertake partnerships with other farms to plant forests on less productive lands.

Moreover, with the price of carbon and carbon liabilities rising as free allocations are phased out, we could see a push for newer technologies and/or improved production techniques to minimise emissions intensity.

Putting this all together, by 2050, New Zealand will probably have more land planted in forestry and less in dairy than otherwise. While this will take some time, we expect that farms will be faced with challenges now. Overall, the ETS will change the nature of farming and could lead to changes in the economy as a whole.

Shyamal Maharaj Economist

Happy holidays!

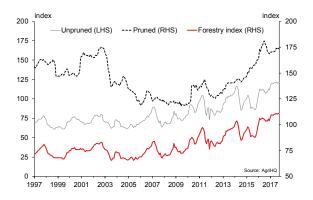
This is the last Fortnightly Agri Update for 2017. FAU will resume on 7 February 2018.

Beyond the farm gate

Forestry

	Current price level compared to 10 year average	Next 6 months
Trend	High	N

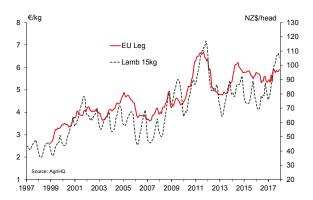
To date, forestry has seen a record period of sustained high prices, driven off the expansion of the Chinese economy and a large construction pipeline. However, going into 2018 prices are expected to come off their highs, as the Chinese government enters a phase of rebalancing the economy, which may see the Chinese economy slow next year. And with a particular focus on the industrial sector and by extension construction activity New Zealand log prices are expected to ease.



Lamb

		Current price level compared to 10 year average	Next 6 months
٦	Frend	High	R

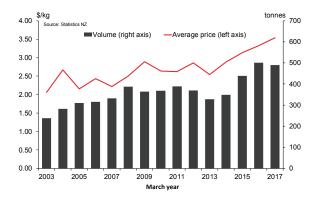
Lamb schedules prices are at a 5-year high. However, this may be short-lived as we are already seeing prices turn. The surge in export volumes from October and November demonstrated the boost to demand and prices supported by the chilled meat trade. November lamb exports rose 20% above last year's levels. Notably, for the first time China (37%) overtook the combined EU/UK (35%) markets as the leading destination of our lamb exports. In particular, mutton exports surged, with China procuring 70% of November's volumes.



Horticulture

	Current price level compared to 10 year average	Next 6 months
Trend	High	7

Over the year, the horticulture industry has consistently produced strong returns for farmers. Constraints on supply due to poor weather conditions has supported prices to an extent. But the strengths in demand from key export destinations for apples and kiwifruit have been far greater. In particular, growth opportunities in Asia have seen farmers invest a wider range of product offerings, such as sweeter variations of apples. Overall, prices for apples and kiwifruit are expected to remain above their five year averages.



Note: Trend arrows indicate direction of change in world prices.

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