



The Delta Blues

Global Dairy Quarterly
Q3 2021



Summary

- **Dairy demand has proven resilient to all but the most extreme forms of pandemic-induced lockdowns so far.** While some regional disruptions will continue to occur and uncertainty remains, the potential for major global demand shocks is limited. Still, lockdowns are often strict and extreme in emerging markets in Southeast Asia, and with less government aid expected this year, longer-lasting economic impacts may take hold.
- **Farmgate milk prices are generally on the high side across much of the world, but rising costs of inputs and downside risk in milk prices are giving many producers the blues.** US dairy farmers are already experiencing relatively lower milk prices following a year of strong production growth, leading to a saturated milk market.
- **Logistics disruptions are leading to higher costs but not impacting the fundamental underlying supply and demand.** Exports have remained strong throughout the pandemic, and buyers have become more opportunistic, preemptively stocking up on products when containers are available. In the long run, however, these costs will add up and potentially curb demand.
- **A slowdown in import demand from China is expected to begin in the second half of 2021 and could weigh on global dairy commodity prices.** Supply is outpacing demand in China, with domestic production growth combined with growing inventories. These factors point to the potential for a period of destocking later this year and into 2022.
- **Global dairy commodity prices have fallen through Q2 and are expected to trade within a narrow range through Q4 2021.** Extending into 2022, downside risk is more likely if importers fail to absorb reduced demand from China.



Regional Dairy Markets



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US

Persistent margin pressure has disrupted a year-long streak of increasing cow numbers. With a grim feed outlook, further decreases could be on the way.

EU

Rabobank anticipates modest milk supply growth in 2H 2021 with relatively stable prices and firm domestic demand.

China

Rabobank forecasts lower YOY imports in 2H 2021 and 2022, due to growing domestic production and ample stocks.

South America

Climate-related challenges and rising input costs are reducing producers' margins, resulting in a slowdown in production growth

Australia

Milk production is heading toward a favorable spring peak, along with positive farm margins.

New Zealand

The season is off to a strong, early start. A weaker tail end of the season is expected to net out to flat production growth against last year.

Global Summary

Global milk supply has been on an extended run of uninterrupted growth, which we expect to continue, but at a slower pace. The growth rate has been sustainable without becoming overly burdensome on markets so far, but any slowdown in global demand would quickly lead to inventory build.

Milk prices are mostly higher, but farm margins around the world are mixed. High feed prices and general input cost inflation are a common thread, but the ability to withstand the cost pressures depends on the milk price. Much of the world is experiencing high enough milk prices to offset higher costs. However, the US market has experienced heavier milk supplies that continue to weigh on milk prices, and EU milk prices are barely keeping up with the rising input costs.

Feed costs are generally higher, without much hope on the horizon for a turnaround. Drought-stricken corn crop conditions in the US are bleak and keeping prices elevated, though demand destruction limits additional upside. Brazil's safrinha crop failure will provide no relief to global markets. US soybean yields are also expected to disappoint.

Logistics disruptions continue, and transportation costs have skyrocketed. Container availability woes continue to cause headaches for exporters. Aggressive zero-tolerance lockdown policies for Covid cases in China have,

and could continue, to lead to sporadic shutdowns of ports, making matters worse.

Despite logistics problems, dairy commodities have continued to move through global markets. Global dairy import demand improved by 6% in product volume terms YOY across January through May. China, the largest importer of global dairy commodities, posted a 31% YOY rise in import volume across the first half of the year.

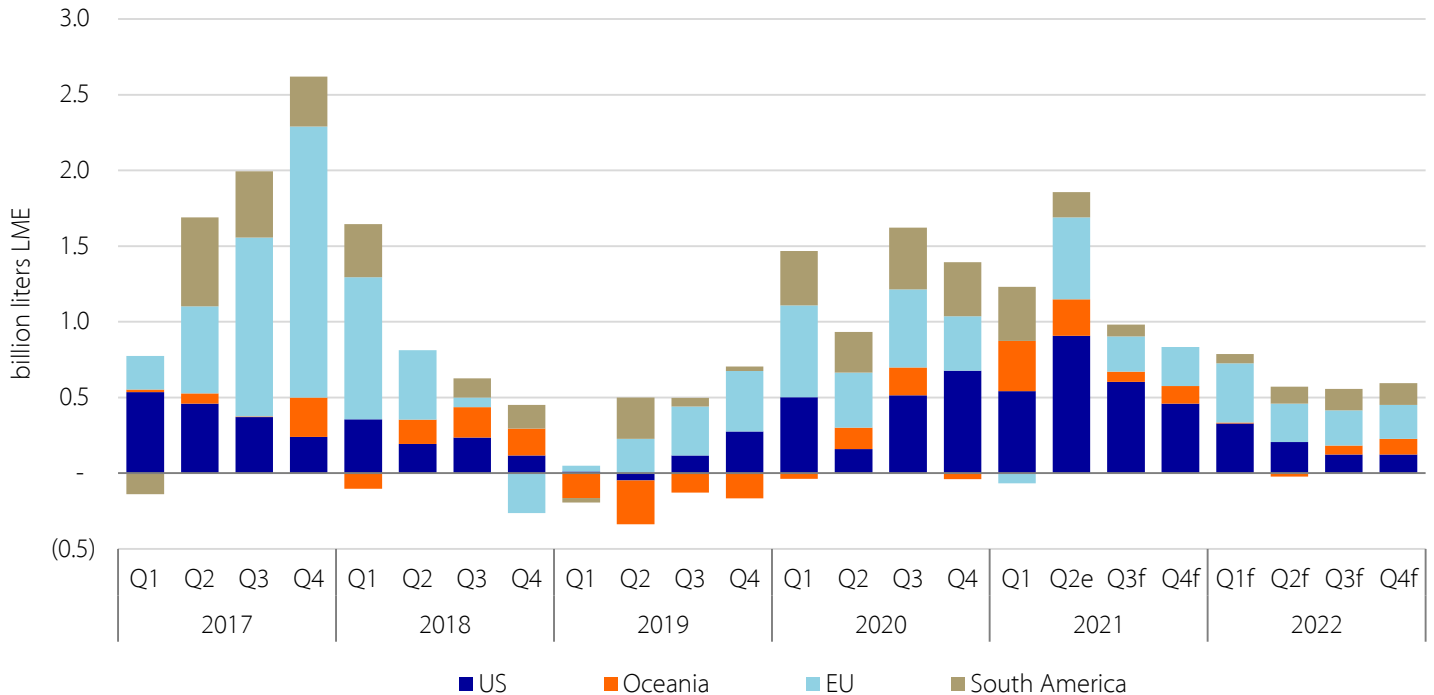
China is expected to reduce imports beginning in the second half of 2021. Global markets may be able to absorb lost sales through 2021, but pressure will be felt in 2022, initially in Oceania, but eventually rippling through global dairy markets.

The near-term peak in global dairy commodity prices is likely behind us. Prices cooled in the second quarter and will be heavily dependent on import demand for the rest of this year, with all eyes on China as a source of risk to the downside.

The macro-economic picture continues to improve but concerns about the Delta variant have led to some downward revisions from previous expectations. Real GDP in the US for Q2 2021 was above the pre-pandemic level of Q4 2019. Throughout the world, GDP growth is being primarily driven by consumer purchasing, while investments remain mixed.



Figure 1: Milk production growth, Big-7 exporters (actual and Rabobank forecast), Q1 2017-Q4 2022f*

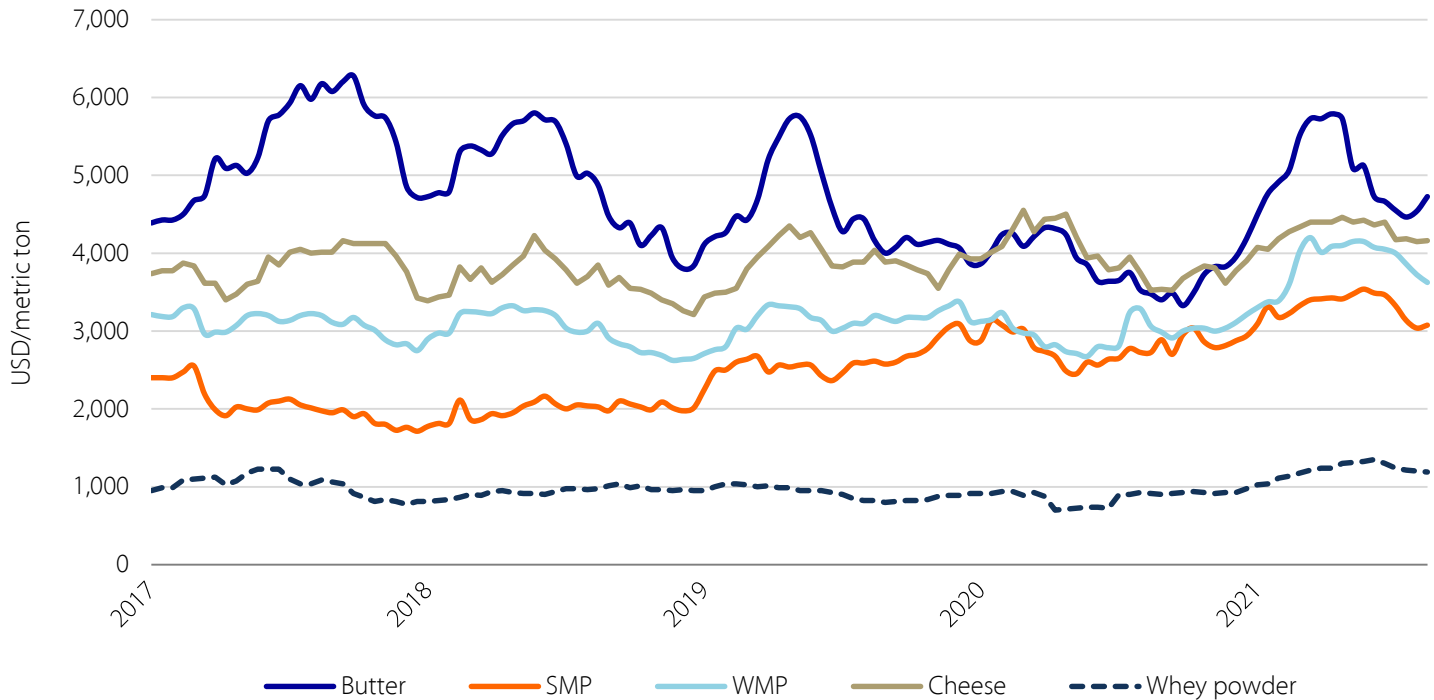


* Big-7 includes the EU, US, NZ, Australia, Brazil, Argentina, and Uruguay.
 Source: Big-7 government industry agencies, Rabobank 2021

Figure 2: Dairy commodity prices, FOB Oceania, 2017-2021*



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* Whey is FOB in Western Europe.
Source: USDA, Rabobank 2021

What to watch in 2H 2021

Inflation is straining supply chains and margins

Dairy and food companies are experiencing inflationary prices beyond dairy inputs. Costs and disruptions are being felt in everything from energy to packaging to labor. Eventually, as these prices move their way to the consumer, demand may be negatively impacted.

Regional differences in pandemic response

The timing of Covid-variant outbreaks and vaccine availability differs by region, and future flare-ups remain a risk. While consumers and supply chains have adapted well to varying degrees of lockdown in the US and EU, port disruptions and school and workplace closures remain a wild card.

Chinese import appetite

A slowdown in China's import needs, at some point in the second half of 2021, seems likely. If Chinese import demand slows, inventory build and downward price pressure on milk powders will weigh on global dairy markets. Any deviations from expectations out of China will be watched closely by market participants.

Milk price correction

Global dairy commodity prices headed downward during Q2 with the potential of further downside risk through year-end. These lower commodity values will ultimately flow back down to milk checks.

New Zealand spring peak

New Zealand's season is off to a strong start and well-positioned for a strong and profitable year. Part of this is due to an early start on calving schedules to avoid the risk of adverse weather later in the season. Still, a weather risk cannot be fully dismissed.

Waning government support

Government support, ranging from fiscal stimulus to commodity purchases or storage aid, was prominent in the initial wave of Covid. As new variants appear and additional outbreaks occur, government aid is expected to be less forthcoming. This will be especially important to watch in emerging economies where lasting economic strain could set in.



EU



Against low YOY comparables for April and May, Q2 2021 EU-27 and UK milk deliveries increased by 1.3% YOY, posting a modest 0.6% YOY gain for 1H 2021. In contrast to the strong

supply growth in Ireland (7.4% or 333,000 metric tons) and Italy (3.6% or 238,000 metric tons), the UK and Poland showed more muted gains of 1.5% and 1.0%, respectively. Milk volumes in North-Western Europe fell, with Germany (-1.2% or 201,000 metric tons), France (-0.9% or 115,000 metric tons) and the Netherlands (-1.2%, or 84,000 metric tons).

As anticipated, EU-27 average farmgate milk prices improved slightly by 1.1% from April to an estimated average of EUR 35.92/100kg in July. This year's gains in milk prices have been

primarily absorbed by higher feed costs and general inflation, resulting in marginal gains in on-farm margins. Early indicators suggest relatively stable EU-27 average farmgate milk prices for the three months ahead.

For Q3 2021, Rabobank expects a modest milk supply growth of 0.5% year-on-year, with the

recent floods, heatwaves, and bushfires having little impact on major milk-producing regions. For Q4 (+0.7% YOY) there are no indications for a strong finish in milk deliveries. Rabobank anticipates a year-on-year gain of 0.6% for 2021, with lower milk volumes in Germany, France and the Netherlands. At the same time, Ireland, Italy, Poland and the UK are set for a year of growth.

Looking ahead to next year, Rabobank expects a gain of 1.0% in Q1 milk deliveries

against the low YOY comparable, with feed costs, quality of silage and expected smaller dairy herds keeping a cap on more significant growth. Based on normal weather conditions, Rabobank anticipates a gain of 0.6% YOY in milk volumes for Q2 and Q3 2022.

With low trade volumes and buyers somewhat hesitant to take large positions, EU dairy commodity prices eased during the early summer months. Between June and the end of

August, SMP prices declined by 3.2%, or EUR 83/metric ton, to EUR 2,513/metric ton, while EU WMP prices eased by 2.7%, or EUR 86/metric ton, to EUR 3,139/metric ton. Butter prices lowered by 4.5%, or EUR 190/metric ton, to EUR 3,940/metric ton. Gouda prices rose by 1.3%, or EUR 41/metric ton, to EUR 3,329/metric ton.

In the months ahead, we are forecasting stable to slightly firmer prices toward the end

of Q3 and Q4, due to relatively low dairy commodity stocks (except for frozen butter), limited milk supply growth, firm domestic demand, and some buyers still looking for coverage for Q4 2021, and Q1 2022. Looking further ahead, the potential for modestly lower prices exists as rising logistic costs and economic uncertainties may negatively impact export markets, and a more competitive domestic (retail) landscape could unfold.



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EU



EU exports of the primary dairy commodities increased by a solid 3.1% in LMEs in 1H 2021, but higher logistic costs have started to trickle through the value chain. Nonetheless, eastbound traffic appears to be less impacted by the low container availability than that going in the opposite direction. Cheese exports posted an increase of 7.5% year-on-year, or 34,600 metric tons, in 1H 2021, while liquid milk exports jumped by 21.8%, and FFMP volumes increased by 9.8%. SMP exports declined by 1.5% or 6,700 metric tons, while WMP volumes fell by 6.8% or 11,100 metric tons. Butter exports dropped by 24.1% or 35,300 metric tons against high comparables and lower exports to the US.

The outlook for domestic demand is positive, with sales at restaurants and bars benefiting from pent-up demand during the summer, as restrictions eased in virtually all European markets. Total revenues remain below 2019's level, but the gap is narrowing. Not all players and channels are benefiting equally from the recovery. In the retail channel, prices will remain relatively firm for the next months as sales volumes continued to slowly return to pre-Covid levels in 2019. Looking further ahead, the risk of a slight correction in (retail) contracts is looming if markets become less tight. Overall, Rabobank anticipates an increase in dairy consumption of 0.4% YOY in 2H 2021 and 0.3% YOY in 2022.

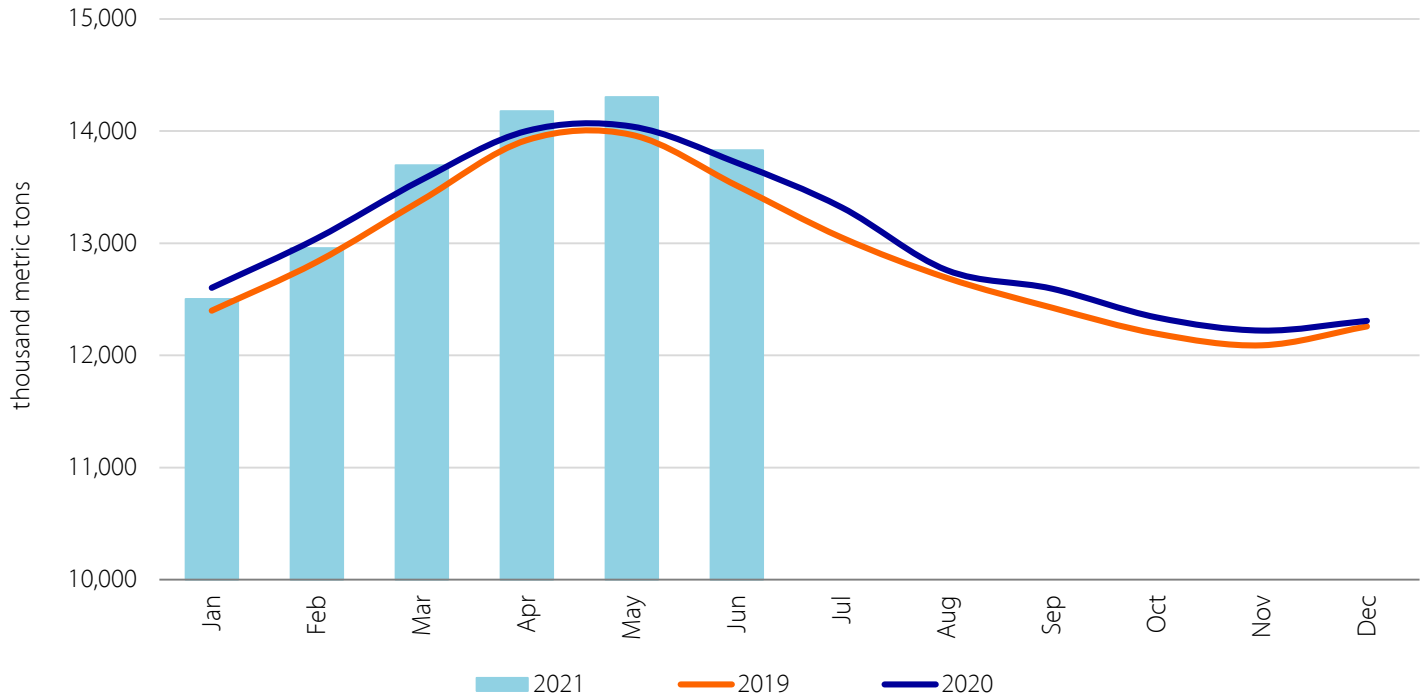
Vaccinations programs have generally been scaled down. By the end of August, most EU-countries had more than 100 vaccination doses administered per 100 population, with Malta having the highest vaccination rate (179.2) and Bulgaria closing the list (31.9). The burst of Delta variant Covid cases across Europe in the early summer is a warning to remain cautious.

Meanwhile, economic parameters are showing signs of recovery and increased activity. The Eurozone grew by 2% quarter-on-quarter in Q2 2021. Going forward, the recovery should be sustained in the coming quarters, although supply chain disruptions will continue to put a lid on manufacturing production. The main risk to the short-term outlook stems from the highly contagious Delta variant. However, so far the overall macro-impact of the Delta variant still seems to be limited in most countries.

Inflation is straining supply chain margins. Dairy and food companies are experiencing inflationary prices beyond dairy inputs. Costs and disruptions are being felt throughout the supply chain, from energy to packaging to labor, potentially impacting demand negatively as consumers eventually face higher prices.



Figure 3: EU milk production, Jan 2019-June 2021



Source: ZMB, Rabobank 2021

US



US milk supplies remain ample, and production continues to grow, but signs are emerging that margin pressure may be starting to have an impact. Between June 2020 and May 2021, milk cow numbers went on a 12-month streak of steady increases, totalling 153,000 head over that period. June and July saw decreases of 6,000 and 3,000 milk cows, respectively.

This break in the pattern could be the beginning of a plateau or a downward correction in cow numbers. Producers have been able to withstand several months of weak margins so far in 2021 but face persistently low prices and a high-priced feed outlook continuing into next year. Texas, the Plains and the Upper Midwest continue to be the beneficiaries of the increased cow numbers, with a 77,000 head increase in July for Texas, South Dakota and Wisconsin combined.

American cheese production remains elevated, up 6.7% YOY across the first half of 2021. Stocks, meanwhile, have remained manageable, up 4.2% YOY at the end of July. Throughout the past several months of strong milk production gains, surplus milk was trading at a discount, and much of this discounted milk found its way to cheese vats in new and expanded plants. Those bargains are about to come to end and some of those opportunistic

production runs of cheese being put away in storage may slow, providing some strength to class III and cheese prices ahead.

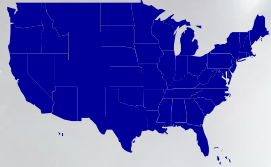
With the school year starting, milk supplies are tightening to the point that spot loads of milk are trading at a premium to class prices for the first time in months. The free lunch program that began at the onset of the pandemic has been extended through this school year which should divert more milk to bottlers, particularly in an environment of in-person learning and lunch lines.

The recently announced Pandemic Market Volatility Assistance Program will provide USD 350 m to dairy farmers whose milk value was impacted by market abnormalities. Payments will be distributed through cooperatives and other eligible handlers to reimburse producers for 80% of a calculated revenue difference in July through December 2020. The program will be capped at an annual production level of 5m pounds. Aid programs this year were expected to be much more muted in their impact on markets than last year, and so far that has been the case.

We expect US milk production to moderate but remain positive, with increases of 1.8% YOY for the second half of 2021 and 1% in the first half of 2022.



US



The demand outlook for the US is still subject to ongoing uncertainties around Covid variants, but the impacts on consumer demand will be limited. The foodservice sector and consumers have adapted to varying restrictions, but many restaurants continue to operate at a reduced schedule or a reduced menu, due to challenges in finding workers.

Retail sales are shifting back toward more normal levels but remain strong. Natural cheese sales were down -3.5% YOY for the four weeks ending July 25 against the elevated levels of 2020, but against the same period in 2019, sales are up 13%. Back-to-school season is driving big gains in string cheese and sliced cheese – formats better suited to the lunch bag.

Fluid milk sales at retail were down 6.7% YOY in the four weeks ending July 25 and will likely continue to see a channel shift away from retail, which was given a boost last year from at-home learning. More of that fluid milk demand will shift to school lunch programs, which will benefit from a return to at-school learning as well as the continuation of the USDA's free lunch program.

Inflation is driving prices higher for consumers but, compared to most spending categories, dairy is a relative bargain. The CPI for dairy increased by 1.8% YOY in July, compared to meats, poultry, fish, and eggs at 5.9%. While consumers may be enjoying less dramatic increases in their dairy prices, overall food inflation

as well as broader inflation in general and higher energy prices will impact budgets.

Prices for commodity cheese and butter, aimed at domestic markets, have been stable to lower than pre-Covid levels. Most of the inflationary pressure has been felt along with other aspects of the supply chain, from farm inputs through transportation, packaging and labor.

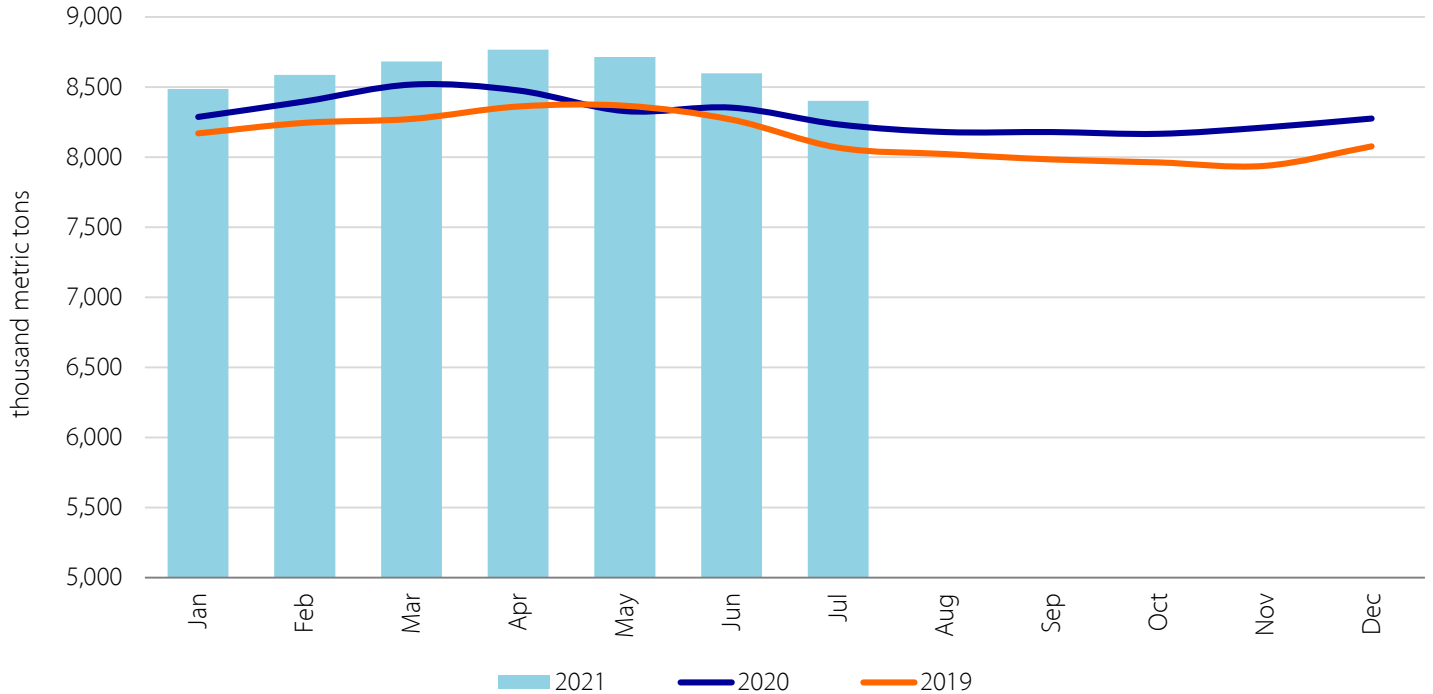
Total commercial disappearance was up 4% YOY in the first half of 2021 on a total milk solids basis. Exports over the first half have improved by 13% YOY. Domestic demand improved 2.2% YOY. The outlook for domestic demand is for continued modest growth rates, assuming no major new pandemic developments or lockdowns. The export outlook is susceptible to more volatility as different areas around the world experience varying degrees of Covid variant outbreaks and manage their responses differently.

Exports have maintained strength so far this year, up 13% in product volume terms. The biggest gains have been from the most important buyers of US dairy, Mexico and China, up 23% and 71%, respectively. Prices of nonfat dry milk and whey climbed in response, but their peaks may be behind us for now.

We forecast US domestic demand to increase 2% YOY for the second half of 2021 and 1.2% in the first half of 2022.



Figure 4: US milk production, Jan 2019-Jul 2021



Source: USDA, Rabobank 2021

New Zealand



Export volumes for the three months to July 2021 jumped 18% (or an extra 130,000 metric tons). All months over this period have been larger YOY, but both May and June 2021 shipments were significantly higher compared to the prior period. Chinese demand for New Zealand product has been voracious with shipments lifting over 50% compared to 2020 volumes to meet buyer needs. Thailand, Malaysia and Indonesia have also purchased more over this period.

Milk production for the new 2021/22 season has started off on a strong footing for most dairying areas. Collections over the trough of the season have delivered positive growth numbers once more. Milk flows for July lifted 6.6% and this followed another strong June production month with growth of 1.7%. Good profitability with the strong milk price forecasts have helped with supply growth over this period, manifesting in extra cows being held over for milking from the prior season, or a shift in on-farm planning for farmers looking to maximise the most of the favourable weather over the first half of season by bringing calving forward.

Milk price forecasts remain favourable, at Fonterra's mid-point of NZD 8.00/kgMS and profitable for farmers if this price holds. However, inflationary pressure is being felt directly on farm with less margin being captured by farmers in a strong milk price setting.

Rabobank's milk production forecast for the full 2021/22 season is for no growth. The winter

months have provided ample rain to replenish drier areas of the east coast and refill water tables and aquifers for another season ahead. However, feed is getting very short in the South Island in particular, with the rain being too generous in some areas of the Island, providing sodden conditions underfoot. Some extra rays of sunshine would be helpful for really getting milk production ramping up.

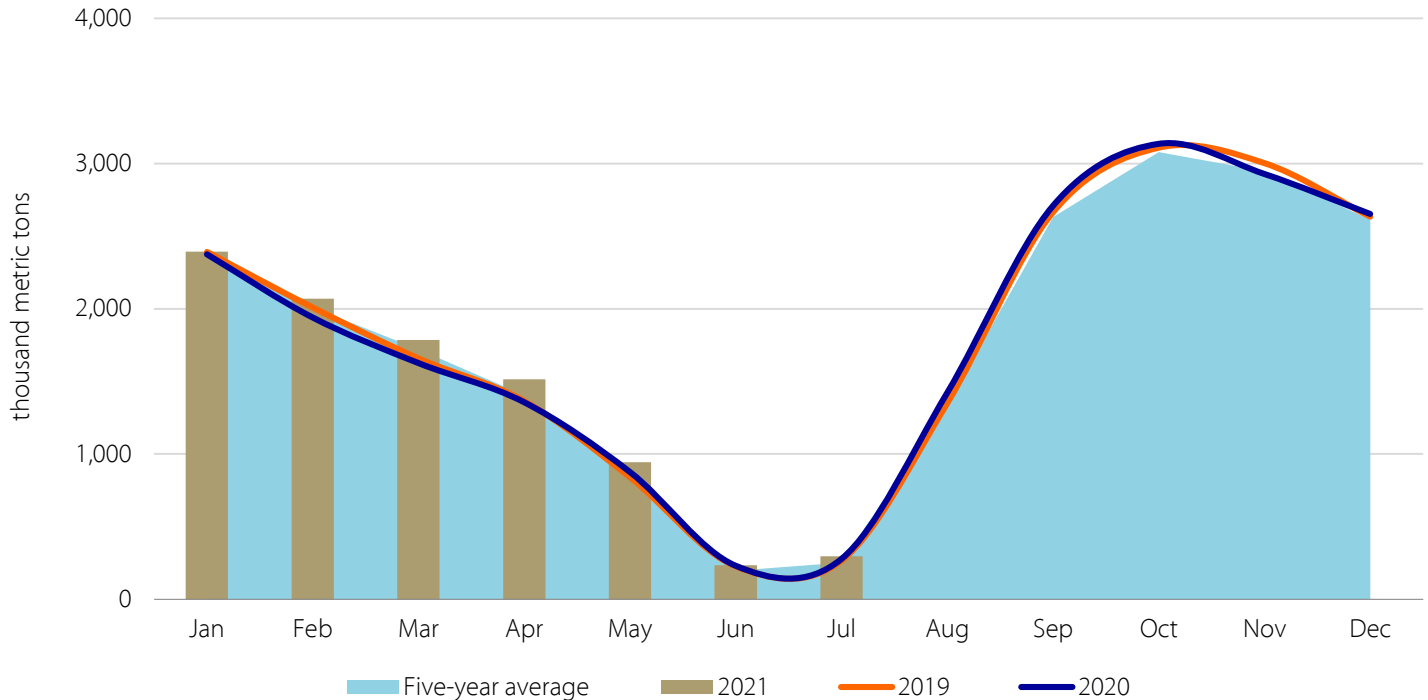
NIWA note some caution when planning for the spring period ahead. Another dry start to summer is possible for this year, as La Niña conditions continue to develop. Q3 milk production growth could struggle to match last year's volumes, given the exceptionally mild weather conditions over the early spring months for 2020. We anticipate weaker production growth over the tail of the season in Q1 2022 to ultimately keep production on an even keel to last season – which would still be an excellent feat as the largest equal milk volume from New Zealand dairy farmers.

Rabobank forecasts a milk price for the 2021/22 season of NZD 7.80/kgMS. Weaker demand from China over the coming weeks will continue to have an impact on commodity prices and ultimately the farmgate milk price.

Covid-19 lockdowns are posing even further logistical nightmares for exporters. Extra precautions under a Level 4 lockdown period are causing further delays to shipping schedules and port operations.



Figure 5: New Zealand milk production, Jan 2019-July 2021



Source: DCANZ, Rabobank 2021

Australia



Milk production fell 1.1% in June year-on-year, as isolated flooding contributed to the weaker result. Milk production finished the 2020/21 season at 8.8bn liters, up 0.6% on the previous season.

The new season is underway, and conditions on the farm remain very favorable. The spring peak is just around the corner, peaking in October.

Rabobank forecasts milk production growth of 1.5% in 2021/22 – returning national supply to 8.9bn liters, a level not seen since 2017/18.

Most Australian dairy farmers are experiencing healthy on-farm profitability, underpinned by near-record high milk pricing, affordable purchased feed prices, and supportive seasonal conditions. The cost of fertilizer has jumped and is a slight negative hit to farmgate margins. Irrigation dairy farmers continue to face favorable settings in the water market. Demand from competing crops is modest, water allocations are increasing, pointing to low pricing for water users. **The latest seasonal weather outlooks suggest dairy farmers are likely to see above average winter–spring rainfall for key production regions.**

The majority of Australian dairy farmers have locked-in milk pricing for the current season at near-record levels, based on the June 1 mandatory processor reported milk prices. The dairy companies now have the task of managing the price risk as production volumes increase

seasonally, and against a backdrop of weaker commodity prices.

Rabobank's farmgate milk price forecast is revised higher to AUD 7.05/kgMS for 2021/22.

This is broadly in line with the official farmgate milk prices range. It also represents a limited upside in milk prices, based on current forecasts for global markets through the remainder of the season.

The Australian dollar has drifted lower against the US dollar in the past quarter, which is favorable for export returns. Domestic lockdowns and the subsequent negative impact on the local economy will likely keep the currency weaker in the months ahead.

Export activity has remained upbeat through the first half of the year. As of mid-2021, dairy export volumes across most of the dairy commodities were higher versus year ago. Liquid milk and milk powders have performed strongly, while cheese exports were fairly flat.

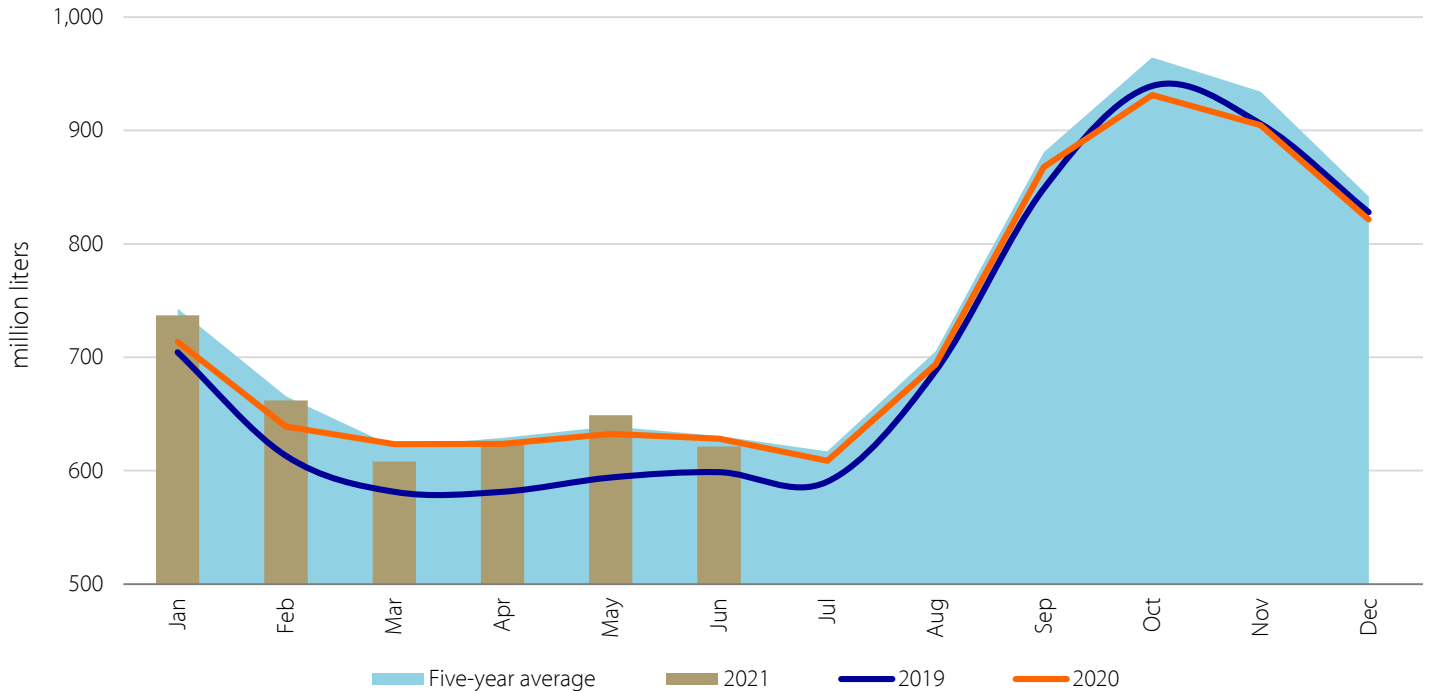
The Australian consumer market continues to be on a rollercoaster. Large proportions of consumers are in lockdown as the country deals with the Delta variant. This is leading to ongoing channel distortion in dairy markets; although pantry-loading is less pronounced. Overall, dairy consumption will remain resilient.



Figure 6: Australian Milk Production, Jan 2019-June 2021



Rabobank



Source: Dairy Australia, Rabobank 2021

Brazil



Farmgate milk prices remain elevated and have limited space to decline for the remainder of 2021. High grain prices and drought conditions have reduced incentives for dairy farmers to increase output. According to some dairy processors, a relevant amount of small farmers have exited the dairy sector in recent months as margins tumbled. Climate problems compound high feed costs, record-high farm inputs and fertilizer prices, limiting milk production growth. Rabobank expects Brazilian milk production to increase by around 1% in 2021.

Drought conditions continue in Brazil during Q3, threatening energy supply in late 2021.

Large parts of Brazil, particularly in the Southeast and Center-West, continue to experience very dry conditions. With over 60% of energy production in the country dependent on hydroelectricity, the low levels of many essential reservoirs is a cause for concern.

Electricity prices are already at record highs and could see further increases in Q4, with the slight possibility of some controlled power rationing. This is terrible news for the dairy industry as costs remain elevated and margins are low to negative.

Dairy processors continue to struggle with high farmgate prices and weak consumption. While vaccinations for Covid-19 have gained speed and cases, hospitalizations and deaths are at lows not

seen thus far in 2021, the Brazilian consumer does not see much improvement in economic terms. The effects of high inflation and record unemployment are limiting disposable incomes and contributing to weaker dairy sales in 2021. According to IBGE (Brazilian Institute of Statistics), CPI inflation increased by 9% in the 12 months to July, a level not seen since 2015-2016.

While dairy companies are paying high farmgate milk prices for raw milk, weaker consumer purchasing power reduces the ability to pass on higher costs to consumers. This results in reduced margins for processors at a time when volume sales are not growing significantly.

Congress might negotiate a new government subsidy program in the coming months, however, this will only become a reality in 2022 and will have no impact on boosting consumer spending during the remainder of 2021.

Dairy imports should see some additional growth in 2H 2021, despite a weak BRL. Dairy imports increased by 26% in volume terms and 13% in value terms during the first seven months of 2021, compared to the same period of 2020. However, import growth has been insufficient to alleviate domestic prices and will have a negligible impact on aiding processor's margins in 2H 2021.



Argentina



Dairy farmers' profitability is again under pressure as farmgate price gains have slowed below overall CPI inflation. This is reducing farmers' profitability and in part, is contributing to a slowdown in milk production growth. According to official statistics, milk production increased by 4% during the first half of 2021, compared to the same period of 2020, as farmers' margins improved, and weather conditions remained favourable.

However, the slowdown in milk production is intensifying, and production declines are possible in some months during Q3 and Q4.

Rabobank expects overall milk production growth of around 2% in 2021, compared to 2020 with a much weaker 2H 2021.

Argentina is now experiencing drier conditions. And the drought in Brazil is also impacting waterway levels and adding logistical costs to grain producers. Dry weather has reduced pasture quality in some dairy-producing regions, adding further dependence on supplementary feed.

The Argentine government has reopened the beef market for exports, which is again helping prices for cull cows and supporting farmer's incomes during a period of lower margins.

However, this might also discourage herd growth as overall slaughter rates accelerate.

Land rentals have declined slightly as domestic soy prices have waned from highs posted in May, partly alleviating some costs for farmers. Around half of all land in dairy production is leased in Argentina, and rentals must be paid in soy equivalent terms. Therefore, the recent declines in soy prices are welcome both for feed costs and land rentals.

While de Argentine peso continues to lose value in the black market and approaches 180 pesos per dollar, the official exchange rate remains artificially strong at less than 100 pesos per dollar. This positively impacts imported inputs such as fertilizers. However, it punishes exporters, with fewer pesos generated for every dollar worth of dairy sold internationally. Argentine dairy exports increased by 7% in volume terms and 8% in dollar terms during the first five months of 2021.

Domestic demand for dairy remains stable, with more Argentinians dependent on government subsidies for food purchases. Strong inflation and declining real incomes are being compensated by ample government spending in the form of cash transfers and subsidized food, which fuels inflation. Lower-income consumers are sustaining food purchases, but the middle class, with limited access to subsidies, is having a tough time as CPI inflation remains stubbornly high at over 50% on an annual basis.



India



The lifting of lockdowns in India has had a positive impact on demand. While B2B is progressing on a slow recovery path, consumer retail sales remained firm. Most of the listed consumer-focused companies experienced positive growth in the Apr-Jun quarter (QOQ) despite lockdowns, driven by increased sales of packaged milk and value-added dairy products. Further improvement is expected in full-year 2021 vs. 2020.

Market sentiments have been buoyant, despite Covid and economic challenges. For example, Dodla Dairy generated positive investor interest, listing at a premium of >25% over the issue price and replicating the results of other recently listed consumer-linked food companies.

Farmgate milk prices increased with reduced supplies during the lean months in the last quarter and improving demand. Festival demand, along with a recovering B2B segment, supported the price increase.

The cow milk price in Maharashtra increased by ~10%, ranging between INR 24/liter and INR 25/liter (USD 0.32/liter to USD 0.34/liter). Prices may weaken towards year-end as supply increases during the flush. **However, like last year, the flush may be muted, as increasing SMP inventory puts pressure on raw milk prices.**

SMP inventories rose during lockdown, as B2B demand shifted milk from fresh dairy products towards more storable SMP and ghee (AMF) manufacturing.

Current local SMP prices are between INR 200/kg (USD 2,700/metric ton) and INR 210/kg (USD 2,850/metric ton), a slight improvement over the past few months. **Prices are expected to remain at these levels and possibly on the lower side in the coming months, owing to continued SMP manufacturing and the move into flush season towards the end of the year.**

SMP exports remained muted in FY 2021 (Apr-Mar 2021). India exported 14,100 metric tons of SMP in FY 2021, compared to 990 metric tons in FY 2020. Even after accounting for an export subsidy (USD 700/metric ton) from the Gujarat state government, Indian-SMP has not been competitive on the world market.

The Gujarat state government announced similar subsidy support through year-end. However, exports remain unfavorable at current global prices, even after accounting for subsidy support. But given the current domestic SMP situation, there may be potential exports, though limited, towards the end of the year.



China



Average milk prices in August made a historical high of CNY 4.36/kg (USD 0.67), up 2% from 1H 2021 and 18% YOY, respectively. The rising domestic milk price in tandem with weakening Oceania WMP prices has resulted in widening discounts. Rabobank's latest import parity analysis shows that the discount of landed Oceania WMP prices is 20% off the average domestic milk price (versus a historical average of 15% since 2013).

China's dairy product production is a proxy for demand strength. According to the National Bureau of Statistics (NBS), year-on-year dairy product production continued to slow after Q1 2021, as market demand normalized, from 29% YOY in Q1 2021 to near 8% in Q2.

Demand further softened to 0.3% YOY in July as regional lockdowns and extreme weather negatively impacting overall consumption.

China's zero tolerance for new Covid cases resulted in restrictive lockdowns. And, some regions, particularly Central China's Henan Province, suffered from heavy rainfalls and disastrous floods during July.

Another sign of muted demand growth comes from the foodservice sector. **An indicator for discretionary spending, away-from-home consumption struggled to maintain a CAGR of 1.1% to 1.3% during Q2 2021 vs. Q2 2019, and it further slipped to below 1% in July.**

Meanwhile, China's dairy supply continues to grow domestically and via imports. China's National Statistics Bureau reports that 1H 2021 milk production grew by 7.6% YOY, driven by the ongoing herd expansion. Chinese import volume of dairy products (LME) soared by 30% year-on-year during the Jan-July period. The strong imports were driven by SMP (+45%), milk and cream (+44%), cheese (+44%), whey (+37%), WMP (+34%) and butter (+23%). The infant formula woes continue, with imports down -25%.

Strong milk production growth since 2019 and escalating import growth in 1H 2021 have pushed supply well-ahead of demand growth in China.

While the Covid-19-related disruptions in the global supply chain warrant the need for carrying some additional safety stock, the much faster supply-side than demand-side growth may have left China with more than ample stocks to work through in the near term.

Channel checks suggest that the cost of imported WMP landed in June leaves little profit for traders in the local market and that in July, this yields a loss. Therefore, buying interest is expected to be muted in the near term, as demonstrated in the more recent GDT sessions. **Chinese import arrivals are expected to slow down from September onward, driving destocking in 2H 2021.**



China



China's milk production grew by 7.6% YOY, according to NBS data. Rabobank's forecast growth of 6.5% remains unchanged for 2H 2021. Rising feed costs increasingly challenge farm profitability. **For now, however, with milk prices at record high levels, farms are still profitable, which will continue to incentivize production and investment in the near term.**

Rabobank maintains consumption growth (LME) at 9% year-on-year for 1H 2021 and 4% for 2H 2021. Current estimates suggest annualized consumption growth between 1H 2021 and 1H 2019 was less than 5%. The annualized growth for supply (production and import), excluding whey over the same period was 9%. **Chinese stock levels midway through 2021 are estimated to be higher than peaks in mid-2014.**

Rabobank anticipates imports will fall by 18% in 2H 2021 to drive some destocking, while still providing adequate inventory coverage. This translates to China's WMP and SMP imports reaching 148,500 metric and 146,000 metric tons, respectively, in 2H 2021, down 73,600 metric tons and 32,000 metric tons from the prior year. Nevertheless, full-year import volume represents a 8% growth year-on-year for 2021 for WMP and a 13% gain for SMP.

Looking ahead to 1H 2022, Rabobank maintains milk production of 4% year-on-year and LME consumption of 3% year-on-year (a deceleration

toward a longer-term trend line). Rabobank expects milk production growth to taper off to 3% in 2H 2022, and consumption growth to remain at 3% year-on-year.

In our view, the production growth forecast may be on the conservative side. Assuming no inventory change at year-end 2022, Rabobank expects imports in LMEs to fall by 26% (previously 18%) year-on-year in 1H 2022 (due to a higher base experienced in 1H2021) and decline by 15% year-on-year in 2H 2022, representing a 22% year-on-year decrease in imports (previously 17%). This results in an estimated reduction of 160,000 and 82,000 metric tons, respectively, in WMP and SMP imports for 2022 vs. 2021.

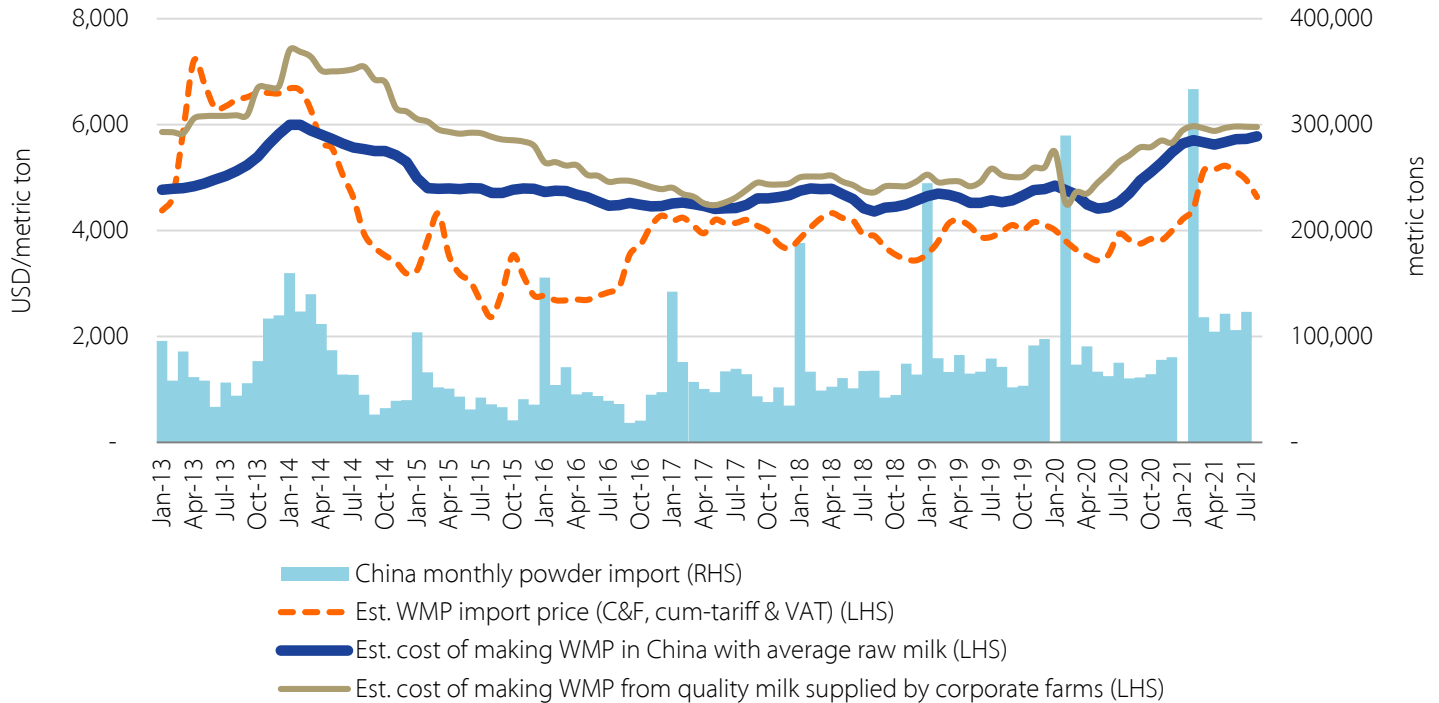
Dairy companies continue to bear the brunt of historically-high domestic milk prices. As suggested by the very muted dairy CPI, limited price increases have been passed to consumers, as tracked by NBS, versus the magnitude of the change in the average milk price. As pricey dairy commodities purchased during late Q1 and into Q2 2021 enter the cost calculation, processors are expected to pass on the increased milk and ingredients costs to consumers, potentially reducing demand more than expected and pressuring milk prices lower. **While milk prices in Q3 have remained firm (following the traditional seasonal pattern), Rabobank expects a visible reversal in milk prices to occur as early as Q1 2022.**



Figure 7: China WMP import parity, Jan 2013-Aug 2021



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Source: China Customs, Eucolait, Chinese Ministry of Agriculture, Rabobank 2021

Table 1: Quarterly dairy commodity prices (historic and forecast), Q3 2020-Q4 2022f



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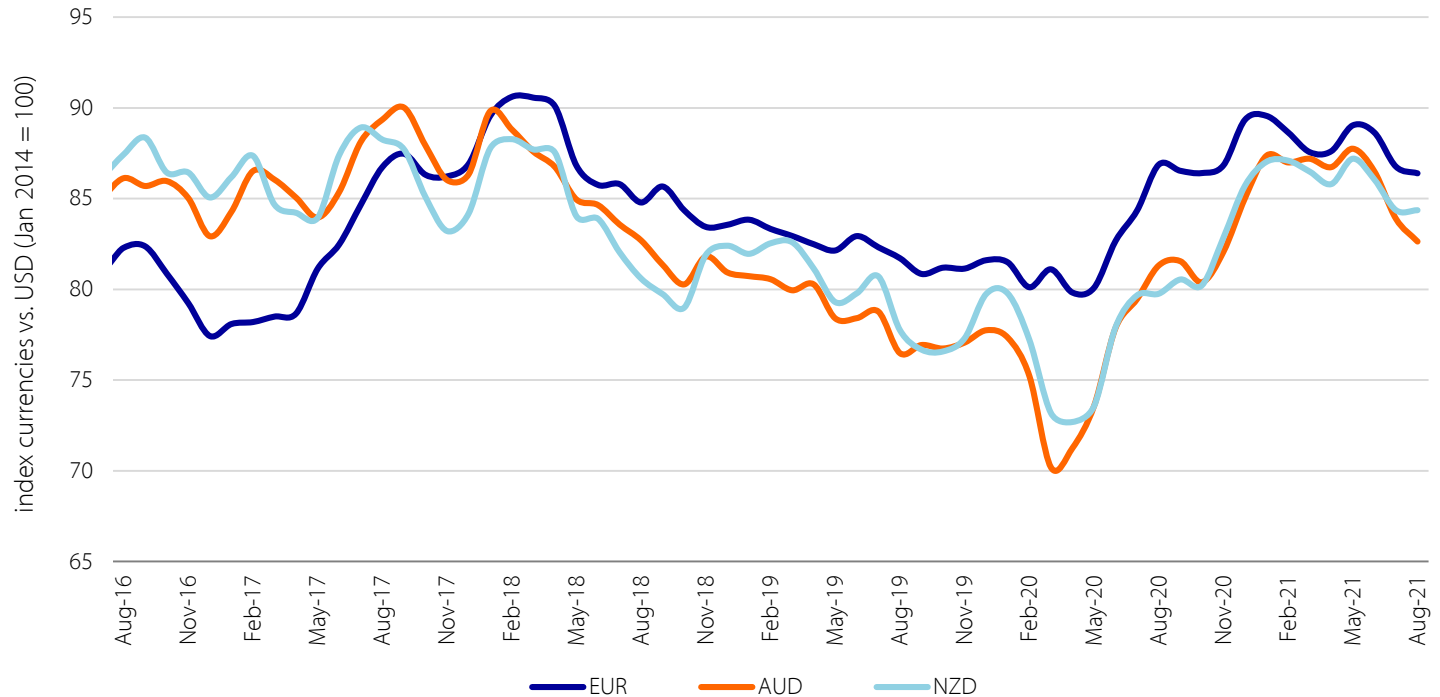
		2020		2021				2022			
		Q3	Q4	Q1	Q2	Q3f	Q4f	Q1f	Q2f	Q3f	Q4f
Butter											
Europe	EUR/metric ton	3,408	3,443	3,607	4,056	3,985	4,125	4,125	4,100	4,100	4,100
US	USD/metric ton	3,521	3,251	3,236	4,000	4,090	4,040	3,930	4,150	4,335	4,335
Oceania	USD/metric ton	3,516	3,833	5,092	5,182	4,560	4,800	4,500	4,600	4,500	4,600
Cheese											
Europe (Gouda)	EUR/metric ton	3,113	3,185	3,162	3,228	3,310	3,275	3,250	3,200	3,200	3,200
US (Cheddar)	USD/metric ton	4,756	4,695	3,559	3,845	3,875	3,850	3,600	3,750	3,875	3,930
Oceania (Cheddar)	USD/metric ton	3,682	3,783	4,219	4,405	4,055	4,200	4,200	4,300	4,300	4,300
Dry whey powder											
Europe	EUR/metric ton	724	738	862	992	960	950	950	925	925	925
US	USD/metric ton	733	844	1,116	1,405	1,395	1,250	1,100	1,050	1,000	960
Skim milk powder											
Europe	EUR/metric ton	2,118	2,173	2,338	2,541	2,525	2,550	2,475	2,475	2,450	2,550
US	USD/metric ton	2,157	2,384	2,475	2,710	2,845	2,845	2,830	2,800	2,755	2,800
Oceania	USD/metric ton	2,773	2,885	3,466	3,473	3,040	3,150	3,100	3,150	3,200	3,200
Whole milk powder											
Europe	EUR/metric ton	2,743	2,731	2,918	3,189	3,160	3,100	3,050	3,075	3,050	3,100
Oceania	USD/metric ton	3,043	3,073	3,652	4,093	3,600	3,450	3,300	3,250	3,300	3,400
South America	USD/metric ton	3,050	3,050	3,250	3,500	3,450	3,250	3,250	3,250	3,150	3,250

Source: USDA, forecasts by Rabobank 2021

Figure 8: Exchange rates, USD vs. exporters, 2016-2021



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Source: UDM Board of Governors of the Federal Reserve System, Rabobank 2021

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