



Rabobank

Dairy Quarterly Q2 2018

Steady as She Goes... For Now

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Summary

- Combined milk supply growth across the Big 7 has stalled, with the pace of growth below expectations through the Northern Hemisphere spring peak.
- As a result, most dairy commodity markets have seen prices rally in Q2 2018, but with mixed results across regions and products. Butterfat and cheese prices have fared reasonably well, supported by buoyant demand.
- Oceania-origin product has maintained premiums in some markets, given the availability of product and end-of-season inventory levels – and will do so at least until the new product-selling seasons are in full swing.
- The global farmgate milk price cycle has turned, but it will take some time to trigger a meaningful supply response, as rising feed costs remain a risk to farmer margins.
- As a result, global dairy commodity markets have moved off of lows posted in Q1 2018 and are expected to move seasonally higher through 2H 2018.
- Some buyers have cover and will remain sidelined in the coming months. China is expected to re-enter the market in a more meaningful way in 2H 2018.
- A mix of upside and downsized market risks warrant monitoring. In particular, the start of the upcoming New Zealand season and the level of escalation in trade wars are likely to set the stage for Q4 2018 and 1H 2019 dairy markets.

Regional dairy markets

<p>EU</p> <p>Unfavourable weather has tempered milk production through the peak. Consumption trends are a mixed bag, with solid growth in some regions being offset by weak economic growth in others.</p> 	<p>China</p> <p>Milk production has increased after a slow start to the year. However, a pickup in demand will underpin Chinese import requirements through 2H 2018.</p> 
<p>US</p> <p>US milk prices have improved, but higher feed costs are keeping farmer margins under pressure. Milk production is expected to continue to grow vs. the prior year, but at a more modest rate.</p> 	<p>South America</p> <p>Freight sector strikes have had a widespread impact on the Brazilian dairy sector. Argentine milk production is growing, but rising feed costs will curb growth.</p> 
<p>New Zealand</p> <p>Favourable weather during the last third of New Zealand's 2017/18 (June 2017-May 2018) milk production season brought year-on-year milk production nearly on par with the prior year.</p> 	<p>Australia</p> <p>A sustained recovery in milk production is expected into the new season, as weather conditions and milk price signals point to ongoing farm profitability.</p> 

Global summary

In Q2 2018, combined milk supply growth of the Big 7 exporting regions came to a near standstill. Output increased just 0.5% YOY, the lowest since the end of 2016, despite Northern Hemisphere production being in full swing and New Zealand having a better finish to its weather-challenged season (see *Figure 1*). Year-on-year growth in Europe and the US failed to meet market expectations, which set the tone for a more bullish market.

Global butter markets continue to be elevated and act as a constant underlying force in the dairy markets. The European butter prices have rallied, but have yet to hit 2017 record highs. However, 2017 price levels are likely to be tested during 2H 2018.

Given low processor stock levels and seasonally low milk flows, Oceania prices will remain buoyant ahead of the new season (see *Figure 2*). Most commodity prices recorded small gains in May, and are now trading between 10% and 20% higher than the start of the year. Notably, there are healthy premiums for Oceania-origin cheese and skim milk powder, which will be an ongoing feature – at least until the new selling seasons get underway in the Southern Hemisphere and fresh product enters the market in a meaningful way. Rabobank is forecasting growth in exportable surpluses in both New Zealand and Australia through the peak production period.

The European Commission has made some inroads towards liquidating aging intervention skim milk powder stocks. EU-origin SMP continues to trade at a discount, compared to most regions, and is likely to do so as long as intervention volumes remain burdensome.

Combined global milk supply across the major export regions is expected to grow, albeit at a very modest rate of 0.4% in Q3 2018. Not surprisingly, year-on-year growth in

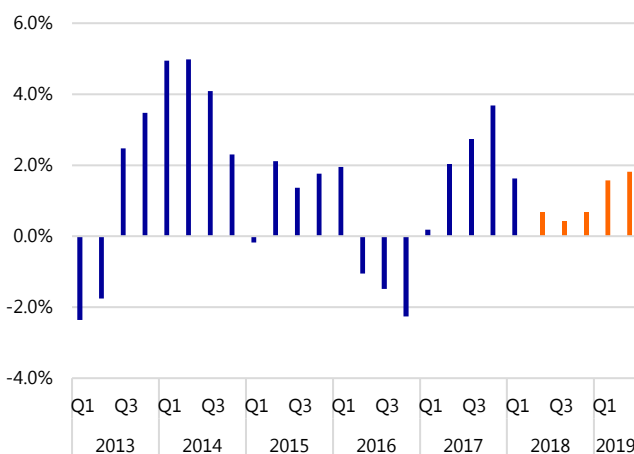
the net exportable surplus from the Big 7 will be limited in 2H 2018, before gaining some momentum in Q1 2019.

Without a disruptive event, global dairy markets are entering a period of relative stability in 2H 2018. Dairy commodity prices are expected to be largely range bound. But it is not all clear skies ahead for global commodity markets. While some inroads have been made clearing EU intervention stocks, 300,000 tonnes of SMP remain. In addition, US non-fat dry milk stocks are higher than the prior year. India, too, has a growing stockpile of SMP.

Export volumes from the Big 7 have tracked higher year-on-year in 1H 2018. While the global economy is in a healthy state, a closer look reveals that there are weak macroeconomic indicators in the form of lower consumer confidence and political instability in some consumer markets, which are important to the overall dairy market balance. As a result, it may be difficult to pass through higher commodity prices in some channels. Buy-side inventories are higher than normal in some regions, meaning that some buyers have ample short-term coverage and will be on the sidelines. However, Rabobank expects Chinese imports to pick up in 2H 2018, surpassing the previous year and prior forecast.

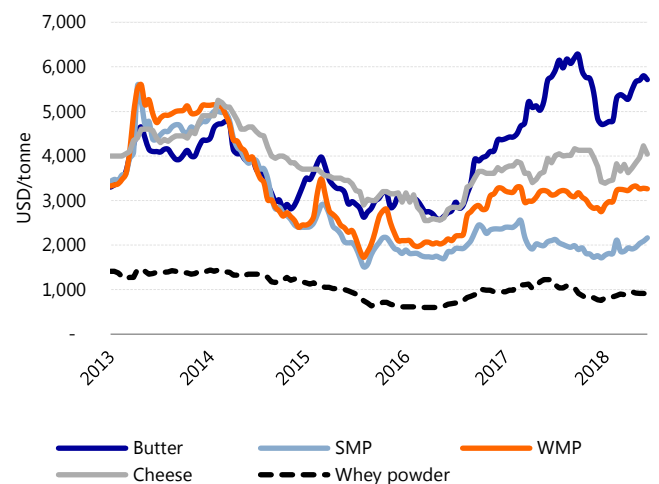
Recent announcements in a number of regions confirm that the milk price cycle has turned in most key export regions. Looking forward, Rabobank anticipates that combined milk supply growth across the Big 7 will remain positive into 1H 2019 – but at a manageable level and in line with consumption trends. Overall, the market fundamentals point to a period of relative stability in global prices (see *Table 1*). It may take a major weather event – particularly through the Oceania spring – to see a major shift in price direction as 2018 comes to an end.

Figure 1: Milk production growth, Big 7 exporters (actual and Rabobank forecast), Q1 2013-Q2 2019f*



* Note: Big 7 includes EU, US, NZ, Australia, Brazil, Argentina, and Uruguay. Source: Big 7 government trade agencies, Rabobank 2018

Figure 2: Dairy commodity prices FOB Oceania, 2013-2018*



* Note: Whey is FOB in western Europe. Source: USDA, Rabobank 2018

What to watch in Q3 and Q4

Mycoplasma bovis disease

Under the New Zealand government's phased eradication plan, 126,000 cows are tagged to be culled, in addition to 23,000 that already left the sector. The targeted cull will not shift the global market balance, but further testing of the herd will take place, and an increase in the number of infected cows could prompt production forecast revisions.

Trade wars

Trade war tensions are escalating. Mexico imposed retaliatory tariffs on US cheese exports, Canada lifted tariff rates on some US products, and rumours abound that Russia is banning Belarussian exports. A close watch also remains on Iranian sanctions.

SMP stock liquidation

The European Commission has reduced SMP intervention stocks by 76,000 tonnes since the start of the year. An additional 145,000 tonnes will be offered on 19 June. A large industry buy-in and acceptance of bids by the European Commission would boost the SMP markets and reduce European holdings by more than 50% since January 2018.

Dairy farm margins

Dairy farm margins across the export regions remain under pressure. Despite milk price improvements, dry conditions are emerging at a critical time for major crop development. Rising feed costs threaten to offset improved milk prices.

Oil prices

Rabobank expects oil prices to retreat from the current levels, but to remain elevated. Higher oil prices can support dairy demand in importing countries, but also contribute to higher input costs for dairy producers and reduce consumers' disposable income in oil-importing countries.

Chinese standards

China is in the process of revising national food safety standards for raw milk, pasteurised milk, sterilised milk (UHT), and possibly modified milk, including the testing method for identifying the use of recombined milk in pasteurised and sterilised products. Under the proposed standards, recombined milk (from powder) will be excluded as an ingredient in sterilised milk. There is also a possibility, based on industry discussions, that recombined milk will be banned in modified milk products. It is early in the public consultation process, but the proposal would have significant implications for China's imports of WMP.

Table 1: Quarterly dairy commodity prices (historic and forecast), Q1 2017-Q2 2019f

		2017				2018				2019	
		Q1	Q2	Q3	Q4	Q1e	Q2f	Q3f	Q4f	Q1f	Q2f
Butter											
Europe	EUR/tonne	4,192	4,512	6,049	5,413	4,597	5,575	6,150	5,725	5,250	5,100
US	USD/tonne	4,851	4,924	5,726	5,059	4,765	5,147	5,732	4,924	4,555	4,750
Oceania	USD/tonne	4,434	5,307	6,111	5,660	5,080	5,519	5,500	5,500	5,200	5,200
Cheese											
Europe (Gouda)	EUR/tonne	3,163	3,141	3,351	3,361	2,981	2,960	2,950	2,950	2,965	2,945
US (Cheddar)	USD/tonne	3,633	3,428	3,579	3,774	3,340	3,578	3,770	3,836	3,570	3,470
Oceania (Cheddar)	USD/tonne	3,719	3,646	4,054	3,981	3,602	3,838	3,950	3,900	3,800	3,800
Dry whey powder											
Europe	EUR/tonne	940	994	862	677	684	715	725	750	750	750
US	USD/tonne	1,070	1,121	957	765	574	610	760	850	850	850
Skim milk powder											
Europe	EUR/tonne	1,985	1,844	1,772	1,534	1,376	1,455	1,635	1,680	1,670	1,660
US	USD/tonne	2,105	1,927	1,927	1,682	1,544	1,721	1,918	1,984	2,040	2,095
Oceania	USD/tonne	2,419	2,013	2,000	1,843	1,882	1,950	2,050	2,050	2,050	2,100
Whole milk powder											
Europe	EUR/tonne	2,997	2,865	3,047	2,794	2,588	2,725	2,815	2,835	2,870	2,920
Oceania	USD/tonne	3,222	3,114	3,163	2,974	3,113	3,268	3,200	3,200	3,100	3,000
South America	USD/tonne	3,295	3,485	3,478	3,219	3,122	3,210	3,250	3,200	3,120	3,050

Source: Rabobank 2018

EU

Supported by low comparables and positive on-farm margins, expectations for improved milk production were set for the EU spring flush. However, poor weather conditions quickly tempered these expectations. Among key events, a severe cold front in March, followed by wet conditions during April, stalled grass growth and delayed the start of the pasture season across much of Europe.

Nonetheless, above-average temperatures were recorded during April and May. As a result, Q1 2018 milk production increased by 2.4% YOY, with March up only 0.5% YOY, after nine consecutive months of growth rates above 2% (see *Figure 3*).

The most severe impact of the weather events in Q1 2018 was recorded in the UK (+0.3%) and Ireland (+2.5%), with March output down 1.2% and 1.1% YOY, respectively. Milk production in Germany and France, accounting for approximately 35% of the EU milk pool, increased in Q1 2018 by 3.4% and 2.4% YOY, respectively. Italy (+3.6%), Poland (+3.0%), and Ireland (+2.5%) also recorded positive growth rates in the first quarter, while milk production levels in the Netherlands (-1.2%) remained below 2017, due to the implementation of the phosphate reduction plan.

As a result of the lingering weather impact, Rabobank estimates Q2 2018 milk production to increase by 1.5% YOY, down 0.5% from the previous forecast. Preliminary results for April show lower year-on-year milk production in the UK (-0.8%), Ireland (-5.9%), and the Netherlands (-1.7%). However, milk production in Poland improved by 2.8% YOY.

EU farmgate prices have fallen by 13% since December, averaging EUR 32.44/100kg across Europe in May. Nonetheless, cash margins remained positive for most European dairy farmers during the first four months of 2018, with feeding costs increasing marginally.

Increased price levels for dairy commodities are likely to translate into moderate farmgate price improvements during Q3 2018, providing positive cash margins as incentive for EU dairy farmers to push milk production in 2H 2018. However, the lower dairy herd size at the end of 2017 (EU-28: -1.0% YOY) and increased slaughter rates (EU-25: +4.5% YOY) during the first two months of 2018 indicate that the potential for milk production growth is limited.

As a result, Rabobank expects milk production to increase by 0.75% YOY for Q3 2018 and 0.5% YOY for Q4 2018. For 1H 2019, Rabobank expects a stable milk production growth of around 0.5% YOY.

In the two months to June, SMP prices lifted from EUR 1,320/tonne, the lowest recorded level since 2007, to EUR 1,450/tonne (+9.8%), while whey powder prices

increased by 7.2%. Despite the price recovery, prices for SMP (-21.6% YOY) and dry whey (-28.2% YOY) remain at a low base.

During the same period, EU butter prices rallied from EUR 4,850/tonne to EUR 5,690/tonne (+17.3%), widening the price gap between fat and protein. Based on the current tight market conditions for European butter, and the lower returns of butter and SMP compared to cheese and whey, Rabobank expects further price increases during Q3 2018. Prices for Gouda cheese were stable, at EUR 2,950/tonne (+0.3%) during April and May, while WMP prices rose by 5.7% (EUR 2,760/tonne).

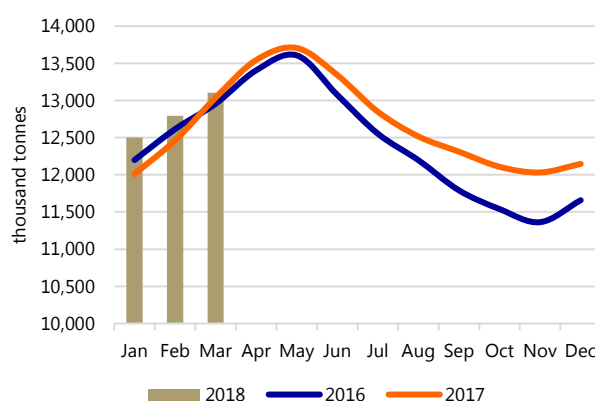
Cheese production grew by 1.8% YOY during Q1 2018. From a low base in 2017, butter production increased by 1.3% YOY. In the first three months of 2018, SMP output jumped by 7.0% YOY, which was still 3.5% below the 2016 level. WMP production declined by 4.2% YOY during Q1 2018.

At the April (24,066 tonnes) and May (41,958 tonnes) tenders, a total of 66,024 tonnes was sold out of the EU SMP intervention stocks, at a minimum price of, respectively, EUR 1,051/tonne and EUR 1,155/tonne, while only 10,289 tonnes were sold during the previous 15 months. With a total of 51,746 tonnes (78.4%), the majority of the accepted offers originated from Belgium (22,829 tonnes), Germany (17,152 tonnes), and Poland (11,765 tonnes).

The upcoming 19 June tender includes 144,847 tonnes of SMP. Recent production and EU-extra trade figures indicate a relatively tight market for fresh SMP, with low private stock levels, which is likely to support buying activity from intervention stocks.

Supported by higher oil prices, the US dollar value increased 2.9% vs. the euro in the five months to June, enhancing the EU's export position. Rabobank anticipates further strengthening of the US dollar through year-end.

Figure 3: EU milk production, Jan 2016-Jan 2018



Source: ZMB, Rabobank 2018

In LME terms, EU exports increased by 2.2% YOY in Q1 2018. Cheese exports expanded by 1.3% YOY, while SMP exports recorded a growth of 8.1%, after double-digit gains in 2017. Limited supplies of fresh SMP and high year-on-year comparisons will soften SMP export figures for the remainder of 2018. Despite buoyant growth (+13% YOY), the base for butter exports remains small, due to low European stocks.

Dairy consumption continues to be a mixed bag across Europe. Dairy companies continue to point to generally robust demand growth in the early months of 2018, but with trouble spots in some member states. Rabobank expects 1.0% domestic consumption growth, supported by robust export demand, based on positive economic developments.

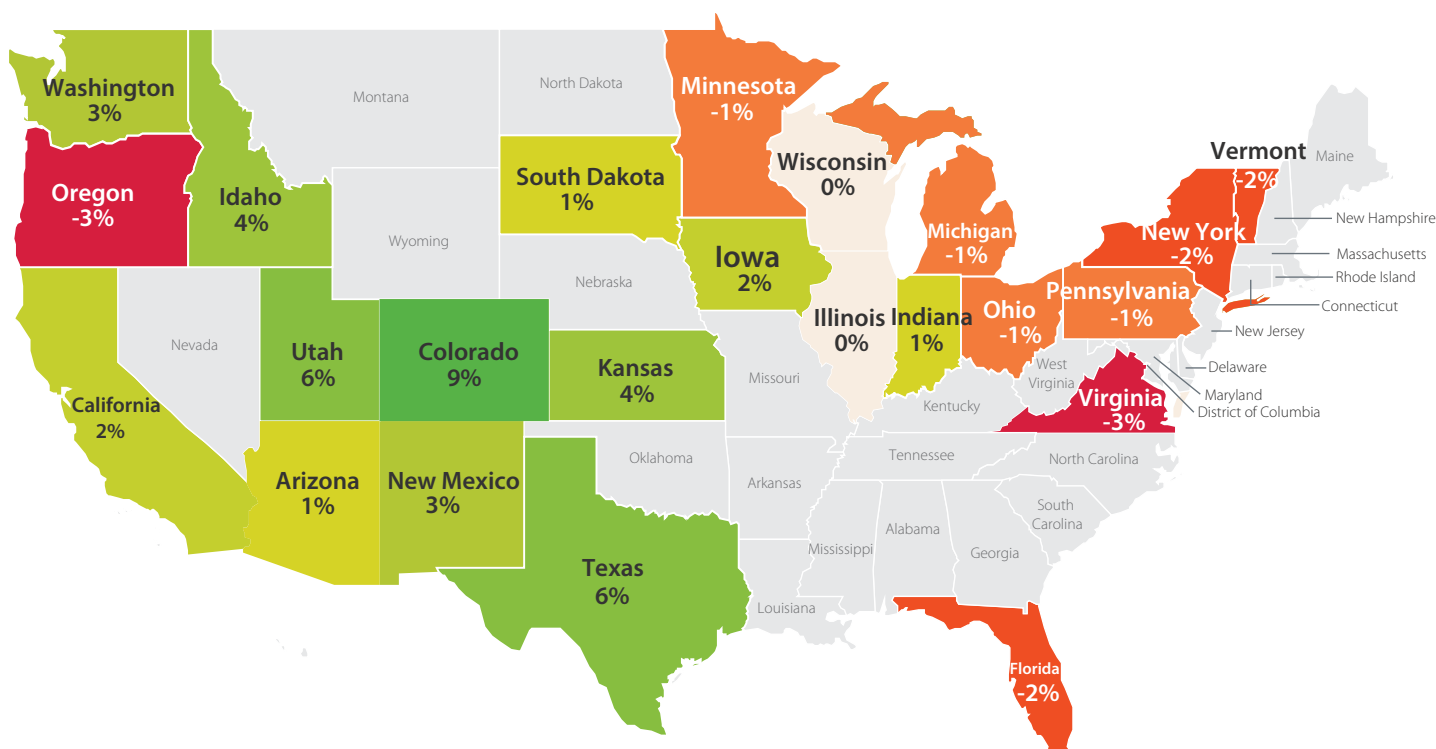
US

US milk production continues to grow, but at a slower pace than posted earlier in the year. January's milk output exceeded the prior year by 1.7%, but by April, the year-on-year gain dwindled to just 0.6%, representing the lowest year-on-year improvement in milk production since January 2016. Lower profitability and unfavourable weather conditions contributed to reduced gains in productivity per cow. In general, year-on-year milk production growth continues in the South-West and North-West, compared to the significant slowdown in year-on-year increases in the Upper Midwest and North-East (see Figure 4).

The US dairy herd has contracted by 8,000 head since February and stood at 9.4m head in April, still 8,000 head above last year. Compared to April 2017, Texas, Colorado, Idaho, and New Mexico jointly added 37,000 head, while the California herd declined by 19,000 head. Dairy cow slaughter through April 2018 is running more than 6% above last year. Ample heifer replacements, due in part to the use of gender-selected semen, are supporting higher culling in 2018. Larger monthly slaughter percentages vs. the prior year are anticipated through the year, resulting in a lower year-on-year herd inventory by Q3 2018. Furthermore, several states that reported growing dairy herds are currently facing severe drought conditions, which could prompt herd reductions if feed availability and costs become an issue in 2H 2018.

After a five-month run of lower milk prices, the dairy product markets have turned, and farmgate milk prices are trending higher. The US All-Milk price in April 2018 averaged USD 15.80/cwt (about EUR 29.50/100kg), up USc 20/cwt from the prior month, but still USc 70/cwt less than last year. The recent modest gain in milk prices was eroded by higher feed costs. Income over feed costs in April dropped to USD 6.62/cwt, the lowest level since June 2016. In the prior year, corn prices were below USD 3.50/bu, which contributed to more favourable margins and spurred more milk production. That is unlikely to occur in 2H 2018, as corn prices rise towards USD 4/bu and alfalfa prices surpass USD 183/tonne, the highest level since May 2015. US milk

Figure 4: US milk production by state: three-month rolling percentage change (Feb 2018-Apr 2018)



Source: USDA, Rabobank 2018

prices are forecast to seasonally rise through 2H 2018, but are expected to be overshadowed by rising feed costs, keeping year-on-year production gains for 2H 2018 closer to 1% than the historical year-on-year growth rate of 1.5%.

Nevertheless, Rabobank anticipates 1H 2019 US milk production growth to be on trend, at 1.5%.

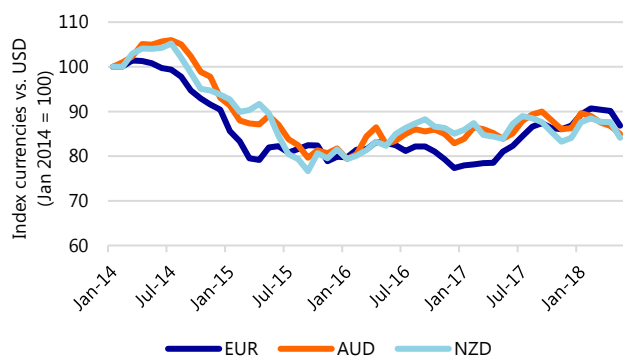
US demand through most of 1H 2018 has seen a slight uptick from late 2017, due to greater total (domestic and export) commercial disappearance. USDA reports that total commercial disappearance for Q1 2018 was up 1.6% YOY on a skim-solids basis and 3.4% on a milkfat basis. Retail demand for natural cheese and butter grew by more than 3% in the period. Foodservice continues to be supportive for dairy product demand, with US expenditure on foodservice up 4.5% in the first four months of 2018 vs. the prior year, according to the U.S. Bureau of Labor Statistics.

Unfortunately, retail sales volume of yoghurt, processed cheese, milk, and ice cream all posted year-on-year declines during the first five months of the year, according to IRI. While these more traditional products have suffered demand challenges, dairy is finding new channels of growth in other categories, such as ready-to-drink coffee. New market entry STōK is reporting exceptional growth and contains added milk protein (micellar casein).

US dairy exports grew by 10% in liquid milk equivalent terms in Q1 2018 vs. last year, driven by growth in NFDM (+23%) and whey products (+15%). US exports have benefited from a weaker US dollar through the early part of 2018, helping to keep the US dairy market balanced. However, the more recent strengthening of the US dollar could impede export growth in 2H 2018.

US dairy product stocks are mixed, compared to last year. Month-ending April NFDM stocks were up 20%, followed by non-American cheese (+14%) and butter stocks (+5%). In contrast, stocks of America and dry whey were off by 3% and 20%, respectively, from last year.

Figure 5: Exchange rates USD vs. exporters, 2014-2018



Source: OANDA, Rabobank 2018

Looking forward, Rabobank expects US dairy demand to be stable, with some upside as the economy remains strong despite being riddled with uncertainty, as the US aggressively negotiates key trade agreements. There are some potential headwinds for demand due to rising gas prices and a stronger US dollar. Higher gasoline prices could have a negative impact on consumer discretionary spending, which, to date, has helped boost foodservice sales. The export picture for the US may also lose some of its brightness, as the US dollar creeps higher on expectations of higher interest rates later in the year (see Figure 5).

New Zealand

The weather over the course of the 2017/18 product season was once again extremely variable. Despite both extreme wet and dry conditions, milk production recovered, with a strong finish during the final months.

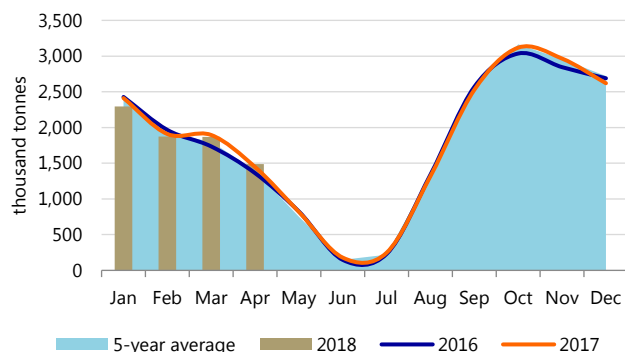
Milk collections for April 2018 increased 3% on the prior year, bringing national milk collection for the season-to-date within 0.1% of last season. With one month shy of a completed season, Rabobank expects 2017/18 milk production to match 2016/17, resulting in 21.4m tonnes of milk (see Figure 6).

The favourable ending to 2017/18 was enhanced by Fonterra raising the expected farmgate milk price to NZD 6.75/kgMS (up NZc 20/kgMS from the prior forecast), a profitable level for most New Zealand dairy farmers.

The new 2018/19 production season began 1 June, with a cloud of uncertainty as the New Zealand government announced its commitment to a phased eradication of the bacterium *Mycoplasma bovis*. This disease does not impact milk quality, but affects productivity by causing illness in cow herds. Under the government's strategy, 126,000 cows (including young stock) will be slaughtered over the next one to two years, in addition to the 23,000 cows culled earlier this year.

This decision will not have a significant impact on short-term milk production. Farmers will have some flexibility as to when the cows are culled. It is likely that many cows will be

Figure 6: New Zealand milk production, Jan 2016-Apr 2018



Source: DCANZ, Rabobank 2018

milking over much of the season, before heading to slaughter. As a result, those farms impacted have time to organise a new herd, following a mandatory 60-day livestock-free period after depopulating their infected herd.

Further testing for this disease will occur over the coming months – the number of cows and young stock culled could potentially be greater. Under the *Mycoplasma bovis* eradication plan, the discovery of a single infected cow results in the culling of the entire herd.

The more immediate impact of *Mycoplasma bovis* will emerge through increased farm costs, as dairy farmers across New Zealand increase on-farm biosecurity measures and mitigate risk to the disease where possible. Furthermore, a new levy will be issued to dairy farmers to cover some of the compensation costs for culled herds – the finer details of which are still to be announced.

Fortunately, 2018/19 looks set to be another season of profitability. Fonterra's opening price forecast is NZD 7.00/kgMS, and other dairy company forecasts are within a comparable price range. Based on forecast commodity prices over the next 12 months, along with a NZD/USD spot exchange rate of 0.70, Rabobank expects the farmgate milk price to average NZD 6.80/kgMS.

The implementation of Fonterra's restriction on palm kernel expeller (PKE) use is anticipated to have a stronger impact on milk production over the course of the new production season. The demerit point test, based on high use of PKE, will constrain what has historically been a lever of milk production growth, and it will mean New Zealand's milk supply is more vulnerable during inclement weather and the shoulder of the season.

Rabobank anticipates year-on-year milk production growth at 2% for 2018/19, supported by a favourable milk price, adequate feed reserves, and assuming normal weather conditions. Fonterra expects its milk collections to grow by 1.5% YOY, which translates into a national milk supply increase as high as 4%. If realised, this would be a record for New Zealand milk production, at nearly 23bn litres of milk, or an extra 872,000 tonnes of milk over the season prior.

Export volumes for the four months to April 2018 were higher, by 7% (52,000 tonnes) on the prior year, due to improved demand from South-East Asian and North African destinations. Shipments will continue to trend slightly above the previous year through Q3 and Q4 2018, due to higher milk flows resulting in additional dairy product available for export during the seasonal trough, compared to 2017. Entering 2019, export volumes are expected to increase nearly 2% YOY, as milk production improves vs. the prior season.

Australia

Australian milk production expanded by 4.5% in April (vs. the previous year) and brought the milk production total to 7.97bn litres – which represents year-to-date growth of 3.5%. The northern Australia region continues to battle dry conditions, which have seen milk production fall.

In the first quarter of 2018, total Australian dairy export volumes grew by 8%. Liquid milk export volumes continued to grow, with quarter-on-quarter growth of 25%. There was also a strong uptick in exports of cheddar cheese and whole milk powder during this period.

After a dry start to autumn in April, many production regions received a timely autumn break in May. Soil moisture deficits still persist after a very hot and dry period across key regions, but the situation is slowly improving.

The latest outlook for weather conditions from the Bureau of Meteorology suggests warmer and drier-than-average conditions through the winter months.

Recent guidance from the Northern Victoria Resource Manager indicates they will start the new season with determinations of about 20% (or higher) of high-reliability water shares. Systems are expected to have seasonal determinations of 100% high-reliability water by mid-October 2018 (assuming average inflows).

A number of southern-export dairy processors have provided milk price guidance for the 2018/19 season. At this stage, early price signals range between AUD 5.60/kgMS and AUD 6.20/kgMS, with much anticipation still surrounding price signals from Saputo.

The latest results from Rabobank's Rural Confidence Survey confirm a bounce in dairy farm confidence levels across the southern export region (from a weak base), on the back of better milk price expectations.

Based on the weighted average commodity market price and currency for 2017/18 (up to end of May), the base commodity market milk stands at AUD 5.70/kgMS.

Rabobank's forecast for Southern Australia's 2018/19 farmgate commodity milk price has been increased. It now stands at AUD 5.90/kgMS (excluding premiums and using a spot currency rate of 0.76) vs. the previous forecast of AUD 5.40/kgMS. Rabobank is forecasting a slight drifting of the Australian dollar, to 0.74 through 2H 2018, which is supportive of export returns. A full-year price of AUD 6.40/kgMS is now within reach, but intense competition in the local retail and foodservice channel remains a clear risk to returns.

Latest data shows that, in Q1 2018, whole milk powder (+48%) has been a priority for dairy processors, but cheese vats have also been kept busy, with production up 3% in the quarter and season-to date output running at 85,000 tonnes.

With total dairy exports running 9% higher in the four months of 2018, inventory levels are running at normal levels.

Australia's milk production curve is entering its low period, meaning product availability will be tight until the season gets underway (see Figure 7).

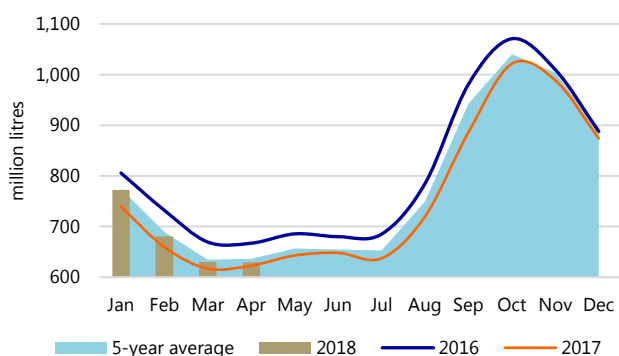
Due to dry conditions, dairy farmer operators' immediate cashflow is being stretched due to a summer feed gap. However, the 2018/19 season continues to shape up as a profitable season for Australian dairy farm operators, on the back of a lift in milk price expectations – but with risk to margins from rising supplementary feed costs and weaker livestock trading conditions on the back of lower cull cow prices.

This will see the continued expansion of the Australian exportable surplus through the next 12 months.

The Australian consumer market for dairy products continues on trend, but with the underlying themes of consumers in search of natural and full-fat products. However, weak economic settings linger in the background, with Australian consumers pressured by high debt levels, weak wage inflation, and – more recently – by falling house prices.

On 1 May, Saputo completed the acquisition of Murray Goulburn's assets. Saputo is moving ahead with the divestiture commitment for the Koroit plant in Western Victoria. The sale process is expected to complete by 1 July.

Figure 7: Australian monthly milk production, Jan 2016- Apr 2018



Source: Dairy Australia, Rabobank 2018

Brazil

Several truck driver associations went on strike in late May. The movement gathered strength rapidly and became a national strike, blocking highways and leaving thousands of trucks idle for over ten days.

The impact on the dairy sector was widespread. Milk collection routes were severely disrupted, with conservative estimates indicating that milk production in May will be around 20% lower than projected.

Processing plants received less milk, with reports that some plants had around 90% less milk during the strike and needed to shut plants. Third-party companies that collect milk had to stop operating in many states, and even processors who own trucks could not find fuel nor pass blockades – and so, farmers had to dump their milk.

Farmgate milk prices will likely see a spike in Q3 2018, and wholesale and retail prices for products such as liquid milk are expected to escalate.

Both farmers and processors will have to absorb sharp losses from a dramatic reduction in income during May. This will be hard for the sector, as it comes after a 12-month period of low profitability and simply means the recovery in production will take time.

In many cases, farmers could not find feed – and, as a result, herds suffered from poor nutrition for nearly ten days, which could impact the remaining lactation cycle.

Farmgate milk prices started April at around BRL 1.25/litre, but should enter June at a higher level and move higher still in July. However, domestic feed costs will likely remain elevated, as international demand for Brazil's grains is strong, particularly given Argentina's supply constraints with its current grain crop.

Rabobank expects milk production in Q2 2018 to be 9% lower YOY as a result of the trucker strike in May, which reduced output by 20% for that month. Looking ahead, production will take time to recover, and it will probably decrease a further 6% in Q3 2018.

In terms of trade, both imports and exports retreated in the first four months of 2018. Imports were down by 35% in volume terms, reflecting that domestic prices have been lower than last year and that demand has yet to start growing because of a very weak recovery after the end of the recession. Farmgate milk prices were already on an upward trajectory before the strike, as the trough in milk production approached during the middle of the year.

Demand will likely remain weak through Q3 2018, as the economy shows signs of stagnation and consumers remain cautious ahead of the presidential elections in October.

Argentina

Milk production continued moving higher in Argentina, despite drought conditions during the beginning of the year. Alfalfa production did not suffer that much, and the herd's physical condition remained strong.

Higher farmgate milk prices helped incentivise farmers to increase output, resulting in a 4% volume growth during Q2 2018. However, the favourable conditions are now rapidly changing, as feed costs continue to increase and overall inflation in the country remains at over 20%, putting further pressure on other non-feed-related variable costs.

The drought conditions of the beginning of the year had a significant impact on the development of the grain crops, and, as the weather has turned to heavy rain, the quality of the soy and corn crop deteriorated further.

As a result, costs for farmers are increasing significantly and are directly affecting profitability at the farm level. Rabobank expects milk production to decline by around 1% in both Q3 and Q4 2018, after strong growth in 1H 2018. With the Argentine peso further depreciating, the pressure on domestic grain prices will be significant for the rest of the year, as dollar-denominated prices remain at high levels.

Argentina's economic recovery has been showing signs of waning, and the recent sharp depreciation of the peso indicated that there are concerns regarding the government's ability to contain inflation and guide the country back onto a more sustainable growth path.

Demand has been increasing thus far in 2018, but the outlook for consumer purchases is less positive for the second half of the year. Inflation remains stubbornly high – and despite continued hikes in interest rates, the government has seen difficulties when attempting to moderate price levels. This is putting pressure on consumer purchasing power. As a result, Rabobank expects demand to move higher by just 1% in 2H 2018.

In terms of trade, Argentina is likely to increase exports in the coming months, as it has been building stocks of whole milk powder – and a more devalued economy will make it even more interesting to export.

In recent years, Argentina has lost share in the international market. However, if local costs are not under control, it will be difficult for the country to be profitable, even at the current exchange rate of around ARS 25/USD.

India

India is the largest milk-producing and -consuming country in the world; however, its impact on global trade is not significant. India has mostly remained a locally produced and consumed milk economy over the last decade. This is likely to remain the case in the short term.

Intermittent trade interactions in times of surplus and deficit occur due to the variability in monsoon rains impacting domestic milk production. India's current milk production is 165.4m tonnes (FY2017 ending March) and has grown at CAGR of 4.9% over last decade. According to Rabobank, milk production (cow and buffalo) is expected to exceed 180m tonnes by 2019 (see Figure 8).

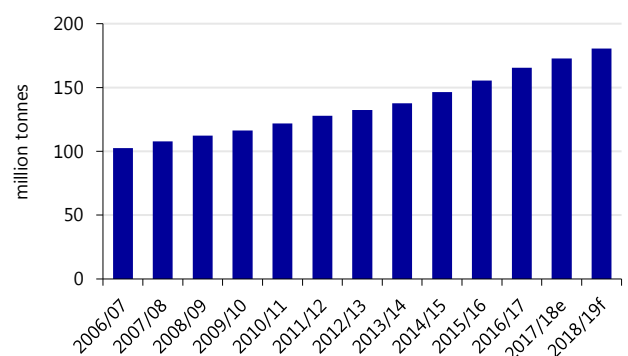
India has exported SMP over the last few years, due to strong milk production growth. Nevertheless, exports have retreated in recent years, from a high of 130,000 tonnes in 2013/14 to 11,500 tonnes in 2017/18. A period of low global SMP prices has meant returns from the world market have fallen well below domestic SMP returns. Currently, domestic SMP prices range between INR 140/kg and INR 150/kg (USD 2,150/tonne to USD 2,300/tonne), representing a decline of 20% to 25% over the last one-and-a-half years.

Domestic SMP inventories have been building as production outstrips local usage. Stocks are now projected at record highs – with estimates of between 250,000 tonnes and 300,000 tonnes, more than 50% of the normal stocking.

Exports are not expected to be significant during 2H 2018, with local wholesale markets expected to offer better returns.

Increased availability of cheaper SMP has resulted in the decline of raw cow milk prices, with current farmgate milk prices at INR 20/litre to INR 22/litre (USD 0.30/litre to USD 0.35/litre), down 20% over the last 18 months. Raw milk prices are expected to stay at this level during the current lean season (in progress) and incoming festival demand period.

Figure 8: Indian milk production, 2006/07-2018/19f



Source: National Dairy Development Board, Rabobank 2018

Consumer demand for milk and dairy products remains strong, driven by factors like the shift from loose to packaged products (liquid milk, curd, paneer, etc.) and growth of value-added dairy products (cheese, yoghurt, UHT milk, etc.).

Most dairy companies with a high share of branded consumer retail dairy products are expected to experience good growth and margins this year. Price declines are not anticipated for value-add dairy products. However, commodity companies with a high dependence on SMP sales will face lower growth and margin compression.

Corporate activity has remained active, with the South Korean company Lotte acquiring a 100% stake in the India-based ice cream company Havmor for USD 150m in November 2017.

In contrast, Danone divested its underperforming fresh dairy business in India early this year, shifting its focus to growing the company's nutrition portfolio in India.

China

Average farmgate milk prices in China eased further in May, to CNY 3.42/kg (USD 0.54/kg), as production finally gained momentum in April and as demand remains seasonally quiet. Current farmgate milk prices are down by almost 3% since the beginning of the year and are 1% lower YOY.

Weaker milk prices are more than offset by a strengthening renminbi in US dollar terms over the past 12 months, leaving US dollar-adjusted prices 7% higher than the same period last year.

Following flat year-on-year production in Q1 2018, the Ministry of Agriculture's raw milk production index pointed to a near 2% YOY production growth in April. Industry contacts suggest that, year-to-date, processors have seldom rejected raw milk. Throughout the past spring, major dairy-farming companies have rarely needed to dry milk at the farm level. These are signs that adjustments from prior years have increasingly contributed to a tighter supply of raw milk in China. Summer weather conditions began a little earlier than the preceding year. Nevertheless, some large-scale farms are optimistic about milk flow over the summer, compared to last year, because they recently invested in on-farm cooling facilities. Large processing companies increased financial incentives to dairy farms for milk received during the peak of summer.

Additional feedback from channel checks indicate that there is little domestically-produced milk powder in the marketplace this year, whereas imported powder appears to be quite 'fresh'. Rabobank is holding steady, with its Chinese milk production growth forecast of 2.2% for 2018 (2% for 1H 2018 and 2.5% in 2H 2018), assuming a more normal summer, as well as improved cooling capabilities on large

farms. Rabobank expects a sustained period of production growth of 1.6% YOY, extending into 1H 2019, primarily driven by yield improvements.

Following 2017's relatively strong consumption growth, Rabobank has observed the continued strength in China's underlying consumption momentum in 2018. Nielsen's Chinese consumer confidence index hit a ten-year high during Q1 2018, and government statistics indicate that final consumption contributed a higher share of 77.8% to GDP growth during Q1 2018 (vs. 77.2% in Q1 2017). Five domestic listed dairy-processing companies (a combination of national and smaller regional players) in aggregate reported a near 14% YOY growth (seasonally adjusted for the late Chinese New Year this year), driven by volume growth, pricing changes, and premiumisation effects.

As such, Rabobank has revised its demand growth estimates to 2% for both 1H and 2H 2018, compared with previous forecasts of 1.5% and 1.2%, respectively. While Rabobank demand forecast is revised upward for 2018, uncertainties around a trade war could potentially have negative implications on the renminbi's exchange rate and economic growth in China. This could, in turn, hurt demand growth due to higher prices (in CNY) and pose greater uncertainty in disposable income growth.

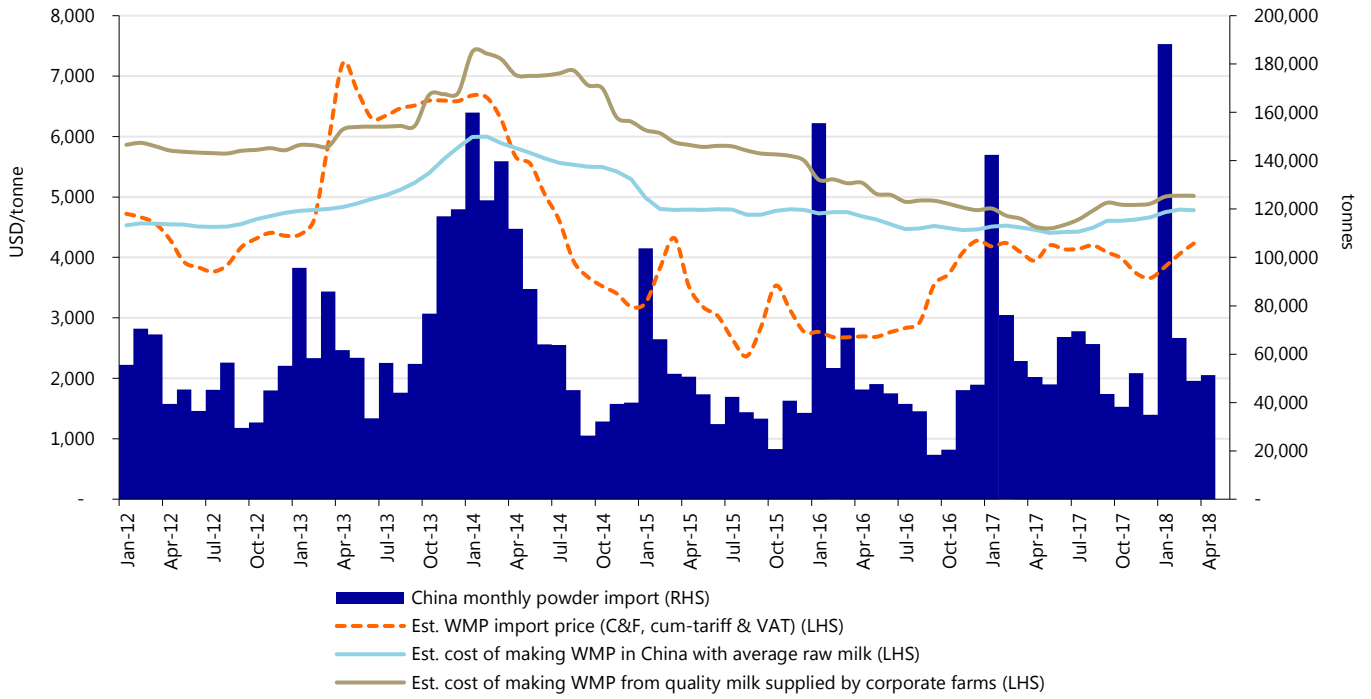
Rabobank maintains its outlook for dairy consumption growth at 2% YOY into 1H 2019.

Chinese net dairy import volumes (in liquid milk equivalents) grew by 11% in Q1 2018, largely driven by strong imports in January 2018. However, import momentum has slowed in subsequent months – as stocks were more than adequate to replenish short-term needs, China enters a quieter period of consumption (seasonally), and as milk production rises with the spring flush.

Rabobank has raised China's annual net import growth requirement to 16.7% YOY for 2018, in liquid milk equivalent terms (12% in 1H and 22% in 2H), from 13.8% previously, following revisions in 2018 forecasts of consumption. As a result, 2018 import growth will be nearly the same as experienced in 2017 – which was a record high. Greater year-on-year demand is expected in liquid milk, cheese, butter, SMP, and IMF – rather than in WMP and whey. Year-end 2018 stock levels are estimated at just less than one month, unchanged from the year's beginning level.

With new forecasts for both production and demand growth through 1H 2019, Rabobank expects a slowdown in the rate of growth of imports, to 2.7% during 1H 2019, following 1H 2018 near-record levels. There is still an appeal for import purchasing from Chinese buyers. However, Rabobank WMP parity analysis shows the discount for Oceania-origin product vs. local product has further narrowed, due to recent small increases in global commodity prices and weaknesses in local milk prices. The discount is nearing 10% vs. the domestic average milk price and 14% vs. the corporate farm milk price (see Figure 9).

Figure 9: China WMP import parity, Jan 2012-May 2018



Source: China Customs, Chinese Ministry of Agriculture, Rabobank 2018

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