



The need for feed

- Weather is a major factor that affects NZ Agricultural practices and economic growth.
- Farms' output has been soft due to wet weather and has increased costs of production.
- Now, we are seeing risks emerging towards drought, as it gets hotter.
- This means that milk production may be softer and slaughter numbers may rise sooner.

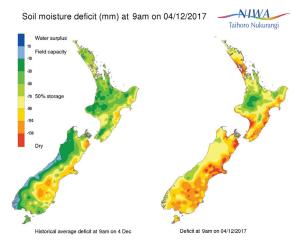
GlobalDairyTrade Auction Results, 6 December 2017

	Change since last auction	Price index USD/Tonne
Anhydrous Milk Fat (AMF)	-0.6%	\$6,836
Butter	-11.1%	\$4,575
Butter Milk Power (BMP)	4.3%	\$1,957
Cheddar	-3.9%	\$3,696
Lactose	n.a.	n.a.
Rennet Casein	3.4%	\$4,879
Skim Milk Powder (SMP)	4.7%	\$1,774
Whole Milk Powder (WMP)	1.7%	\$2,830
GDT Price Index	0.4%	-

Farmgate milk price forecasts

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

Soil moisture deficit



Source; NIWA

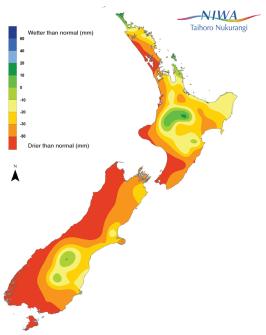
It appears the market has responded to the risks pointing to lower New Zealand milk production. Last night's GlobalDairyTrade auction saw a 0.4% rise in the overall dairy price index. Futures prices overshot the potential rise, but nailed the direction once again. Whole milk powder prices rose 1.7% to US\$2,830/t. Butter prices continue to soften, mostly due to higher supplies coming out of Europe. Nevertheless, we maintain our forecast of \$6.20/KgMs for this season, but note that with risks to softer production, there may be potential upside to our forecast.

Months of wet weather across New Zealand has restricted productivity in the agricultural sector at the beginning of this season. In particular, production levels of our major

export commodities has fallen short of their normal production cycles. Normally this cycle sees a significant boost to production volumes between the September and October months, but this time around, the weather has proven to be more of a contentious issue for farmers across the board.

Soil moisture anomaly

Soil moisture anomaly (mm) at 9am on 05/12/2017



Source: NIWA

The situation now points to the other extremes of the weather spectrum i.e., hot and dry. According to the weather agency NIWA, the reported soil moisture deficits compared to the same time last year and the historical average for this time in the cycle is severely dry. As the moisture map shows, major farming regions are seeing a rapid drying of pastures, which is certain to limit the potential for grass growth the industry has been counting on as we head into 2018.

We expect this to affect the dairy and meat sectors mostly, as the regions showing the driest conditions are focussed largely in these sectors. These sectors are facing the greatest vulnerabilities as pasture growth is a pivotal input to production. In the time between the wet and dry weather, grass growth improved a bit, giving farmers a turn of luck. But continued dryness could see this luck run out abruptly.

Irrigation is pivotal to ensuring grass growth when facing the risks of drought. Canterbury and Otago (to a lesser extent) have widespread irrigation infrastructure. Notably, 75% of total irrigated land is utilised in those regions. This means that risks to South Island pasture growth are smaller as those regions have a backstop for the dry weather to come. We also note that over two thirds of that irrigated land is concentrated in the dairy and meat space.

However, the most vulnerable regions are in the North Island. Irrigation is much more scarce and not as highly used in the North Island. We note the soil moisture map shows dry conditions albeit to a lesser extent in the North Island, but the lack of irrigation used in those dairy intensive regions representing around 60% of dairy cows means the risks for lower production are greater. What this means is that the downside risks for milk production are greater given that a greater stock of dairy producing cows are located in regions facing tougher and drier months ahead.

Notably, we are already seeing the effects of dry weather stifle productivity in Taranaki, and the Waikato. Taranaki and the Waikato remain heavy hitters in the dairy industry, together representing around 30% of total milk production. Other regions in the North Island are also facing similarly dry conditions. Bay of Plenty, Hawke's Bay and the Manawatu are slightly better positioned for their irrigation in comparison. But these regions are concentrated in the horticultural space, where prices are currently above average.

However, that's not the case for the dairy and meat sectors. Our forecasts for dairy and meat commodity prices are set to soften going into 2018. Notably, production has been consistently soft from the dairy sector and even with the recent lift in production volumes reported in Fonterra's latest dairy update, the risks emerging concerning the dry weather may prove to be a challenge as farmers would have been counting on some reprieve from adverse weather around this time.

Dairy farms are unlikely to cease production outright. Rather they face increased costs of production. Free cash from last season's payout may be committed toward purchasing costlier feeds, rather than paying down debt. Moreover, costs may rise further as farms compete for grains, which may also face risks to supply from the drier weather. On this basis, Fonterra's production growth forecast of 1% for the 2017/18 season faces some downside risks.

On the other hand, prices for lamb and beef are set to soften through 2018 as we expect greater supply to come on stream. We note that slaughter numbers may rise sooner, rather than originally anticipated as the weather brings forward timetables. Notably, we are already seeing prices for lamb schedules ebb lower as slaughter numbers have picked up in the aforementioned transitionary period. Additionally, US imported beef prices are also softening, as greater supply enters the market mainly from Brazil and Australia.

Putting this all together, our two main commodity exports are likely to face downward pressures on production in the summer months ahead. We maintain our farmgate milk price of \$6.20/KgMs for the 2017/18 season. However, the risk of a shortfall in milk production also means an upside risk to our milk price forecast.

Shyamal Maharaj

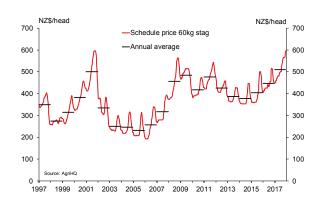
Economist

Beyond the farm gate

Venison

	Current price level compared to 10 year average	Next 6 months
Trend	Above Average	2

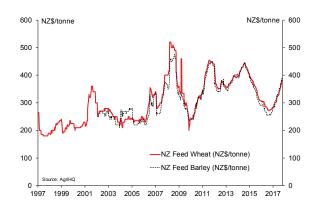
Low production continues to drive the uptick in prices for venison schedules, with South Island product attracting a premium. Over the year, venison prices have been steadily rising, especially as we see European demand for chilled meats push higher. Production in the major agricultural sectors has been soft around the September and October months, because of the tumultuous weather. But we note that venison tends is not as frequently consumed as lamb or beef. With that in mind, NZ venison exporters remain mindful that European buyers will be weary in their inability to pass on the additional cost to consumers, thus squeezing buyer margins and limiting long-term business prospects for NZ venison exporters



Grains

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

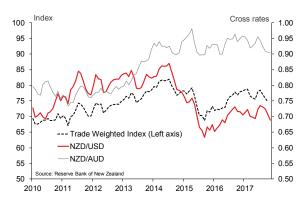
The poor weather to date has been a strong supporter of demand for grains and alternative feeds. Farms in the dairy and meat sectors have struggled to adequately renew grass growth to service feed needs for cattle going into the summer months. With the weather expected to remain dry heading into summer, we expect that prices are tipped in favour grain growers. Moreover, with maize planting rocketing along, it appears growers will be able to support heightened demand. Nevertheless, we remain wary that dry weather may also affect the speed at which grains can be harvested, which may add upward pressure to prices for the time being.



NZ Dollar

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

The New Zealand dollar has held steady against the US dollar since the middle of October. A significant reason for this is that the market has all but priced in the effect and outcome of the election. Between August and November, the NZD/USD fell more than 7%. However, now, the story will be largely dependent on how the US dollar behaves in the months ahead. Key factors we anticipate that will push the USD up, is any positive news regarding US tax reforms progressing through the Senate (albeit this may prove contentious), and the expectations around the US Federal Reserve's December meeting. The markets have fully priced in an expectation of an interest rate hike in the US and so any material shift in the USD will be dependent on guidance around US inflation and probabilities of rate hikes in 2018.



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

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