

PERSPECTIVE AUGUST 2016

The latest insights in global dairy markets

Your regular global overview of the dairy industry along with trends in milk production, commodity prices and dairy trade.

Ingredients by Fonterra

Dairy for life

Welcome back to Perspective!

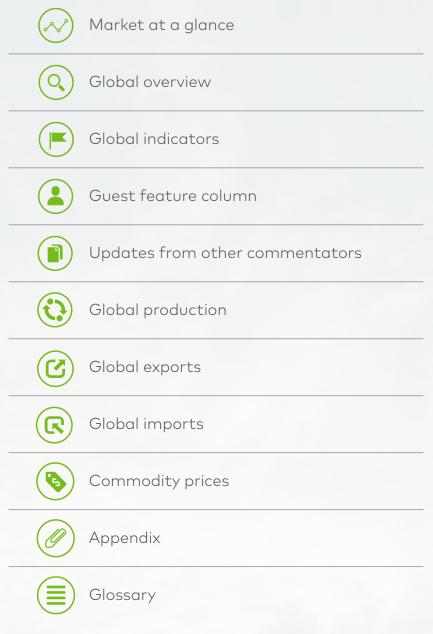
Here at NZMP we are looking forward to the 2016-2017 season, as farmers in New Zealand and Australia begin to gear up for spring production. It is therefore fitting that this month's column is brought to you in association with Rabobank Australia, where our guest writer Michael Harvey takes a look into Australia's recent milk price fallout, and the longer-term implications for the Australian dairy industry.

Remember, if you have any suggestions for topics you would like to read about in Perspective, or any other general feedback, we would love to hear from you. You can contact us at **nzmpbrand@fonterra.com** or through your account manager.

Kind regards,

The Perspective team

In this issue



And A. P.

mik-a

Market at a glance



PRODUCTION IS SLOWING BUT GLOBAL EXPORTS CONTINUE TO SHOW GROWTH AS MILK POWDER DEMAND PICKS UP, AND MAJOR IMPORTING REGIONS CONTINUE TO DEMAND FRESH AND FLUID DAIRY



Global overview



As with last month, global production continues to decelerate. In the EU, YOY production was just +1% in May, slowing for the third consecutive month. Reduced margins, combined with adverse weather conditions and increased cow slaughter, even drove production declines in France (-1%) and the UK (-5%); UK suppliers are re-thinking whether monetary incentives are needed to maintain production volumes. In the US, production continued its slow growth, which has been affected by hot and humid conditions. Dairy herd size has been holding steady with most increases in production attributed to increasing milk per cow outputs. In Oceania, YOY production remains down in NZ (-2%) and Australia (-6%). Both these markets have seen increased cow slaughter as farmers continue to manage costs on farm. This will lead to reduced cow herd numbers for the start of the Southern Hemisphere's new season.



EU dairy exports increased +12% in April, compared to the same month the previous year. Most of this growth has been driven by higher-value products such as fluid and fresh dairy, cheese, and infant formula. The weakening of the Euro has given its exports an edge over the strengthening NZ and US currencies. The story in the US has not changed; as high domestic demand for dairy, and the consequently higher domestic prices, limited supply for exports resulting in a -10% YOY decline. Lactose and whey protein exports continue to be the bastion of US exports. NZ exports still show great resilience, growing +33% YOY. Milk powders have performed well, with SMP growing at +69%, and WMP at +16%. China remained the top destination for milk powders, although SEA also had a healthy appetite for SMP, and MEA for WMP. Australia exports also fared well in May, growing at +35% YOY, led by fluid and fresh dairy (+37%), and SMP (+46%).



Dairy imports across markets are being led by fluid and fresh dairy, which speaks to growing opportunity for suppliers in this space. China YOY dairy imports grew +25% in June. This was led by fluid and fresh dairy (+45%). Although this may have displaced some need for powders, WMP jumped +120%. Asia imports have fluctuated this year, falling -2% in April. Falling demand has been attributed to the high levels of inventory and the downturn in MEA, affecting the re-exports from Malaysia. MEA demand decreased -11% in April, with losses mainly in milk powders and cheese. Fluid and fresh dairy demand remains positive, with significant supply from the EU. Latin America imports grew +12% in April, driven by milk powders as the region makes up a shortfall created by adverse weather conditions. Meanwhile Russia imports grew +7%, led by fluid and fresh dairy, cheese, and whey powder – much of which was sourced from Belarus. Turkey is in discussions with Russia about lifting the embargo to allow them to supply dairy to the country.



The GDT Price Index rose +12.7% to reach 833 at TE 170 (16 August), following an increase of +6.6% to 739 at TE 169 (2 August). TE 170 saw 37,766 MT sold to 177 winning bidders. Futures Markets are positive for WMP and cheese, with prices trending upwards through to the first quarter of 2017. However, the extent of growth forecasted varies between organisations. SMP and butter forecast a split between being highly positive and moderately negative. 🕒 Global indicators



Food commodities

FAO Food Price Index fell for the first time in five months to reach 161.9 in July, down -0.8% from June, and -1.4% below July 2015. Dairy Price Index reached 142.3 in July, up +3.2% from June. Prices rose for all the dairy commodities that compose the Index, in particular for butter. Yet, prices remain at very low levels compared to recent years. In the face of lacklustre international demand, especially for milk powders, the EU is considering measures to foster a reduction of milk output. Meanwhile, in Oceania, generally favourable rainfall at the start of the 2016/17 milk year has improved yield prospects.



Although international guidance indicates the probability of a La Niña event has fallen, it still has a 55-60% likelihood of La Niña developing during August-October 2016. This likelihood increases in the next quarter. If La Niña conditions are established, it is expected that this event will be characterised by a relatively late onset, short duration, and weak amplitude.

Source: Qualitative assessment; Climate Prediction Centre

Source: FAO



The EUI's forecast for global growth is largely unchanged from the adjustments made immediately after the UK's EU referendum. However, downward revisions to some European countries have been somewhat less pronounced than originally expected. Financial markets have also rallied since Brexit, due to expectations of more accommodative monetary policy both in the UK and US. Global growth is therefore forecast to grow at +2.2% in 2016, quickening to +2.4% in 2017. Growth may slow in 2019 as the US suffers a short recession.

Source: Economist Intelligence Unit



As reported last month, the OECD have suspended their release of composite leading indicators (CLIs) until September 2016. This has been in response to the unforeseen impacts of the UK referendum, and is an attempt to queid appringesurate and potentia

and is an attempt to avoid any inaccurate and potentially misleading assessment of the short-medium term outlook.

Source: OECD



Guest feature column







Michael Harvey Senior Analyst – Food and Agribusiness Research and

Advisory, Rabobank

Michael Harvey joined Rabobank Food and Agribusiness Research and Advisory (FAR) in 2011 as a senior analyst, responsible for dairy and farm inputs. Rabobank's FAR team is charged with analysing developments in food and agricultural markets and industries, and advising the bank and its clients on strategic implications for their businesses.

Michael was raised on a dairy and irrigation farm in northern Victoria, Australia. Michael holds a Bachelor Degree in International Trade from the Victorian University and is currently undertaking a Postgraduate Degree in Diplomacy and Trade at Monash University.

Australian dairy – the fallout as milk prices turn sour

These are very challenging times for many Australian dairy farmers. The 2015/16 season was particularly challenging as Australian dairy producers battled very hot and dry weather conditions – despite a good start to the season. Circumstances were made more difficult when farmgate milk prices were reduced late in the season.

The reality was a global commodity price slump eventually took its toll on farmgate returns in Australia, as it has done in all dairying regions around the world. This delay was, in large part, due to the common strategy deployed by processors in Australia to 'value-add' to their respective product mix. The goal is to generate higher and more stable returns for the value chain. However, this is not limitless and dairy commodity prices will always drive the value of milk in the industry.

The immediate fallout is that the late-season price reductions saw farmgate returns fall below breakeven for many, creating cash flow challenges. As a result, dairy producers have made immediate adjustments to production systems in an effort to cut costs. This has involved a combination of reducing herd sizes, changing to lower-cost feed systems, minimising capital expenditure and cutting discretionary spend.

Australian milk production rounded out the 2015/16 season down by at least two per cent – compared with the previous year. Expectations this season are for a sizeable drop in Australia's milk supply on the back of on-farm adjustments to production systems.

There are some pockets of good news for Australian producers, however. Seasonal conditions are critical in helping producers manage the difficult pricing environment. On this front there has been good rainfall, which will underpin an improvement in pasture growth and homegrown feed, helping to reduce production costs. This will partially mitigate lower milk prices but producer margins will remain below breakeven in 2016/17.

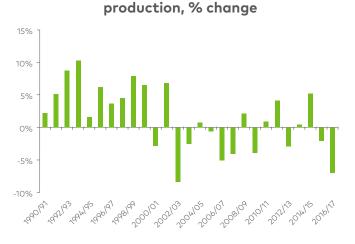
Rabobank expects at least a seven per cent decline in milk production in 2016/17, bringing total annual volumes back below 9.2 billion litres and contributing to a tightening in milk supply for global markets in the approaching months. There are long-term implications stemming out from the events of last season. Across the industry there have been calls for changes to the milk-pricing models and improvements to be made to market transparency. Time will tell what effective changes can be realised on these issues.

The biggest challenge currently confronting the Australian dairy industry is a lack of confidence to invest. Australia's ability to generate the confidence and capital to invest for growth has been a constant roadblock for the industry. In the past decade Australian milk supply has virtually been stagnant as the industry has faced both climatic and market price risk.

The current market downturn has all but extinguished any momentum and will require a significant improvement in conditions to swing confidence levels.

There is, however, light at the end of the tunnel. Global milk supply is under pressure in all export regions with producers battling low milk prices. A tightening of supply from the export engines will allow global surplus to be run down and pave the way for a price recovery in the coming months.

Australian annual milk



Source: Dairy Australia, Rabobank, 2016

USDA, Dairy Outlook

Recent developments for July 2016

- In May, milk production continued to grow, reaching 18.6 billion pounds, up +1.2% from May 2015. Milk per cow averaged 1,999 pounds, +23 pounds above the same time last year. Milk cow numbers during May were 9.33 million head, +3k more than May 2015.
- Dairy imports increased from April to May by +96 million pounds on a milk-fat equivalent basis, and +59 million pounds on a skim-solids milk-equivalent basis. Products with notable increases in imports included cheese, milk protein products, milk albumin, and food preparations with significant dairy content.
- Dairy exports also increased from April to May by +65 million pounds on a milk-fat basis and +148 million pounds on a skim-solids basis. Products with notable increases in exports included dry whole milk, cheese, whey products and lactose. Exports of butterfat products decreased significantly from April to May. Domestic demand for dairy products has been relatively high in 2016, especially on a skim-solids basis.

Dairy forecasts for 2016

- Forecasts of milk cow numbers for the second and third quarter of 2016 have been lowered by -10k head, although there has been no change to the milk per cow forecast. As a result of lower cow numbers, total milk production has been adjusted down by -0.2 billion pounds, to 212.4 billion pounds.
- On a milk-fat basis, 2016 imports are expected to be 6.8 billion pounds, unchanged from last month's forecast. However data for milk albumin and food preparations suggest slightly higher skim-solids imports for the year.
- With lower exports of butterfat products expected to more than offset by higher dry whole milk exports, the export forecast on a milk-fat basis is lowered by -0.1 billion pounds to 8.4 billion pounds.
- Based on recent price data and expectations of robust demand, prices for all of the major dairy products are expected to be higher than forecasted last month.

Dairy forecasts for 2017

- Milk cow numbers are expected to increase by +15k cows for 2017 to reach 9.335 million, due to higher forecasts for milk prices and lower forecasts for feed prices. Total production is therefore forecast at 215.6 billion pounds, +0.3 billion pounds higher than June predictions, and an increase of +1.5% from 2016.
- 2017 forecasts for imports and exports on a milk-fat basis are unchanged, at 6.7 and 8.7 billion pounds, respectively. Meanwhile on a skim-solids basis, import and export forecasts have been increased slightly. This reflects the expectation that higher exports of whole milk powder are expected to offset lower exports of butterfat products in 2017.
- Imports are now forecast at 6.3 billion pounds, 0.1 billion pounds higher, due to higher expected imports of milk albumin and food preparations with significant dairy content. Exports are forecast at 37.3 billion pounds, 0.2 billion pounds higher than previously suggested.
- Higher dairy product price forecasts are extended into 2017. Robust domestic demand is expected to contribute to higher prices for all major dairy products, and improving international markets are expected to support higher domestic prices for NDM and dry whey.

Updates from other commentators



Blimling, Forecast Update

August 2016

- Despite strong milk outputs, late summer heat has hit milk production and fat content. This has resulted in tighter fresh cheese supplies, whilst higher than expected domestic demand has kept cheese moving quickly through the supply chain. Higher US prices are encouraging greater cheese imports late in 2016, displacing domestic product. The cheese market will likely find continued support ahead of the holiday season as concerns regarding reduced fresh cheese availability keep a bid in the marketplace. However, heavy inventories will likely cap upside.
- Similarly, demand for butter remains strong heading into the fourth quarter, as higher-than-expected stocks of uncommitted bulk butter find their way to the market. This is due to unexpected late season butter production. Churns remain active later into the season than normal, taking advantage of low cream multiples.
- As stock builds, cold storage reports indicate a potential fall in prices. Butter inventories typically peak in May before falling seasonally, yet June 2016 stocks grew by +1 million pounds to 326 million pounds. While not unprecedented, this bucked the average decline of -4 million pounds seen over the prior five years. Inventories heading into the third quarter are the largest since 1993. It is likely that even with robust demand, butter stocks heading into the next quarter will be significantly higher than year ago levels, meaning plenty of supply for the holiday season.
- The NDM/SMP market will likely continue trading around EU Intervention price levels. Though fresh product may garner premiums, heavy global supplies will cap upside potential.

Informa Economics, Global Dairy Report

August 2016

- Dairy prices have continued to recover, as supplies appear to tighten. Overall prices are expected to trend higher into early 2017, especially as milk production across the major exporters, except the US, continue to be lower than predicted.
- Cow slaughter in NZ has remained at higher than expected levels for the third consecutive month. This will result in herd numbers being reduced again this season.
- Farmgate margins in both Europe and the US have hit their low points, with prices now on the rise. However, there will be a lag time between increased margins and subsequent improvement in production. Increases are therefore not expected until early 2017, with EU-28 production predicted to stay below year ago levels through Q1 2017.
- In addition to the normal economic-driven and weather driven production uncertainties, the EU Commission has budgeted towards monetary incentives to encourage farmers to reduce production during Q4-2016 and/or Q1-2017. Details have yet to be finalised, but at its worst this could potentially reduce EU-28 production by -1%.
- Global import demand was higher than expected during June. Recent data on GDP and dairy prices, point towards stronger imports this year. Chinese demand has been close to forecasted level (+16% YTD). However, falling domestic prices and reports of inventory building could potentially lead to a slow down in demand in the foreseeable future. Chinese import growth is therefore forecasted to average +2.5% YOY for the rest of 2016, and +10% for 2017.



MILK PRODUCTION GROWTH IS SLOWING IN EUROPE, WITH DECLINES FOR MANY KEY PRODUCERS

To view a chart that illustrates year-on-year changes in production –

CLICK ON ONE OF THE BOXES BELOW

New Zealand



Production change for the 12 months to June 2016

- Total NZ milk production in June was comparable to the same month last year, and remains at -2% for the 12 months to June.
 Volumes are currently low due to the seasonality of supply.
- NZ experienced mild winter temperatures, which were slightly above historical averages over June and July. However these favourable conditions ended with a recent cold and snowy start to August, which may hamper short-term production.
- Reductions in production volume are also expected as cow slaughter has been up, indicating that cow numbers will be down for the second season in a row.

Australia



Production change for the 12 months to June 2016

- Australia production in June continued to decrease -6% compared to the same month last year, driving down production in the 12 months to June by -2%.
- Late season milk production has been heavily impacted by the reduction in Australian milk prices, as the market has aligned to global prices.
- To manage costs dairy farmers have been increasing cow slaughter (+50% YOY, +37% YTD), particularly in southern parts of the country. This is despite excellent rainfall, which paired with warm temperatures will lead to favourable conditions for pasture growth in spring.
- The above average rainfall in the past couple of months has reversed most of Australia's short-term drought conditions, although ongoing concerns about longer-term water deficiencies for Victoria, Queensland and Western Australia persist.

European Union



- EU production in May remained at +1% YOY as production continues to show signs of slowing for the third month in a row. This brings MAT growth to +4%, driven by Ireland (+15%), the Netherlands (+13%), Poland (+5%), and Germany (+4%).
- The average milk price in the EU eased only slightly this month. Prices for July and August were forecasted to remain flat, although recovery is expected to begin from September.
- In response to low milk prices and inconsistent weather, YOY production in both France and the UK are showing declines at -1% and -5% respectively, with some UK suppliers indicating they may incentivise increased production to bring back volume.
- The additional milk from the Jan-May 2016 period has been primarily channeled into increasing production of SMP (+17%), butter (+12%), WMP (+10%), cheese (+3%), and fermented milk (+2%).

United States



- US production in June again increased +2%, compared to the same month last year, bringing milk production for the 12 months to June, up +1%.
- Currently hot and humid conditions are characterising this year's US summer. This could lower production as well as changing milk composition.
- Growth in production has been primarily credited to increase in milk per cow.
- Dairy herd size has essentially held steady since March. However there was some slight growth over June, contributed to by lower feed costs and cow slaughter being down -2% YOY. This brought national herd size to 9.3 million. As US dairy farmers wait for milk prices to improve, it is possible that cow numbers will remain relatively steady through to the end of 2016.
- The United States Department of Agriculture is forecasting milk production to grow +1.9% in 2016.

Source: Data from Global Trade Information Services and from government and industry websites, including USDA, Eurostat, Dairy Australia and Dairy Companies Association of New Zealand.

Global exports

NZMP PERSPECTIVE





To view a chart that illustrates year-on-year changes in exports –

CLICK ON ONE OF THE BOXES BELOW

GLOBAL DAIRY EXPORTS REMAIN STRONG, EXCLUDING THE UNITED STATES, WHICH CONTINUES TO SEE INCREASED DOMESTIC DEMAND AND LESS COMPETITIVE EXPORT PRICES

New Zealand



- NZ June exports increased +33% (+65kMT) compared to June last year, bringing total export for the past 12 months up +7% (to 207kMT).
- Growth was seen across all key commodities. Given the global abundance of milk powders NZ's export results were strong; SMP rose by +69%, and WMP by +16%. China remained the top destination for both, with demand growing +6% and +53% respectively.
- SEA also had a healthy appetite for SMP, particularly from Malaysia, Indonesia and the Philippines; which collectively made up another quarter of the SMP exports.
- MEA remains focused on WMP, with Algeria and UAE making up 23% of the NZ WMP export market.
- After four months of falling cheese exports, June saw demand jump +35% (+7kMT). Although share has been lost in Mexico, Chile, Egypt and Denmark, the shortfall has been compensated by sales into Australia, Japan, China and the US.

Australia



- Australia's dairy exports in May increased +35% compared to May 2015, despite declining production and financial pressures with the strengthening Australian currency. The jump in exports was led by fluid and fresh dairy (+37% to 18kMT), and SMP (+46% to16kMT).
- Exports for the 12 months to May also grew +10%, again driven by fluid and fresh dairy (+17%), SMP (+8%) and cheese (+9%).
- Infant formula exports which were reported to be in decline last month, bounced back slightly to grow +280% YOY in May, although this was off a small base.



European Union

Export change for the 12 months to April 2016

- EU dairy exports increased +12% (+48kMT) in April compared to the same month the previous year, primarily driven by fluid and fresh dairy (+26%), cheese (+13%), whey powder (+8%), and infant formula (+18%). These products also drove growth on a MAT (+12%) and YTD basis (+13%).
- SMP exports continued to decline (-27%) with losses across the board, with more significant demand drops from Indonesia, China, Japan and Algeria.
 Meanwhile, WMP volumes picked up +12%. Most of this WMP volume was destined for MEA, with Oman topping demand for the region.
- European butter (+53%) and cheese exports are providing stiff competition in global markets, both due to their lower prices.
- Recent weakening of the Euro has provided additional price advantages against the US and NZ.

United States



Export change for the 12 months to May 2016

- In May, US dairy exports remained weak with volumes down, -10% YOY. As with previous months, decreases in exports were led by SMP (-28%), whey powder (-22%), and cheese (-19%). This has largely been due to continued strong domestic demand. On YTD or MAT basis, exports are down -10% (-87kMT) and -8% (-176kMT) respectively.
- Loss of volumes was partially offset by continued YOY growth of lactose (+20%) and whey proteins (+8%), which is being driven by demand from Mexico.
- US exports have not been helped by a strengthening of the USD, and sustained high domestic demand for butter, cheese and whey powder.
- Cheese demand has also fallen from Japan and Saudi Arabia, as these countries look to EU and NZ suppliers.

Source: Data from Global Trade Information Services, US Dairy Export Council, EU Milk Market Observatory, Dairy Australia, and Eucolait.



To view a chart that illustrates year-on-year changes in imports -

Asia (excluding China)

Import change for 12 months to April 2016

- Asia dairy import volumes decreased -3% (-9kMT) in April compared to the same month the previous year. This was driven by a fall in milk powder demand, with both SMP and WMP dropping -12%. Whey powder demand also contributed to this result, falling -16%.
- Commentators have noted that SEA's falling demand may be caused by countries, such as Vietnam, already being well stocked from imports earlier in the year when prices were at their lowest: and Malaysia being impacted by MEA's economic downturn.
- Declines in imports were partially offset by increased volumes of fluid and fresh dairy (+7%) and cheese (+11%). Australia made gains in fluid and fresh dairy during April, potentially at the cost of NZ whose supply of this category has fluctuated lately.

CHINA CONTINUES ITS STRONG RECOVERY FROM LAST YEAR, LATIN AMERICA CONTINUES TO SEE SOLID IMPORT

GROWTH, WHILE ASIA, MIDDLE EAST AND AFRICA **IMPORTS HAVE SOFTENED**

China



Import change for 12 months to June 2016

- China June imports increased +25% YOY, with significant gains in fluid and fresh dairy (+45%), WMP (+120%) and infant formula (+18%).
- This month's results see NZ's YTD share of SMP and WMP jumping to 49% and 63% respectively.
- High import of fluid milk and cream imports (UHT) will have displaced some need for milk powders. YTD, the top three suppliers of fluid and fresh dairy make up just over 70% of the category's imports. Germany remains the majority supplier.
- The increase in imports can be partially attributed to increasing dairy price forecasts. Furthermore, domestic supplies have been slowing as Chinese farmers have been responding to reduced milk price. Imports are also driven by consumer preference for overseas products due to trust concerns around local production.

Middle East & Africa Latin America



Import change for 12 months to April 2016

- MEA imports decreased -11% (-32kMT) in April compared to the same month the previous year.
- Decreases were seen across the board including SMP (-20%), cheese (-16%) and WMP (-14%).
- YTD imports are down -5%, reflecting a longer-term economic slow-down as suppressed oil prices continue to impact the performance of key economies in the region.
- Over these past 12 months the largest declines in imports have been in SMP (-17%), butter (-13%) and WMP (-8%).
- The EU continues to aggressively fight for share in this region, which has become particularly important as an outlet for EU WMP. WMP exports to UAE were up +202% (+2,327MT) from year ago levels on the largest volumes shipped to the country since this time last year.



Import change for 12 months to April 2016

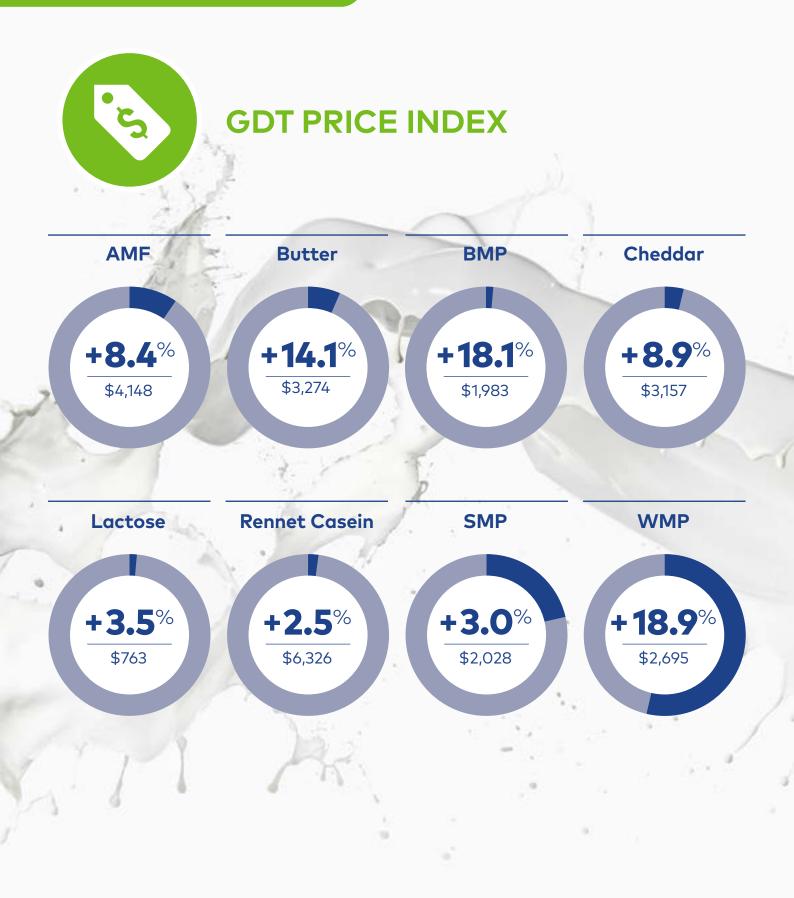
- Latin America imports increased +12% in April compared to the same month in 2015. Increases were seen across major dairy categories, driven by WMP (+40%, +9kMT) and SMP (+38%, +10kMT).
- This YOY increase may be attributed to manufacturers making up for shortfall in local milk supplies, due to recent adverse weather events such as flooding in Argentina and Uruguay.
- Growth in the 12 months to April remained healthy at +10% (+161kMT). This was led by WMP (+27%) and SMP (+19%). Cheese and infant formula also saw notable growth at +13% and +8% respectively.
- Mexico remains the leading import player. Although its imports are primarily serviced by the US, NZ is continuing to strengthen their position here, as Mexico has become one of NZ's ton markets for AMF, casein, and SMP.

Russia



Import change for 12 months to April 2016

- Russia dairy import volumes grew +7% in April YOY, contributed to by large growth in fluid and fresh dairy (+12%, to 25kMT), cheese (10%, to 17kMT), and whey powder (+36%, to 13kMT).
- Imports over the 12 months to March continue to be down (-33%). The major losses in volume continue to be in imports of fluid and fresh dairy (-37%,), cheese (-39%), and whey powder (-25%).
- Russia has been in discussions with Turkey, after the supplier requested lifting of embargoes imposed on it in 2015.
- 2016 FAO ranks Turkey as the world's 9th largest dairy producer.



Data reflective as retrieved on 22 August 2016

The shaded dials indicate the proportion of each product group sold versus total quantity sold during the previous 12 months, with a 3 month lag. Figures within the dials represent the percentage change in GDT Price Index and the weighted average price.



POSITIVE GROWTH ACROSS THE BOARD IN BOTH OF AUGUST'S TES, FOLLOWING STAGNANT RESULTS IN JULY. THE BIGGEST PRICE CHANGES WERE SEEN IN WMP, BMP AND BUTTER. MORE MODEST PRICE INCREASES IN OTHER COMMODITIES

GDT Price Index

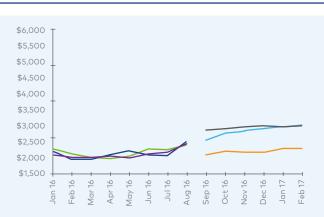


The GDT Price Index has been increasing over August, growing +13% at the conclusion of Trading Event 170 on 16 August. TE 170 saw 37,766 MT sold to 177 winning bidders. Results were positive across the board, with growth led by WMP (+19%), likely buoyed by Fonterra's recent announcement that they will reduce volume offerings. BMP grew in a similar range at +18%, followed by butter (+14%), then AMF (+8%), and cheddar (+9%). Smaller increases were seen with BMP lactose (+4%), SMP (+3%), and rennet casein (+3%).

Commodity prices







- Since July, average GDT WMP prices rose by +19% to USD 2,517/MT. Although USDA Oceania and Dutch Dairy Board prices increased at a lower rate, +11% to USD 2,435/MT, and +6% to USD 2,450/MT respectively; the outlook for WMP is looking positive.
- Predictions from future markets have shifted in response to recent growth in WMP prices. NZX Futures predicts the largest increase at +34%, to give a six month average of USD 2,982/MT. Informa Oceania is expecting a smaller +3.6% growth, to USD 2,874/MT. Rabobank Oceania remains the most conservative estimate with growth forecasted at +2% to USD 2,217/ MT. Across the board steady increases are expected through to next year.

Butter

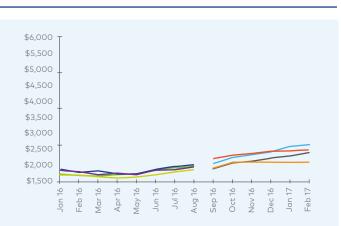


- Butter prices during August were varied. The Dutch Dairy Board and GDT saw healthy increases at +8% (to USD 3,794/MT) and +10% (to USD 3,078/MT) respectively. USDA Oceania saw a moderate increase at +5% (to USD 3,025/MT). USDA NASS was the only one to buck trends, seeing a -3% reduction to USD 4,872/MT.
- Butter predictions were also split. CME Futures projections declined the most at -9%, bringing their six month average down to USD 4,659/MT. Rabobank also forecasted a small decline of -1% to USD 3,133/MT. Positive results are expected by Informa Oceania and NZX Futures, although at different scales of +7% to USD 3,212/MT and +21% to USD 3,549/MT respectively.

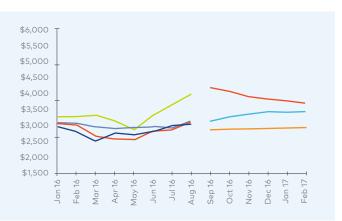


SMP

Cheese



- SMP prices in August saw positive growth across the board. Although the Dutch Dairy Board led growth at +4%, the resulting price of USD 1,970/MT was more of an alignment to prices of other suppliers. GDT saw a moderate increase of +3% to USD 2,025/MT. This was closely followed by USDA Oceania and USADA NASS, which both grew +2% to USD 1,963/MT and USD 1,988/MT respectively.
- SMP forecasts were mixed. Whilst NZX Futures were optimistic, with an average six month increase of +13% to USD 2,399/MT, CME Futures and Informa Oceania were both down -1% to USD 2,380/MT and USD 2,399/MT respectively. Rabobank sees a minor increase of +1%, bringing their future average to USD 2,083/MT through to February 2017.



- To round off largely positive results, cheese in August saw good growth.
 USDA Oceania and CME spot prices experienced similar growth rates of +10% to USD 3,229/MT and +9% USD 3,982/MT. The EU Commission saw a lower growth at +6% to USD 3,126/MT, followed by GDT at +3% to USD 3,063/MT.
- Future markets are seeing mild growth for cheese in the upcoming six months. This was led by Informa Oceania with prices forecast to rise +4% to USD 3,327/MT. The EU Commission is expecting a +2% rise to USD 3,904/MT. Rabobank sees no change at USD 2,900/MT.





To view a summary

of the year-on-year

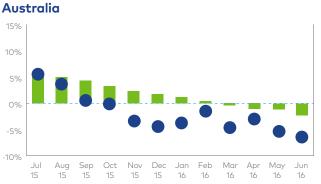
changes in production

CLICK HERE 🕨

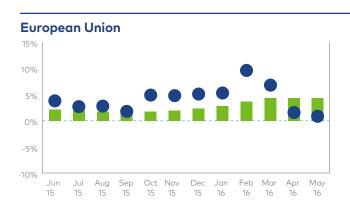
MILK PRODUCTION IN THE MAJOR SUPPLIERS TO WORLD MARKETS

New Zealand 15% 10% -5% -10% May Jul Nov Dec Jan Feb Mar 15 16 16 16 16 16

- June production was comparable to last year, leaving MAT production at -2%.
- NZ experienced mild winter temperatures. However, favourable conditions ended with a recent cold and snowy start to August, which along with increased cow slaughter may hamper short-term production.



- Australia production in June continued to decrease -6% YOY, driving down production in the 12 months to June by -2%.
- · Late season milk production has been heavily impacted by the reduction in Australian milk prices
- Cow slaughter has increased +50% YOY (+37% YTD).



- EU production in May remained at +1% YOY as production continues to slow, bringing MAT growth to +4%, driven by Ireland (+15%), the Netherlands (+13%), Poland (+5%), and Germany (+4%).
- In response to low milk prices and inconsistent weather, YOY production in both France and the UK declined -1% and -5% respectively.
- Additional milk from the Jan-May 2016 period has been primarily channeled into increasing production of SMP (+17%), butter (+12%), and WMP (+10%).

United States



- US June production increased +2% YOY, bringing MAT results to up +1%.
- Currently hot and humid conditions during the US summer could lower production and impact milk composition
- Growth in production has been primarily credited to increase in milk per cow, as dairy herd size had essentially held steady since March. Cow slaughter is down -2% YOY.

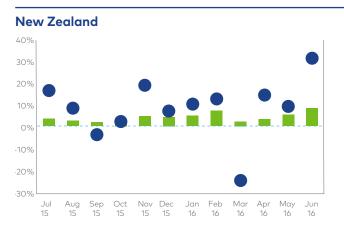


Source: Data from Global Trade Information Services and from government and industry websites, including USDA, Eurostat, Dairy Australia and Dairy Companies Association of New Zealand

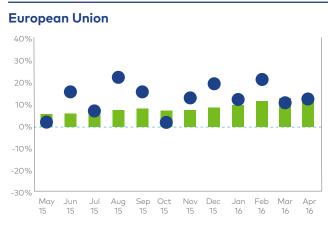
16



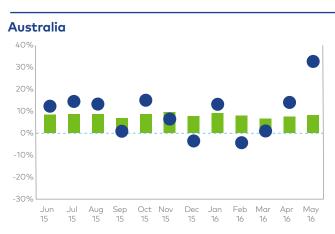
EXPORTS FROM THE MAJOR SUPPLIERS TO THE WORLD MARKETS IMPORTING REGIONS



- June exports increased +33% (+65kMT) YOY, bringing total exports for the past 12 months up +7%.
- \cdot Given the global abundance of milk powders, NZ's export results were strong; SMP rose by +69%, and WMP by +16%. China remained the top destination for both.
- SEA also had a healthy appetite for SMP, whilst MEA has remained focused on WMP.
- Demand for NZ cheese also jumped in June due to sales to Australia, Japan, China and the US.



- EU dairy exports increased +12% (+48kMT) in April compared to the same month the previous year, primarily driven by fluid and fresh dairy (+26%), cheese (+13%), whey powder (+8%), and infant formula (+18%).
- SMP exports continued to decline (-27%), with losses across the board, particularly Indonesia, China, Japan and Algeria. Meanwhile, WMP volumes picked up +12%, mostly destined for MEA.
- Recent weakening of the Euro has provided price advantages against the US and NZ, particularly for butter and cheese.



NZMP PERSPECTIVE

AUGUST 2016

To view a summary of the year-on-year

changes in exports

CLICK HERE ▶

- Australia's dairy exports in May increased +35% YOY, despite declining production and a strengthening Australian dollar. Export gains were led by fluid and fresh dairy (+37% to 18kMT), and SMP (+46% to 16kMT).
- Exports for the 12 months to May also grew + 10%, again driven by fluid and fresh dairy (+17%), SMP (+8%), and cheese (+9%).



- In May US dairy exports were down -10% YOY. As with previous months, decreases were led by SMP (-28%), whey powder (-22%) and cheese (-19%). On a MAT basis, exports are down -8% (-176kMT).
- Losses of volumes were partially offset by continued YOY growth of lactose (+20%) and whey proteins (+8%), which is being driven by demand from Mexico.
- US exports have not been helped by a strengthening of the USD, and sustained high domestic demand.



Source: Data from Global Trade Information Services, US Dairy Export Council, EU Milk Market Observatory, Dairy Australia and Eucolait

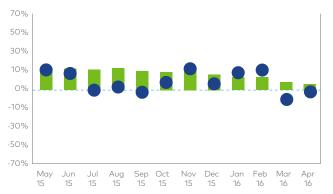


IMPORTS INTO THE MAJOR IMPORTING REGIONS

To view a summary of the year-on-year changes in imports

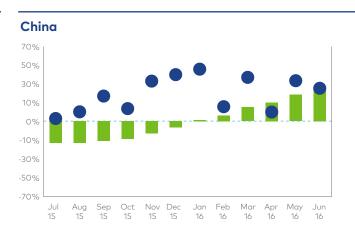
CLICK HERE >

Asia (excluding China)



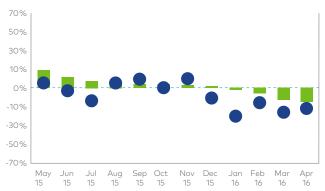
• April dairy imports decreased -3% (-9kMT) YOY. This was driven by a fall in milk powder demand, with both SMP and WMP dropping -12%.

 \cdot Declines in imports were partially offset by increased volumes of fluid and fresh dairy (+7%), and cheese (+11%).



- China June imports increased +25% YOY with significant gains in fluid and fresh dairy (+45%), WMP (+120%) and infant formula (+18%).
- NZ's YTD share of SMP and WMP jumped to 49% and 63% respectively.
- The increase in imports can be partially attributed to increasing dairy price forecasts, a slowing of domestic supplies, and consumer preference for overseas products.

Middle East & Africa



• MEA imports decreased -11% (+32kMT) in April YOY led by SMP (-20%), cheese (-16%) and WMP (-14%).

- YTD imports are down -5%, reflecting a longer-term economic slowdown due to suppressed oil prices.
- Over these past twelve months the largest declines in imports have been in SMP (-17%), butter (-13%) and WMP (-8%).



Source: Data from Global Trade Information Services and EU Milk Market Observatory

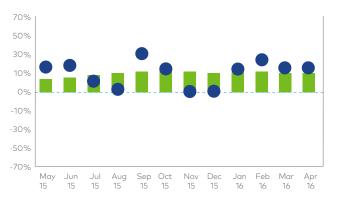




To view a summary of the year-on-year changes in imports

CLICK HERE 🕨

Latin America



- Imports increased +12% in April YOY, driven by WMP (+40%, +9kMT), and SMP (+38%, +10kMT).
- Adverse weather events such as flooding in Argentina and Uruguay have contributed to a shortfall in local milk supplies.
- MAT growth remained healthy at +10% (+161kMT), led by WMP (+27%) and SMP (+19%). Cheese and infant formula also saw notable gains.

Russia 70% 50% 30% 10% 0% -10% -30% -50% -70% Sep Oct 15 15 Feb Mar Aug 15 Nov Dec Jan Apr 16

- April imports grew +7% YOY, contributed to by large growth in fluid and fresh dairy (+12%), cheese (10%), and whey powder (+36%). Significant amounts were supplied by Belarus.
- MAT imports to March were down (-33%), driven by fluid and fresh dairy (-37%), cheese (-39%), and whey powder (-25%).





Glossary and references

Fonterra draws the information in this update from a variety of principally external sources listed below. Also included are defined acronyms for better understanding.

- CME Chicago Mercantile Exchange
- EIU Economist Intelligence Unit
- FAO United Nations Food and Agriculture Organisation
- FTA Free Trade Agreement
- GDI Global Dairy Intelligence group, Fonterra Cooperative Group Limited. GDI provides insights to Fonterra management based on a model of the global dairy market developed by GDI and populated with publicly available data. The model outputs referenced in this report do not reflect Fonterra's non-public production or sales data
- GDP Gross Domestic Product
- GDT GlobalDairyTrade auction platform
- GDT Price Index is an index that provides a measure of the weighted average percentage change in the movement in price of all products sold on GDT. This provides a simple measure of changes in dairy price between trading events
- IMF International Monetary Fund
- Informa Informa Economics Inc., Dairy Group, Global Dairy Market Report
- LME Liquid Milk Equivalent
- MAT Moving Annual Total

- MEA Middle East and Africa
- NDM Non-fat Dry Milk
- NZX NZ Stock Exchange
- OECD Organisation for Economic Co-operation and Development
- Q[1] [First] Quarter
- SEA South East Asia
- TE GDT Trading Event
- USDA NASS US Department of Agriculture National Agricultural Statistics Service
- USDA Oceania US Department of Agriculture Agricultural marketing service price series for specific products in the Oceania region
- YOY Year-on-year
- YTD Year to date

Comments on weather are obtained from various government weather sites as well as independent reports including Martell Crop Projections. Global milk production data is sourced from government and industry websites including US Department of Agriculture (USDA), EuroStat, Dairy Australia, Dairy Companies Association of NZ (DCANZ) and others.

Graph explanation

Year-on-year (YOY):

Represented by the blue dots. YOY data shows results from a single month compared to the same month in the previous year. This metric can change significantly between months, particularly if an 'event' such as an extreme weather incident or regulatory change occurs.

Moving annual total (MAT):

Represented by the green bars. MAT data shows results averaged across a 12 month period. These results tend to be a lot smoother, compared to YOY and can give a better longer term perspective.

So what do you need to know?

- Blue dots that are above the bars are showing growth i.e. strong monthly performance will ultimately drive up the average 12 month performance if sustained.
- Blue dots below the bars are showing decline i.e. performance has been worse than the 12 months average.



Ingredients by Fonterra Dairy for life

Important note: The information and commentary contained in this 'Perspective from NZMP' is based on publicly available official government statistics; industry association reports; other published industry reports together with data and insights developed by Fonterra's Global Dairy Intelligence group ('GDI'). These sources are identified as appropriate in this 'Perspective from NZMP'. GDI insights and data are derived from a global dairy market model populated by publicly available data. The model inputs and outputs do not reflect Fonterra's non-public production, pricing or sales data. Fonterra Cooperative Group Limited and its group members involved in the manufacture or sale of NZMP branded products ('Fonterra') has provided this 'Perspective from NZMP' for informational purposes only. It does not constitute recommendations or advice for the purposes of making financial decisions regarding trading in dairy products or commodities, or dealing in financial instruments relating to dairy commodities. Although every effort is made to ensure the accuracy of reproducing and interpreting such information, no warranty or representation of such is made and Fonterra shall have no liability in respect of any reliance placed on such information in the formulation of any business decision.