

Dairy Market Insights

Third Quarter 2022

1. Summary

Outlook increasingly complex

- The outlook for global dairy commodity markets is becoming increasingly complex and uncertain, predominantly due to macroeconomic and geopolitical factors. As tensions in the Russia-Ukraine war escalate the European energy crisis looks set to worsen. At the same time global currency markets are responding to the efforts of central banks to manage inflation.
- Supply-side fundamentals have changed somewhat, with gradually improving milk availability in the EU, while the US is now firmly back in growth mode. It seems we're sailing into a new perfect storm as the easing of tight milk supplies comes just as demand-side damage from high prices becomes more apparent.
- Some uncertainty lingers in the EU with the likely damage to feed quality and reduced fertilizer application that could continue to weaken milk production and solids content in H1-2023. Extreme energy costs which are expected to remain a feature as EU countries wean off Russian gas dependence may discourage milk drying to limit SMP and butter production.
- Oceania milk collections are in steep decline largely due to La Nina's effect that has extended excessive wet conditions, as well as a cocktail of influences that are preventing any response to record milk prices.
- Spending on dairy is slowing in major developed markets as household's cover from the effects of strong inflation and rising interest costs. Trading down is evident in spending, but retail data shows dairy volumes are already weaker. Whether that extends across food service is - as yet – unclear.
- In developing markets, rising food inflation and high dairy ingredient prices have also dented demand. There is still a lot of "wait and see" as buyers watch for signs that Chinese demand starts to return, and the EU situation becomes clearer.
- After dominating dairy trade as China emerged from COVID in 2021, ongoing strict lockdowns to avoid the risk of new variants of the virus for unvaccinated populations continue to limit consumer mobility and weaken demand for dairy ingredients. Fear of infections will linger. Macro indicators suggest a weak spending recovery while domestic milk supplies remain adequate to constrain import demand for WMP.

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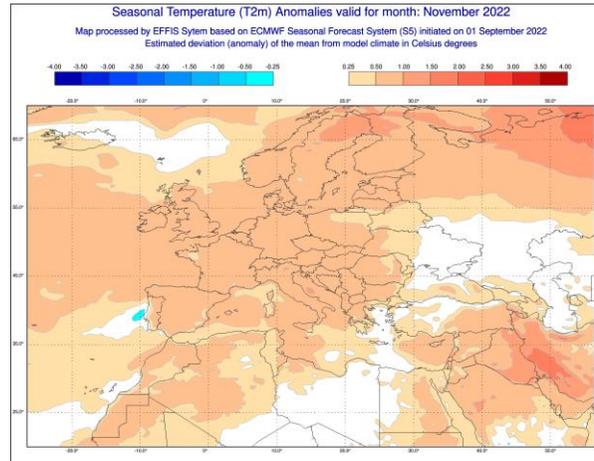
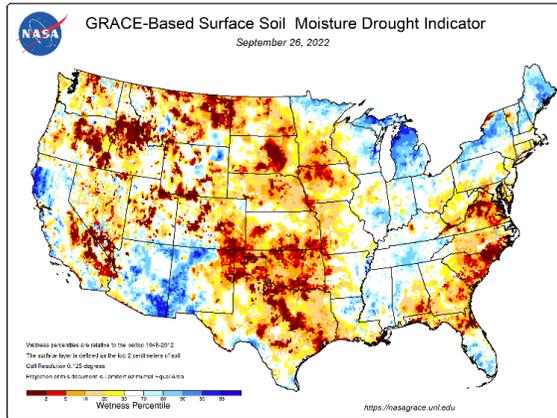
What it means for Australian dairy farmers

- The spot commodity milk value* (CMV) stood at \$8.64kgMS at the end of September down 8% from the June update, this compares to the weighted average announced southern region price of \$9.60kgMS.
- Spot cheddar prices have fallen US\$250/t since the end of June to be the best performing major commodity. Butter and SMP prices have fallen US\$860/t and US\$730/t respectively over the same period, while WMP spot quotes fell US\$420/t.
- A strengthening US dollar has seen the local currency fall from US\$0.69 to US\$0.65 over the same period, offering some relief for exporters. The impact on individual companies will be dependent on their exposure to spot commodity and currency markets.
- As in most other countries, inflation is running at historic highs, prompting successive interest rate rises from the Reserve Bank of Australia. While there are mixed signals about how consumers are responding in terms of discretionary spending, there is already evidence in retail data of trading down. Given the gap between where the CMV is tracking and announced prices, passing through price increases in the domestic market remains critical.
- While there are signs that energy prices are likely to ease in coming months, increased supply chain costs remain, with labour shortages and disruptions reducing productivity and adding to processor costs.
- **To learn more about current 2021/22 season regional farmgate pricing, and track CMV movements visit the Milk Value Portal at milkvalue.com.au**

* The CMV was recalculated for 2021/22 to account for escalating fuel and energy prices.

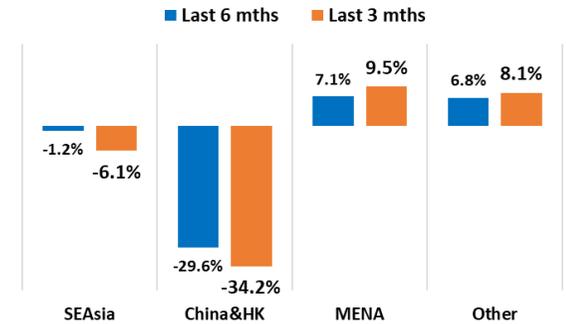
2. Some key global market indicators

Weather conditions will remain challenging in the EU and US. Europe is expected to have a warmer than normal autumn and winter. The US drought is not getting significantly worse but water shortages are limiting hay production and may force further farm exits.



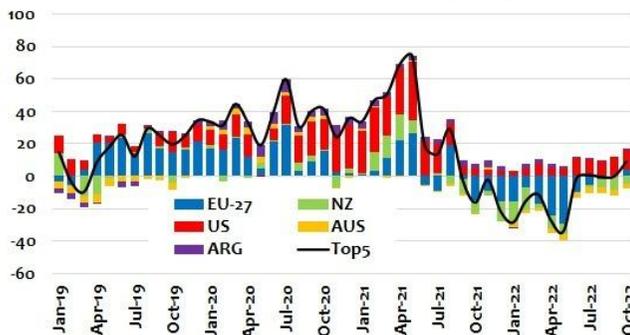
The steep year-on-year declines in China's demand across commodity categories has weighed on global trade in the past 6 months. A year earlier, Chinese demand dominated as it refilled post-COVID.

Growth in milk solids equivalent (MSE) trade



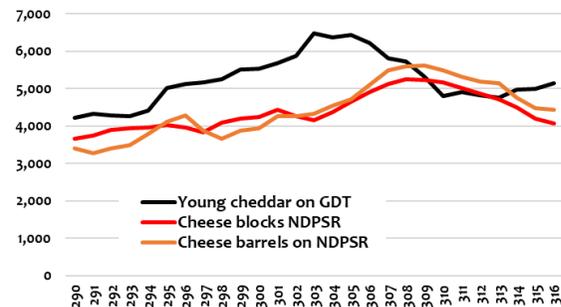
Milk output in the top 5 exporters crossed into growth in July 2022 and will continue to increase year-on-year production by 0.9% with the US the major driver and the EU slightly ahead. Weather is crushing Oceania production

YOY growth in kgMS production ('000t)



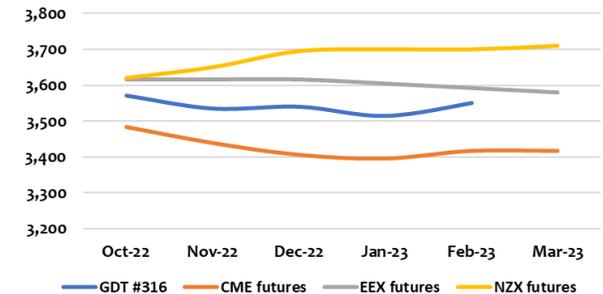
US cheese prices have a direct effect on prices achieved for NZ cheddar in export markets, as shown in the comparison of CME and GDT prices in the past few months.

GDT v US NDPSR cheddar (\$/t)



SMP forward values have diverged with SGX futures climbing on expectations of improved Chinese demand. Higher milk output and lower cheese demand appears to be weighing on US NFDN values

Forward SMP price comparison US\$/t



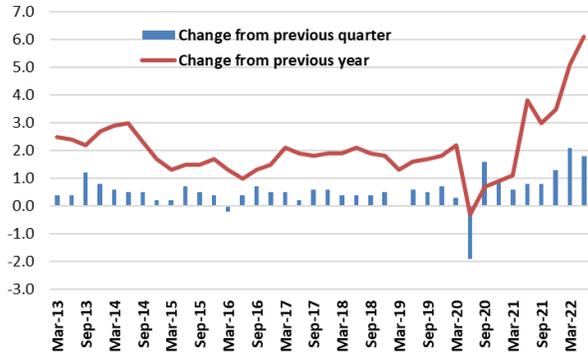
3. Major issues in the global market outlook

	Bullish (for prices)	Bearish	Uncertain
Demand	<ul style="list-style-type: none"> SE Asian imports remain resilient, and will be helped by easing commodity prices Improving Chinese demand for SMP following some de-stocking 	<ul style="list-style-type: none"> Worsening economic outlook as Central Banks raise interest rates to fight inflation Limits on trade finance may slow some short-term trade Increasing retail prices in key consuming regions may curtail demand Weaker vegetable oil prices as availability increases US demand for cheese has slowed in retail and some foodservice segments Slowing SMP demand from Mexico Impact of food price inflation and travel on foodservice activity in developing regions 	<ul style="list-style-type: none"> Impact of rising inflation on overall dairy demand Future direction of Chinese COVID policy Escalation in Russia's war on Ukraine could put feed supplies at risk
Supply	<ul style="list-style-type: none"> Uncertainty about energy policy and costs in EU27 could constrain SMP production Slow start to NZ spring will likely constrain milk output and could reduce WMP output Weaker Latin American exports with lower milk production 	<ul style="list-style-type: none"> US milk growth improving, despite tighter farm margins Much US milk growth is occurring in cheese-rich regions at a time when domestic demand is slowing, increasing export availability Increasing butterfat availability with improving US milk output, likely easing of tight supplies after year-end ordering completed Improving EU27 production with more favourable producer margins 	<ul style="list-style-type: none"> Following EU lead, risk of pushback against higher prices in some markets Impact of poorer feed quality on European milk production and raw milk components into 2023 NZ product mix response if peak supplies are reduced

4. Some key domestic market indicators

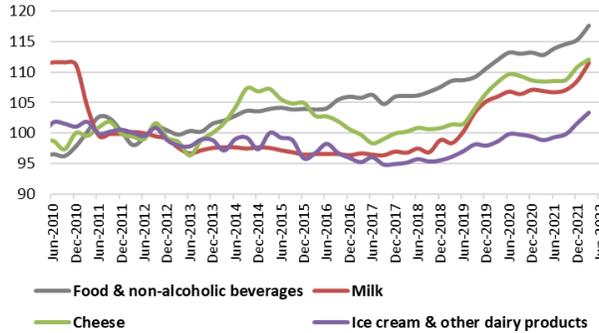
As in most other countries, inflation is the big story in Australia with increased energy and supply chain costs impacting most of the economy, particularly transport. Increasing interest rates are also pushing housing costs higher and further impacting discretionary spending. Retail prices for food have increased accordingly, with dairy product prices following

All groups CPI, quarterly & annual movement (%)



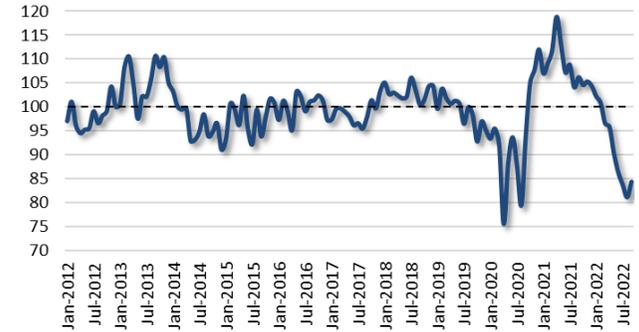
Source: ABS 6401.0 Consumer Price Index

Retail price indices (2011/12 = 100)



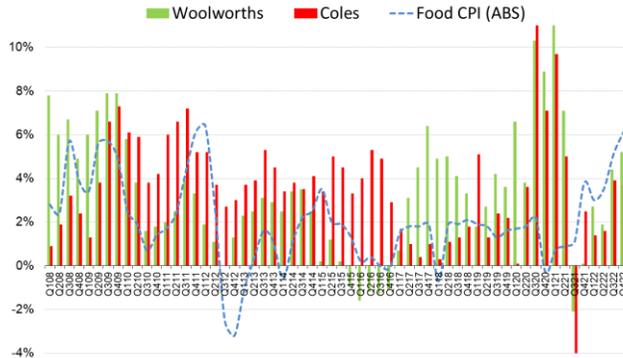
The Westpac-Melbourne Institute Index of Consumer Sentiment rose for the first time since November 2021. The increase was surprising given there is no let up in cost-of-living increases.

Westpac consumer sentiment index



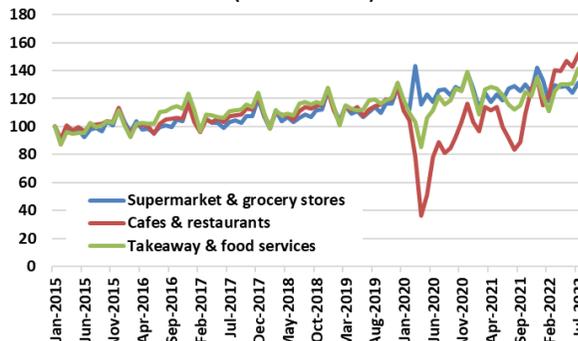
Major supermarkets appear to have improved their sales performance in Q4 of the 2021/22, food price inflation played a major role, with volume metrics down.

Retailer "same store" sales v food inflation



With increased food spending in cafes and restaurants, share of supermarkets is returning to historic share, well down on the previous two COVID impacted years.

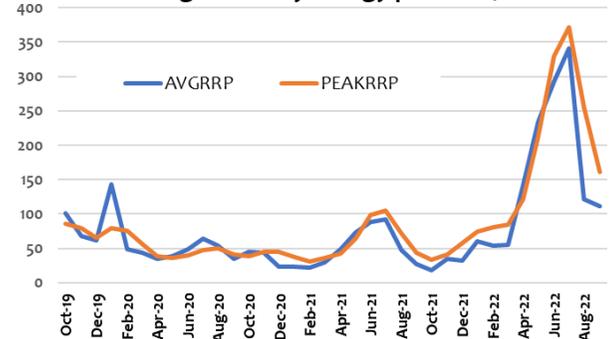
Retail turnover indices (Jan 2015 = 100)



Source: ABS 8501.0 Retail Trade

Wholesale spot electricity prices have retreated in recent months and futures suggest they will continue to fall into 2023, easing some inflationary pressures

Vic average monthly energy price in \$/mwh



5. Australian outlook

Critical issues

Milk production

- Milk output in the major southern manufacturing regions remains significantly lower than the prior year despite good pasture conditions. The seasonal outlook through summer and into Q1-2023 remains favorable now that La Niña has officially returned, although excessive rain in some regions may hamper milk production.
- The lush conditions may provide some support to milk output through spring but the underlying weakness due to declining cow numbers due to persistent exits (and many farmers reducing carrying capacity) will ensure output remains below the prior year. Feed quality has been impacted by the wet conditions. Grain and hay prices eased further in September towards the 5-year average.
- ABARES reported in September that urea imports to Australia have not slowed despite a trebling of prices and that fertilizer supplies will be sufficient over the 2022/23 season, albeit at much higher prices than dairy producers have experienced. Higher milk prices and lower grain and forage prices should protect margins.

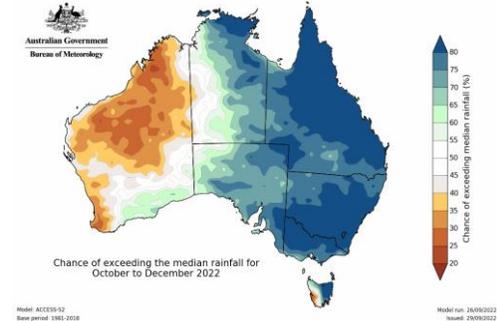
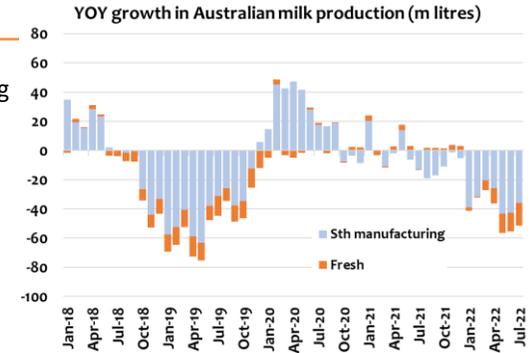
Milk prices

- The spot CMV lifted to near \$9.00/kgMS, but the forward curve for the CMV is expected to weaken based on the outlook for fundamental dairy commodity values.
- The weaker A\$ against the US\$ has driven all but a small portion of the increase in CMV with only small changes in commodity prices in the past 2 months.
- There is little scope for changes to milk prices, which sit around \$9.60/kgMS, given the fall in the CMV since late May. Competition for milk remains strong nonetheless and there are anecdotal reports of producers changing contracts in recent weeks.
- Current indicative regional farmgate milk prices can be monitored at the [Milk Value Portal](#).

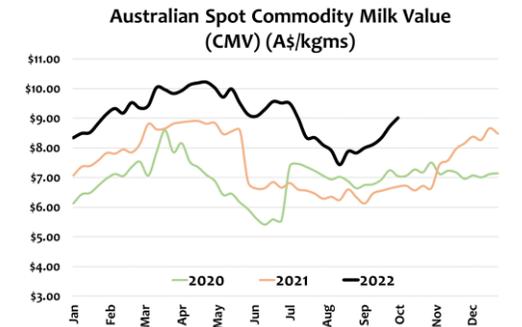
Outlook assumptions

- We expect about 4-5% decline in milk collections in coming months, and a full season decline for 2022/23.

AUS milk and product output ('000t)					
	Milk	Fats	Cheese	SMP	WMP
2020	8,688	55	367	189	33
2021	8,680	63	424	217	39
2022	8,212	68	443	212	40
2023	8,213	65	441	188	47
YOY % changes					
2021	-0.1%	15.3%	15.6%	14.7%	17.2%
1H-21	1.2%	25.1%	-3.1%	33.2%	37.4%
2H-21	-1.1%	9.0%	31.9%	5.0%	2.8%
2022	-5.4%	8.3%	4.5%	-2.4%	0.9%
1H-22	-6.3%	-1.0%	19.1%	-0.9%	-16.1%
2H-22	-4.6%	15.3%	-4.8%	-3.4%	17.1%
2023	0.0%	-4.7%	-0.5%	-11.4%	19.8%
1H-23	-1.2%	1.7%	-2.6%	-12.1%	48.8%
2H-23	2.0%	-7.7%	2.6%	-9.8%	0.0%



- Our projected CMV for the 2022/23 based on our outlook for fundamentals has a mid-point of \$8.25/kgMS. We monitor our conversion costs in this projection for changes in costs of energy and diesel.
- Looking further ahead, the reality is that next season's (2023/24) Southern milk prices will at this stage be much weaker than the current season – based on current CMV projections, around \$8.20-8.70kgMS.



5. Australian outlook

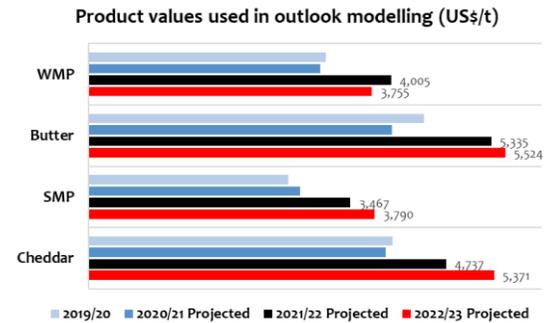
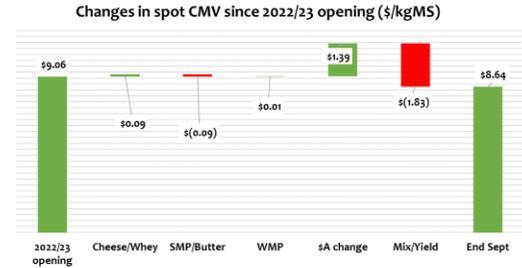
Critical issues

Markets

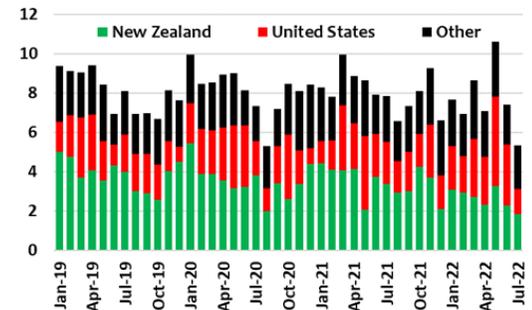
- Retail sales of food remain positive but volumes are weaker than the prior year once inflation is taken into account. There is anecdotal evidence that cheese retail markets are weaker but overall cheese, taking account of higher foodservice trade in 2022, is not yet apparent.
- Pressure on consumer spending is increasing but there is little evidence yet from credit card data that discretionary spending is being significantly impaired. Trading down in dairy categories is however apparent from retail data.
- There has been an improvement in milk availability with the seasonal lift in collections, but little change in wholesale prices for cream despite weaker butterfat prices in regional markets.
- Import trade was mixed in latest data. Cheese imports were down 5% in the 7 months to July, but the US lifted its share for a 20% growth year-on-year. NZ butter imports were marginally higher for the first 8 months of the year, but increased year-on-year each month since April 2022. AMF imports are also weaker than the prior year

Outlook factors

- With the gulf between commodity values and the cost of milk, pressure on processor margins is acute and consolidation is a possible outcome.
- While there is evidence that dairy retail prices have increased, there continue to be increased pressures on processor margins from labour issues, energy, transport and packaging costs. At the same time, competition for dwindling farm milk supplies remains acute.
- The product mix in the short-term will remain focused on small growth in cheese output while milk powder and ingredient (and butter) production will suffer.



Australian cheese imports by supplier ('000t)



Glossary and explanation of key terms

Acronym		Explanation
AMF	Anhydrous Milk Fat	Removal of water from cream or butter yielding 99.8% milk fat product used in preparing reconstituted product and in food processing
CME	Chicago Mercantile Exchange	US-based derivatives marketplace offering a range of futures and options products for risk management for agricultural commodities.
CMV	Commodity Milk Value	The CMV calculation utilises actual or forecast spot prices for major commodities (SMP, WMP, cheese and butter) converted to local currency and the average industry product mix to generate revenue estimate. Direct conversion, overhead costs and allowance for profit retention to generate an estimate of returns available to the relevant milk pool. The CMV is used as a useful forward indicator of how the global market might affect the farmgate and is tracked weekly here .
EU-27	European Union	European trading bloc including 27 member states
FMP	Farmgate Milk Price	The average FMP that is paid by processors in the southern exporting region of Australia (including southern NSW, Victoria, Tasmania and South Australia) is made up of the underlying commodity value of milk (CMV) and a value-add or premium that depends on the product and market mix of each processor. This includes fresh and other retail dairy products as well as higher value specialised dairy ingredients.
FOB	Free on Board	A shipment term used to indicate whether the buyer or seller is liable for goods that are damaged or destroyed during shipping
LatAm	Latin America	Mainly focused on major dairy producing and importing countries Argentina, Uruguay and Brazil.
MENA	Middle East and North Africa	
MS	Milk Solids	The protein and fat content of milk which is the basis of payments from processors to farm suppliers. According to Australia in 2019/20 the average Australian litre of milk comprised 4.15gms of fat (4.15%) and 3.45gms of protein (3.45%) and therefore was 7.60gms of milk solids (7.6%).
NDSPR		National Dairy Products Sales Report produced by the United States Department of Agriculture (USDA)
NFDM	Non-Fat Dry Milk	Shelf-stable milk powder derived from the evaporation and spray drying of skimmed milk. NFDM is defined by the US Code of Federal Regulations and is similar in composition to the more widely produced and traded skimmed milk powder at 34% protein.
NZ	New Zealand	
OPEC	Organisation of the Petroleum Exporting Countries	OPEC is a permanent intergovernmental organization of 13 oil-exporting developing nations that coordinates and unifies the petroleum policies of its Member Countries.

Glossary and explanation of key terms

Acronym		Explanation
PFV	Projected Fundamental Value	Freshagenda's forecast for the future value of commodities based on the expected market fundamentals of supply and demand
SGX	Singapore Exchange Ltd	Singaporean investment holding company that provides different services related to securities and derivatives trading and others. SGX and NZX formed a strategic partnership in 2022, agreeing to the listing of NZX's Global Dairy Derivatives contracts on SGX's trading and clearing platform
SMP	Skimmed Milk Powder	Shelf-stable milk powder derived from the evaporation and spray drying of skimmed milk. SMP is defined by the globally recognized Codex Alimentarius as comprising 34% protein and 1.5% milkfat.
US	United States of America	
WMP	Whole Milk Powder	Shelf-stable milk powder derived from the evaporation and spray drying of whole milk. SMP is defined by the globally recognized Codex Alimentarius as comprising 34% protein and a minimum 26% and less than 42% milkfat.
