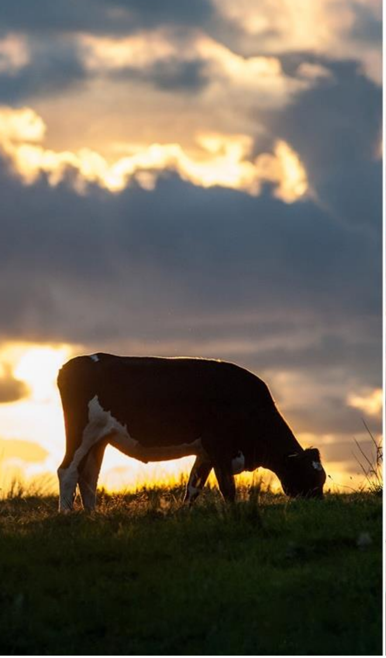
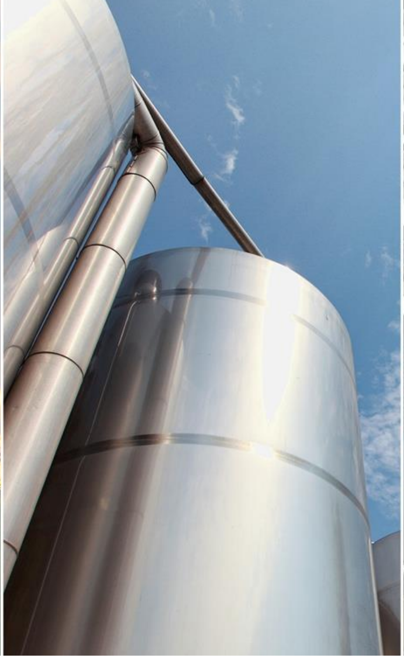

Stuck in Neutral… For Now

Global Dairy Quarterly Q2 2021

RaboResearch Food & Agribusiness

June 2021

Rabobank

Summary

- ***Global dairy spot markets, for the most part, have been stuck in neutral through Q2 2021***. Oceania origin commodity prices were mostly flat in the past quarter, excluding a correction in the butterfat markets. At mid-year, commodity prices (in USD terms) across the complex are trading at elevated levels compared to last year.
- ***Global supply growth across the major export regions has also been stuck in neutral.*** The European flush has largely been lackluster. However, US milk production remains in high gear, and New Zealand has delivered a strong finish to the 2020/21 season. Supply growth has been positive in South America, but rising feed costs and inflation are expected to temper year-on-year growth in 2H 2021. As a result, supply growth across the major export regions has been manageable. Rabobank is expecting modest year-on-year production growth of 1% during the next 12 months for the Big-7 export regions.
- ***From a global perspective, the global pandemic is far from over.*** India currently tops the list of most new cases per day. The global vaccination drive is slow in many countries, and might take until the end of 2023 to complete. However, some large dairy markets (US and China) are now nearing pre-pandemic levels in dairy demand through retail and foodservice channels. There is growing market optimism as vaccine rollouts boost consumer confidence. Still, there are risks aplenty with the prevalence of third and fourth waves, new variants, and slow vaccination rollouts in some regions.
- ***China continues to drive global trade.*** China's healthy appetite for imports is visible in the early months of 2021 and has been the primary pillar of price support. Rabobank is still expecting softer year-on-year import volumes in 2H 2021, and this remains the key demand determinant shaping commodity dairy prices into 2022.
- ***Since the last report, there have been two noticeable shifts in the market.*** Endemic congestion at ports continues to cause shipping delays and higher freight costs. Rabobank has also lifted its price expectations for the global grains and oilseeds markets. Higher feed prices will linger well into 2022, keeping farmer margins under pressure.

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Regional Dairy Markets

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US

The US herd continues to grow and yields are improving. However, milk prices are below year-ago levels and feed costs are rising leading to reduced margins.

EU

EU milk supply is tipped to register very modest growth of 0.5% in 2021. Unfavorable weather and rising feed costs are countering higher milk prices.

China

Buoyant import demand continued through 1H 2021. However, Rabobank is forecasting softer import volume growth in 2H 2021 on year-on-year comparisons.

Australia

Farmer margins remain healthy heading into a new season, but supply growth remains limited nonetheless.

South America

Rising feed costs have put the brakes on milk production and domestic demand remains patchy.

New Zealand

Rabobank expects early season milk flows to be strong during the trough of the dairy production year. Strong price signals and favorable weather will set the foundations for peak milk flows.

Global Summary

With each passing month, dairy markets worldwide are slowly returning to normal from the pandemic-led channel distortion. Careful supply and demand data assessment is warranted as we overlap the hardest hit corresponding periods and pantry loading from 2020. Nonetheless, looking at the next 12 months, the underlying market fundamentals remain relatively neutral. But risks and uncertainty still abound, which is supporting commodity pricing at elevated levels. With reduced Chinese import demand a likelihood in 2H 2021, alternative buyers' purchasing power will be tested and will likely lead to price adjustments in the dairy markets.

Farmgate milk prices have been on a higher trajectory journey for most farmers. New Zealand producers are enjoying the full benefit of a strong commodity cycle. Farmer margins are broadly at breakeven or better, which is supporting milk supply growth. However, weather and feed price risks are likely to limit growth even with some further milk price improvement.

A fuse was lit under grains and oilseed markets recently, with prices reaching near-decade highs. Supply concerns from adverse weather in key growing regions combined with strong demand drove prices higher. While there has recently been some reprieve, Rabobank expects feed prices to remain firm well into 2022, pressuring dairy farmer margins.

As a result, Rabobank is forecasting milk supply growth for the Big 7 to expand by just1% year-on-year through 2H 2022. This is below the previous forecast and the long-term historical growth rate.

Nonetheless, on an annualized basis, the combined exportable surplus will expand in 2021. The US is doing most of the heavy lifting after a modest flush in Europe. Attention turns to the Oceania peak with expectations for New Zealand to have a good season but with the usual caveats around the weather.

Macroeconomic settings are improving. However, the recovery is expected to lose some steam throughout 2021 as initial pent-up demand dies out and government-sourced financial support is scaled back.

Supply challenges and rising costs of goods are squeezing food company margins. At the same time, dairy demand in some markets and categories will be tested given ongoing consumer cautiousness and affordability issues.

Global commodity markets are delicately poised waiting for some direction. Further upside cannot be ruled out, but the peak is near. An expected softening of Chinese import demand should be enough to trigger a price correction in the dairy complex that is likely to occur in the later stages of 2021.

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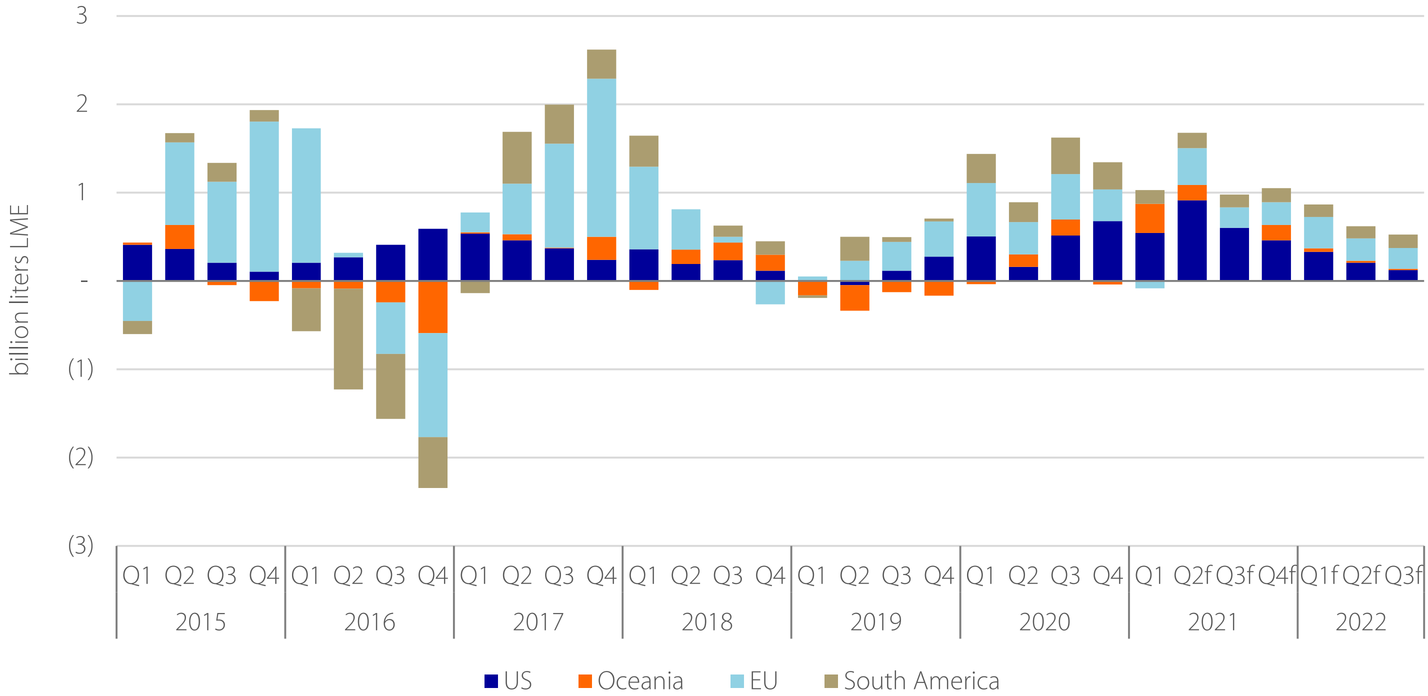
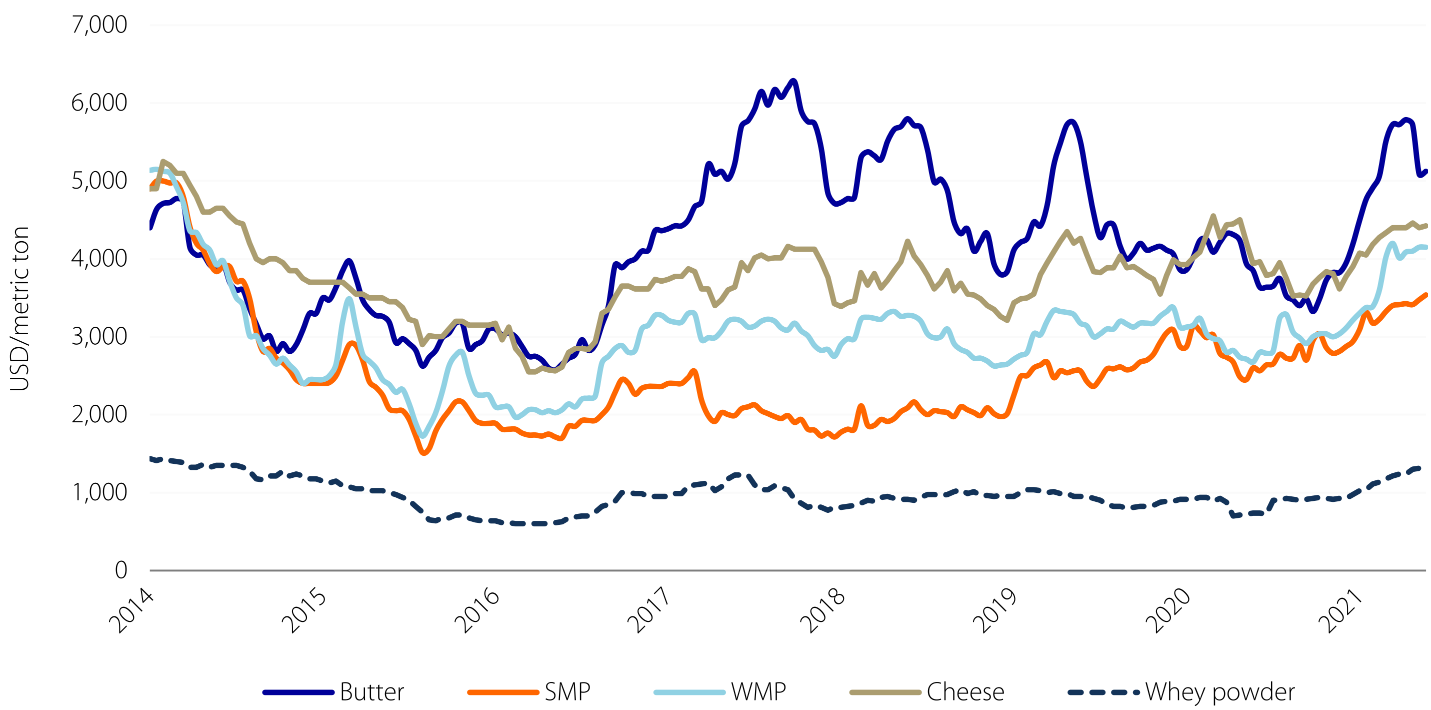
Figure 1: Milk production growth, Big-7 exporters (actual and Rabobank forecast), Q1 2016-Q3 2022f*



** 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, 2014-2021*



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

What to Watch in 2H 2021

Global shipping issues

Global logistical challenges remain and continue to impact international commerce in the form of higher freight costs and delayed shipments. The short-term outlook does not appear to provide any relief and poses an upside risk to our price forecasts should disruptions continue.

Third and fourth waves and new variants

While the pandemic is rapidly improving in some countries, others are dealing with renewed waves, new variants, and regional lockdowns. The lockdowns are more localized but a close eye will be on whether it leads to a material impact on food markets.

Chinese milk production and buying pattern

China's milk production growth continues to roar ahead. With two years of consecutive strong growth, there is a growing risk that this growth will outpace consumption growth, adding further pressure on inventory levels. This, in turn, could change China's buying pattern and have negative implications for dairy commodity prices.

African swine fever

African swine fever (ASF) continues to impact pork markets around the world, particularly in China. China's herd rebuild is ongoing despite some headwinds from other diseases, and new ASF variants. China's hog feed demand will expand by double-digit rates in 2021, which factors into our whey forecast.

Stocks and pipeline filling

Inventory levels on the export side are not excessive (particularly when considering shipping disruptions) as economies open up and pipelines are filled. Given shipping delays, dairy importers are eager to have sufficient product in warehouses. Rabobank estimates that buy-side inventory is currently manageable.

Margin pressure

Food companies are facing cost inflation on several fronts. This includes the cost of raw materials, packaging, and shipping. Companies will be walking a tightrope when attempting to pass on higher costs to consumers, given the pressure on incomes, and expected lower levels for government-derived financial assistance.

EU

As anticipated, Q1 2021 EU-27 and UK milk deliveries were muted, finishing -0.2%, or 0.08m metric tons, below Q1 2020. Milk deliveries in northwest Europe fell sharply, with France (-2.5% or 159,000 metric tons), Germany (-1.9%), and he Netherlands (-1.3%) all declining, while Ireland (+10.3%) and Italy (+2.3%) registered firm growth.

EU-27 average farmgate milk prices improved marginally by 0.5% from January to an estimated average of EUR 35.11/100kg in April. Early price indicators suggest improvement in EU-27 average farmgate milk prices in the range of EUR 1.50/100kg during May and June. For the summer period, Rabobank forecasts more modest gains in farmgate milk prices.

Looking ahead to Q2 2021, Rabobank expects a milk supply growth of 1.0% year-on-year. However, this nominal rate of growth is up against an extremely low comparable. Unusually cold and wet spring weather across Europe and rising feed costs have limited production gains and offset improved milk prices.

Unfavorable weather conditions delayed plantings of feed crops in many regions, and the late first-cut of grass silage compounded the problem of low roughage availability. Hopefully, the recent low temperatures will have a limited impact on crop development for the entire season.

In 2H 2021, Rabobank anticipates a more modest increase in milk volumes of 0.6% year-on-year, accumulating to just over 0.5% growth in milk deliveries for FY2021. Focusing on the major milk-producing countries, we estimate declining to flat production in the key member states of Germany, France and the Netherlands. At the same time, Italy, Poland, and Ireland appear poised for another year of growth.

Supported by good global demand, tight domestic market conditions, and optimism about removing lockdown restrictions, EU dairy commodity prices strengthen during March until easing in mid-April for most products. Between February and May, SMP prices increased by 9.3%, or EUR 220/metric ton, to EUR 2,570/metric ton, while EU WMP prices rose by 9.0%, or EUR 265/metric ton, to EUR 3,205/metric ton. Butter prices strengthened by 12.9%, or EUR 470/metric ton, to EUR 4,100/metric ton. Gouda prices rose by 3.3%, or EUR 105/metric ton, to EUR 3,280/metric ton, while spot prices for Mozzarella showed a recovery of 5.2% (EUR 150/metric ton), to EUR 3,035/metric ton during the same period.

Rabobank expects EU wholesale dairy markets to peak by the end of Q3 2021.

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EU

EU dairy exports, with the exception of butter, performed strongly in Q1 2021. Cheese exports posted an increase of 4.8% year-on-year, or 11,100 metric ton, in Q1 2021, while WMP exports were marginally higher (0.3% year-on-year). SMP exports gained by 3.1% or 6,100 metric ton. Butter exports underperformed against high comparables and lower exports to the US, contributing to a decrease of -18.7% year-on-year, or 12,600 metric ton, in Q1 2021.

Lockdowns gradually started to ease across Europe in May but with significant regional variance in reopening. Terraces have reopened in many countries, but indoors service remains closed or significantly restricted virtually everywhere. Further easing of restrictions is expected in the upcoming weeks, but a total return to normality will take longer.

As restrictions ease, Rabobank anticipates a sharp recovery of restaurant demand driven by customers' eagerness to eat out after months at home. In anticipation, dine-in-only restaurants need to replenish their supply chain pipeline. Nonetheless, both traders and buyers remain somewhat hesitant to take large positions for 2H 2021 due to the still-present uncertainties and potential capital constraints at the buying-end.

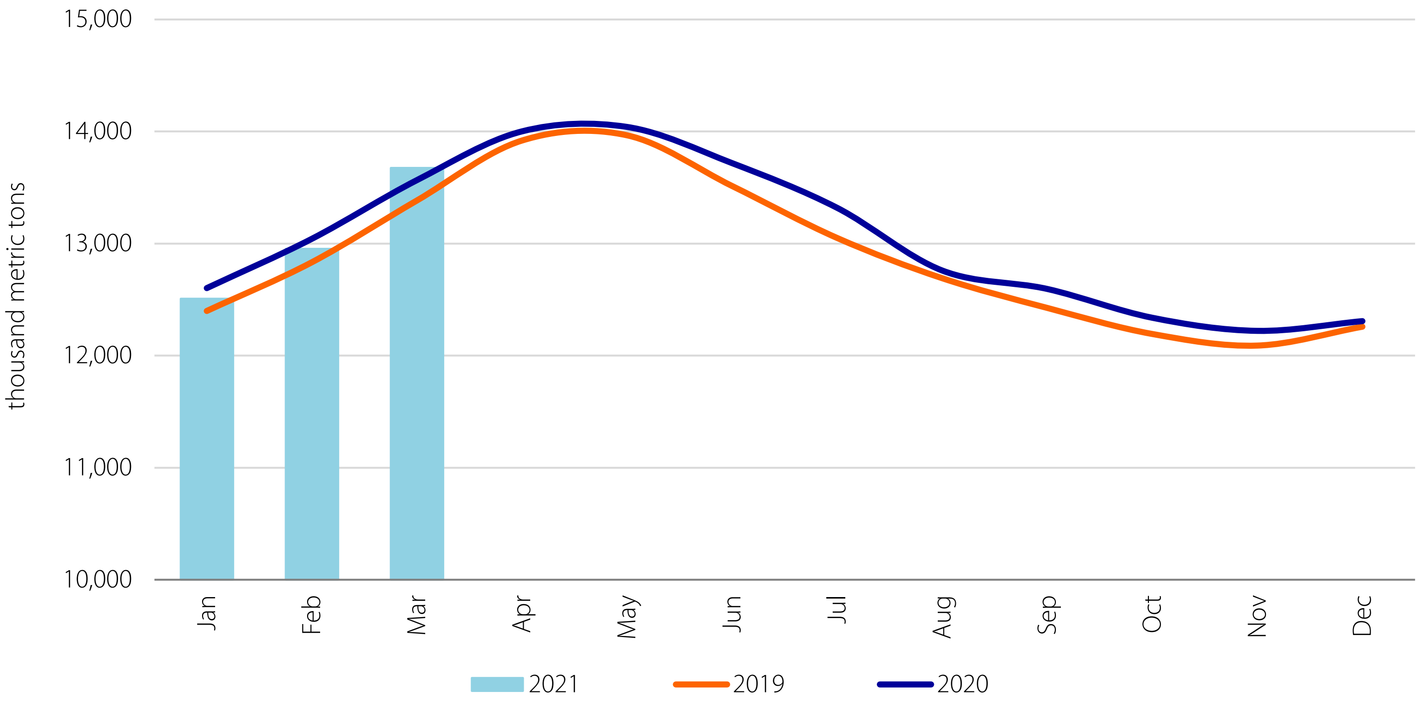
A full and sustained recovery across all foodservice channels is not likely until 2023. Doubts around fiscal stimulus programs, economic recovery, and unemployment continue to act as headwinds for domestic consumption.

In the first quarter of 2021, the Eurozone economy contracted by 0.6% quarter-on-quarter, but there is some cause for optimism. Rabobank forecasts economic growth to recover in the second half of the year. After that, the pace of recovery will soften, taking until mid-2022 for GDP to return to its pre-crisis level.

Rabobank is anticipating a marginal lift in domestic dairy consumption for FY2021, with retail sales to remain elevated, supported by some recovery in foodservice demand.

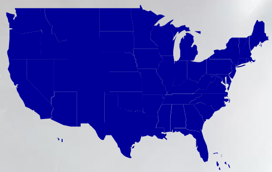
Brexit update: The UK has postponed implementing border checks on EU dairy products until at least October 1. Border checks of UK products entering the EU have resulted in some delays, which is problematic for fresh products like cream and condensed skim milk. In addition, EU-made products manufactured in part with UK raw materials may face rules-of-origin challenges from countries outside the EU. This issue will likely linger, resulting in EU plants segregating ingredient streams, which may discourage the use of UK dairy ingredients.

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



Source: ZMB, Rabobank 2021

US



In April, there were 9.49m milk cows in the US, making it the largest dairy herd in more than 20 years and more than 135,000 head above the low of the pandemic last June. Most of the additional cows were held in Texas and the Upper Midwest. This represents a continuing movement of cows from the coasts, inward, searching for fewer barriers to scale, and the prospect of new processing capacity, including Hilmar's recent announcement to build a cheese plant in Dodge City, Kansas.

Milk production in the first quarter grew by 2% year-on-year. April milk production increased year-on-year by 3.3%, against a low Covid-19-impacted comparable. Compared to 2019, April milk production was up 4.7%, still representing a stronger-than-trend growth rate.

High feed costs will challenge the pace of growth, with lower-producing cows facing a career change. Dairies that grow their own feedstuffs and those that purchased feed before the spike in prices are faring better than those buying spot feed. Herd expansions are also limited as elevated construction costs currently make adding barns a challenging financial proposition.

Expanded cheese capacity is absorbing some of the new milk. American-style cheese production was up 7% year-on-year across Q1 2021. Mozzarella production, meanwhile was down -0.8% for Q1.

Butter production has been relieved somewhat by cream moving to ice cream and increasing butterfat exports to Mexico the and Middle East. Production is in line with 2020 levels, and demand continues to chip away at stocks, up only 3% above April 2020, but still on the high side, considering inventories are still 33% higher than in April 2019.

Rabobank forecasts milk supply to increase by 3.7% year-on-year in Q2 of 2021, bearing in mind that Q2 2020 was the most impacted quarter for milk production during the pandemic. The sizeable and efficient milk cow herd in the US today will carry momentum through the rest of the year for a 2H 2021 increase of 2.2% year-on-year before slowing to 1.1% gain in 1H 2022.

Two major shifts are impacting US dairy demand. First, the number of Covid cases is falling, and vaccination rates are rising rapidly, leading to an easing of many restrictions. The foodservice sector benefits from these loosened restrictions as consumers return to events, travel, and restaurants. The second shift is the discontinuation of some government food and dairy product purchases, which was a prominent market driver in 2020, in favor of returning of consumer-driven demand.

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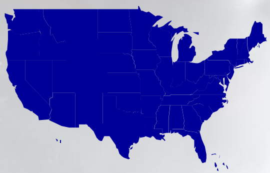
US



While foodservice continues to improve broadly, retail sales are showing some signs of cooling. In April, fluid milk sales at retail understandably fell dramatically (-17% year-on-year) from the spike in sales during the lockdowns and school closures last year. But sales volumes still show weakness against the same period in 2019 as well, down -7%.

Retail sales of natural cheese fell -17.7% year-on-year in April but were still up 4.7% from the same period in 2019. Butter was down -39.9% year-on-year for April and was -14% lower than the same period in 2019. But these steep declines at retail should not detract from the overall gains in demand as channels begin to shift back toward foodservice.

In Q1 2021, domestic commercial disappearance of American cheese and butter were each up 6% year-on-year in Q1. The year-on-year gains are anticipated to strengthen further in April. Export demand continues to impress as well, up 12% in Q1 year-on-year.

Foodservice restocking pull-on demand has slowed somewhat, following the initial phase of excitement as people re-engage in activities and events. Still, there remains some risk of sticker shock. Food price inflation could give pause in the coming months, particularly if financial aid to consumers in the form of stimulus and unemployment benefits wanes in a meaningful way.

The pace of government purchases is slowing with the end of the 'farmers to families food box program'. There are additional aid programs underway that are expected to favor butter or be more balanced across products to be less disruptive to federal order pricing formulas. Still, we expect the level of purchasing to be nowhere near as impactful as during 2020.

Whey and non-fat dry milk have enjoyed strong export results so far this year to China and Mexico. The elevated exports have supported wholesale prices, but freight and logistical challenges remain a headache. There are some reports that China's rapid increase of whey orders has started to slow.

However, new processing capacity along with strengthening demand from the sport nutrition segment are driving elevated production levels of higher protein products including WPC80 and WPI, with Q1 2021 production up year-on-year by 15% and 18% respectively. Dry whey, meanwhile, experienced flat growth, below 1% year-on-year for Q1.

Domestic demand is forecast to increase by 4.4% in Q2 2021 as moves toward reopening the country accelerate. The second half of 2021 should continue to show improvement over 2020, up 2% year-on-year. The first half of 2022 will give a mixed picture, but will be net positive, up 0.6% year-on-year.

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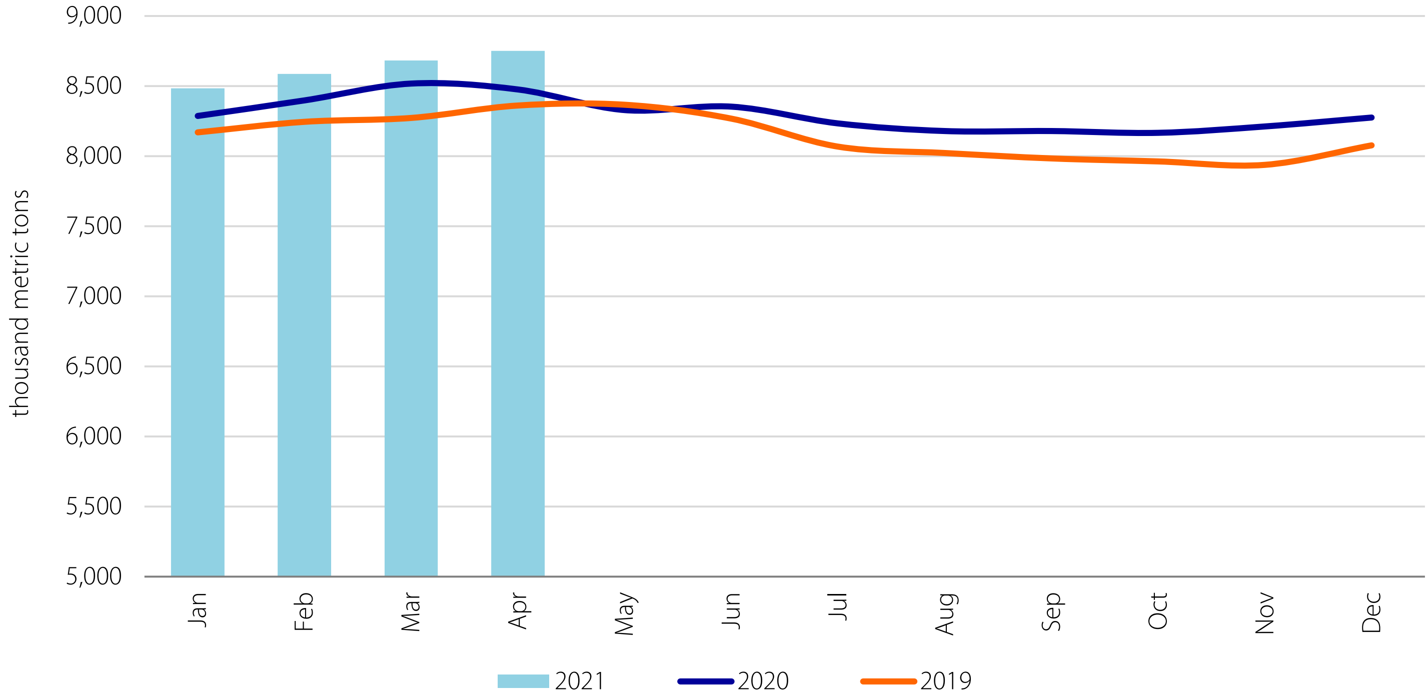
Figure 4: US milk production, Jan 2019-Apr 2021



Source: USDA, Rabobank 2021

New Zealand

Export volumes for the first four months of 2021 lifted 5% (58,000 metric ton) due to strong demand and an improvement in milk flows through February and March on weak comparables in 2020. Chinese demand for New Zealand product has been robust with exports lifting over 40% during the first four months of the year, setting new records for the monthly shipments in March and April.

Milk production for the tail end of the season has given a rousing performance. Milk flows for April jumped double digits – a first since 2014. Good profitability and generally favorable weather have supported milk production through the season although the South Island's east coast has swung from a very dry autumn to a deluge at the end of the season. National season-to-date production has lifted by 2.7% on a tonnage basis as of April. Rabobank has revised upwards its forecast for the 2020/21 season from 2% to 3% growth.

A new 2021/22 season kicked off on 1 June amongst positive settings for farmers. Generally, farmers have adequate feed reserves heading into winter with cows in good condition.

Farm cash flows have been given an extra boost by Fonterra's announcement of a NZD 8.00/kgMS (midpoint) forecast milk price for 2021/22. This is the highest opening milk price forecast by Fonterra, enabling the purchasing of supplementary feed (if required) during spring to plug any feed gaps and helping with higher cost creep on farm.

Early season milk flows will be stronger during the trough of the production season, providing a good footing for the peak milk flow period. However, Q3 milk production growth could struggle to match last year's volumes, given the exceptionally early spring weather last year.

Milk production growth is anticipated to continue across 2021 and 2022 at a modest rate, based on current milk price forecasts and assuming no major weather disruptions. This will help with some inflationary pressure on costs being felt at the farm level.

New Zealand's exports are seasonally low through Q3, but will be positively impacted by the robust milk output during the final production months of the season combined with strong demand from New Zealand's key market China. Rabobank anticipates Chinese demand to soften by Q4 2021, increasing the availability of export volumes for other markets.

Rabobank forecasts a milk price for the 2021/22 season of NZD 8.00/kgMS. Weaker demand from China will have an impact on commodity prices over the course of the season; however, we expect the timing of the softer demand to be past the production and sales peak.

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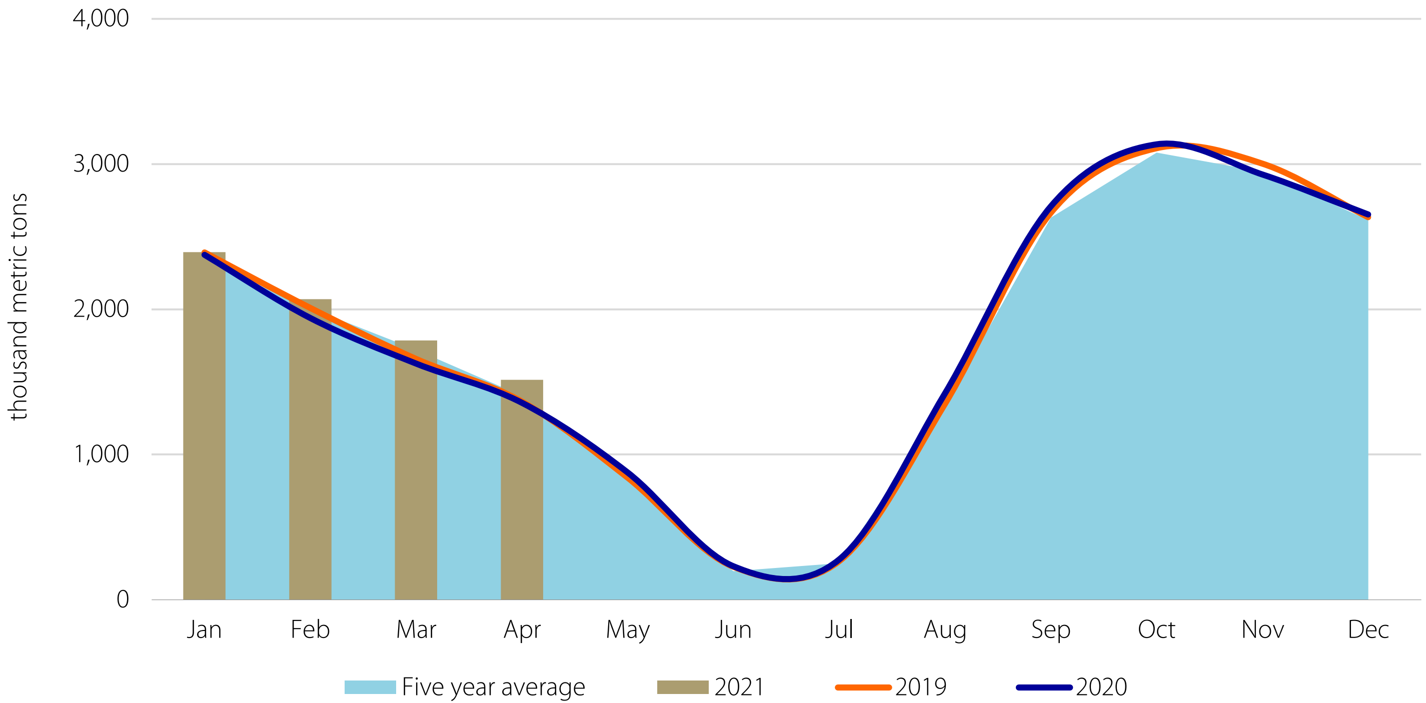
Figure 5: New Zealand milk production, Jan 2019-Apr 2021



Source: DCANZ, Rabobank 2021

Australia

Conditions are in place to register healthy profit margins for Australia's dairy farmers again in 2021/22, due primarily to a marginally higher milk price. Ample availability of home-grown feed will support on-farm profitability. However, there is the potential upside risk of purchased feed prices and home-grown feed inputs, which is a key risk to farmer margins in 2021/22.

Australian milk production has expanded by 0.7% season-to-date (as of March). However, March production declined year-on-year across most of the Southern export region. According to the latest seasonal outlook from the Bureau of Meteorology, winter (June to August) rainfall is likely to be above average across most of the major dairying regions.

Sustained profitability of the Australian farmgate sector will flow through to milk production. Rabobank expects Australian 2021/22 milk production to expand by 1.3%, pushing annual milk production to 8.8bn liters. Yield improvement is the key driver of growth, as milk production remains constrained by low national herd numbers and the hesitation to rebuild herds and expand operations despite attractive prices.

In the first halfway mark (December 2020) of the current season Australia's output of cheese was around 200,000 metric tons of cheese. This was marginally higher than the same period the previous season. In contrast, skim milk powder production was 7% lower at 92,000 metric tons.

Rabobank forecasts a full-year milk price of AUD 6.90/kgMS for 2021/22 in the southern export sector. By mid-May, a number of dairy companies have announced official minimum milk prices for the 2021/22 season. They range between AUD 6.40-AUD 6.90/kgMS.

The latest national data highlights that Australia's food market is very close to being back to pre-pandemic levels. The foodservice channel enjoys greater mobility and consumer confidence to eat out and fewer capacity limits for venues. The grocery channel is slowing to more normal growth rates, with retailers also noting that customer purchasing behavior returns to normal in-store visits and basket size as well. A solid economic position is supporting consumer purchasing behavior. The Australian economy was at pre-pandemic levels by the end of last year, and employment is higher than in 2019, highlighting the strong consumer market settings.

In the first quarter of 2021, Australian dairy exports have been strong despite freight issues and modest milk supply growth. By way of comparison, dairy exports were higher across all key commodities versus the same period in 2019, with butter, liquid milk, and cheese being the star performers with double-digit increases.

Figure 6: Australian milk production, Jan 2019-Mar 2021

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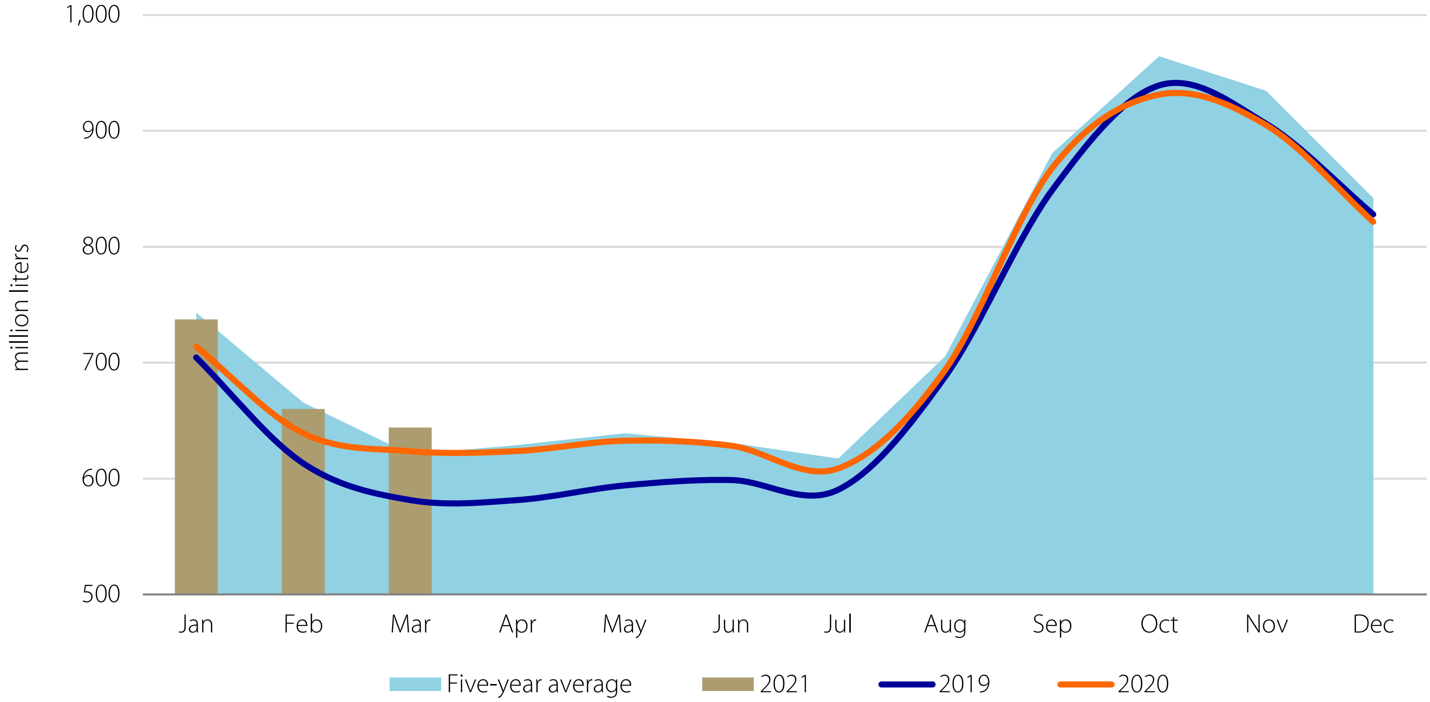

Source: Dairy Australia, Rabobank 2021

Brazil

Milk production growth increased in Q1 2021 compared to the prior year due to weak comparables and relatively high farmgate prices early in 2021. Farmgate milk prices (CEPEA gross national price) averaged BRL 1.98/liter in Q1 2021 compared to BRL 1.37/liter in 2020, representing an increase of about 44%. According to preliminary data of the Brazilian Institute of Statistics (IBGE), the production volume increased by 3.5% compared to Q1 2020. However, costs have continued to rise in 2021, with soy and corn prices reaching new record highs – as CBOT prices rose and the BRL remained weak.

According to data from CEPEA, milk production costs increased by 9.1% in the first four months of the year, much faster than annual inflation, putting pressure on margins for farmers. Dry weather has also contributed to higher production costs, with less forage available, farmers in the south and southeast of Brazil are supplementing their herds' rations with grain-based feed.

Dairy processors are struggling with tight margins in the dairy sector in 2021. Consumers were hit by a second wave of Covid-19 in March and April at a time when they were vulnerable due to high unemployment (14%), food inflation (15% in the past 12 months), and a dwindling government cash transfer program. Processors have had a hard time passing on higher costs, not only from increased farmgate milk prices but also those from other ingredients such as grains, vegetable oil, packaging, and energy.

Recent data suggest that economic activity suffered less than expected during the second wave. Retail sales declined by just 0.6% in March. Economists from numerous financial institutions are revising GDP growth expectations upwards for 2021.

Strong global growth and booming commodity exports are driving economic activity, with a record trade surplus expected for the year. Market consensus points to GDP growth of less than 4%, but some economists suggest it could be higher.

The Brazilian dairy trade balance has expanded, with imports and exports up so far in 2021, reflecting weak comparables following the turmoil that caused trade to slow in Q1 2020. However, exports do reflect some opportunities for international sales in April, particularly for WMP, when high international prices and a weak BRL provided Brazilian exporters a window of opportunity. Looking forward, exports will face some currency headwinds as the BRL gains ground against the USD and domestic milk prices will remain elevated, reducing the competitiveness of Brazilian dairy exports on the global market.

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Argentina

Argentina is experiencing significant cost-side inflation in the dairy sector, much like Brazil and Uruguay, as domestic grain prices continue to rise. However, the problem is magnified by out-of-control overall inflation across the Argentine economy (indicators show it has been up 40% over the past 12 months), which rapidly eats into margins for both farmers and the industry as other costs escalate.

After significant increases in milk price in 2020, the gains have slowed in 2021, putting further pressure margins at farm-level, which are expected to be in negative territory in May and June.

However, favorable weather in the milk producing regions of Santa Fe and Cordoba has helped dairy farmers overcome some of the cost pressures in recent months. Overall milk production growth slowed in Q2 2021 and is expected to advance by 2% in the three months to June, following a nearly 5% increase in Q1 2021.

The slowdown in milk production will likely continue into Q3 2021 as high grain costs will continue to impact margins. Rabobank expects growth of around 1% in 2H 2021, compared to the same period of 2020.

The Argentine government recently stopped all beef exports in an attempt to reduce inflation by increasing domestic supply. This is a policy measure has been deployed with limited success in the past, but it poses a significant risk to other sectors including dairy.

A similar measure for dairy exports would be extremely negative for the sector, given that domestic demand remains weak and recent global sales have provided support through increased export revenues. Exports were up 20% in Q1 2021 from the previous year and are expected to account for around 25% of milk production.

Beef export restrictions have also directly affected dairy farmers selling older cows to China for better prices than the prevailing domestic market. Now that beef exports have been banned, those revenues have disappeared and have negatively impacted dairy farmers' incomes. It is uncertain at this stage how long the export restrictions will remain in place.

Domestic demand for dairy remains largely stagnant as the ongoing impacts of the pandemic, a weak economy and high unemployment are partially offset by extensive government subsidies.

Across the dairy aisle, consumers continue trading down towards lower price items, with higher value sectors like hard cheese and functional yoghurts underperforming compared to value product offerings.

India

A second wave of Covid-19 and subsequent lockdowns across many states in India have again impacted the informal milk segment. Like last year, the impact on the informal channel has forced farmers to sell more milk in the formal channel. As a result, the transition from informal to formal channels has continued at a rapid pace through the pandemic. Supply-chain disruptions have occurred due to lockdowns, however unlike last year, these are being well managed by the supply chain stakeholders.

Farmgate milk prices have declined due to disruptions and lockdown restrictions. The impact on business-to-business (B2B) and foodservice demand has led to raw milk surpluses in some states, negatively impacting milk prices. The price of raw cow milk in Maharashtra has fallen by 10%-15% in the past two months. Current prices range between INR 22/liter and INR 23/liter (USD 0.30/liter to USD 0.32/liter). Prices are expected to remain at these levels, or slightly higher, in the coming months. This is due to seasonally lower milk production during the lean season and the potential improvement in B2B demand as a result of the lifting of restrictions.

Consumer demand is performing relatively well despite the pandemic and is expected to remain firm in the months ahead. This is in contrast to the B2B segment, which was in recovery mode when the second wave forced the closure of hotels and restaurants due to lockdown. As a result, ice-cream and cheese sales have been weak. These segments are expected to show improvements when the lockdowns are lifted in the coming months.

Disruptions and impact in B2B demand has led to weakness in the domestic milk powder market. Local SMP prices have been on a roller-coaster ride over the last 12 months. After hitting a high of INR 260/kg (USD 3,575/metric ton) early this year, domestic prices have fallen by 20%-25% to INR 180/kg to INR 200/kg (USD 2,475/metric ton to USD 2,750/metric ton) – touching the levels observed during the crisis last year.

Manufacturing of SMP has increased, which will lead to rising SMP stocks. However, the tightness in milk supply due to the ongoing lean season and improving demand after the second wave should reduce supplies and allow prices to rise in the coming quarters.

SMP exports remain low in FY2021 (Apr-Feb 2021). India exported 13,100 metric tons of SMP YTD in FY 2021 (Apr-Feb), compared to 938 metric tons in FY 2020 (Apr-Nov). Export markets have not been overly attractive for dairy companies in the past two quarters, even with an export subsidy (USD 700/metric ton) provided by the Gujarat state government earlier.

However, sentiment is changing, increasing expectations that exports will pick up in the next quarter. Still, volumes are likely to remain limited.

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China

Average milk prices in May came in at CNY 4.23/kg (USD 0.66), down 1.4% from record highs in Q1 2021, consistent with the typical seasonal weakness at this time of year. Based on the latest import parity analysis, this puts landed Oceania WMP pricing at a discount of 12% to the average domestic milk price (versus historical average discount of 15% since 2013).

Disclosures from eight domestically listed processors indicate a 3% year-on-year growth in aggregate sales volume for liquid milk in 2020 (which includes white milk, yoghurt, milk drinks). These data paint a picture of very positive dairy consumption in a key category in 2020, but perhaps not as strong as expected.

Turning to Q1 2021, the latest earnings updates reveal strong 37% year-on-year rebounds in headline sales – but this is because of low comparables due to a pandemic-stricken Q1 2020. On an annualized basis, headline sales growth came in at a two-year CAGR of 10%.

Considering some limited price hikes and corporate activity, comparable sales growth can reasonably be estimated to be below this figure, and largely on par with growth in recent years.

The white milk category has been a star performer, supporting domestic milk prices. But it also suggests that other liquid dairy categories have underperformed.

Migrant workers have largely heeded the government's call not to return to their hometowns for the Chinese New Year holiday. While this likely boosted consumption in local economies, many workers returned to work after the Chinese New Year holiday much sooner than usual. As a result, post-holiday processing volumes ramped up earlier in Q1, and could add some headwinds to the growth of overall processing volume in Q2 2021, in addition to the base effect.

China's National Statistics Bureau has reported that Q1 2021 milk production grew by 8.5%, driven by ongoing herd expansion.

Chinese import volume of dairy products (LME) grew by 24% year-on-year during the Jan-Apr period. Excluding whey volumes imports, they were 20% higher. The strong imports were driven by milk and cream (+54%), SMP (+36%), whey (+62%) and cheese (+51%), WMP (+17%) and butter (+12%). The infant formula woes continue with imports down -26%. Chinese buying in the GDT has been very active, with large volumes purchased for SMP and WMP, suggesting that near-term import growth will come through during the upcoming months.

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China

Rabobank's forecast milk production growth remains unchanged at 6% year-on-year for 1H 2021. This is a conservative forecast versus the official statistics which show growth at +8.5% for Q1. Growth of 6.5% is forecast for 2H 2021. Farm profitability is challenged by the rapid increase in feed costs. For now, however, farms are still profitable and this will continue to incentivise production and investment.

Rabobank maintains consumption growth (LME) at 9% year-on-year for 1H 2021 and 4% for 2H 2021. Because import arrivals during Jan-Apr 2021 were much stronger than expected, Rabobank has revised the estimate of imports for 1H 2021 upwards to +22% year-on-year (previously +2%).

Current estimates suggest annualized consumption growth between 1H 2021 and 1H 2019 will be less than 5%. The annualized growth for production and import (excluding whey) over the same period is 7% and 8%, respectively. These assumptions take Chinese stock levels midway through 2021 to the highest level since historical peaks in mid-2014, highlighting the need for some destocking in 2H 2021.

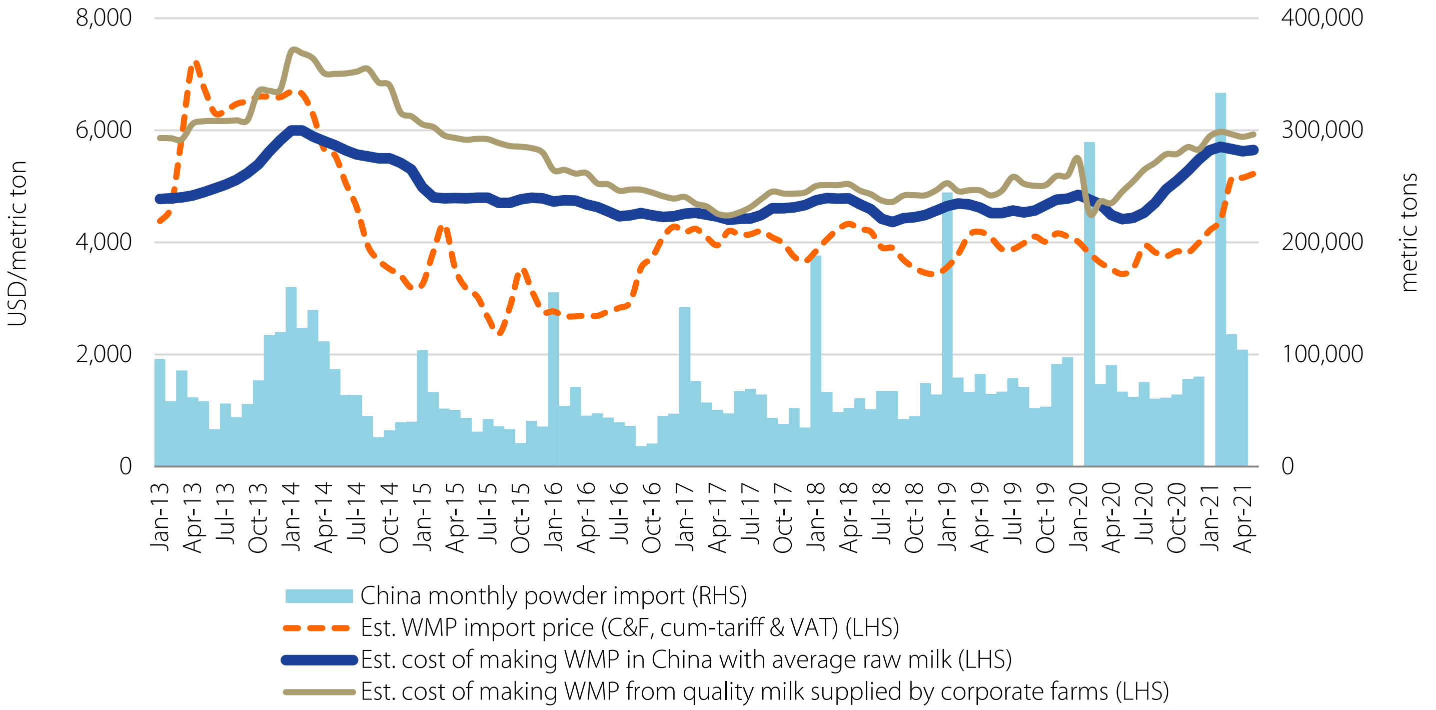
As such, Rabobank expects imports to fall by 18% in 2H 2021 (versus previous estimate of a 11% year-on-year decline). This still leaves China with inventory coverage. Chinese importers will be eager to maintain ample stocks, considering the ongoing shipping issues.

Rabobank expects imports to slow in Q3 2021, and to fall sharply in Q4 2021. Full year import volume is revised up to 3% growth year-on-year for 2021 (versus a previous decline of 4% year-on-year).

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, production growth may well be on the conservative side. Assuming no inventory change at year-end 2022, Rabobank expects imports to fall by 18% year-on-year in 1H 2022 and by 15% year-on-year in 2H 2022, representing a 17% year-on-year decline in imports.

Dairy companies have been bearing the brunt of the rising milk prices and have passed on limited price increases to consumers. As WMP prices continue to rise, processors are likely to start passing on increased milk and ingredients costs to consumers. This could slow demand more than expected and pressure milk prices. Given the traditionally tight supply in Q3 to support milk prices in China, Rabobank expects a visible reversal in milk prices to occur as early as Q1 2022.

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



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

Table 1: Quarterly dairy commodity prices (historic and forecast), Q2 2020-Q3 2022f

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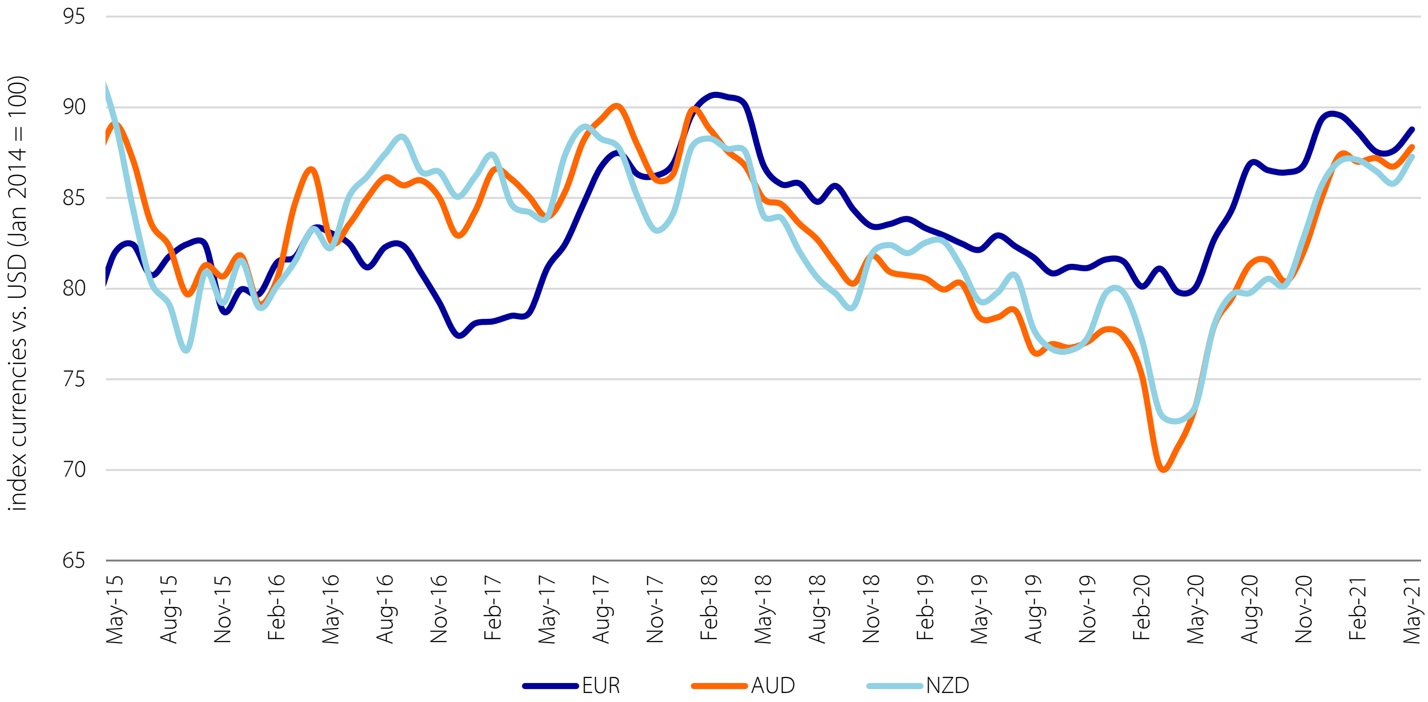
		2020			2021				2022		
		Q2	**Q3**	**Q4**	**Q1**	**Q2f**	**Q3f**	**Q4f**	**Q1f**	**Q2f**	**Q3f**
Butter											
Europe	EUR/metric ton	3,023	3,408	3,443	3,607	4,085	4,300	4,250	4,150	4,150	4,100
US	USD/metric ton	3,145	3,521	3,251	3,236	4,000	4,090	4,040	3,930	4,150	4,335
Oceania	USD/metric ton	3,935	3,446	3,851	5,170	5,200	4,800	4,650	4,500	4,600	4,600
Cheese											
Europe (Gouda)	EUR/metric ton	3,122	3,113	3,185	3,162	3,240	3,300	3,275	3,225	3,200	3,175
US (Cheddar)	USD/metric ton	3,613	4,756	4,695	3,559	3,845	3,875	3,965	3,600	3,750	3,875
Oceania (Cheddar)	USD/metric ton	4,000	3,600	3,755	4,200	4,300	4,300	4,200	4,200	4,200	4,250
Dry whey powder											
Europe	EUR/metric ton	738	724	738	862	985	1,000	990	950	925	925
US	USD/metric ton	822	733	844	1,116	1,405	1,395	1,250	1,100	1,050	1,000
Skim milk powder											
Europe	EUR/metric ton	2,031	2,118	2,173	2,338	2,535	2,625	2,650	2,575	2,550	2,525
US	USD/metric ton	1,995	2,157	2,384	2,475	2,710	2,845	2,910	2,865	2,800	2,755
Oceania	USD/metric ton	2,546	2,809	2,843	3,200	3,400	3,300	3,100	3,000	3,000	2,950
Whole milk powder											
Europe	EUR/metric ton	2,683	2,743	2,731	2,918	3,215	3,300	3,225	3,150	3,150	3,125
Oceania	USD/metric ton	2,756	3,039	3,082	3,750	4,300	3,850	3,200	3,200	3,200	3,150
South America	USD/metric ton	3,050	3,050	3,050	3,500	3,750	3,600	3,250	3,250	3,250	3,150

Source: USDA, forecasts by Rabobank 2021

Figure 8: Exchange rates, USD vs. exporters, 2015-2021



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

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