



PERSPECTIVE

September 2019



The latest insights into global dairy markets

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

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Welcome back to Perspective!

September 2019

As I sat down to write this month's column, I was alerted to the fact that China's Commerce Ministry has announced they will be filing a lawsuit against the United States under the World Trade Organisations dispute settlement mechanism. It has been well publicized that the trade war between the US and China is gaining momentum, and it is likely the tariffs the US has imposed on **\$300 billion worth of Chinese exports** has been the push China needed to take action with the WTO.

Last month we looked at the potential impact of a 'no-deal' Brexit, and as the US trade war with China is escalating, it is extremely important that global businesses keep up to date with the possible future of global trade.

Therefore, this month we continue the conversation on trade by inviting our own Jenny McGregor, Fonterra's General Manager of Trade Strategy, to break down the current events of this pressing topic in our feature article.

Four key movements for the month:

-  Production – Australia's production continues to decline. EU and the US are flat, whilst New Zealand's early season returns expected small volumes.
-  Exports – Australia and EU export growth endures, whilst US exports continue to show a large decline.
-  Imports – Middle East & Africa imports maintain a significant decline. China, Latin America and Asia imports continue to grow.
-  Prices – **GDT auction event 243** produced mixed results, resulting in the GDT price index down only -0.4% to USD \$3,202/MT. AMF, Cheddar, Lactose and WMP saw decreases, whilst BMP, Rennet Casein and SMP saw increases. Butter remained flat at USD \$4,029/MT.

If you have 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,

Alex Turnbull
Director, NZMP Marketing

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Turbulent Times for International Trade



Jenny McGregor
General Manager,
Trade Strategy, Fonterra

Jenny McGregor is Fonterra's General Manager of Trade Strategy, leading a team that drives Fonterra's engagement and advocacy on strategic trade issues globally.

Jenny has spent over 15 years working in a range of trade roles, both in the private sector and with the New Zealand Government. She is an experienced trade negotiator, having been involved in a range of World Trade Organisation and free trade agreement negotiations, and spent time working as New Zealand's Geneva-based agriculture negotiator.

Jenny has a BA (Hons) in Political Science from Victoria University and a Bachelor of Commerce in International Business from Auckland University.

The international trade landscape is becoming increasingly strained as protectionist sentiments and geopolitical tensions escalate between many major economies. In a globalised world where countries are more interconnected than ever, the ripple effects are being felt far and wide.

At the epicentre, Trump's "America First" approach to trade is leaving behind a trail of tweets and tariffs against key trade partners.

Over the past 18 months, the US and China have gone head to head in applying tariffs on each other's goods, including dairy products.

There is currently no end in sight to this trade war following Trump's latest announcement that the US will apply a further 10% tariff on an additional \$300 billion worth of Chinese imports. While the President has made bold claims that "tariffs are the greatest", the increasingly volatile state of global markets and the mounting challenges facing the American agricultural sector suggest otherwise.

In fact, the Trump Administration has recently announced a sweeping US\$16 billion aid package for US farmers to offset their losses resulting from the trade war, a move which raises a risk of increased subsidisation in agricultural markets.

Across the Atlantic, European-US trade relations remain fraught as a decades long dispute over airline subsidies comes to a head. In the coming months, the World Trade Organisation (WTO) is scheduled to reach a decision on the value of retaliatory tariffs that the US can impose on goods from the European Union (EU) in relation to this dispute. With the EU threatening to respond with retaliatory tariffs of their own, it is likely that dairy products will get caught up in a broader US-EU trade battle should a resolution not be found.

But possibly the greatest threat to the global trading system is the pressure being applied to the WTO's Appellate Body (AB).

Formed in 1995, the WTO is the governing body for international trade and the AB is a core component of the WTO's dispute settlement function. While many consider the AB to be cumbersome, it remains the only legally binding mechanism which enables countries to challenge each other on trade-related matters.

The AB is also particularly critical for small, export-dependent countries like New Zealand who can't rely on sheer size and influence to resolve complex trade issues.

For some time, the US has been raising concerns about the WTO system and has been blocking the appointment of new judges to the AB. As a result, the AB will no longer be able to take on new legal cases this December if no further appointments are made. Given the importance of the WTO and the AB, the New Zealand Government has been actively supporting efforts to reform the WTO and address US concerns.

But it's not all bad news from a trade perspective.

The role of modern and ambitious free trade agreements (FTAs) between smaller groupings of countries has become more important than ever.

Fonterra is working to support the New Zealand Government's proactive trade agenda, which seeks to negotiate high quality FTAs that reduce tariffs and facilitate export growth for New Zealand goods. This approach is evident in New Zealand's current trade negotiations with the EU and the Regional Comprehensive Economic Partnership (RCEP), which comprises 16 countries from across the Asia-Pacific region and is an important opportunity to increase market access into the highly protected Indian dairy sector. An FTA with the UK is also high on the Government's priority list, should the UK leave the EU in October.

The nature of modern FTAs also continues to evolve and we're increasingly seeing FTAs being used to move the dial on issues beyond traditional trade. For example, the New Zealand Government is developing a 'Trade for All' policy which seeks to ensure that our trade agreements deliver benefits to all New Zealanders and address issues such as climate change, gender equality, labour standards, the rights of indigenous people and more.

This holistic approach to trade is shared by others around the world such as the EU, who are also interested in using their FTAs to promote values and ethical trade practices.

While there will certainly be bumps in the road ahead, tumultuous times like these create opportunities for strategic exporting countries like New Zealand to show leadership and reinforces the importance of a steadfast rules-based and progressive approach to trade.



Disclaimer: The views expressed above are the opinion of the author, not those of Fonterra, and Fonterra is not responsible for any decisions taken in reliance on the same.

Australia production continues to decline, EU and US production flat. Small volumes of early season New Zealand production.

NEW ZEALAND

+2%.₂

Production change for the 12 months to July 2019

New Zealand milk production for the 12 months to July was 2.2% higher than last year.

New Zealand milk production in July was 23.5 million kgMS, up 4.8% compared to the same period last year. June and July account for only a small proportion of total milk production for the full season. The increase over last season partly represents good conditions at the start of the season and supply is also supported by winter milk.

AUSTRALIAN COLLECTION

-8%.₂

Production change for the 12 months to June 2019

Production for the 12 months to June was down 8.2% on the previous 12 months.

Australia milk production decreased 9.9% in June compared to the same period last year.

Dairy Australia are forecasting a decline in the 2019/20 season of 3% to 5% in total milk production on the back of reduced herd sizes and strained farmer finances.

EUROPEAN UNION

+0%.₁

Production change for the 12 months to June 2019

EU milk production for the 12 months to June was up 0.1% compared to the same period last year.

EU milk production decreased 0.3% in June compared to the same period last year.

A slowdown in production due to the recent heatwave, impacted Germany (2.3%), The Netherlands (2.7%), Spain (2.1%) and Finland (5%).

Production in Ireland continues to grow, up 7.5% in June versus the same period last year.

UNITED STATES

+0%.₃

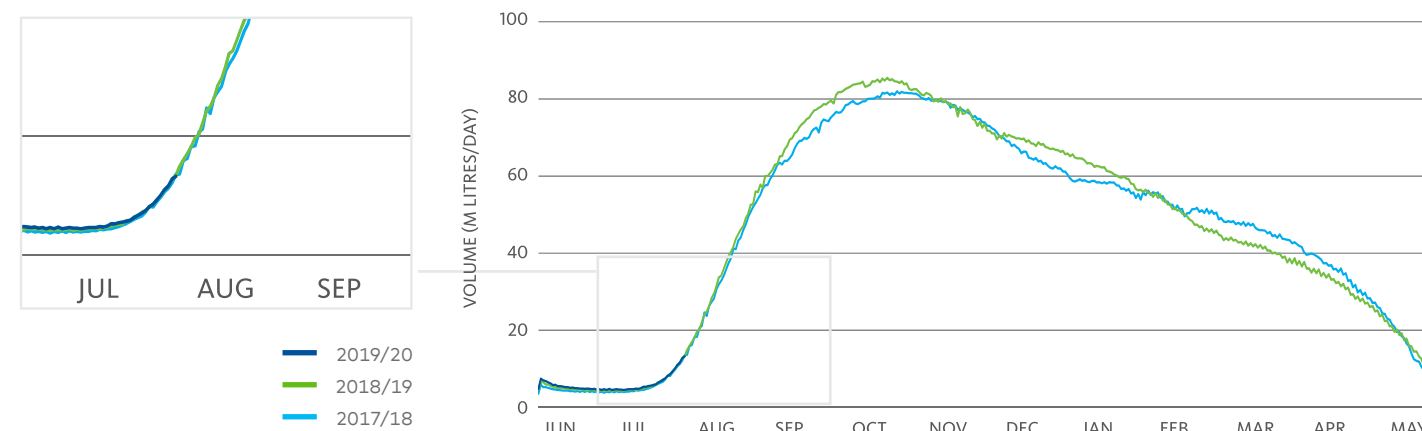
Production change for the 12 months to July 2019

Milk production for the 12 months to July was up 0.3% compared to the same period last year.

US milk production remained stable at 8 billion litres in July, compared to the same period last year.

The lack of production growth continues as poor on-farm profitability is leading to an increase in culling.

FONTERRA MILK COLLECTION 2019/20 SEASON



NEW ZEALAND COLLECTION

+2%.₂

Increase for July 2019 compared to July 2018

+4%.₇

Season to date 1 June to 30 July

Fonterra's July collections were 18.3 million kgMS, up 2.2% on the same month last season.

Season to date collections were 32.7 million kgMS, up 4.7% on last season. This represents only around 2% of full season collections.

These volumes are small in the context of the full season which is usual at this time of the year. The increase over July last year is also small and is due to a relatively mild July across much of the country supporting good pasture cover.

AUSTRALIAN COLLECTION

-28%.₉

Decrease for July 2019 compared to July 2018

-28%.₉

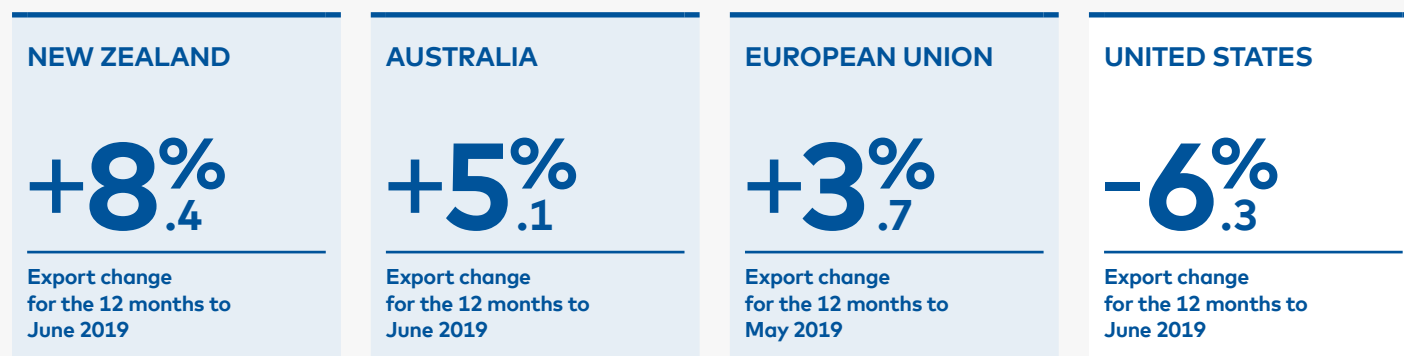
For the 2019/20 Season 1 July to 30 July

Fonterra's milk collection across Australia for the 2018/19 season was 122 million kgMS, down 20% on last season. Fonterra collections in June were 7 million kgMS, down 30% on June last season.

Fonterra's milk collection has reduced due to poor seasonal conditions, high input costs, increased cow cull rates, farm retirements and milk collection movement in a highly competitive market.



Exports from Australia and the EU continue to grow. Large decline in monthly US exports.



Exports for the 12 months to June were up 8.4%, or 272,002 MT, on the previous comparable period. This was primarily driven by a significant increase in WMP and fluid milk products, up a combined 250,000 MT.

Total New Zealand dairy exports decreased by 0.2%, or 410 MT, in June compared to the same period last year. This was primarily driven by butter and AMF, down 9,700 MT but mostly offset by a WMP increase of 7,326 MT.

Exports for the 12 months to June were up 5.1%, or 38,835 MT, on the previous comparable period. Fluid milk product and infant formula are the main drivers of this increase, up a combined 56,059 MT. WMP and SMP declined 19,002MT, partially offsetting the 12 months' growth.

Australia dairy exports increased by 10.3%, or 6,545 MT, in June compared to the same period last year. This was driven by fluid milk products, up 9,643 MT, and partially offset by cheese and whey powder, down a combined 2,847 MT.

Exports for the 12 months to May were up 3.7%, or 199,704 MT, on the previous comparable period.

SMP, lactose and fluid milk products were up a combined 255,738 MT. This was offset by a 75,231 MT decrease in WMP.

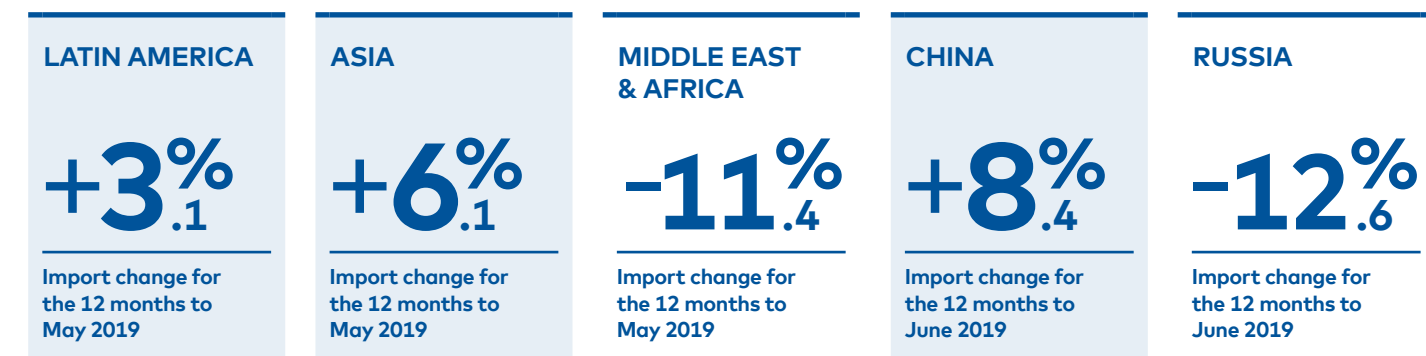
EU dairy exports increased by 5.9%, or 28,049 MT, in May compared to the same period last year. This was primarily driven by SMP, fluid milk products and butter, up a combined 32,477 MT. This was partially offset by WMP, down 5,993 MT.

Exports for the 12 months to June 2019 were down 6.3%, or 151,577 MT on the previous comparable period.

The decrease was largely driven by whey powder, WPC, lactose and SMP, down a combined 177,916 MT.

US dairy exports decreased 12%, or 24,978 MT, in June compared to the same period last year. Whey exports to China continue to decline (7,778 MT) as a result of the African Swine Fever. Declines were also reported in SMP and cheese, down a combined 18,669 MT.

Monthly imports into Middle East & Africa show large decline. China, Latin America and Asia imports continue to grow.



Imports for the 12 months to May 2019 were up 3.1%, or 59,775 MT, compared to the same period the previous year. Increases were recorded across a broad range of products with SMP, fluid milk products and WMP up a combined 56,389 MT.

Latin America dairy import volumes¹ increased 1.5%, or 2,611 MT, in May compared to the same period last year. This was driven by SMP, cheese and WPC up a combined 7,674 MT and partially offset by decreases in infant formula and cultured products, down a combined 3,957 MT.

Imports for the 12 months to May were up 6.1%, or 283,317 MT, compared to the same period the previous year. Growth continues across a broad range of products with fluid milk products, SMP, WMP and lactose up a combined 241,818 MT.

Asia (excluding China) dairy import volumes¹ increased 0.2% or 742 MT, in May compared to the same period last year. Increases were recorded across WMP, WPC, infant formula and butter, up a combined 10,647 MT and largely offset by decreases in cultured products, SMP, Whey powder and AMF, down a combined 10,218 MT.

Imports for the 12 months to May 2019 were down 11.4%, or 482,050 MT, compared to the same period last year. The reduction has been driven by cheese, fluid milk products, WMP, SMP and other powders down a combined 424,344 MT.

Middle East and Africa dairy import volumes¹ decreased 24.5% or 94,891 MT in May 2019 compared to May last year. Decreases were recorded in fluid milk products, cheese, WMP, cultured products and SMP, down a combined 82,431 MT. The main driver is lower imports by Algeria as political instability creates economic uncertainty and drives weaker demand in powders.

Imports for the 12 months to June were up 8.4%, or 232,321 MT, compared to the same period last year. Strong demand out of China continued with imports across all key categories; WMP, fluid products and SMP were up a combined 279,352 MT.

China dairy import volumes increased 2.8%, or 6,163 MT, in June compared to the same period last year. This was driven by increases in fluid, WMP, SMP and cheese, up a combined 33,283 MT but largely offset by whey, which was down 21,900 MT. African swine fever continues to have a significant impact on whey imports as hog numbers decline along with demand for feed.

Imports for the 12 months to June 2019 were down -12.6% or -147,916 MT compared to the same period the previous year. This was mainly driven by Fluid and fresh dairy, MPC/MPI, Lactose, Whey Powder, SMP, and Cultured Products being down a combined -213,782 MT. Offset by Cheese, AMF, WMP and Butter being up a combined 60,252 MT.

Russia import volumes were down -19.3% or -16,630 MT for June 2019 compared to the same month the previous year.

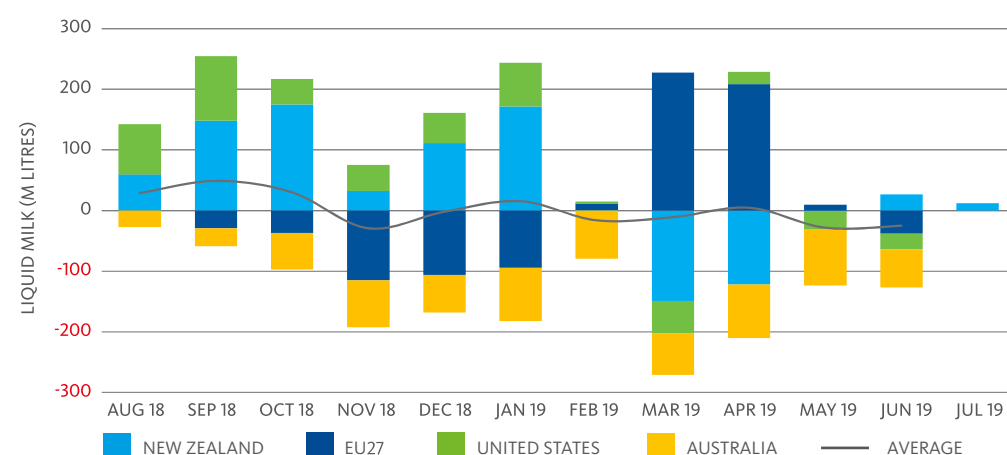
Global Dairy Market

The charts on the right illustrate the year-on-year changes in imports, exports and production for a range of countries that are important players in global dairy trade.

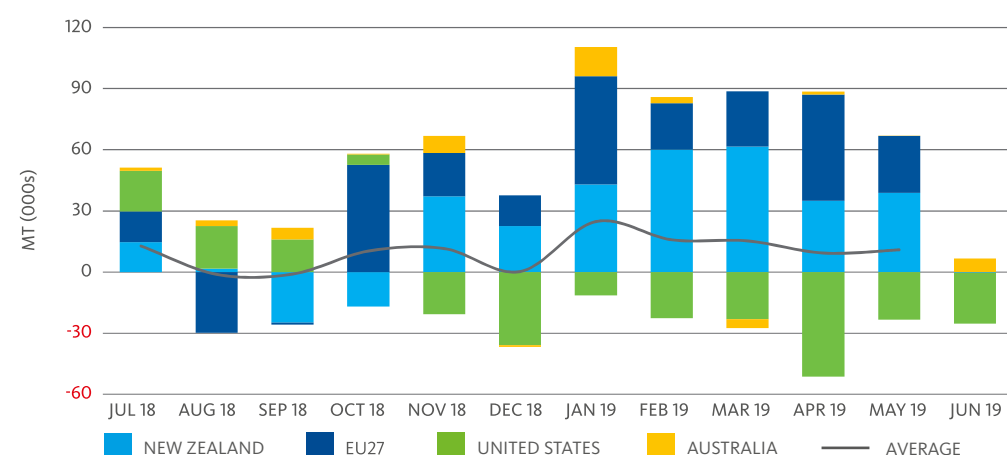
The absolute size of the bars represents the change in imports, exports or production, relative to the same period the previous year.

Averages are shown where data is complete for the regions presented.

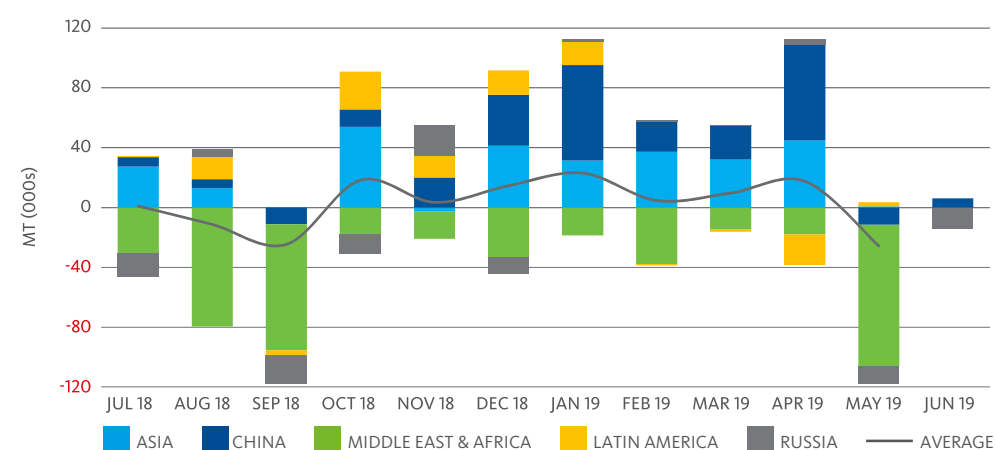
PRODUCTION



EXPORTS



IMPORTS



Food Price

The FAO Food Price Index (FFPI) averaged 169.8 points in August, down 1.1% from July, but 1.1% higher than the same time last year. This decline marks the third consecutive monthly decrease and comes as the prices of sugar and leading cereals fall sharply.

Meanwhile, the FAO Dairy Price Index averaged 194.5 points, up 0.5% from July, and reversing sharp falls in the two preceding months. Price quotations for cheese, skim milk powder (SMP) and whole milk powder (WMP) all rose in August. In contrast, price quotations for butter fell for a third consecutive month due to weaker demand.

Source: [FAO](#)



Economic

Composite leading indicators (CLIs) now point to stable growth momentum in the OECD as a whole, but continue to point to easing growth momentum in the US, Germany and the euro area.

Although large margins of error persist in the UK due to Brexit uncertainty, growth momentum there is expected to remain stable, albeit around historically low trend growth rates.

Among the major emerging economies, the CLIs point to stable growth momentum in China's industrial sector, although trade tensions there have produced a higher degree of uncertainty than usual.

Source: [OECD](#)



Consumer

The EIU's forecast for global growth this year remains unchanged at 2.4%.

The EIU notes that the US-China trade war is at a high risk of escalation and they predict the US will go ahead with their threat of additional tariffs on Chinese goods. They don't expect the US to raise tariffs further, but if this did take place, there's a risk of a retaliatory spiral that's increasingly likely to extend to non-tariff measures.

Meanwhile, in the UK, the Brexit saga continues. The EIU has now raised the probability of a hard Brexit from moderate to high.

Source: [Economist Intelligence Unit](#)



Weather

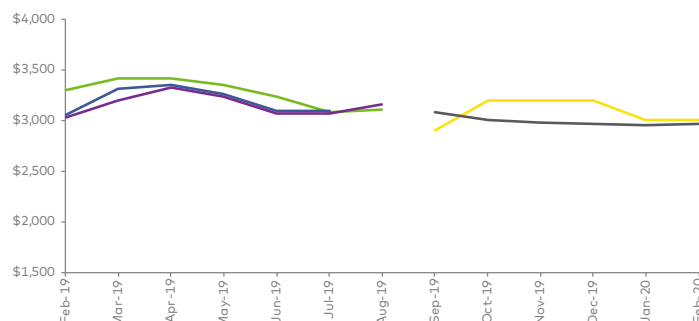
July proved to be New Zealand's second warmest on record. According to NIWA, temperatures were above average or well above average nearly everywhere in the country. Rainfall was above normal for most of the South Island, as well as the central and southwestern areas of the North Island. Near normal or below normal rainfall occurred in much of the North Island's northern and eastern areas.

In Australia, mostly dry weather persisted in the drought-affected areas of southern Queensland and northern New South Wales in July. Near-normal rainfall was recorded in southeastern Australia.

Meanwhile, continuing heat and dryness in central and northern Europe contrasted with locally heavy rain across southern growing areas.

Source: [World Agricultural Weather Highlights USDA oCOE, NIWA](#)

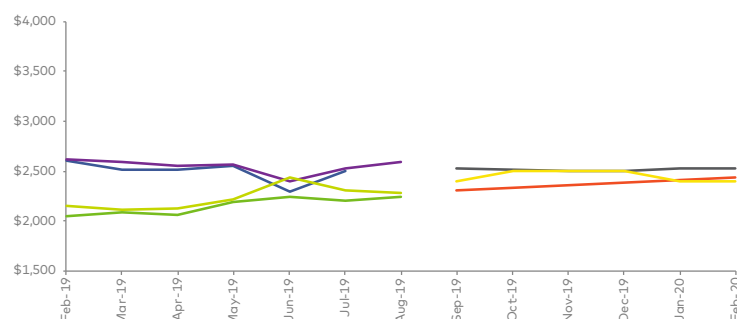
WMP



There were minor price changes in August for WMP with Dutch Dairy Board (DDB) flat at USD \$3,107/MT, and USDA Oceania up +2.8% to USD \$3,154/MT. GDT data was not available at the time of publication.

Futures and forecasts for the next six-months are mixed. Rabobank Oceania holds its average 6-month forecast at USD \$3,083/MT. However, NZX Futures has revised down -2.6% to an average USD \$2,991/MT.

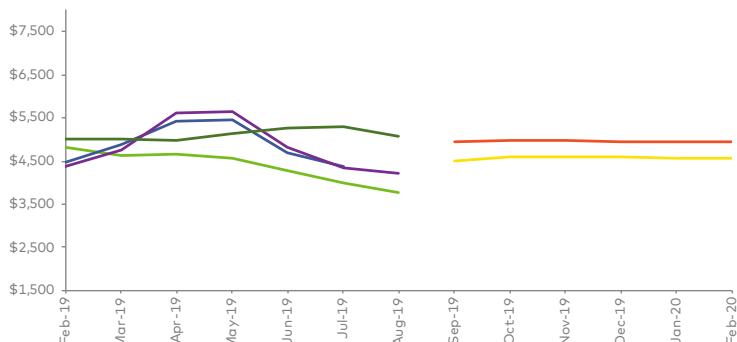
SMP



Prices for August are mixed, USDA Oceania and Dutch Dairy Board both increased just over +2% to USD \$2,592/MT and \$2,249/MT respectively. USDA NASS showed another decline, reporting USD \$2,284/MT. GDT data was not available at the time of publication.

Forecast and futures show minor changes to previous SMP prices predicted, with the average 6-month price forecast now between USD \$2,372/MT and USD \$2,518/MT.

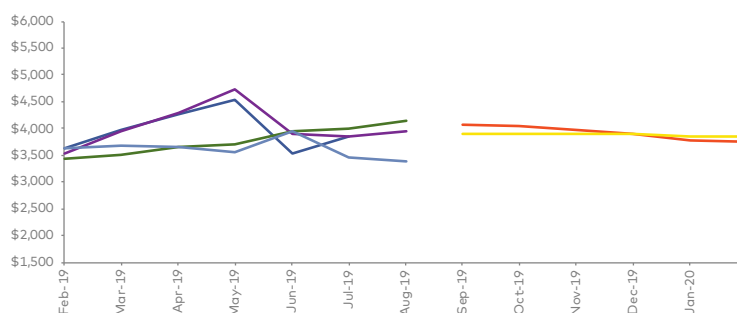
BUTTER



There were continued decreases in the butter prices in August. The largest drop coming from Dutch Dairy Board, declining a further -5.5% to USD \$3,763/MT. USDA Oceania and CME Spot dropped to USD \$4,200/MT and \$5,058/MT respectively. GDT data was not available at the time of publication.

Average futures and forecasts for the next six-month period are mixed with CME Futures dropping their average another -4.5% to USD \$4,958/MT and Rabobank Oceania average prices holding steady at USD \$4,567/MT.

CHEESE



Mixed results are reported in August, the EU commission reported another decline of -2.2% to USD \$3,383/MT. CME spot price is up +3.4% to USD \$4,143/MT. USDA Oceania also increased +2.1% to USD \$3,938/MT. GDT data was not available at the time of publication.

Average futures and forecasts for the next six-month period have dropped with CME Futures average down -3.1% to USD \$3,918/MT and Rabobank Oceania average prices at USD \$3,883/MT.

Actuals

■ GDT Fonterra ■ Dutch Dairy Board ■ USDA Oceania
■ USDA NASS ■ CME Spot ■ EU Commission

Forecasts

■ NZX Futures ■ CME Futures
■ Rabobank Oceania

GDT Results

TRADING EVENT 243

-0.4%

Change in GDT Price Index from previous event

USD 3,202

Average price (USD/MT, FAS)

WMP

-0.8%

\$3,076

AMF

-1.5%

\$4,988

SMP

+0.7%

\$2,500

BUTTER

0.0%

\$4,029

RENNET CASEIN

+4.6%

\$6,632

CHEDDAR

-0.8%

\$3,827

LACTOSE

-0.9%

\$729

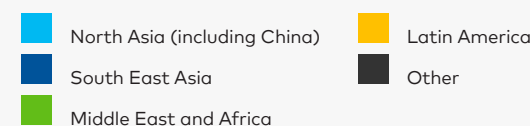
BUTTER MILK POWDER

+3.4%

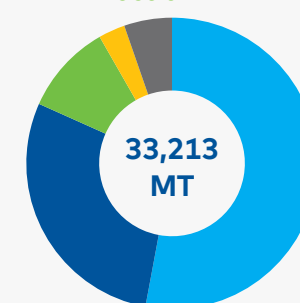
\$2,476

GDT SALES BY DESTINATION

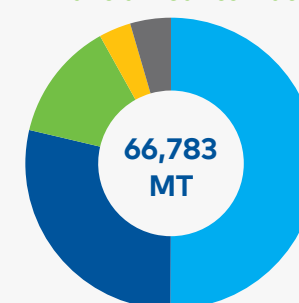
TRADING EVENT 242



Auction 242



Financial Year to Date



The next trading event will be held on 3 September 2019. Visit www.globaldairytrade.info for more information.

Dairy commodity prices and New Zealand dollar trend

Expectations for a softening in world growth, driven largely by heightened risks to global trade, resulted in a mildly weaker New Zealand dollar by the end of July.





USDA, Dairy Outlook

Published Aug 2019



Recent developments

The export forecast on a milk-fat basis has been lowered 0.1 billion pounds to 9.4 billion, while imports on a milk-fat basis are now forecast at 7.2 billion pounds for 2019, up 0.3 billion on last month's forecast. Meanwhile, total milk production for the year is now forecast at 217.9 billion pounds, down 0.3 billion on the last forecast. The all-milk price for 2019 is up 10 cents at \$18.30 per cwt, while the all-milk forecast for 2020 is 5 cents lower than the previous forecast, now sitting at \$18.80 per cwt.

Price movements for dairy products from the week ending July 6 to the week ending August 10 were mixed.

Butter fell 1.4 cents to \$2.3657 per pound, while the non-fat dry milk (NDM) price fell 0.9 cents to \$1.0405 per pound. However, prices for cheddar cheese 40-pound blocks and 500-pound barrels increased 1.6 cents and 4.5 cents to \$1.8371 and \$1.7522 per pound, respectively. Dry whey rose 1.3 cents to \$0.3673 per pound.

USDA, National Agricultural Statistics Service (NASS) estimated US milk production at 18.230 billion pounds in June, down 0.3 percent on June 2018. Milk cows numbered 9.323 million head in June, down 10,000 from the previous month. Milk per cow was estimated at 1,955 pounds, an increase of 0.6 percent from June 2018.

On a milk-fat milk-equivalent basis, exports have now been below the previous year every month since March. In June, those exports totalled 816 million pounds, 43 million less than the previous month and 166 million less than June 2018. Meanwhile, on a skim-solids milk-equivalent basis, exports have been below the previous year every month since November 2018. In June, those exports were 3.267 billion

pounds, 337 million less than May and 538 million less than June 2018.

Notably, skim milk powder exports fell to 94 million pounds in June, a drop of 32.7 percent from May, while domestic butter prices are currently significantly higher than butter prices overseas.

On a milk-fat basis, imports totalled 641 million pounds, down 13 million pounds from May, but up 138 million pounds from June 2018. Imports on a skim-solids basis were 514 million pounds in June, a decrease from May of 45 million pounds, but an increase of 88 million pounds on June 2018.

Ending stocks on a milk-fat basis totalled 18.252 billion pounds for June, a drop of 598 million pounds from the same time last year. On a skim-solids basis, June ending stocks totalled 11.188 billion pounds, 340 million pounds less than June 2018. Cheese stocks fell slightly from the previous month for the second straight month to 1.382 billion pounds, and were also down slightly year on year.



Source: [USDA](#)



Dairy forecasts for 2019

Based on recent milk cow and heifer statistics, the forecast for 2019's milking herd has been lowered 5,000 head to 9.335 million. Due to a lower number than expected for milk-per-cow in June, the milk-per-cow estimate for the year has also been lowered 15 pounds to 23,350. Therefore, total milk production for 2019 is now forecast at 217.9 billion pounds, 0.3 billion lower than the previous forecast.

Imports on a milk-fat basis are forecast at 7.2 billion pounds for 2019, 0.3 billion pounds up on last month's forecast. The export forecast on a milk-fat basis has been lowered 0.1 billion pounds to 9.4 billion. Ending stocks for 2019 are now forecast at 13.0 billion pounds, 0.1 billion pounds down on the previous forecast.

On a skim-solids basis, the import forecast for 2019 has risen 0.1 billion pounds to 5.5 billion, due to higher expected imports of milk protein products. A weaker Chinese yuan continued trade tensions, and strong competition for NDM exports have meant a dimmer outlook for skim-solids exports. Those exports are now forecast at 40.6 billion

pounds, down 0.7 billion pounds on the previous forecast. Ending stocks for 2019 are unchanged, forecast at 10.0 billion pounds.

Slight changes in dairy product price forecasts have been made for the remainder of the year.

Recent strength in cheese prices and growth in domestic use have seen an increase of 2.5 cents in the cheddar cheese price to \$1.685 per pound. The dry whey price has also gone up slightly to \$0.380 per pound for 2019. Due to domestic demand, the butter price forecast has raised slightly to \$2.320 per pound.

In contrast, the NDM price has weakened of late, with the forecast now sitting at \$1.005 per pound for the year, down 1.5 cents. With slightly higher prices for cheese and whey, the Class III price for 2019 has been raised 25 cents to \$16.30 per cwt. The lower NDM price forecast has seen a decrease of 15 cents in the Class IV price forecast to \$16.30 per cwt. The all-milk price for 2019 is now 10 cents higher than previously forecast at \$18.30 per cwt.

Source: [USDA](#)

Blimling, Forecast Update

Published August 1, 2019

Blimling's latest forecast notes that Mexico has been especially hard to read this year with inconsistent trade activity and rising political tensions.

Cheese sales to Mexico are down, with total exports from the US, EU, New Zealand and South America falling to 106 million pounds year-to-date through May – down 7% from 2018. However, NDM exports to Mexico from the US, EU, New Zealand and Canada in the first five months have reached 345 million pounds, up 8% on 2018.

Blimling predicts that with Mexico milk flows pushing higher, increased self-sufficiency and uncertainty around trade dynamics may play into buyer sourcing decisions.

Elsewhere, increased potential for constrained milk and fresh cheese supply could push prices higher as the market moves into the demand season.

Blimling says the US butter market is more upside than downside as the demand season unfolds, supported by solid US demand and increased risk of reduced supply.

NDP/SMP prices will likely push higher into 2020, due to increased supply concerns and greater domestic demand from US manufacturers.

Meanwhile, weak whey demand out of Asia, combined with soft carbohydrate prices, should keep the pressure on dry whey prices for the foreseeable future.



Source: [Blimling](#)

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

AMF Anhydrous Milk Fat

BMP Butter Milk Powder

CME Chicago Mercantile Exchange

DDB Dutch Dairy Board

EIU Economist Intelligence Unit

FAO United Nations Food and Agriculture Organisation

Farmgate Milk Price The price for milk supplied in New Zealand to Fonterra by farmer shareholders

Fluid and Fresh Dairy The Fonterra grouping of fluid milk products (skim milk, whole milk and cream pasteurised or UHT processed), concentrated milk products (evaporated milk and sweetened condensed milk) and yoghurt

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 Global Dairy Trade 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 (this is data averaged across the 12 month period)

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

Reference Products The dairy products used in the calculation of the Farmgate Milk Price, which are currently WMP, SMP, BMP, butter and AMF

SEA South East Asia

Season New Zealand: A period of 12 months to 31 May in each year. Australia: A period of 12 months to 30 June in each year

SMP Skim Milk Powder

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

WMP Whole Milk Powder

YOY Year-on-year

YTD Year to date



Tracking the global dairy market Production, Export and Import charts

The production, export and import charts illustrate year-on-year changes in production, exports and imports for a range of countries that are important players in global dairy trade.

The absolute size of the bars represents the change in production, exports or imports compared to the same month the previous year. The portion of the bar below zero represents a year-on-year decrease and the portion above the line shows the year increase for that country. Where countries are not shown this is likely due to the data not yet being available.

Weather Source (Page reference – 11)

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 New Zealand (DCANZ) and others.



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 Co-operative 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.