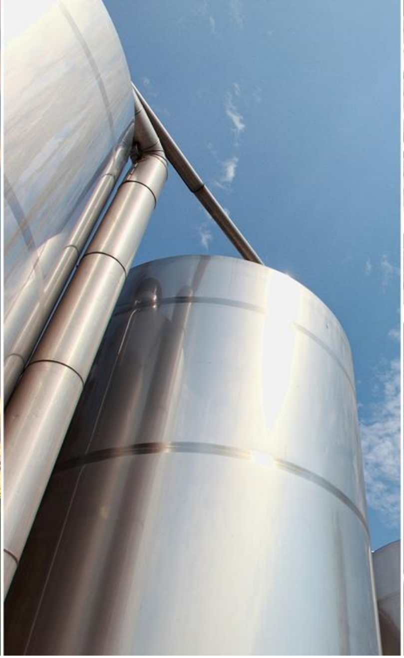

A Delicate Rebalancing

Global Dairy Quarterly Q3 2020

RaboResearch Food & Agribusiness

September 2020

Rabobank

Summary

- **Milk production growth across the major export engines began in Q2 2020** and is forecast to continue expanding into 2021, a feat not matched since 2018 (see Figure1). Despite the disruptions Covid-19 brought to the global dairy markets, farmgate milk prices have been resilient. Rabobank forecasts a 1.3% YOY increase in production across the Big-7 dairy regions in Q4 2020, and 1.0% in 1H 2021 and 0.8% in 2H 2021.

- **Commodity prices rallied in Q2,** largely on the back of government support in the form of government purchases, inventory management, and fiscal stimulus for consumers. The outlook for government support is less certain in Q4 and into 2021, elevating the risk of downward price pressure.

- **Sequential improvements are observed in foodservice,** as more regions have come out of lockdown while retail dairy sales show early signs of deceleration. It will take time for foodservice demand to return to pre-Covid-19 levels, even for countries that have been well ahead of the curve.

- **With the forecast milk production growth over the next 12 months,** and consumption that will take time to recover, Rabobank expects the global market fundamentals to remain weak into Q2 2021, at which point the level of exportable surplus retreats in 2H 2021 as domestic consumption improves.

- **Chinese import behavior over the next six to nine months,** on the back of ongoing local milk supply growth and a possible shift in stocking strategy, presents uncertainties to the dairy commodities outlook. Rabobank's updated Chinese dairy imports are still forecast to drop in 2020 and 2021 (excl. whey). Loose monetary policies and a weak USD exchange rate will present upside risks to dairy commodities prices.

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Regional Dairy Markets

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US

Government purchases buoy US demand, and elevated farmgate prices, ensuring continued milk production growth.

EU

Dairy product prices have flattened, as milk production growth is stronger than anticipated.

China

Consumption recovery in 1H 2020 beat expectations, but stocking strategies and China's ambitious farm investment plans cast uncertainties for 2021 dairy imports.

Australia

A favorable climate outlook across spring bodes well for growth in Australia's milk production.

South America

Exchange rates will disrupt trade flows across the continent, and feed costs are pressuring farm margins.

New Zealand

The beginning of spring 2020 has set outstanding conditions for the 1H 2020/21 season. We expect milk supply growth to range between flat to 2% YOY for the full season.

Global Summary

A delicate rebalancing of supply and demand is on the horizon. Milk production growth across the global Big-7 dairy exporters will collide with a recalibration of retail, foodservice, and export dairy demand. Price rebounds in Q2 have encountered some resistance, except for categories in regions with strong government support, which highlights the fragile nature of a market recovery.

Global dairy trade during 1H 2020 was better than anticipated, up about 3%. In general, low commodity prices and food security concerns spurred purchases, overriding the lower purchasing power from oil economies and currency devaluations, particularly in April and May. Trade volumes were stable from May to June 2020 and up (13.7%) compared to June 2019. However, the recent trade strength may be at risk in 2H 2020, as government stimulus packages abate, the impacts of a global recession fully take hold, and importers consider policies that enhance domestic production.

Demand in net import regions will be affected. Several countries in Southeast Asia, which are significant dairy importers, continue to struggle with new outbreaks (Indonesia in particular). A significant share of GDP and employment in the region comes from tourism and travel. As a result, the pandemic remains a major obstacle to the region's economic recovery.

Foodservice demand continues to improve, but remains well-below pre-Covid19 levels. As social distancing measures persist, fine dining and travel-related foodservice are still being hard hit. In China, which is ahead of the recovery curve, July foodservice revenue returned to just below 90% of the same month in 2019, with smaller restaurants/foodservice outlets under-performing versus larger ones. Globally, foodservice demand could take months to return to pre-Covid-19 levels. Lower traffic, from economically challenged and health-cautious consumers is likely to impede a full recovery in the foodservice channel.

For most of the world, economic growth will likely return to a growth mode in 2021. This will hardly lift the economy to the level seen pre-Covid-19. The pressure on domestic demand is unlikely to go away quickly. Much depends on the effectiveness of government stimulus packages, the risk of a second wave of infections as the Northern Hemisphere heads into the fall and winter could slow the pace of recovery, absent the widespread availability of an effective vaccine. Still, the resilience in dairy product demand has been undeniable, demonstrating the nutritional importance of dairy in diets across the globe.

By mid-2021, the delicate balance could tip. With year-over-year consumption growth anticipated to turn positive in Q1 2021, the modelled exportable surplus will peak and start to decline in Q2 2021, at which point the market balance will tighten.

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Figure 1: Milk Production Growth, Big-7 Exporters (Actual and Rabobank Forecast), Q1 2015-Q4 2021f*

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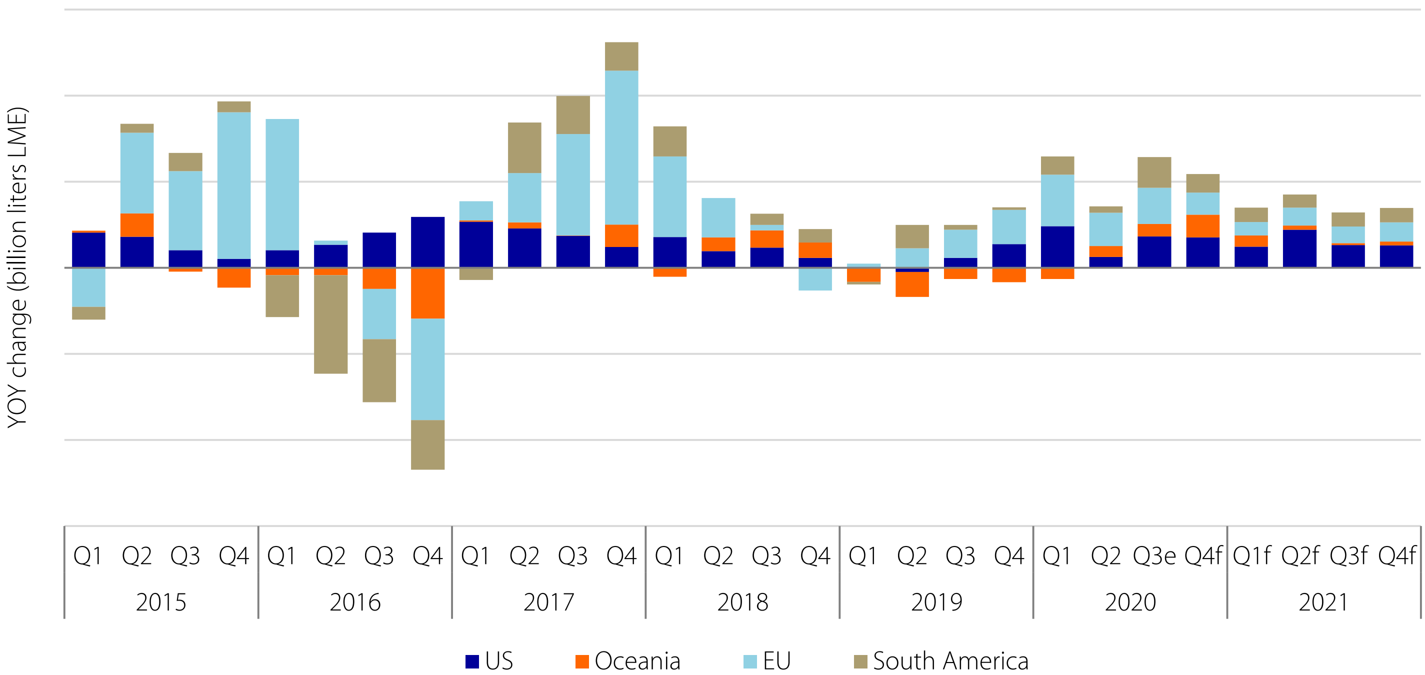
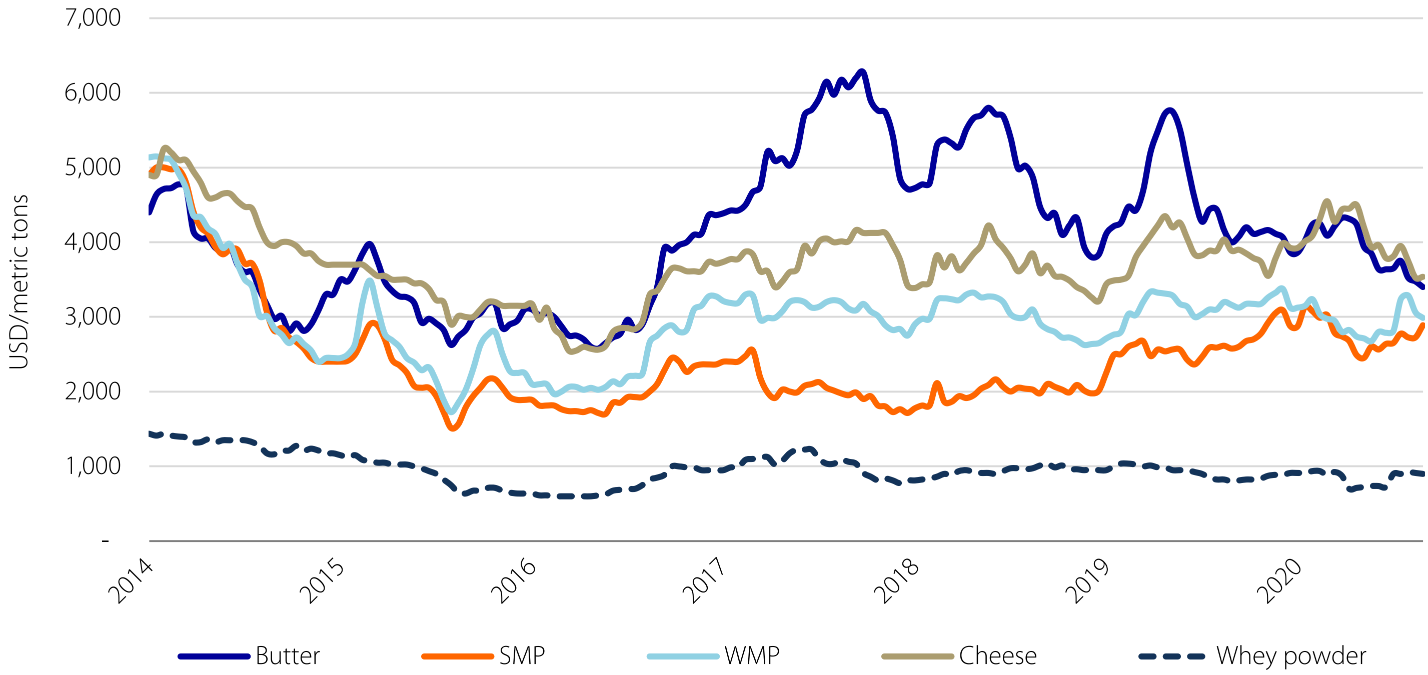


** Big-7 includes EU, US, NZ, Australia, Brazil, Argentina, and Uruguay.*
Source: Big-7 government industry agencies, Rabobank 2020

Figure 2: Dairy Commodity Prices, FOB Oceania, 2014-2020*



Whey is FOB in western Europe.
Source: USDA, Rabobank 2020

What to Watch in Q4 and Q1

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Shift in global trade

The US dollar has retreated by 9% vs. the euro since June, placing the US in a more favourable trade situation compared to European exporters. Perhaps more significant was the devaluation of the Argentine peso, which contributed to strong exports in 1H 2020, but that is unlikely to the be case in 2H 2020, as the government-imposed (artificially strong) peso could have a negative impact on Argentina's competitiveness in global markets in the coming months.

Recession and changing consumer patterns

Much of the world will emerge from lockdown into an economic recession. High unemployment rates and slower economic growth will put a damper on dairy demand lasting into 1H 2021. While some consumers may find comfort, trust, and indulgence in their favorite brands, other consumers will trade down, boosting private label sales.

How the global dairy sector embraces e-commerce

Covid-19 has rejuvenated the dairy category as consumers returned to a trusted, nutritious product with health and wellness in mind. It has also accelerated some trends, such as e-commerce, which provides opportunities as well as challenges for the dairy sector.

The China factors

Despite stronger-than-expected recovery in dairy consumption, stock levels in China are higher than in recent years. Whether Chinese buyers stock up further or decide to destock over the next 12 months will bring volatility to the market outlook. Meanwhile China's ongoing ambitious plan to build local supply presents a downside risk to import needs if materialized.

The US election

US elections cast a shadow of uncertainty on the US market – the only consensus in the market is the opaque path ahead. Uncertainty in the market poses USD volatility and challenges for US exporters as well as businesses with USD exposure.

Potential of a resurgence

While Rabobank's outlook is based on the assumption that there will be no major resurgence in cases of Covid-19, the possibility cannot be ruled out and this adds to the broad uncertainty about the future, unless effective vaccines become available soon, and in ample supply.

EU

EU milk deliveries in 1H 2020 finished 1.2% or 984,000 mt above last year, with June up by 1.7% YOY. The stronger-than-anticipated growth was supported by a strengthening in milk deliveries of 1.8% YOY (353,000 mt) from countries outside of the EU's Big-7 milk producing countries, like Spain (+3.1% YOY) and Belgium (+3.8%). Milk deliveries from the Big-7 increased by 1% YOY or 631,000 mt. Rabobank anticipates YOY Q3 and Q4 increases in milk deliveries of 1.1% and 0.7%, respectively.

Weather conditions in northern and western Europe have been fairly inconsistent during this season. After experiencing an early spring drought, significant rain fell in June and July that was followed by a heatwave in early August, which abated by month-end, bringing timely rain and cooler temperatures into September. Pasture growth and the development of (feed) crops were impacted by the periods with unfavorable weather conditions, and soil moisture deficits remain in most regions. As a result, larger-than-normal variations in corn yields are anticipated. Overall feed availability remains a 'what to watch' for the winter period.

EU-average farmgate milk prices remain above EUR 32.00/100kg. Farmgate milk prices declined by EUR 1.63/100kg (-4.8%) in April to an average of EUR 32.52/100kg in July. Based on current commodity prices, average milk prices are expected to be range-bound until year-end.

Milk utilization tips towards cheese (and whey) production in June (+4.5% YOY). During the lockdown period, and following market uncertainties, milk was initially allocated from cheese/whey to butter/milk powders. SMP and butter are covered by the EU intervention program. The value of milk in WMP remained firm, based on fat and protein values. June SMP and butter production were up by 2.0% YOY and 2.2% YOY, respectively, while WMP production was down by 4.2% YOY.

Economic activity continues to rebound across Europe. Foodservice revenue is improving and retail sales remain elevated. However, increasing infection rates and the re-introduction of (regional) travel restrictions remind us of the looming risk of this pandemic. A 12.1% contraction in EU GDP in Q2 2020, and rising unemployment illustrate the magnitude of the economic impact. With restrictive measures still in place, the foodservice sector will be challenged to fully recoup lost revenue.

Brexit negotiations continue. The 8th round of EU and UK negotiations, held in early September, yielded little progress, increasing the risk of a no deal scenario. Further negotiations will follow in the months ahead.

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EU

Most EU dairy commodity prices have improved since the initial lockdown and remain relatively range-bound. From early June to the end of August, SMP prices have declined by EUR 33/mt to EUR 2,139/mt, while WMP prices increased by EUR 28/mt to EUR 2,736/mt. Gouda prices improved by EUR 109/mt to EUR 3,146/mt, and EU butter prices jumped by 11% (EUR 338/mt) to EUR 3,428/mt.

Nonetheless, current EU dairy commodity prices remain below mid-February's pre-Covid levels. SMP prices remain18.3% (EUR 479) below the pre-Covid price level, WMP, butter and Gouda prices are down by 10.8% (EUR 330/mt), 5.2% (EUR 187/mt) and 4.5% (EUR 147/mt), respectively, due to more than adequate supply.

The European Commission Private Storage Aid (SMP) program closed on June 30. Offered quantities for cheese, butter and SMP accumulated to 47,711/mt, 67,694/mt and 20,138/mt, respectively. The storage periods ranged from a minimum of 60 days for cheese and 90 days for butter and SMP and a maximum of 180 days. Stocks will gradually be cleared from the PSA program during upcoming months.

EU-28 exports were strong into closing months of 1H 2020. EU cheese exports posted an increase of 9.2% or 39,000 mt YOY in 1H 2020, with June exports up by 15%. In 1H 2020, volume losses to the US (8,000 mt or 12,7% YOY) were offset by growing export volumes to other countries, such as the Ukraine (12,500 mt, or 142%), South Korea (11,200 mt or 64.5%) and Japan (7,000 mt or 12.3%). During the same period, EU butter exports jumped 63.7% or 57,100 mt YOY, with Saudi Arabia (8,100 mt), Egypt (6,700 mt) and the Ukraine (6,600 mt) recording the largest volume growth. WMP exports grew by 15.9% (22,500 mt), based on increased trade to Algeria (11,600 mt) and Nigeria (7,600 mt). SMP exports, on the other hand, plummeted by 16% YOY due to the high comparables from last year's large exports originating from EU-intervention stocks.

Headwinds are expected for EU dairy exports in 2H 2020 due to unfavorable FX developments, low oil prices and elevated EU dairy commodity prices.

Rabobank foresees domestic consumption to be under pressure in 2H 2020. For 1H 2021 we forecast domestic consumption to decrease 0.3% YOY, contributing a YOY change in exportable surplus of 600,000 mt in LMEs. By 2H 2021, domestic consumption is expected to rebound, with the magnitude depending on the development of a Covid-19 vaccine and economic growth, reducing the level of exportable surplus.

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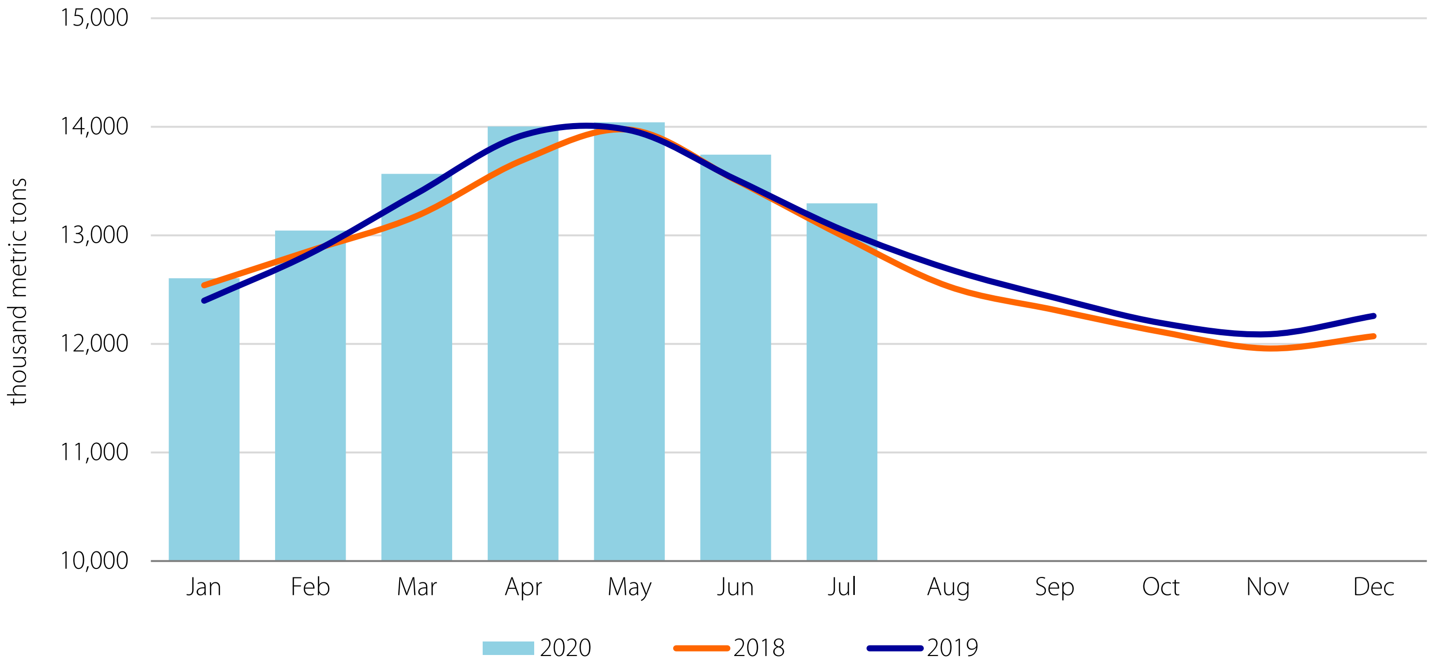
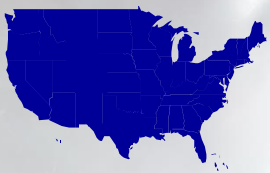
Figure 3: EU Milk Production, Jan 2018-Jul 2020



Source: ZMB, Rabobank 2020

US



US milk producers have been on a price rollercoaster for much of 2020. The US All Milk price fell by 31% from January to May and rebounded by 51% from May's USD 13.60/cwt to July's USD 20.50/cwt. The August All Milk price will decline as the underlying cheese price declined by 33% through the month. A combination of the call to reduce milk output in Q2, the lockdown measures, and the government-sponsored purchasing programs have contributed to the price volatility.

Year-on-year milk production returns to on-trend growth. With production controls lifted and favorable pricing, July US milk production increased by 1.5% YOY, following Q2's meager 0.5% gain due to a 0.5% YOY contraction in May as dairy producers responded to mandates from processors to reduced production. The dip in both prices and milk supply was only temporary..

Dairy product production growth has varied as processors flexed their assets when possible to arbitrage pricing dynamics. Cheese production growth has fluctuated, and swings between Cheddar to Mozzarella have been more pronounced due to the sector's large exposure to the foodservice channel. As an initial response to lockdown, there was a flight to Cheddar, with April output soaring 8% YOY as Mozzarella production fell 5.6%. By June, Mozzarella production increased 3.2% YOY, as government purchasing programs and pizza demand ramped up. NFDM production also increased. April output increased 16% YOY and simultaneous weak demand for SMP resulted in March and April output falling by 15% and 13%, respectively. But this product mix inverted in May and June, with SMP output up YOY 77% and 18%, respectively, as SMP buyers returned.

US dairy product stock levels are mixed. After setting record cheese inventories in April (up 5.8% YOY, or 1.5bn lbs.) the market has undergone an unseasonal and aggressive inventory drawn-down, with July stocks just 2.4% higher than last year. Butter and dry whey stocks remain burdensome at 13% and 27%, respectively, above July 2019's level.

Rabobank expects milk production to increase 1.5% YOY in 2H 2020, followed by quarterly gains of 1.0% YOY to 1.8% through 2021. Dairy producers' margins, enhanced by direct government payments and favourable feed costs, over the next 12 months, provides fodder for milk production growth. However, after hitting an estimated 1.8% YOY gain in Q2 2021 (against a low comparable), growth will slow to 1.1% in 2H 2021 as pricing pressure begins to make its way back to the farmgate.

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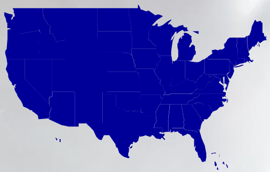
US



US total dairy disappearance increased by 0.7% YOY in Q2 2020, driven by export growth of 20%, offsetting a 2.4% decline in domestic demand. Total domestic dairy demand, measured in total solids, fell by 6.3%, 1%, and 0.1%, respectively, from April through June, as lower foodservice sales took its toll. As we move forward, domestic and export demand is expected to moderate as the longer-term effects from Covid-19 take hold.

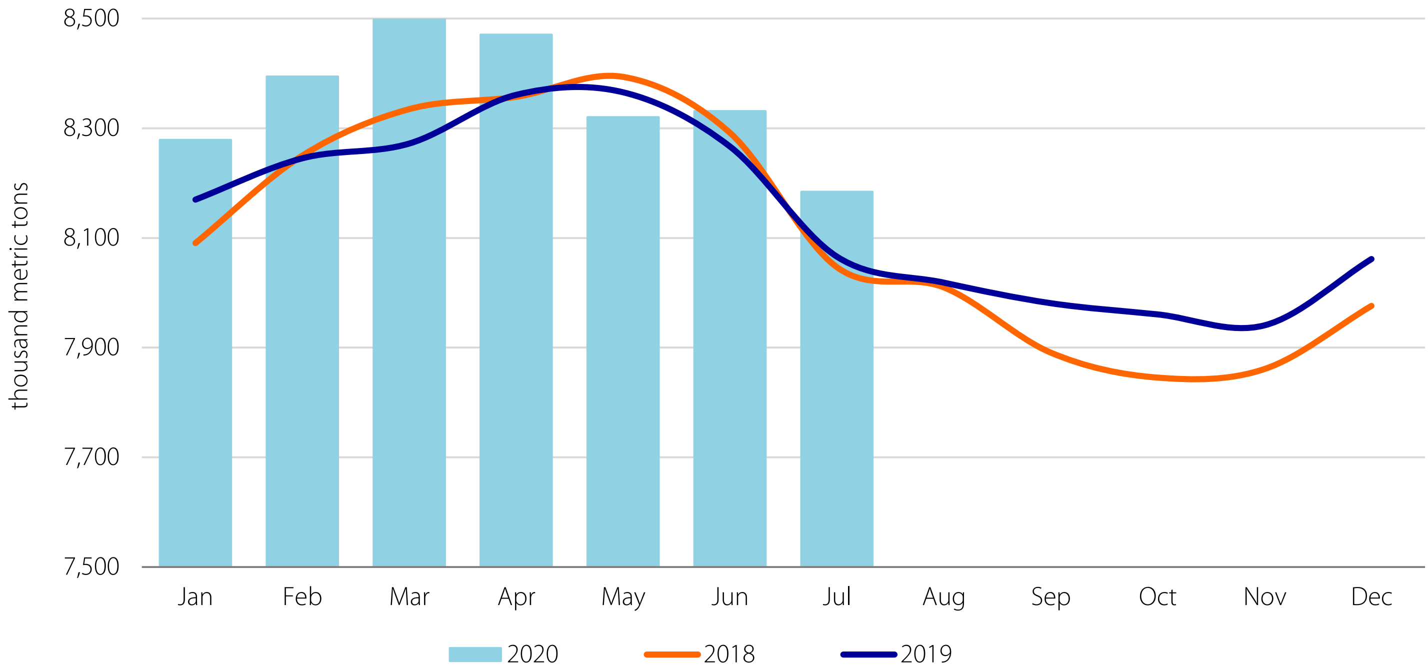
After an initial dip in trade in Q1, US exports have picked up, with July volume up 15% versus last year. Cheese exports increased 5% in July vs. last year despite a 1% decline in sales to Mexico, which were offset by exports to Asia. South Korean imports rose 107% YOY, up an additional 3,600 metric tons. Combined NFDM/SMP exports increased 52% YOY, but again Mexican demand lagged, falling 5% YOY and was made up primarily by greater trade to Southeast Asia. Dry whey exports soared 65% YOY in July, as sales to the US's largest whey market (China) jumped 316% YOY, nearly matching 2017's pre-ASF and trade war levels.

The retail dairy demand channel has remained resilient through the last three months. Retail dairy sales have shrugged-off price inflation, which was 6% and 5% higher year-on-year in June and July, respectively, according to the Bureau of Labour Statistics.

Significant food assistance is buoying US dairy markets. The USDA has expended an estimated USD 600m on milk and dairy products for food boxes distributed to food banks and other non-profits through August. An additional USD 300m is anticipated to be spent on dairy purchases by the end of Q3. Traditionally, the USDA spends about USD 500m annually on dairy purchases for various feeding programs. Covid-19–related food aid programs are nearly double the typical annual government purchases and over a much shorter time horizon, resulting in severe demand pressure on specific products such as Cheddar cheese, with prices at times moving well-above pre-Covid-19 levels. Some portion of these distributions will displace retail sales rather than generating new demand.

Rabobank estimates Q4 2020 US domestic demand to fall 0.2%. Recovery in domestic demand continues to improve as the balance of retail and foodservice sales converge as restaurants begin to reopen. Rabobank estimates that 10%-20% of restaurants will remain permanently closed, dampening the potential of a 'bounce back' in foodservice demand. While there is more water to pass beneath the proverbial economic bridge in the US, domestic dairy demand is expected to increase 2% in 2021, as lockdown measures subside, reducing its YOY exportable surplus.

Figure 4: US Milk Production, Jan 2018-Jul 2020



Source: USDA, Rabobank 2020

New Zealand

Milk is flowing for the 2020/21 season (beginning 1 June 2020). Higher milk collections for June (+2%) and July (+5%) have enhanced the seasonal trough volumes.

Export volumes for the three months to July 2020 were lower by 2% on the prior year period. Increased shipments to Algeria, Saudi Arabia and Thailand were not enough to offset lower sales to the US, China and Japan. Export volumes for the remainder of 2020 will depend largely on the strength of Chinese purchases. Exports for 1H 2021 will exceed 1H 2020 due to anticipated improved year-on-year milk flows.

Jack Frost has been kind this winter, with mild weather across most of the country since the last quarterly. Calving is now well underway and on-farm conditions across much of the dairying regions are favourable for this season's spring flush. Pasture covers have recovered in areas impacted by the summer heat. Parts of the Waikato are experiencing early silage making, and conditions are shaping up to provide a boost to the first half of the season.

NIWA notes that favourable conditions to remain over the coming spring months. But with higher-than-average temperatures forecast through to November, some risk remains for parts of the Waikato still experiencing lower water tables and/or soil moisture deficits - meaning some farms will be more susceptible to dry periods through year-end and into 2021.

Our base case scenario is that New Zealand's milk production for the 2020/21 season (ending 31 May 2021) will range between flat growth to a modest lift of 2% compared to the prior season. This forecast is based on the assumption that in contrast to last spring, any fickle weather will not leave a tangible mark on production in key dairying regions. The higher-end of our forecast range would set a new record for New Zealand milk production.

Fonterra have held their 2020/21 farmgate milk price forecast range steady at NZD 5.90/kgMS to NZD 6.90/kgMS. This wide range reflects the uncertainty in global markets, with the cooperative aware of the potential for foodservice sales to be negatively impacted from any new Covid-19 outbreaks and the resulting containment measures.

Fonterra's higher-end forecast range offers a profitable milk price for most farmers. Also supporting cautious optimism among farmers is stronger cash flows over the winter period compared to last year: a reflection of deferred milk payments from the 2019/20 season.

Rabobank forecasts the farmgate milk price to be 6.35/kgMS, based on global commodity price expectations across the remainder of the 2020/21 season.

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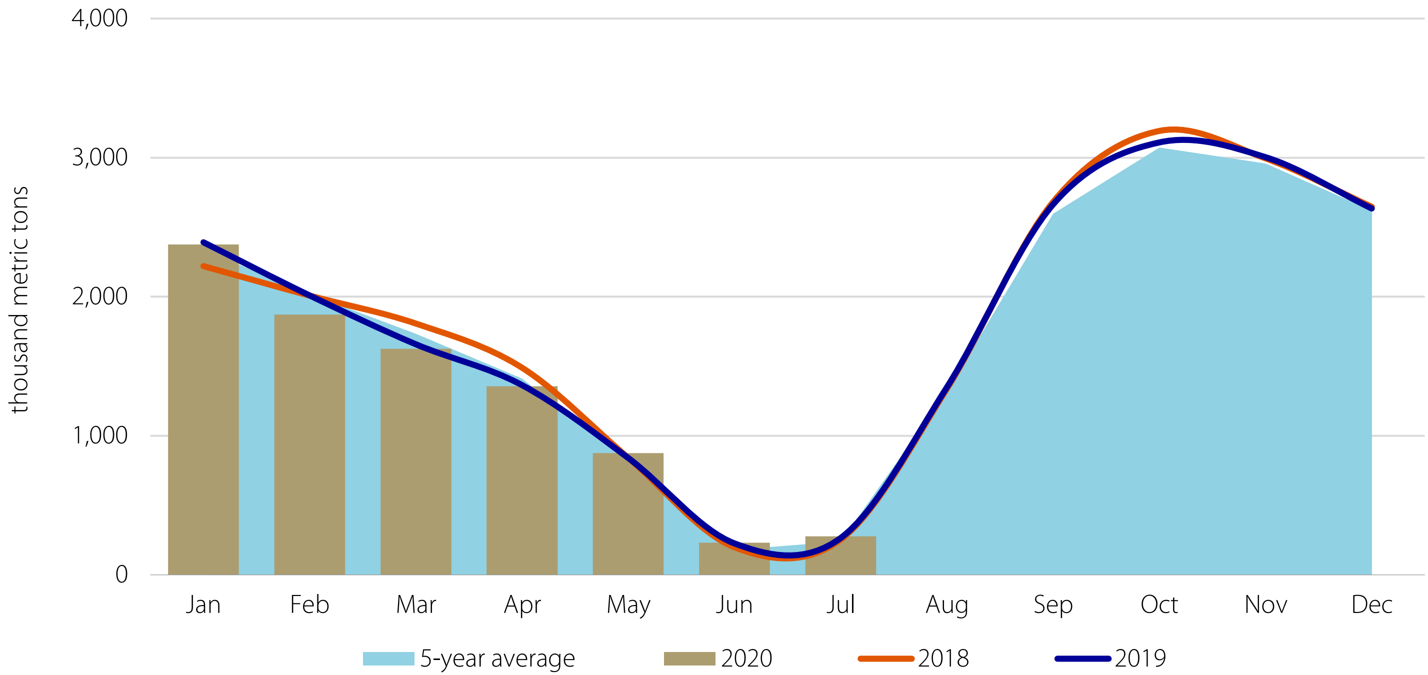
Figure 5: New Zealand Milk Production, Jan 2018-Jul 2020



Source: DCANZ, Rabobank 2020

Australia

Australian milk production in June was 4.1% higher year-on-year. This brings a close to the 2019/20 season, with national production down marginally to 8,775m liters. It was a tale of two halves. Production was negatively impacted by poor seasonal conditions in the first half. But timely rainfall across key regions in summer and autumn saw the milk pool begin to recover from December. The growth was led by Tasmania and Eastern Victoria. Meanwhile, dairy farm irrigators in the Southern Murray Darling Basin (sMDB), which contributed to the biggest production declines in recent years, are enjoying better water market conditions.

The spring flush will peak in October and Australia is on track for its best flush in three seasons. Rabobank forecasts milk production to expand by 2.8% in 2020/21, bringing national milk production back above 9bn liters**.** Rainfall is expected to be above-average across the main dairy belts from September through November. Dairy farm operators continue to enjoy lower feed costs and elevated cull cow prices. Rabobank's latest rural confidence survey highlights that Australian dairy farmer confidence levels are upbeat and there is a notable lift in intentions for investment/expansion.

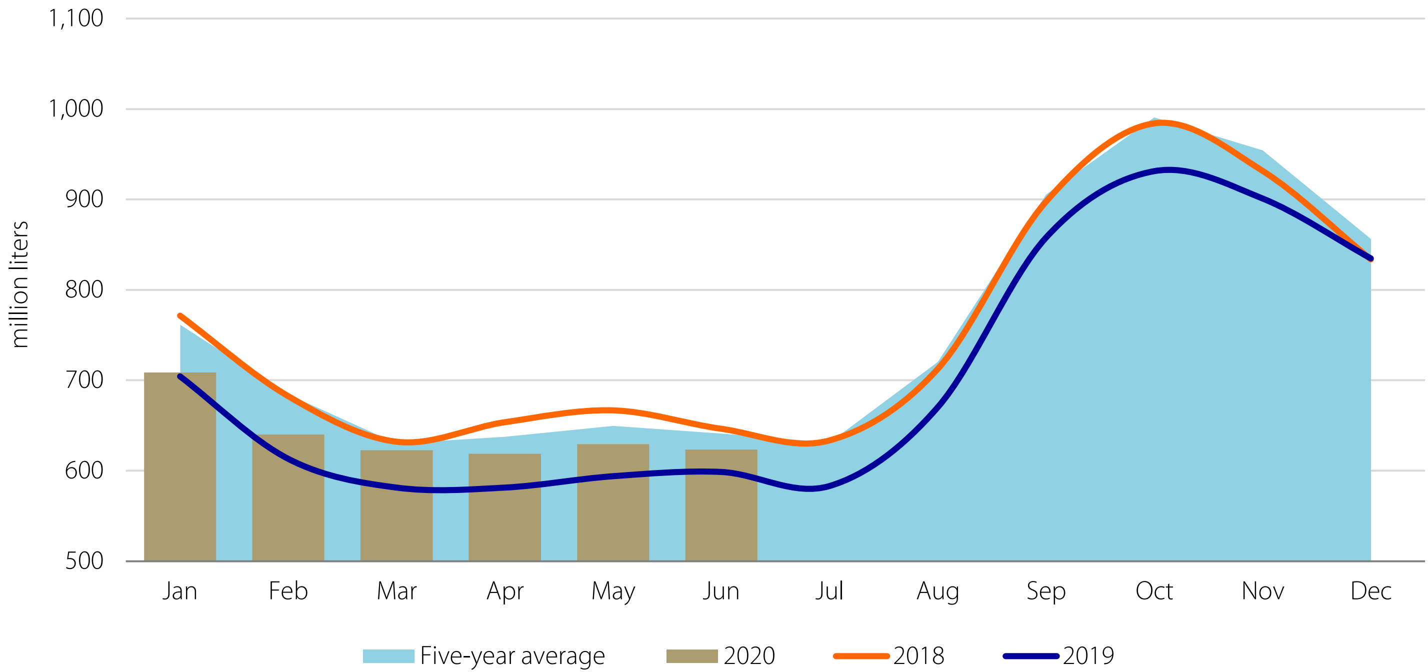
Rabobank's farmgate milk price forecast is at AUD 6.30/kgMS for 2020/21. This is broadly in line with the previous report. Official farmgate milk prices range between AUD 6.20/kgMS and AUD 7.20/kgMS, which are mostly profitable and supportive of milk supply growth.

For the 2019/20 season, Australian dairy export volumes finished down 7.1% YOY. This is not surprising given the backdrop of a tight milk supply. Exports of liquid milk and fresh cheese were the leading light, both growing by 4% for the year. There were large falls in shipments of SMP (-29%) and butter (-44%).

Australia's domestic dairy market continues to find a new normal. According to the latest insights, retail sales of dairy products continue to grow above long-term trends. However, sales growth is moderating as pantry loading recedes. However, out-of-home consumption, while in recovery mode, remains well-below year-ago levels, with ongoing lockdowns in Victoria, capacity restrictions and cautious consumers limiting foot traffic in major cities. Australia's economy will contract by 5.5% in 2020.

An ongoing recovery in milk supply will be welcome news for the Australian dairy supply chain. Australia's exportable surplus will continue to recover with milk supply growth. More milk in the system will help alleviate some overhead cost pressures for dairy processors, but will also allow dairy exporters to explore growth opportunities.

Figure 6: Australia Milk Production, Jan 2018-Jun 2020



Source: Dairy Australia, Rabobank 2020

Brazil

A large cash payment program has lifted incomes during the Covid-19 crisis. At the start of the pandemic, back in March, the dairy sector was rightly concerned about how consumers would react to quarantines and sudden loss of incomes. In particular, this was an issue given the high level of informality in the country and unstable incomes for many consumers. The government's cash transfer program started in April with a monthly payment of BRL 600 (USD 110) given to around 60m Brazilians and will continue at least until December, with a reduced amount from September onwards.

Demand improved significantly with cash transfers. The cash payments of BRL 600 equated to around two-thirds of a monthly minimum wage and boosted many families' incomes significantly. Sales of UHT milk, powdered milk and Mozzarella cheese all increased from April onwards as the money reached consumers' accounts. This proved that consumers prioritized food purchases during the pandemic and retail sales increased by around 10% in volume terms for most categories during Q2 2020.

Stronger consumer demand drove processors to purchase milk at farm level. The year started on a downbeat mood for dairy farmers in Brazil, as feed prices increased rapidly with the depreciation of the real (30% against the US dollar), translating into much more expensive corn and soymeal in the domestic market. Milk production declined by around 1% during the first half of the year (a slightly smaller decline than we had expected), due to rising farmgate milk prices in June. Processors realized that consumer demand was increasing and they incentivized milk production at the farm level.

Prices continue to rise in Q3 with demand gains. Farmgate milk prices reached record levels in August with Cepea (a think-tank from the University of São Paulo) reporting an average national price of BRL 1.94/liter (USD 0.37/liter), a 10% jump on the previous month. This level will most likely increase in September as production reaches its seasonal low level and demand continues firm from cash transfers and the gradual recovery of the economy.

2H 2020 should end favorably for both processors and farmers. As farmgate prices recovered in recent months, farmer's margins have seen an improvement. However, profitability will depend on feed prices, which probably will stay at high levels given the weakness of the real. For processors, the continuation of the cash transfer program has been excellent news as consumers' incomes will continue to be well-supported until the end of the year.

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Argentina

Production advanced by 10% in Q2 2020. As expected, production continued expanding during Q2 2020 in Argentina, with positive farmer's margins due to higher farmgate prices and ample silage reserves. Overall, production increased by 9% during the first half of the year, against last year's 6% decline in 1H 2019.

Domestic demand continues weakening. Argentina has implemented one of the world's longest quarantine periods, with restrictive measures that started being implemented in March and are still in place in some regions to various degrees. While the Covid-19 crisis was largely centered in Buenos Aires in Q2, other regions of the country are now being impacted. Some estimates indicate that the country's GDP could contract by up to 12% in 2020 and the drop in economic activity is clearly having a significant effect on consumers. Also, inflation remains high and continues to erode purchasing power.

Exports were up 21% in 1H 2020. Some of the excess production has been channeled towards exports to Brazil as the key destination with a 27% share of shipments, followed by Algeria with 20%, Russia with 11%, and China with 7%. Local sources indicate that further volumes could be sold to Algeria in September. However, the artificially strong peso could have a negative impact on Argentina's competitiveness in global markets in the coming months.

Profitability for farmers is much lower in Q3. As domestic demand has continued to weaken and exports advanced moderately, the excess supply has cooled rising farmgate prices. With inflation running at 2% and rising domestic grain prices, profitability for farmers is now just 1% according to OCLA (a local think-tank).

Lower profitability will slow production. Production post more moderate growth for the rest of 2020. Rabobank expects Argentine milk production to lift by 4% in the second half of 2020, compared to 9% during the first half, as farmers feel the pressure from rising costs and stagnant (real terms) farmgate prices. Forage availability during Q3 and Q4 will help sustain milk production in Argentina, which usually has a seasonal peak in October at the end of spring.

The dairy industry faces a challenging end to 2020. The deepening of the economic recession in 2020 has impacted profitability for both farmers and processors. Exports could aid revenues for the balance of 2020. Domestic consumers continue to trade down in search of value during these difficult times. More expensive categories like yogurt and hard cheeses will see bigger volume declines compared to liquid milk and fresh cheese. An increase in UHT milk inventories has been reported by local sources and that could mean lower prices ahead in the domestic market.

India

India's milk production is expected to grow at 3% in FY21. The organized segment is flushed with milk as farmers shift from selling milk in the informal channels to cooperatives and private companies. Prospects of a good kharif season crop harvest due to favorable monsoon rains will support milk output. We expect milk production to grow at 3%, surpassing 200m metric tons in FY21 (ending March).

Farmgate milk prices remain bearish. The raw milk price in Maharashtra has changed little over the last quarter, with current prices ranging between INR 21/liter to INR 23/liter (USD 0.30/liter to 0.33/liter). Prices are expected to stay at lower levels in the next quarter due to reduced demand from the B2B segment, excess SMP stocks and expected rising milk supplies during the flush season, starting late November.

Consumer demand for milk and dairy products holds strong. Demand has remained strong over the last three months. However, the availability of some products has been a challenge. The B2B segment is expected to remain impacted through Q4. Companies have experienced an increase in dairy sales in the retail channel. Demand for packed liquid continues to be strong at household level. The cheese and ice cream segments remain impacted, with slight Improvement compared to previous months.

Local milk powder prices have remained at lower levels. Domestic SMP prices have been between INR 170/kg to INR 190/kg (USD 2,450/mt to USD 2,700/mt) over the last quarter. Most of the companies have been manufacturing SMP due to disruptions in dairy products sales. The incoming flush season will also lead to additional SMP manufacturing. Rabobank expects SMP prices to remain at these levels over the next quarter.

SMP exports were negligible in FY20 (April-March 2020). India exported 992 metric tons of SMP in FY20 compared with 45,000 metric tons in FY19. Exports for FY21 (YTD) have also been negligible and are expected to remain so unless the export market becomes remunerative or Indian exporters receive financial support from the government.

Growing SMP stocks continue to create a headache for the Indian dairy industry. Reduced dairy product sales in the foodservice segment through Q4 will continue to force the industry to produce SMP and ghee/butter. The upcoming flush season will further compound the situation. Industry stakeholders are pitching to the government for subsidies to support SMP exports. Without exports as conduit to sell-off surplus SMP stock, the domestic SMP situation will remain challenging for the rest of the year.

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China

Half-year results by China's dairy processors revealed a mixed bag, with consumption volume beating expectations. Q2 sales recovery was visible, with the largest players gaining market share over smaller players. Profitability was squeezed due to the Q1 lockdowns, aggressive promotions, donations, and the cost of drying local milk. The white milk category gained significant traction with consumers in 1H, helping to absorb large milk flows. This also reflects consumers trading down to lower-value products, as premium categories like UHT yoghurt suffered. Domestically-produced milk powder stocks were reportedly largely depleted by Q3. Top-line sales guidance for 2H 2020 by larger corporates is positive. Margin pressures vs. 1H should alleviate, but may persist YOY due to continued promotions and high raw milk prices.

Milk prices started to recover as processing demand strengthened in Q2, according to the Ministry of Agriculture (MOA), after falling during Feb-Mar. Milk prices need to be held high for the rest of the year to continue to induce production growth as feed costs rise. The recent Oceania WMP price shows a discount of 18% to the domestic milk price, based on import parity.

China's official data indicates that milk production growth continues to surprise on the upside July's output jumped by 12.7% YOY growth, surging by nearly 8% in 1H 2020, driven by renewed herd expansion which started last year. By May 2020, an incomplete tally of new projects totalled a target herd size addition of nearly 700,000 head. This, combined with other planned projects, would add nearly 1.6m head, an estimated 20% increase, to the existing herd. We expect these additions to materialize over a few years, assuming everything goes as planned.

Rabobank revises1H 2020 demand growth to flat YOY (previously -7.6%) to reflect the stronger-than-expected volume recovery in Q2 on intense promotional efforts. Rabobank also raised its consumption growth estimated to 4% in 2H 2020, as consumers shift toward white milk, a combination of trading down and health consciousness. Looking forward, Rabobank maintains demand growth of 9% YOY in 1H2021 on low comps, and raises 2H2021 demand growth to 3% YOY (2% previously).

Rabobank lifts milk production growth estimate/forecast to 5% YOY in 1H and 6% YOY in 2H 2020, reflecting a stronger Q2 growth, supported by herd expansion from 2019. With continuous investments flowing into farming on the back of improved profitability, and, with China's push to grow the domestic supply potential and possibly providing more flexibility in implementing environmental protection regulations, Rabobank raises 2021 production growth forecasts to 6% YOY in 1H 2021 and 6.5% YOY in 2H 2021 (vs 2% previously).

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China

Rabobank revised its forecast for the decline in dairy import requirement (in LME) to -4% YOY for 2020 (previously -15%YOY). This reflects a combination of higher-than-expected import arrivals in 1H2020 and a narrower decline in 2H given higher consumption estimate. Without the lift from a surge in whey import, driven by the 'phase-one' trade deal with the US, and expectations of restocking of hog herds in China, total LME import requirement would decline by 7% YOY in 2020, largely loaded in 2H2020.

Looking ahead into 2021, Rabobank expects import requirement to fall 12% YOY 1H2021 and to grow by 2% YOY in 2H, making for a full-year decline of 6% YOY (previously flat YOY), excluding whey, which is estimated to grow but at a slower pace than 2020 on the back of continuous gradual hog herd rebuilding, LME import requirement would decline by 8% YOY.

China's Jan-July 2020 LME dairy imports grew by 2% YOY, largely driven by YOY growth in whey (+37%), without which total LME imports would have declined by 1% YOY. Butter and cheese also saw strong growth YOY (butter: +46% on low comparables and cheese: +17%, may have reflected expectations of foodservice restocking in Q2 and popularity of cheese snacks). Imports of bulk milk powder and infant formula declined by 4% YOY and 2% YOY, respectively.

Stronger-than-expected production growth and weaker than expected decline in imports have nevertheless led to an estimated rise in inventory at mid-year 2020, despite the better-than-anticipated recovery in domestic consumption. The situation may not have been as serious as the peak in mid-2014, but at a much higher range than in the most recent years. Rabobank believes the Covid-19-related supply chain disruptions and rising geopolitical risks have prompted the Chinese dairy industry to carry larger stocks than in the more recent past, and the distribution of the inventory may be very uneven among the industry players.

China's continuous interest in increasing safety stocks presents an upside risk to the import outlook. It is hard to gauge the level of 'suitable' safety stock required. It is also difficult to predict corporate strategies. Continuous aggressive promotions will be needed to move products faster when consumer confidence needs a lift.

China's ongoing dairy sector investment spree, to boost domestic sufficiency, may present downside risks to milk prices and China's import needs as these projects materialize.

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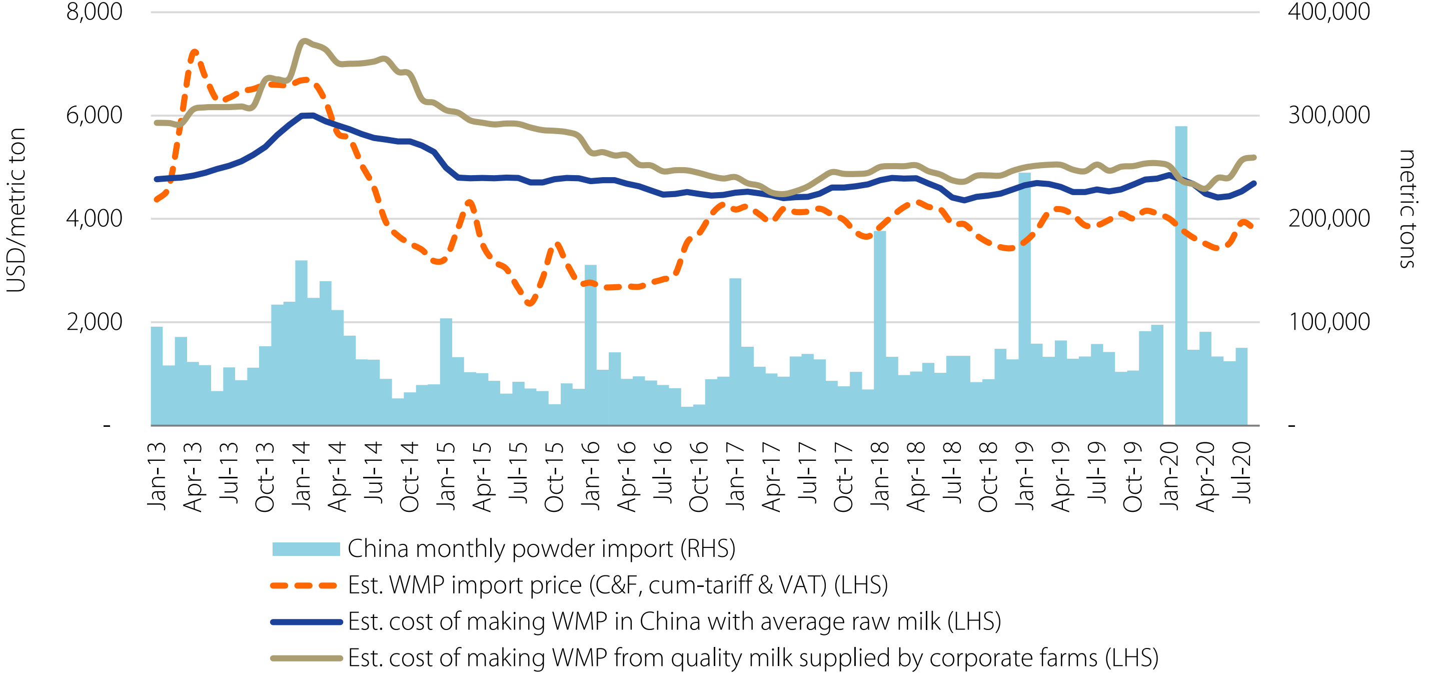
Figure 8: China WMP Import Parity, Jan 2013-Aug 2020



Source: China Customs, Eucolait, Chinese Ministry of Agriculture, Rabobank 2020

Table 1: Quarterly Dairy Commodity Prices (Historic and Forecast), Q3 2019-Q4 2021f

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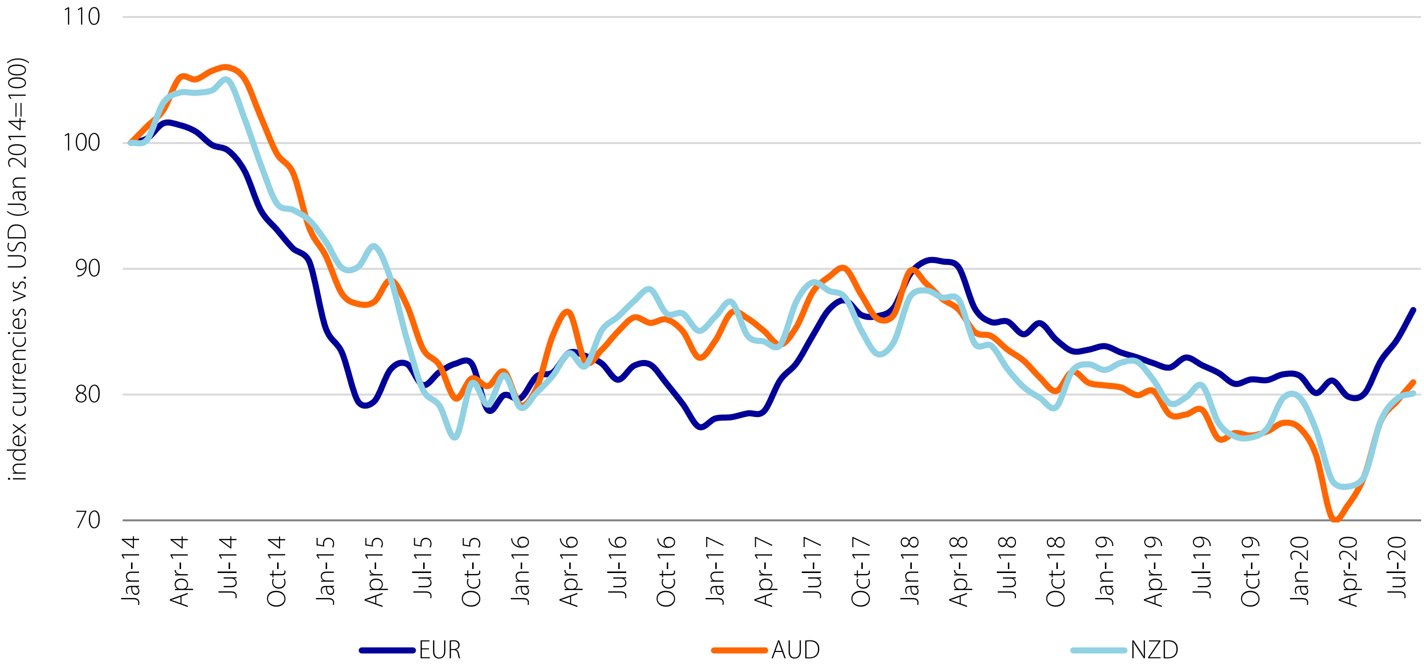
		2019		2020				2021			
		Q3	Q4	Q1	Q2	Q3e	Q4f	Q1f	Q2f	Q3f	Q4f
Butter											
Europe	EUR/mt	3,669	3,635	3,575	3,023	3,400	3,450	3,450	3,400	3,450	3,450
US	USD/mt	5,136	4,576	4,025	3,145	3,545	3,470	3,485	3,515	3,600	3,750
Oceania	USD/mt	4,227	4,075	4,143	3,935	3,555	3,450	3,450	3,450	3,500	3,500
Cheese											
Europe (Gouda)	EUR/mt	3,112	3,178	3,284	3,122	3,125	3,050	3,050	3,100	3,100	3,100
US (Cheddar)	USD/mt	4,083	4,551	3,900	3,615	4,850	3,875	3,650	3,525	3,785	4,040
Oceania (Cheddar)	USD/mt	3,896	3,796	4,229	4,140	4,300	3,625	3,650	3,750	3,850	3,900
Dry whey powder											
Europe	EUR/mt	683	735	793	738	725	700	750	750	750	750
US	USD/mt	808	717	795	820	740	675	730	760	785	825
Skim milk powder											
Europe	EUR/mt	2,101	2,430	2,511	2,031	2,125	2,150	2,175	2,200	2,200	2,200
US	USD/mt	2,296	2,547	2,650	1,995	2,150	2,350	2,350	2,200	2,250	2,315
Oceania	USD/mt	2,527	2,902	2,946	2,569	2,753	2,650	2,600	2,550	2,600	2,650
Whole milk powder											
Europe	EUR/mt	2,879	3,016	2,998	2,683	2,750	2,650	2,600	2,600	2,600	2,600
Oceania	USD/mt	3,157	3,240	3,039	2,756	2,700	2,900	2,900	2,850	2,900	2,950
South America	USD/mt	3,180	3,100	3,050	3,050	2,950	2,950	2,900	2,900	2,900	2,950

Source: USDA, forecasts by Rabobank 2020

Figure 9: Exchange Rates, USD vs. Exporters, 2014-2020



Source: UDM Board of Governors of the Federal Reserve System, Rabobank 2020

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