# Agribiz

July 2012

# Milk Matters

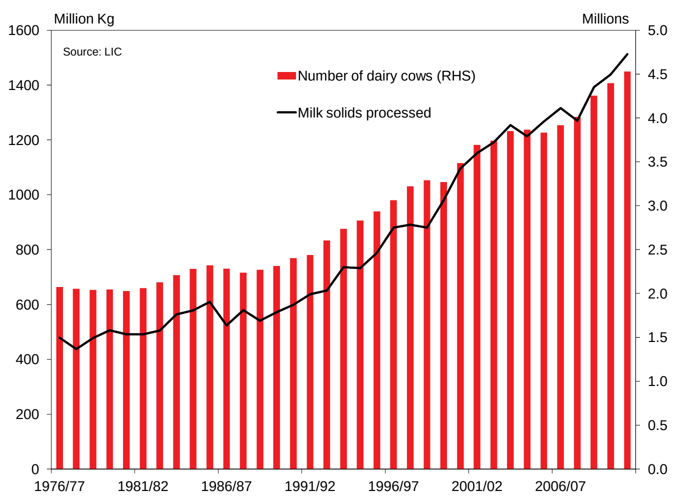
## A closer look at dairy

*There's no dispute that the dairy industry has grown to become the dominant player in New Zealand's agricultural economy over the last decade. Spurred on by high prices and a positive outlook for global demand for dairy, resources have poured into the sector. Yet despite positive longer-term dynamics, dairy prices have been volatile and will remain so. Most recently there have been significant falls in prices. In this quarter's Agribiz we examine these recent moves and look at what the outlook might be from here.*

### The growth of New Zealand's dairy industry

Over the last decade, the dairy industry's dominance in the New Zealand agricultural economy has grown. Encouraged by attractive returns, technological innovation, and (presumably) optimism about the medium-term outlook, resources have flowed into the sector. The number of dairy cows has grown 23%, and milk production has climbed 31% over the last decade (figure 1). There have been changes to the landscape too. The amount of New Zealand land devoted to dairying has grown following conversion of land that has been traditionally regarded as best suited for other uses such as dry stock farming and forestry. Between 2002 and 2007, the amount of land dedicated to farms with sheep, beef cattle and deer declined by 5.9%. In contrast, the amount of pastoral land used by farms with dairy cattle increased 5.1%. Dairy farming has also become more intensive (with increased stocking rates) and productivity has improved.

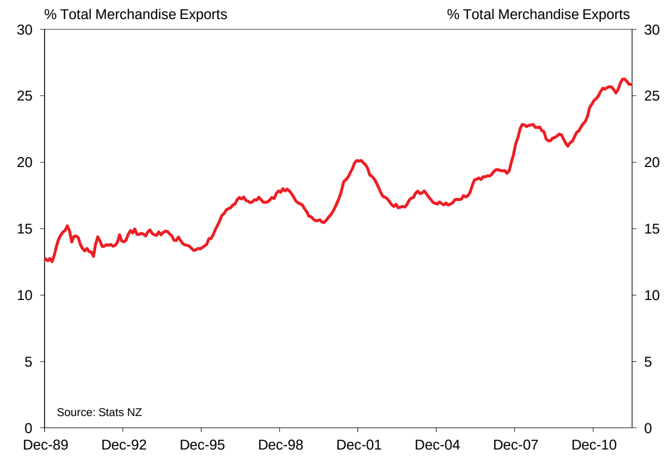
***Figure 1: National dairy herd and milk production***




However changing land use has not been without consequences. Environmental concerns such as water quality, soil health and greenhouse gas emissions have gained increasing prominence.

Increased milk production has translated to a lift in dairy exports (figure 2). Dairy exports now make up 26% of total goods exports leaving New Zealand – and were worth $11.5bn over the 12 months to May 2012.

***Figure 2: Dairy exports as a percentage of total exports***




### Recent Developments: Demand down, supply up

High dairy prices relative to other agricultural products have been one factor supporting the shift into dairying. However most recently dairy prices have posted significant falls. Prices for all major milk products have fallen, with some of the biggest falls for Whole Milk Powder, Skim Milk Powder and butter (down 38%, 32% and 44% respectively from their recent peaks).

*Figure 3: Dairy prices*

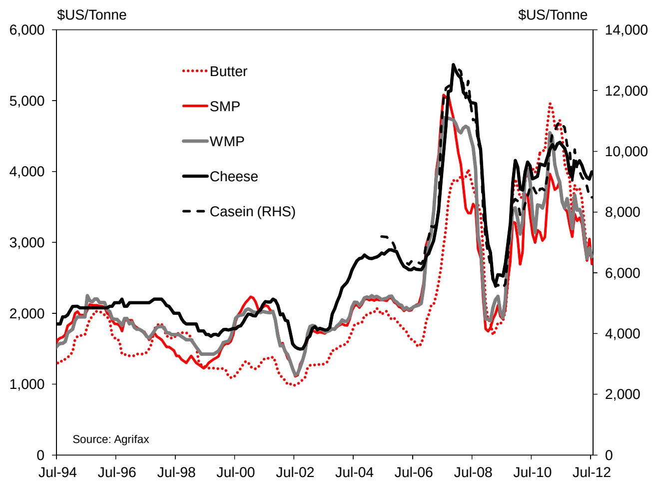
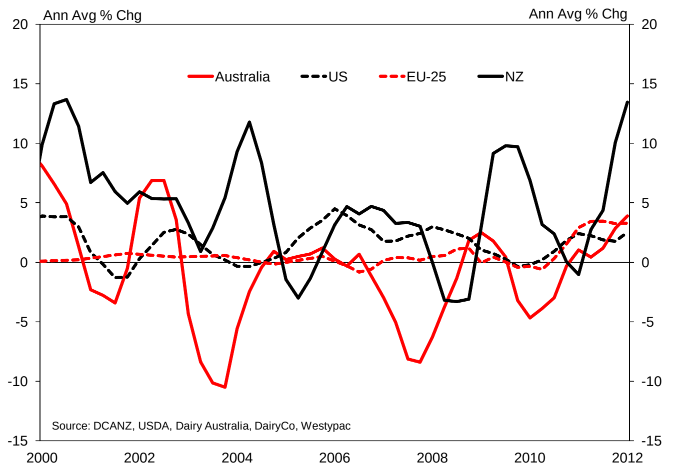



*Figure 4: Milk production*




Like other commodity prices, dairy prices have not been immune to slowing global growth. Add to this heightened uncertainty and growing concern about Europe's ability to muddle its way through its extended debt crisis, and commodity prices of a wide range of persuasions have fallen. But it is demand in developing countries which underpins trade in dairy products. And in New Zealand's case, the most important destination for dairy exports is China. Most recently, economic growth there has slowed noticeably (though not unexpectedly) from 10.4% in 2010, to 9.3% in 2011, and is expected to slow further (on Westpac forecasts) to 7.8% in 2012.

## Global production – a perfect storm?

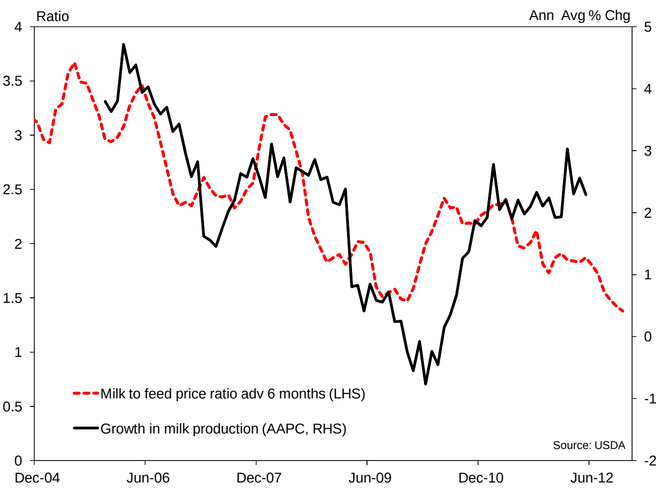
At the same time, there has been a period of synchronised growth in milk production in the world's key dairy exporting regions (keeping in mind that only a very small proportion of global dairy production is traded, around 6%). High prices on offer in late 2010/early 2011 have encouraged farmers to maximise milk production, while excellent weather in regions which use the pastoral method has provided a natural lift to output. In addition, soft consumer demand in the US and Europe, combined with a relatively weak exchange rate in both areas, has encouraged export growth from these two big global producers.

But the times they are a changing and we don't expect this situation to be sustained. Weather conditions are unlikely to remain as favourable for Southern hemisphere pastoral-based producers over the coming 12 months, and weather is also playing a part in rising costs for feed-based US producers. Over the last few weeks, corn and wheat prices have skyrocketed as temperatures have soared in key grain producing regions and fears over crops have grown.

This will put further pressure on northern hemisphere producers' margins, which have already been tightening as milk prices have headed south (figure 5). This squeeze on global milk supply is expected to occur as demand growth in key developing economies, particularly China, improves. Policies designed to boost growth in China are expected to gain traction from late 2012. This should boost global demand for protein, even if consumption stagnates in Europe and the United States.

With this outlook in mind, we are hopeful that we may be nearing the trough in global dairy prices (we've pencilled in only modest further falls in prices over the next few months). But there are always risks on the horizon. The European situation remains the ultimate wildcard – a catastrophic event there means all bets are off and would send commodity prices lower across the board (for a more in depth analysis of what "Eurogeddon" might mean for the New Zealand economy more widely, including interest rates, exchange rates and credit conditions, see our recent report at www.westpac.co.nz/business/economic-updates/economic-research-and-strategy/). But risks to dairy prices are not restricted just to the downside. Weather related events have the potential to quickly impact on prices – the recent sharp increases in grain prices are a prime example. Events such as this have the potential to drive up dairy prices more quickly than we have assumed.

*Figure 5: US Milk / feed price ratio and milk production*



## Regional roundup

- New Zealand's pasture-based producers have benefitted from exceptionally strong pasture growth in most regions which has translated into near double-digit growth in milk production in the 2011/12 season. But with signs of an El Nino weather pattern waiting in the wings for spring some regions may experience drier weather (particularly the northeast) and production will struggle to register a repeat of last season's exceptional gains.
- Australian milk production is estimated to be up 4% in 2011/12 (the strongest growth in a decade) but growth is forecast by ABARES to slow to 1.5% in the forthcoming 2012/13 season. Exporters are being squeezed by falling global commodity prices while prices for those supplying the domestic market have been under pressure due to intense retail competition.
- US production is running 1.7% ahead of last year on the back of herd and productivity growth, but the pace of increase is slowing. There is the potential for output to slow further as producers' margins are squeezed by the combination of rising feed costs and lower output prices. The current drought in the US is so far less severe than last year's but much more widespread. With domestic demand likely to remain tepid, any additional production has been funnelled offshore, adding to global supply.
- In the EU higher prices have encouraged production growth. And with complex pricing and quota arrangements in place, it may take time for falling global prices to be reflected in reduced output. Nonetheless, European milk production is widely expected to post slower growth in 2012/13 than the 2.3% growth recorded in 2011/12.

## So what about this season?

We're forecasting whole milk powder prices to average around US$ 3,000/tonne over the course of 2012 (compared to current spot prices of around $2,800) which incorporates a modest increase in dairy prices in the last few months of this year and into next year. Of course world prices are only part of the equation for New Zealand dairy farmer income. The other important (and notoriously difficult to forecast) component affecting revenues is the currency. After remaining stubbornly high in the face of falling dairy prices earlier in 2012, the NZD fell sharply in May as the European debt crisis intensified. However as the European crisis has lurched back from the precipice toward merely rocky ground, markets have become less risk averse, and the NZD has once again started gaining ground. For our part, we're forecasting the NZD/USD to average 77c in the September quarter, before heading back up toward the low 80c range for the remainder of 2012 and 2013.

This leaves us forecasting a total payout of $5.70 this year – a little below Fonterra's own opening season payout forecast of $5.95-$6.05 and noticeably below last season's forecast of $6.45-$6.55. The lower payout combined with a return to more normal weather conditions means 2012/13 will be a more challenging year for dairy farmers. However we think many will be well placed to meet these challenges. The lower payout comes on the heels of several pretty good years (with the average payout above $7 for the last three seasons), a period of debt consolidation by the sector as a whole, and with many farmers starting the 2012/13 season with both stock and pasture in excellent condition. We also anticipate that as global demand picks up and dairy prices start to recover, that the payout will improve in 2013/14.

***Figure 6: Southern Oscillation Index***

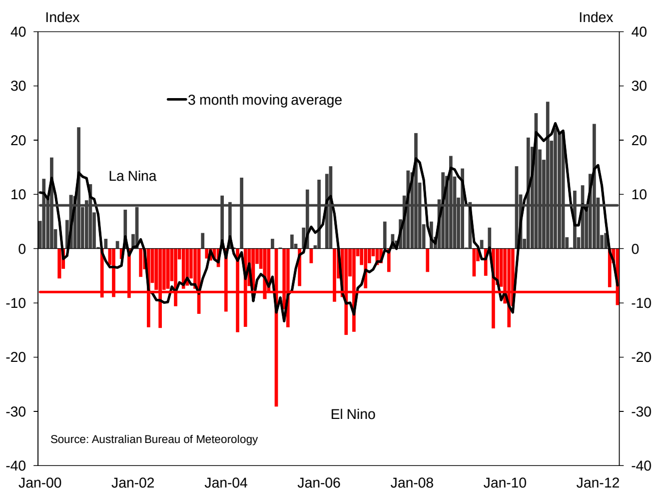
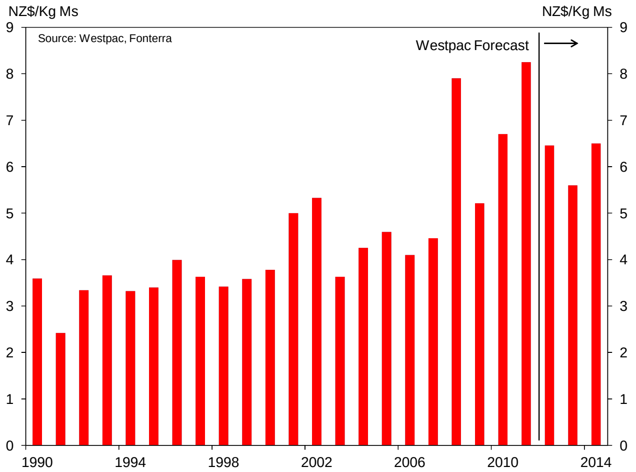



***Figure 7: Dairy payout***




## The Bigger Picture

As farmers know perhaps better than anyone else, volatility in global commodity prices is part and parcel of the business they are in. And that volatility is not going to disappear any time soon (in fact some might suggest we're currently in a period of structurally higher volatility). However we do expect this volatility to occur against a backdrop of underlying strength in demand for dairy products and food more generally.

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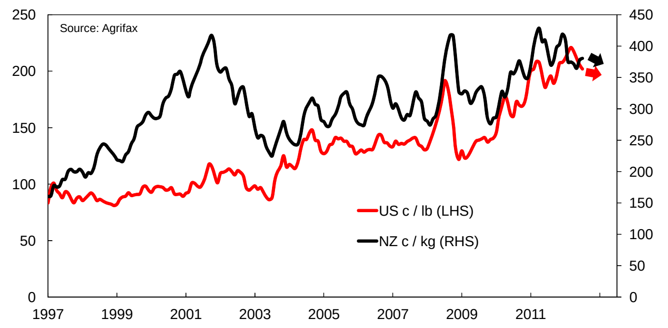
# Beyond the farm gate

## Beef

International beef prices have moderated over the last few months but remain at historically high levels. Looking ahead, upside risks to prices are emerging as weather conditions in the US deteriorate. Drought conditions across large swathes of the Midwest are raising fears for crop production. Continuing hot dry weather is forecast to hit crop yields and this has seen prices for wheat, corn and soybeans soaring. This will likely flow through to higher costs for meat (and dairy) producers, pushing up prices. Higher feed costs may lead to producers culling stocks but conversley could also put the brakes on any herd rebuilding in the US, meaning global supply could stay tighter for longer.

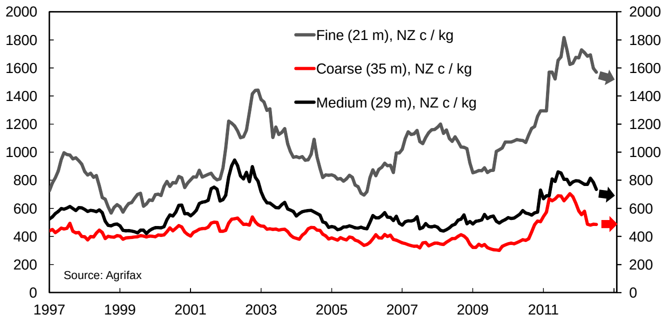
*Beef*




## Wool

Wool prices have continued to moderate from very high levels over recent months. Prices may come under further downward pressure over the remainder of the year as consumer demand in key developed economies such as the US and Europe remains fragile. World wool production is also widely expected to increase gradually in response to favourable wool and sheep meat prices. Even so supplies are expected to remain near historically low levels. Combined with rebuilding of stocks, should help put a floor under any price declines.

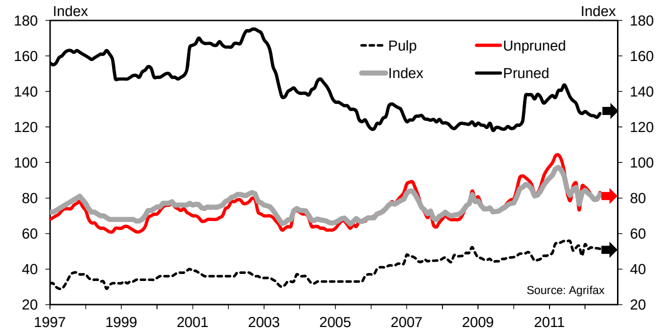
*Wool*




## Forestry

Log prices have stabilised of late, even firming a little in June. However longer-term prospects hinge on the growth outlook in key emerging markets, and in particular China. Our expectation is that prices will gradually improve next year as policies designed to stimulate growth in China gain traction and demand improves. Recent changes announced to New Zealand's Emissions Trading Scheme included some adjustments to the rules around pre-1990 forests which were generally greeted favourably by forest owners. However on the downside, the price of carbon credits remains very low, and none of the announced amendments to the ETS are likely to boost prices in the short term.

*Forestry*




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

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