

New Zealand Dairy Update

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Contact

Susan Kilsby
Agriculture Economist
 Telephone: +64 21 633 469
Susan.Kilsby@anz.com

Sharon Zollner
Chief Economist
 Telephone: +64 27 664 3554
Sharon.Zollner@anz.com

Defying gravity

- Global dairy commodity markets are being severely impacted by changes in consumption patterns related to large number of cafes and restaurants being shut down.
- We have revised down our milk price forecast for the 2020-21 season to \$5.75/kg MS, down from our previous forecast of \$6.45/kg MS.
- Our farmgate milk price forecast for the 2019-20 season is unchanged at \$7.15/kg MS.

Milk price revised down

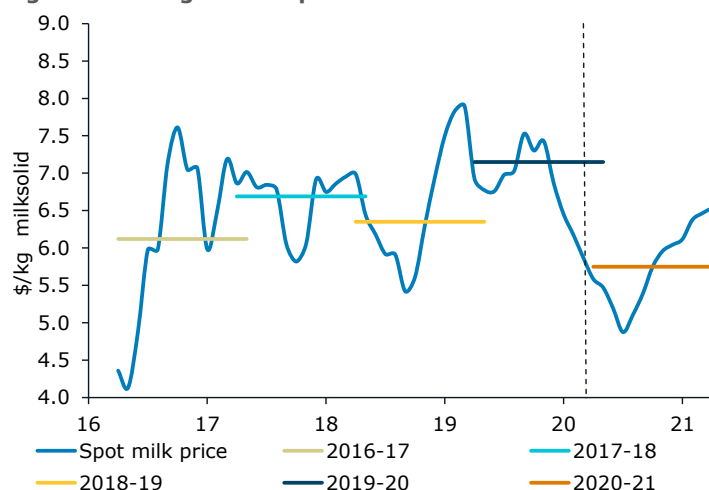
Our farmgate milk price for the 2020-21 season has been revised down 70c to \$5.75/kg MS. The lower forecast has been driven by a significant deterioration in economic conditions in most parts of the globe, and more specifically the recent sharp fall in dairy commodity prices in the United States and European markets.

The reduction in demand for dairy products from the food service sector has resulted in growing surpluses of milk, especially in regions where a large share of dining normally occurs outside of the home.

Thus far, the prices New Zealand is receiving for its dairy commodities have held up much better than the prices of similar goods traded within the US and Europe. But it's only a matter of time before prices for New Zealand sourced dairy products also come under pressure.

Markets for dairy products from different geographics don't always move in tandem, as fundamentals – particularly on the supply side – can move in opposite directions. Measures to protect domestic production mean the US and European markets often trade at a premium to products traded outside of these regions and these premiums can persist for substantial periods. However, price premiums for New Zealand products tend to last for only a few months. This suggests that returns for New Zealand dairy commodities will not be able to defy gravity for too much longer.

Figure 1. Farmgate milk price



Source: ANZ Research, Fonterra

We anticipate New Zealand's dairy commodity prices will ease by approximately 25% over the next six months. This is a larger fall than is currently showing in the NZX Dairy Derivatives market. Whole milk powder futures dated October 2020 are currently priced at USD2585/t, which is only about 5% lower than current prices. However, given the current weakness evident in other commodity markets we consider this to be too optimistic.

By October we anticipate the spot milk price will be approximately \$5/kg MS, but then see this improving as the season progresses. This does, however, mean a large portion of next season's milk production will be sold into a weakening market, which will have a significant impact on the milk price that will be paid across the full production season. Towards the end of 2020 dairy commodity markets are expected to improve. Supply from the Northern Hemisphere regions will slow due to both the normal seasonal pattern and farmers in Europe and the US cutting back the number of cows they are milking due to poor financial returns.

Figure 2. Dairy commodity price basket



Source: GDT, NZX, ANZ Research

The recovery in dairy commodity prices may be delayed, depending on how much excess dairy production is able to be stored. If we see a large build-up in stocks of long-life products like skim milk powder and butter then it will take even longer for prices to recover. At present we anticipate only a small increase in stocks of these commodities with steady demand for dairy products in the majority of the markets we supply.

Also supportive of the farmgate milk price is the relative weakness of the NZ dollar. The USD is being supported by demand from investors who are looking to hold their funds in a relatively 'safe' currency. This demand is expected to continue to put downward pressure on NZD/USD in the season ahead.

Figure 3. NZD/USD

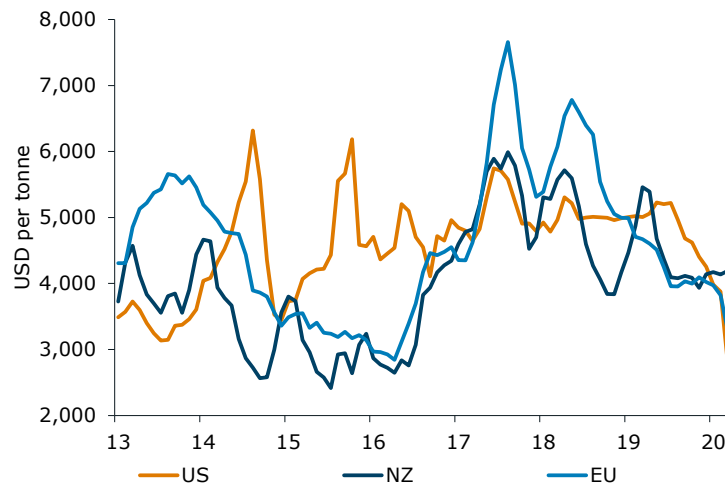


Source: Bloomberg, ANZ Research

Global commodity market dynamics

Prices for dairy products sourced from Oceania have held up relatively well, whereas dairy product prices have plummeted in the US and fallen sharply in Europe.

Figure 4. Butter prices



Source: Reuters, CME, GDT, European Commission

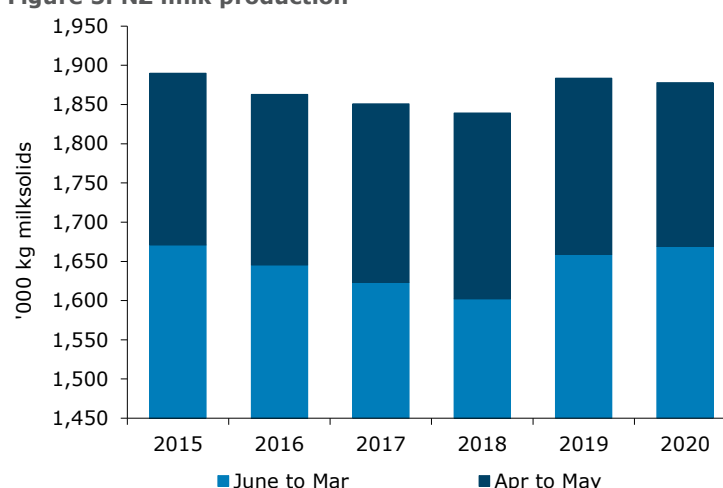
There are a number of reasons why New Zealand sourced product is currently commanding a premium. The most obvious is that supply of product from New Zealand is diminishing as the dairy season draws to a close, while the quantities in the Northern Hemisphere markets are near their seasonal peak.

Milk production in New Zealand this year has been curtailed by the widespread drought, which means many farms have dried cows off a lot earlier than normal. A significant reduction in milk supply has not yet shown up in the official production data with March data on par with last season, and still running 0.6% ahead for the season to March. However, data for April and May is expected to show a much sharper drop in output, which will bring the full season's production back to slightly less than last season.

Feed on hand is limited in many regions, and supplementary feeds and grazing have become expensive. In many cases dairy heifers are being returned from grazing in lighter condition than is ideal, while many winter grazing contracts have been cancelled. This means more stock will be wintered at home, which will make it challenging to attain goods levels of pasture cover ahead of

calving. Farming through the winter and early spring is likely to be challenging if weather conditions aren't favourable. Getting cull cows away is still proving a challenge in many parts of the country, although the situation is improving as most meat processors are now back operating at or near capacity due to extra shifts being added, sites being reconfigured to accommodate more workers, and physical distancing rules being relaxed so workers only need to be spaced 1 metre apart.

Figure 5. NZ milk production



Source: DCANZ, ANZ Research

The relatively tight supply of product from New Zealand has limited the slide in prices. The Global Dairy Trade Price Index has eased 15% since late January – that's painful, but prices in US markets have fallen about twice as much.

Protein expected to outperform fats

Protein-based dairy products are expected to outperform fat-based products during the economic downturn. Demand for fat-based products tends to be driven by developed markets, while demand for protein products is more aligned with the developing markets.

During 2020 all economies are expected to be severely impacted by the measures being taken to contain COVID-19, but some economic growth is still expected to occur in developing markets. For example, we anticipate GDP growth of 1.8% this year for China, while the IMF is anticipating global average growth to plummet to -3% in 2020.

Consumers in developing nations tend to spend a larger proportion of their income on food than in developed countries, where a greater share of spending tends to be on more discretionary items – including food service. For example, in the US more than half of the cheese produced is used by the food service sector in products like pizzas, hamburgers etc. Likewise, high-end restaurants tend to use much larger amounts of butter and cream in their dishes than is used when cooking at home.

The food service sector is currently being hit very hard as social distancing measures being taken across the globe to control the outbreak of COVID-19 limit both the desire and the opportunities to dine out. The restrictions on the movement of people mean tourism has virtually dried up in most countries. This will reduce demand for dining out even once restaurants are able to reopen. Meanwhile, demand for dairy products that can be consumed at home has risen.

In this environment, protein products – including milk powders – are expected to perform better than fat-based products such as butter and cheese.

Need for agility

Being agile in terms of product mix and markets will be critical in the challenging times we face both now and looking forward.

Fortunately, New Zealand has a much greater ability than many of our competitors to flex our product mix towards the products and markets where the greatest demand lies. Our steep production curve means for much of the season we have plenty of optionality in terms of products we make. As fat prices fall, the production of whole milk powder (WMP) is expected to become a more viable option than other product mixes. Skim milk powder (SMP) and butter have a longer shelf life, meaning their prices may be limited by an inventory build-up in the Northern Hemisphere market as the excess milk supply is dealt with.

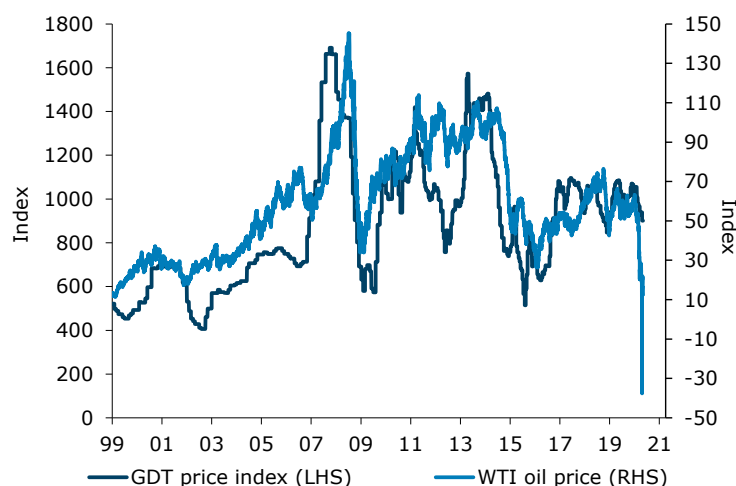
For this reason, WMP is expected to perform relatively better than SMP and butter. New Zealand is one of the few countries with the ability to flex more production towards WMP. Cheese, in particular, is expected to come under heavy pressure, as this is a product of which both Europe and the US produce large quantities, and it is also a product for which demand is currently lagging.

New Zealand processors are accustomed to continually monitoring the most valuable product mix and making adjustments to manufacturing programs. Keeping an eye on markets this season will be extremely important.

New Zealand exporters are also fortunate to have good trade access and strong business relationships in a wide range of markets. Maintaining these relationships will help our industry negotiate its way through the season ahead. Trade tensions have been building globally, which is making it increasingly difficult for some other dairy exporters to access some markets.

Trade is slowing globally, making it more challenging to move product across the globe due to a reduction in the number of ships operating. Air freight options are also now very limited.

Figure 6. Oil prices vs GDT



Source: Bloomberg, GlobalDairyTrade, ANZ Research

Oil prices have slumped this year, severely reducing the buying power of many countries in the Middle East/North Africa region that are major importers of dairy products. Dairy prices have historically tended to follow the direction of oil prices, but dairy commodities are (thankfully) expected to be more resilient than oil during this downturn. This is due to the strong underlying demand for dairy as a source of nutrition, whereas oil demand is much more intricately linked to economic activity.

The decrease in buying power from oil-producing nations means New Zealand exporters will be even more reliant on Asian demand this year. New Zealand's strong alignment with Asian markets is expected to serve us relatively well during the next 12 months.

Cheese under pressure

Europe and the US dairy processors are very reliant on sales of liquid milk and cheese. Liquid milk demand has remained relatively robust – with the exception of school milk programs – but cheese demand has plummeted due to the closure of many restaurants, resulting in an over-supply of this product. Processors in the Northern Hemisphere tend to have very limited ability to alter their product mix as they normally manufacture for a domestic market where demand is usually steady. Their milk supply curve is also much much flatter than New Zealand's, due to cows being housed and calved year-round. However, they do still have some seasonality in their supply, and milk flows are currently near peak levels.

The flow of milk is greater than many processors can manage, which means some milk is having to be dumped. Other processors are paying a standard price for the milk for which they have capacity, and virtually nothing for any additional supply beyond that. By doing this they are actively encouraging farmers to cut milk supply as quickly as they can – but this is proving difficult to achieve due to the time of the season. There are also severe disruptions in meat processing in the US, which is making it difficult to cull cows.

Subsidies will provide some support to farms

Dairy farmers in both the US and Europe are struggling to cover operating costs due to the massive plunge in farm-gate milk prices. Some government subsidies are being made available, but the size of the direct subsidies available to farmers in both the US and EU are relatively small.

The USDA has funds that allow it to purchase excess dairy products and make these available to food aid programs. This is expected to account for 2 to 2.5% of milk supply – not insignificant, but not sufficient to soak up all the excess milk available. The combination of farmers cutting milk supply by reducing cow numbers and cutting back feed, and the increase in demand from the food aid program, means US milk markets are expected to rebalance before the end of the year.

In Europe, the intervention programme allows the European Commission to purchase excess supplies of SMP and butter if prices drop below a specific level. At present European dairy prices are still above intervention levels, so no product has entered these programs. There is also Private Storage Aid (PSA) available, which subsidises the costs of storing SMP, butter and cheese. The aim of these programs is to take product temporarily out of the market during periods of over-supply. The PSA program that is currently open allows for product to be stored for 90-210 days. This does mean that any product that enters this program within the next few months will need to come out of this storage program before the end of the year – which has the potential to delay any recovery in prices.

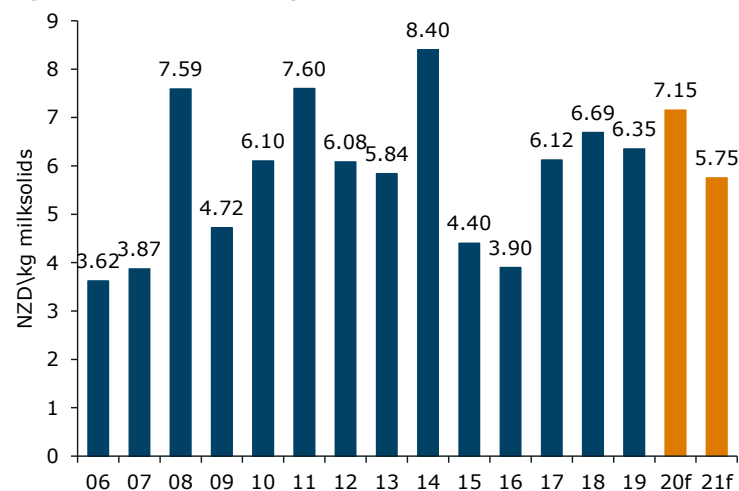
Overall, we anticipate quite a quick supply response from US dairy producers who are now cutting back on the size of their dairy herds and feeding levels. In Europe we expect to see a more prolonged response as farmers hope support programs will be sufficient to get them through this economic downturn. However, Europe is going to face a very long and slow recovery from the current economic crisis and their dairy farmers are far from the only part of their economy looking for financial assistance. Any assistance provided is

expected to be relatively small, so we do expect to see some reduction in dairy herds in the less-efficient areas – especially where processors have little flexibility in product mix and access to external markets.

New Zealand well positioned

New Zealand's dairy industry is expected to weather this crisis better than many other dairy industries, but that said, it certainly won't be easy. Incomes are expected to be curtailed for the next season, but as global economic activity slowly starts to improve New Zealand dairy processors will be well positioned to supply the needs of these markets.

Figure 7. Fonterra milk price



Source: ANZ Research, Fonterra

We expect Fonterra will take a cautious approach when it announces its initial milk price forecast for the 2020/21 season due to the highly uncertain nature of the current markets. It has already announced plans to bring forward its monthly payments and has set its advance rate at 65% of the mid-point of its forecast range. These measures will assist with cashflow early in the season.

Overall it is expected to be a tough season from a financial point of view, and could be equally tough from a physical viewpoint if weather conditions are not favourable. But the New Zealand dairy sector has an unusual degree of agility that will help us pivot to make the most of the opportunities that arise as markets evolve and diverge through this crisis.



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