



PERSPECTIVE

MARCH 2018

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.

Welcome back to Perspective!

NZMP seeks to bring you information about the global dairy trading environment.

This month Ben Jeckel, Managing Director/Dairy Consultancy and Intelligence at Blimling, shares insights into the growing and evolving world of protein.

Production, exports, imports and pricing













- Demand for dairy remains strong in China. Latin America and Asia imports decline for the month.
- Growth in dairy exports from New Zealand in January. Steady growth from the EU and the US.
- Increased production from EU in January. NZ production down for the month.
- WMP, butter and cheese price changes were all positive except from SMP, with the biggest increase seen in butter prices.

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

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CUSTOMERS, DAIRY PROTEIN MARKETERS FOREVER EVOLVING



BEN JECKEL

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Blimling and Associates, Inc.

Ben Jeckel oversees the Blimling and Associates consulting and market intelligence platforms. He spends extensive time working on client engagements covering the high protein product space, manufacturing plant feasibility studies, M&A activity, business development and transportation issues. Before joining the Blimling team, Ben spent 10 years with Abbott Laboratories in finance, accounting and dairy procurement roles.

What type of protein are you consuming?

A decade ago, many casual consumers would have shrugged and replied, "meat, eggs, milk?" That's changed. Now, consumers know more about protein and its role in the diet than ever before. Dairy protein has been central to the discussion. A trip to just about any grocery store, club store, drug store and even convenience store reveals an almost dizzying array of protein products.

Worldwide protein demand growth

Widespread, worldwide adoption of whey and milk protein ingredients has been an unabashed success story for the dairy industry. But as with any shiny, new, high-growth product, success and profitability bring imitation and competition. That dynamic is reshaping the landscape.

“Sports nutrition has been the primary catalyst. Think ready-to-mix powders, beverages, and protein bars. But it’s not just body builders buying the stuff. Ever more casual day-to-day consumers recognise the nutritional benefits.”

In the US, we estimate whey protein demand growth at 8% annually between 2008 and 2017. That's a healthy rate for any food or beverage category, especially dairy. Sports nutrition has been the primary catalyst. Think ready-to-mix powders, beverages, and protein bars. But it's not just body builders buying the stuff. Ever more casual day-to-day consumers recognise the nutritional benefits. So now weekend warriors, moms on the go, and aging adults are all partaking. Milk protein ingredients are also in the mix, enjoying similar growth as ingredients in nutritional beverages and even some traditional sports nutrition products.

Consumers in Asia are getting on board, too. WPC80 and WPI are increasingly popular in unique beverage formulations and infant formulas in places like China. Over the last ten years, China whey protein imports are up 18% annually. Casein-based imports are up 9% a year over the same period. It's not just China. Whey proteins are gaining acceptance in Japan, with imports up 8% annually over the past decade.



Changes are still coming

That demand growth, combined with lagging supply, propelled whey and milk protein prices to record highs between 2012 and 2014. In response, end-users and competing suppliers began toying with plant proteins – soy, pea, others – that cost less and/or confronted less price volatility. Suddenly the protein space featured sourcing flexibility. And, many consumers did not seem to notice.

Consumers are making new demands around transparency, product traceability and social responsibility. They are placing greater attention on environmentally safe production practices. More “clean label” and “free from” ingredient statements – sometimes a tall order for dairy proteins. Diets are evolving, too – sometimes in rapid, unpredictable and erratic ways amidst contemporary social media swirl. Maybe

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it's a month without dairy while trying the Whole30 diet or going all-out vegan. In those cases, consumers – especially those in the US – are targeting dairy-free fare. Many are looking past the whey protein pouch, instead reaching for a bag of 100% pea protein.

How are dairy protein manufacturers around the world coping?

Education

Studies in the both the US and EU show a surprising number of consumers unaware of protein quality. Many do not realise that not all protein sources are created equal. Pushing casual consumers away from a "protein is protein" mind set seems critical for dairy protein marketers.

Innovation

Innovation is also a priority. Advances in separation technology are leading to more specialized protein fractions. Alpha-lactalbumin, lactoferrin and glycomacropeptide (GMP) are gaining traction in the infant formula and supplement markets. Native whey and micellar casein – products derived from microfiltered skim milk – are also gaining favour. Dairy protein producers have also begun to heed the call for "clean" labels, introducing more organic and non-GMO ingredient options to satisfy on-trend label claims.

“Globally, manufacturers have invested billions of dollars to harvest more raw whey from cheese operations and efficiently convert it to high protein products.”





Price matters

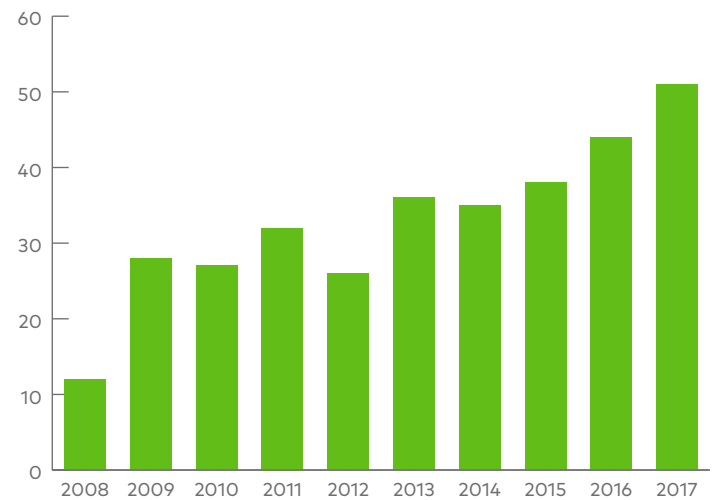
Price matters in the overall picture, of course. Here, things may be evolving in a way that likely invites renewed demand vigour. At long last, high protein supplies have jumped ahead of use. Globally, manufacturers have invested billions of dollars to harvest more raw whey from cheese operations and efficiently convert it to high protein products. MPC capacity has experienced notable expansions as well, particularly in the US. That has put real downward pressure on prices. Marketers can tout whey and milk protein's advantages to research and development departments with less need to apologise about price or prospective availability. And, the industry has worked to improve price discovery and risk management facilities in a way that has the potential to allow for better risk management.



Plant protein is not going away

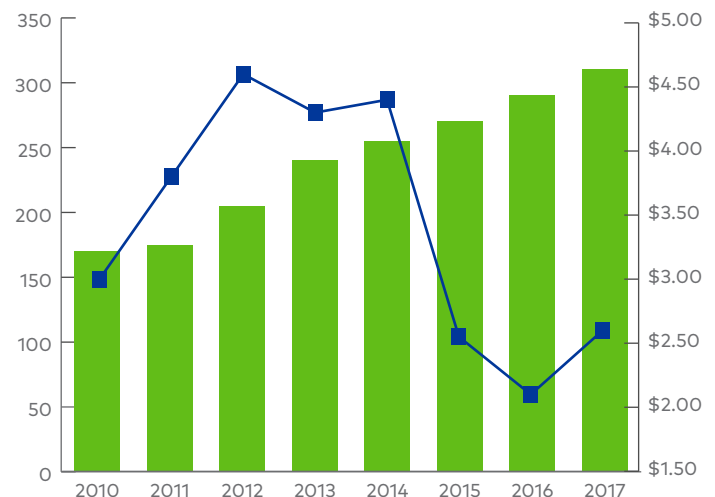
Vegans aren't going away, either. But we wouldn't count out an industry that has managed to collectively turn what was essentially a waste product into a multi-functional, multi-billion-dollar product segment.

CHINA WHEY PROTEIN IMPORTS



Millions lb; GTIS (HTS 350220)

US WPC 80 SUPPLIER STOCKS VS. PRICE



Millions lb; \$ per lb; USDA, Blimling Survey

Stocks (L) Avg Price (R)

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INCREASED PRODUCTION FROM THE EU IN JANUARY. NEW ZEALAND PRODUCTION DOWN FOR THE MONTH.

To view a summary of year-on-year changes in production [click here](#)

New Zealand

+1%

Production change for the 12 months to February 2018

For the 12 months to February, milk production was up +1% compared to the same period the previous year.

Total New Zealand milk production in February was down -2% compared to the same month last year, as the difficult weather conditions that have hampered production for most of the season continue to impact pasture quality.

Australia

+1%

Production change for the 12 months to February 2018

Production for the 12 months to February was up +1% compared to the same period the previous year.

Milk production growth continues to be steady, particularly in South East Australia, where improved seasonal conditions and cost efficiencies have increased production.

Australia milk production in February increased +2% compared to the same month last year, largely due to favourable weather conditions.

European Union

+2%

Production change for the 12 months to January 2018

EU milk production in January was up +4% compared to the same month last year, driven by continued strong dairy prices.

While production growth was experienced across most of Europe, Germany and Italy had the highest growth, up a combined +7% in January.

This was partially offset by decreases in both Hungary and Sweden.

United States

+1%

Production change for the 12 months to January 2018

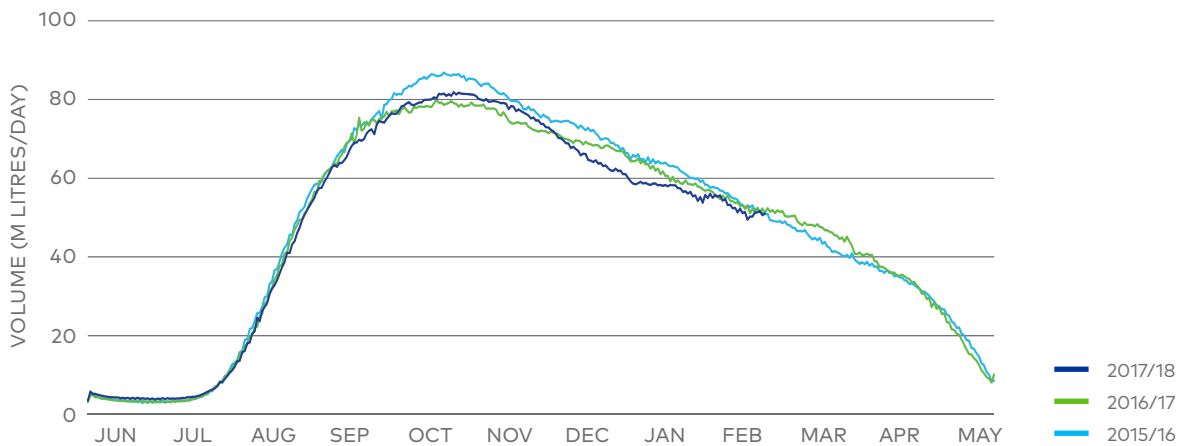
Milk production for the 12 months to January increased by +1% compared to the same period the previous year.

The increase in production is largely driven by larger herd numbers and improved production per cow.

US milk production in January increased +2% compared to the same month last year.



FONTERRA NEW ZEALAND MILK COLLECTION 2017/2018 SEASON



New Zealand Collection

-2%

Decrease for the season from 1 June to 28 February

Fonterra's milk collection across New Zealand in February reached 135 million kgMS, -4% behind February last season.

Collection volumes decreased in most regions in February, as the impact of difficult weather conditions continues to effect pasture quality and feed growth rate.

For the nine months to 28 February, milk collection was 1,171 million kgMS, -2% behind last season.

Australian Collection

+28%

Increase for the season from 1 July to 28 February

Fonterra's milk collection across Australia in February reached 11 million kgMS, +3 million kgMS higher than February last season.

February collections were up +30% due to Fonterra's increased market share and favourable seasonal conditions that continue to support production growth from both existing and new suppliers.





GROWTH IN DAIRY EXPORTS FROM NEW ZEALAND IN JANUARY. STEADY GROWTH FROM THE EU AND THE US.

To view a summary of year-on-year changes in exports [click here](#)

New Zealand

-1%

Export change for
the 12 months to
January 2018

Exports for the 12 months to January declined -1% or -43,000 MT on the previous comparable period.

Total New Zealand dairy exports in January increased +3% or +10,000 MT compared to the same month last year.

While exports of WMP and fluid and fresh dairy, two of New Zealand's largest export categories were up a combined +6% or +97,000 MT, most other categories declined over the period.

Growth was driven by WMP and fluid and fresh dairy, up a combined +16% or +24,000 MT for the month, however this was slightly offset by declines in AMF, SMP and butter, down a combined 14,000 MT.

Australia

-2%

Export change for
the 12 months to
January 2018

Exports for the 12 months to January were down -2%, or -14,000 MT on the previous comparable period.

Australia dairy exports decreased -12% or -7,000 MT in January compared to the same month the previous year. This was largely driven by exports of SMP and cheese, down -29% compared to the same month last year.

The decline in exports this year was driven by WMP, SMP and whey powder, three of the larger export categories, which were down a combined -41,000 MT. This decline was partially offset by a +34,000 MT increase in fluid and fresh dairy.

European Union

+6%

Export change for
the 12 months to
December 2017

Exports for the 12 months to December were up +6% or +286,000 MT on the previous comparable period.

EU dairy exports in December increased by +2% or +6,000 MT compared to the same month last year.

Exports of fluid and fresh dairy, cheese and SMP grew a combined 9,000 MT, however this was offset by declines in caseinate, whey powder and lactose.

Total exports of SMP increased +205,000 MT or +36% as Europe continues to sell down its post-intervention SMP inventory.

United States

+5%

Export change for
the 12 months to
January 2018

Exports for the 12 months to January were up +5% or +108,000 MT on the previous comparable period.

Increases were seen across most export categories, in particular whey powder and cheese, which were up a combined 9,000 MT.

Cheese, whey powder and SMP exports experienced the largest growth, up a combined +9% +115,000 MT, offset by declines in fluid and fresh dairy and WMP.

US dairy exports in January increased by +8% or +14,000 MT compared to the same month last year.



DEMAND FOR DAIRY REMAINS STRONG IN CHINA. LATIN AMERICA AND ASIA IMPORTS DECLINE FOR THE MONTH.

To view a summary of year-on-year changes in imports [click here](#)

Latin America

+2%

Import change for the 12 months to November 2017

Imports for the 12 months to November were up +2% or +46,000 MT. This growth was driven by increases across all key import categories except for WMP, which was down -21% or -61,000 MT.

Growth in SMP was offset by declines in cheese and WMP down -25% and -28% respectively compared to the same month last year.

Latin America's dairy import volumes¹ decreased -8% or -13,000 MT in November compared to the same month the previous year.

Asia

+2%

Import change for the 12 months to November 2017

Imports for the 12 months to November were up +2%, or +99,000 MT, compared to the same period the previous year.

Imports of cheese and WMP were up a combined +87,000 MT or +8%, slightly offset by declines in whey powder, down -13,000 MT.

Asia (excluding China) dairy import volumes¹ decreased -4% or -15,000 MT in November compared to the same month last year.

SMP, the largest import category in Asia, declined -24,000 MT or -26%.

Middle East & Africa

-1%

Import change for the 12 months to October 2017

Imports for the 12 months to October were down -1%, or -47,000 MT. Combined declines in butter and WMP of -10% or -106,000 MT, dampened large gains in fluid and fresh dairy and SMP of +80,000 MT and +36,000 MT respectively.

Middle East and Africa dairy imports¹ in October decreased -3%, or -11,000 MT, compared to the same month the previous year. This was mainly due to a decline across the top three import categories, WMP, SMP and fluid and fresh dairy, down a combined -13,000 MT, partially offset by a +7% increase in cheese imports.

China

+20%

Import change for the 12 months to January 2018

Imports for the 12 months to January were up +20%, or +454,000 MT, compared to the same period last year.

Growth was seen across all export categories except casein. Fluid and fresh dairy, WMP and infant formula had the most significant growth, up a combined +271,000 MT.

SMP imports were also up +42% or +77,000 MT.

China dairy imports were up +44% or +115,000 MT in January compared to the same month last year with substantial growth in Fluid and fresh dairy, WMP and whey powder, up +92%, +28% and +45% respectively.

Russia

+4%

Import change for 12 months to January 2018

Imports for the 12 months to January 2018 were up +4%, or +46,596 MT compared to the same period the previous year. The increase was due to the increase in Fluid and Fresh Dairy up +29%.

Russia import volumes were up down -7%, or -6,139 MT for January compared to the same month last year.

¹ Estimates are included for those countries that have not reported import data.

Sources: Data from Global Trade Information Services; EU Milk Market Observatory; FAO; Highground Trading Group



TRACKING THE GLOBAL DAIRY MARKET

Global Dairy Market

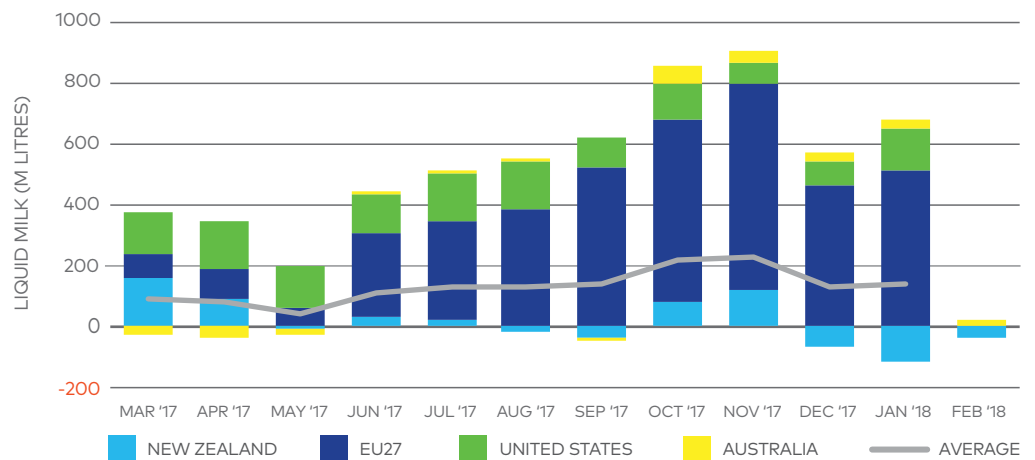
The charts on the right illustrate the year-on-year changes in imports, exports and production for a range of countries that are important players in global dairy trade.

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

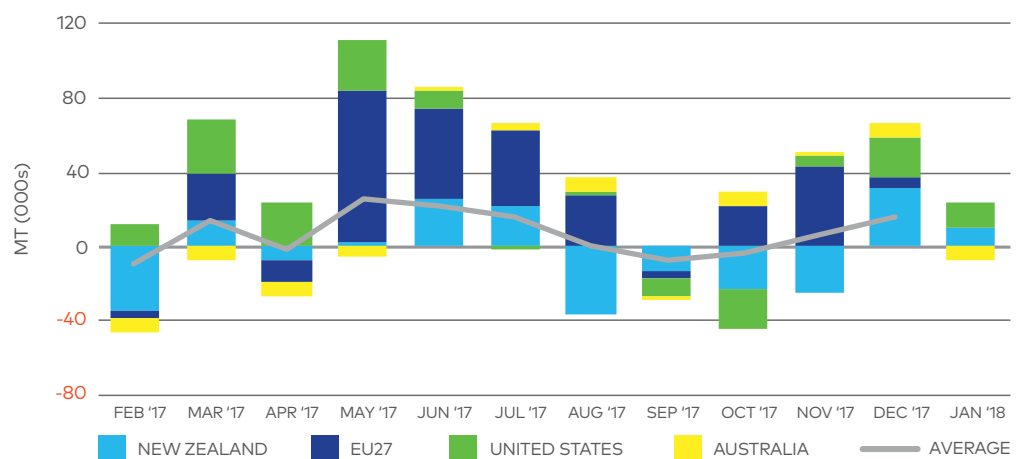
Averages are shown where data is complete for the regions presented.

For further information [click here](#)

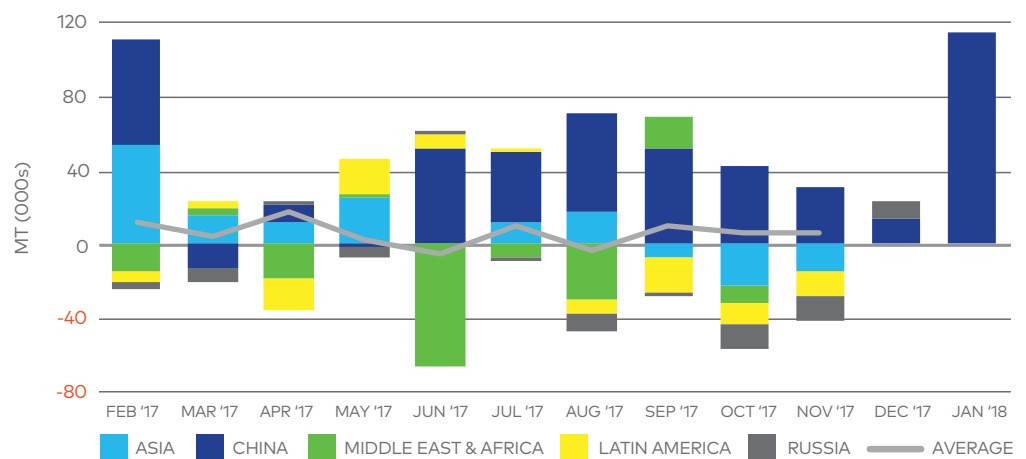
PRODUCTION



EXPORTS



IMPORTS



Source: Government milk production statistics/GTIS trade data/Fonterra analysis



Food Price

FAO Food Price Index averaged nearly 170.8 points in February 2018, down -1.8 points from January but still +2.7% above its year ago level. The Dairy Price Index averaged 191.1 points for February 2018, up +6.2% from previous the month. The international price quotations for milk products caused the index to rise, sustained by strong import demand amidst lower than expected milk production in New Zealand. After declining for four consecutive months since reaching its peak in September 2017, butter price quotations increased by almost +6%.

Source: FAO



Economic

Composite leading indicators (CLIs) continue to anticipate stable growth momentum for the OECD as a whole. Stable growth is expected in United States, Japan, Canada and Euro area as a whole. However, in the UK, the CLI continues to point to easing growth. Growth forecasts among emerging economies show growth gaining momentum in India. Stable growth momentum is expected in China and Russia.

Source: OECD



Consumer

The Economist Intelligence Unit (EIU) has lowered its global forecast for trade growth in goods for 2018-2020. This is because of the US import tariffs implementation on steel and aluminium. EIU expects the same.

Source: Economist Intelligence Unit



Weather

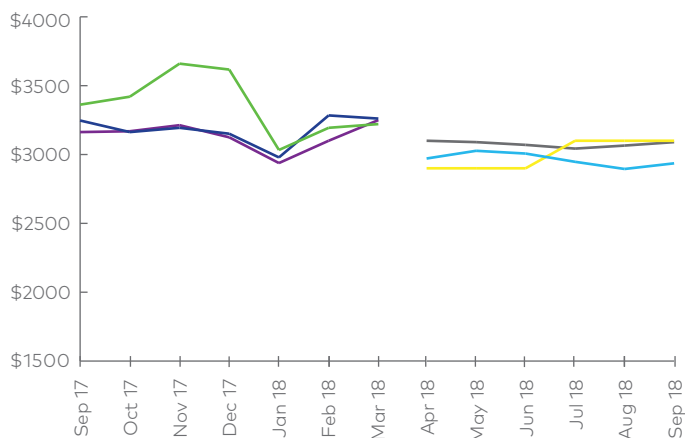
In the US, dry weather persisted during February, however late month storms provided some drought relief for the southern and central parts of US. In Europe, weather conditions were wetter and colder than normal maintained favourable moisture soil conditions. In New Zealand, subtropical storms and cyclones caused havoc in some parts of the country, although some parts experienced rainfall, this hasn't alleviated the impact of the early, hot and dry summer in most regions across the country.

Sources: Climate Prediction Centre, World Agricultural Weather Highlights USDA oCOE; Dairy Australia Production Inputs Monitor; Otago Daily Times



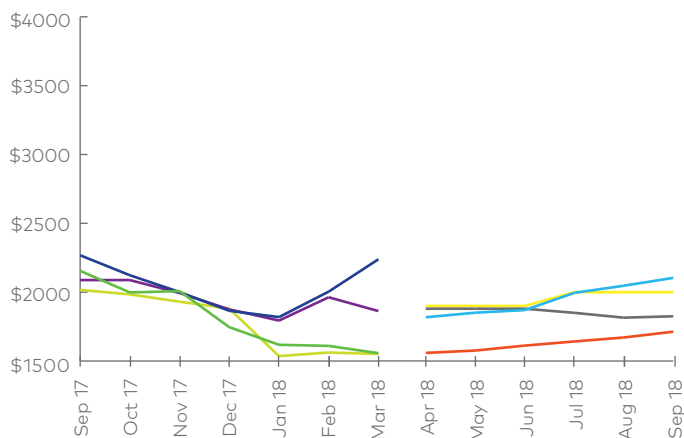
COMMODITY PRICES

WMP



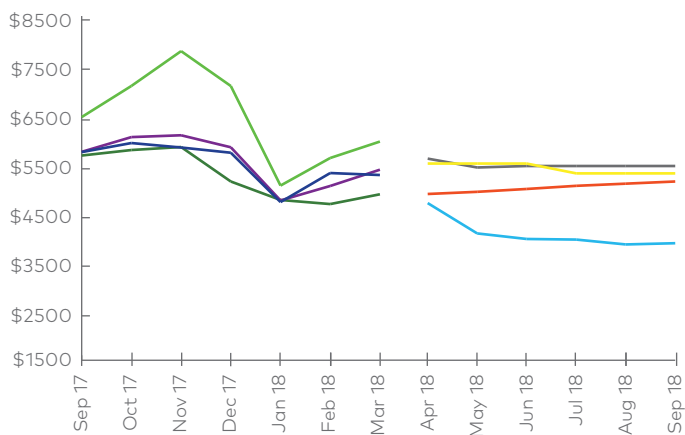
- March WMP price increased with the exception of GDT which was down -0.7% to USD 3,261/MT. Dutch Dairy Board (DDB) up +0.8% to USD 3,221/MT, and USDA Oceania up +4.8% to USD 3,250/MT.
- Average futures and forecasts for April to September 2018 are relatively stable with Informa, NZX Futures, and Rabobank Oceania average prices over the 6 months at USD 2964/MT, USD 3076/MT, and USD 3,000/MT.

SMP



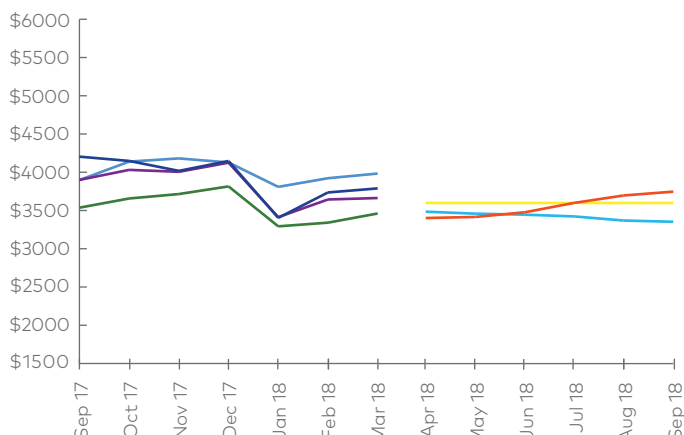
- SMP prices decreased in March 2018 with the exclusion of GDT up +11.7% to USD 2,239/MT. DDB down -3.3% to USD 1,557/MT, USDA Oceania down -5.1% to USD 1,863/MT and USDA NASS slightly down -0.7% to USD 1,551/MT.
- Futures and forecasts are mixed. NZX Futures forecasts the biggest declines in price - 6.5% to an average price of USD 1,855/MT. CME futures also down -2.6% to an average price of USD 1,629/MT. Informa Oceania averages USD 1,629/MT and Rabobank averages USD 1,950/MT.

BUTTER



- Butter prices all increased apart from GDT, which remained flat at USD 5,267/MT. DDB up +6.0% to USD 5,947/MT, USDA Oceania rose by +6.6% to USD 5,375/MT and CME spot up +4.3% to USD 4,975/MT.
- Forecast/futures are pricing much lower than the market with prices between USD 4,070/MT and USD 5,400/MT. Informa Oceania forecasts the strongest declines in price whilst other forecasts and futures present a more stable outlook.

CHEESE



- Cheddar cheese prices all increased in March 2018. GDT increased +1.4% to USD 3,789/MT, CME spot price increased +3.6% to USD 3,461/MT and EU Commission increased +1.6% to USD 3,983/MT. USDA Oceania remained flat at USD 3,663/MT.
- Futures and forecasts are mixed. CME Futures prices increased for the six months from April to September 2018, up +1.6% to an average price of USD 3,558/MT. Informa Oceania averages USD 3,424/MT and Rabobank averages USD 3,600/MT.

Actuals

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

Forecasts

- NZX Futures
- CME Futures
- Rabobank Oceania
- Informa Oceania



Trading Event 208

+1.7% ↑

Change in Fonterra's weighted average product price from previous event

USD **3,766**

Fonterra's weighted average product price (USD/MT)

17.5 000/MT

Fonterra product quantity sold on GDT

WMP

-0.2%

\$3,226

SMP

-10.3%

\$1,955

AMF

+0.1%

\$6,249

BUTTER

0.0%

\$5,281

CHEDDAR

-4.0%

\$3,609

RENNET CASEIN

-3.5%

\$4,948

BMP

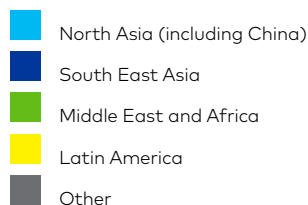
Not offered at this event

LACTOSE

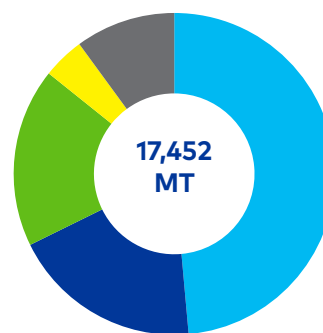
Not offered at this event

GDT Sales by Destination

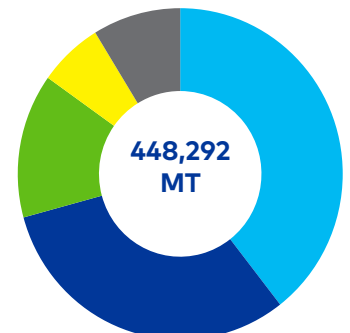
TRADING EVENT 208



Latest Auction



Financial Year to Date



GDT Price Index

Dairy commodity prices and New Zealand dollar trend:

The New Zealand dollar was volatile through February but ultimately depreciated on the back of a recovery in the US dollar.





USDA, DAIRY OUTLOOK

Published 14 March 2018

Recent developments

USDA reported January 2018 milk production of 18.5 billion pounds, +1.3% above January 2017. Milk cow numbers increased to 9.41 million head, 46,000 head more than January 2017.

Wholesale prices reported from January 27th to March 3rd in USDA National Dairy Products Sales Report decreased for butter, nonfat dry milk (NDM), and dry whey. The only price increase was cheddar cheese prices, with 40-pound blocks and 500-pound barrels growing by 2.1 and 6.1 cents, respectively.

Domestic use increased +2.0% or 17.0 billion pounds on a milk-fat milk-equivalent basis compared to January 2017. On a skim-solids basis, the domestic use was 15.4 billion pounds, similar YOY.

US exports on a milk-fat basis were 685 million pounds, a decrease of 76 million month on month for January but increase on 60 million more compared to January 2017. US exports on a skim-solids basis were 3.395 billion pounds, 253 million more than same time a year ago. Exports of whey products remained relatively high, with China being the top destination for US whey products exports.

Imports on a milk-fat basis decreased 123 million YOY to 424 million pounds in January 2018. Imports on a skim-solids basis decreased 91 million YOY to 487 million pounds in January 2018. Much of the decrease on both bases is due to lower milk solids imported in food preparations.

Ending stocks remained very high for January 2018 with YOY increases on most dairy products with a high skim solids content.

Dairy forecasts for 2018

USDA Milk production forecast for the US for 2018 is 219.0 billion pounds, 0.3 billion pounds higher than last month's forecast. Milk cow forecast for 2018 is unchanged at 9.415 million head, however milk per cow has been increased to 23,255 pounds per head.

On a milk-fat basis, USDA raised the export forecast to 9.6 billion pounds, due to the recent strength in exports of whey products and cheese. USDA lowered the domestic use forecast on milk-fat basis to 214.8 billion. Ending stocks for the year on a milk-fat basis are forecast at 12.8 billion pounds, down -0.1 billion on last month's forecast.

On a skim-solids basis, import forecast for 2018 has been lowered to 5.9 billion pounds, due to lower expected dairy-related food preparations. Export forecast has been raised to 42.8 billion pounds. Domestic use forecast on skim-solids basis has remained unchanged at 181.6 billion pounds for 2018. Ending stocks on a skim-solids basis have been lowered to 11.3 billion pounds.

Product price forecasts for 2018 have slightly changed from last months' forecast. Cheddar cheese price forecast was raised and price forecasts have also been raised for butter. Dry whey and NPD prices forecast have been slightly lowered.



BLIMLING, FORECAST UPDATE

Published 7 March 2018

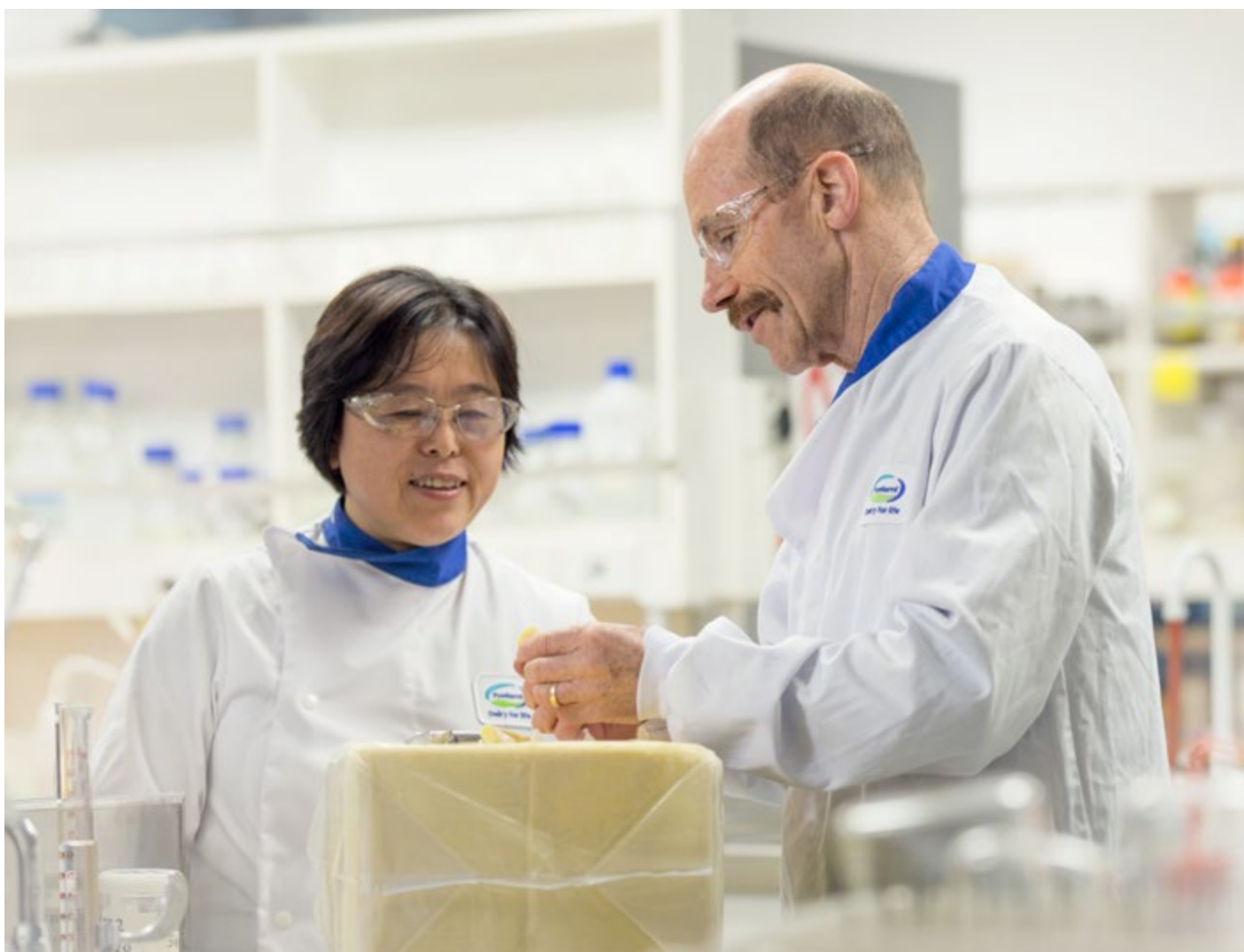
Blimling's March Forecast Update focuses on the China milk powder imports. It is not uncommon to see a strong demand for milk powders in China during January, however this year combined WMP and SMP volume hit a new record of 184,600/MT, a sharp increase of +31% in comparison to January 2017. New Zealand was responsible for supplying about 95% of the volumes. Trade policy between China and New Zealand was the major factor that led the high imports demand. At the same time, uncertainty around milk production in New Zealand also contributed high import volumes as Chinese buyers may have been more eager to secure stock.

Blimling forecasts that the upcoming holiday demand may put a little bounce in the market's step. Yet, strong supplies will continue to limit price upside for cheese later on.

Butter should continue to experience strong demand, however, ample stock growth will leave the butter market well supplied for the second quarter of the year, which could weigh on prices in the future.

Ample supply of NDM/SMP will continue to pressure prices. Low milk production in the US and EU could aid some of the surplus later in the year.

Blimling predicts that sustained supply-side pressure from seasonally stronger cheese production and weak high protein markets will limit the upside price movement.



Sources: 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

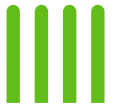
USDA NASS US Department of Agriculture National Agricultural Statistics Service

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 – 13)

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.