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# **PERSPECTIVE** SEPTEMBER 2017

# 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!

This month Eric Hansen, Director Global Dairy Trade reflects on the formation of GDT Marketplace platform one year on.

#### Production, exports, imports and pricing

- Wet conditions in New Zealand are impacting early season production.
- Double-digit export growth for New Zealand in June. US export growth continues and steady growth from the EU.
- Continued strong growth in China and Latin America imports, and steady overall growth in Asia.
- GDT Price Index stayed relatively stable in September with two small increases. Increased +0.3% at TE 195 and +0.9% at TE 196. WMP prices remained fairly stable, SMP decreased slightly whilst butter and AMF increased.
- Modest decline for WMP prices and continued decline in SMP prices in September. Butter prices mostly continue to increase with DDB rising significantly +6.6%. Cheese prices were mixed.

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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# FEATURE ARTICLE



## **ERIC HANSEN** Director Global Dairy Trade

Eric's career spans more than 25 years in the public and private sectors, with senior roles in central banking, government ministry of finance, economics consulting, venture capital, wholesale electricity market, and the dairy industry.

Eric co-led the design and implementation of Global Dairy Trade in 2008 and continues to spearhead the market and business development of the platform.



# GDT MARKETPLACE

# The 24/7 online dairy trading platform

Sharing ideas over a morning coffee a few years ago with a colleague at Global Dairy Trade, we had a "what if" moment.

What if dairy sellers trading in product quantities smaller than those typically sold on our fortnightly large volume GDT Events auction could be linked online with buyers anywhere, any time?

Since launching in 2008, GDT Events had become a trusted and transparent platform for high-volume, high-quality generic dairy ingredients.

But the global dairy market is constantly evolving. Our conversations with customers indicated there was an appetite for a complementary channel that offered greater flexibility, immediacy and privacy for buyers and sellers of smaller volumes, on a reliable, safe and secure digital platform.

We are always looking for opportunities to broaden our services and provide more choices for connecting the world of dairy trading. It's part of our innovation mindset — and it did not take long for us to move from conceptualising our new online dairy trading platform to making it happen.

After two rounds of formal market research to make sure we were aligned with customers' needs, we committed to developing GDT Marketplace.

We wanted it to act like a global shop front, connecting buyers and sellers and allowing transactions of any dairy product at any time, with no minimum quantity



constraints. Customers told us that confidentiality was important to them. It also had to be easy to use.

That is why the GDT Marketplace transaction models are highly flexible and pricing is private. Prices for fixed price listings are only visible to buyers approved by the seller, and competitive tender result prices are not published. Considerable effort went into ensuring that the platform design and function were intuitive, and easy to navigate.

We launched GDT Marketplace in June 2016, after carefully testing its functionality and assuring ourselves that all aspects of the new platform were fit for use.

Here is how a typical transaction works. A seller lists 100 metric tonnes of organic cheddar cheese at a fixed price, and indicates they are willing to sell in quantities as low as 15 tonnes in specific markets. The seller includes as much or as little documentation and detail as they consider appropriate. Approved buyers who accept those terms can click to make the purchase. Contracting information such as insurance and freight rates specific to each buyer is contained within each listing. Other sellers might not specify a price, but instead offer product to would-be buyers by way of a tender.

GDT Marketplace is growing strongly, with a 40 per cent increase in buyers and doubling of sellers since June 2017. It now has 233 registered buyers and 10 registered sellers from USA, Western Europe, Oceania, and Asia. Each new seller operates privately on the platform until they request that their name is announced publicly. More than 2700 listings have been completed across a broad product range from generic ingredients like whole milk powders and cheese to more specialist offerings such as flavoured milk powders and calcium caseinates used in sports nutritional products.

We constantly seek buyers' feedback to ensure ongoing enhancements serve their needs. GDT Marketplace's convenience and efficiency have won high praise. Buyers value the opportunity to browse a wide range of dairy ingredients, seek new supply sources, and connect directly with sellers to ask questions or seek approval. They also like being able to secure product immediately when approved for listings, access a new layer of pricing information, and visibility of forward supply.

Several buyers have commented that GDT Marketplace fundamentally changes the way dairy will be traded in the future.

Just over one year since its launch, GDT Marketplace is proving to be an attractive hub for connecting buyers and sellers, and is effectively complementing our primary GDT Events platform.

For more information about GDT Marketplace, please follow these links:

#### globaldairytrade.info/en/gdt-marketplace/

globaldairytrade.info/en/gdt-marketplace/compare-ouronline-trading-platforms/ **GLOBAL PRODUCTION** 

# WET CONDITIONS IN NEW ZEALAND ARE IMPACTING EARLY SEASON PRODUCTION

To view a summary of year-on-year changes in production **click here** 

#### **New Zealand**



For the 12 months to July, production was down -1% compared to the previous year. Wet weather in August is impacting production with the 2017/18 season-to-date down -2%.

Total New Zealand milk production in July was up +7% compared to the same month last year.

Due to the seasonal profile, volumes in New Zealand are lower at this time of year, but will build over the coming months as the peak collection period draws near.

#### Australia



Production change for the 12 months to June 2017

Production for the 12 months to June was down -7% compared to the same period the previous year. This decrease for the year is largely a result of poor weather conditions in spring and the impact of soft farmgate milk prices earlier in the year.

Australia production in June increased +2% compared to the same month last year.

#### **European Union**



Production change for the 12 months to June 2017

Production for the 12 months to June was down -2% compared to the same period the previous year.

EU production in June was up +2% compared to the same month last year.

While the two biggest producers in Europe, Germany and France were down a combined -1% in June, this was offset by growth in other key export regions, particularly Poland, Ireland and Italy. The increase in June gives some support to the EU Commission forecast for overall production growth of +0.7% for 2017.1

<sup>1</sup>European Commission, Agriculture and Rural Development Short Term Outlook https://ec.europa.eu/agriculture/ market-observatory/milk\_en

#### **United States**



Milk production for the 12 months to July increased by +2% compared to the same period the previous year.

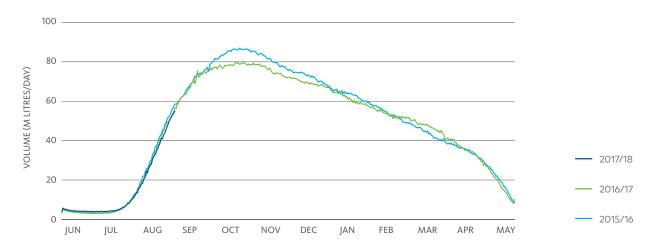
US production in July increased +2% compared to the same month last year.

US volumes have been increasing at a rate of +2% per month for the last 13 months. The increase in production is largely driven by larger herd numbers and improved production per cow.<sup>1</sup>

<sup>1</sup>http://usda.mannlib.cornell.edu/ usda/current/MilkProd/ MilkProd-08-18-2017. pdf

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

# FONTERRA NEW ZEALAND MILK COLLECTION 2016/2017 SEASON



#### New Zealand Collection



For the three months to 31 August, milk collection was flat at 122 million kgMS. Monthly volumes of milk collected will start to build over the coming months as we head towards our peak collection period, which is expected in October.

Fonterra's milk collection across New Zealand reached 93 million kgMS in August, -2% lower than August last season.

Continued wet weather throughout August has proved challenging for farmers and has impacted milk collection volumes.

## **Australian Collection**



from 1 July to 31 August

Fonterra's milk collection across Australia in August reached 11 million kgMS, two million kgMS higher than August last season.

The increase in August was driven by new suppliers that have moved to Fonterra over the past few months. This combined with milder winter conditions and favourable feed and fertiliser costs has set our Australian supplier base up well for spring.



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**GLOBAL EXPORTS** 

# DOUBLE-DIGIT EXPORT GROWTH FOR NEW ZEALAND IN JUNE. US EXPORT GROWTH CONTINUES, AND STEADY GROWTH FROM THE EU

To view a summary of year-on-year changes in exports click here

## **New Zealand**



Exports for the 12 months to June were up +1% or 25,000 MT on the previous comparable period.

Fluid and fresh dairy was up +33% or 69,000 MT, offset by a 49,000 MT combined decline in AMF and casein. WMP, SMP and cheese, the three largest export categories were relatively flat.

Total New Zealand dairy exports in June increased +10% or 26,000 MT compared to the same month last year.

Growth was driven by WMP and fluid and fresh dairy, up a combined +23% for the month.

## Australia



Export change for the 12 months to June 2017

Exports for the 12 months to June were down -3%, or 23,000 MT on the previous comparable period.

This decline was driven by SMP, cheese and butter, three of the larger export categories, which were down a combined 40,000 MT, partially offset by a 16,000 MT increase in fluid and fresh dairy, the largest export category.

Australia dairy exports increased +3% in June compared to the same month the previous year.

In June, SMP, fluid and fresh dairy and WMP exports grew a combined +39%. This was offset by declines in cheese and whey powder, down a total of -33% for the month.

#### **European Union**



the 12 months to May 2017

Exports for the 12 months to May were up +3% or 160,000 MT on the previous comparable period.

Growth was seen in most export categories, in particular cheese and lactose, up a combined 165,000 MT.

EU dairy exports in May increased by +19% or 82,000 MT compared to the same month last year.

Exports of SMP, one of the largest export categories, increased by +96% or 40,000 MT in May as the EU clears excess inventory. Fluid and fresh dairy, cheese and infant formula also grew a combined 37,000 MT.

#### **United States**



Exports for the 12 months to June were up +15% or 282,000 MT on the previous comparable period.

The US had significant growth in its largest export category, SMP, up 117,000 MT or +22%. Growth was also seen across most other major export products, in particular whey powder and cheese, up a combined 114,000 MT.

US dairy exports increased +5% in June compared to the same month the previous year.

Increased exports of cheese and SMP, up a combined +17% for the month were offset by declines across a number of smaller export categories.

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



# CONTINUED STRONG GROWTH IN CHINA AND LATIN AMERICA, STEADY GROWTH IN ASIA

To view a summary of year-on-year changes in imports click here

### China



Imports for the 12 months to July were up +9%, or 192,000 MT, compared to the same period last year.

Growth was seen across all key import categories, in particular whey powder, infant formula and WMP, which grew a combined +14% or 146,000 MT.

China dairy imports were up +20% or 38,000 MT in July compared to the same month last year. Growth was seen across almost all import categories in July, however WMP and SMP had the most significant growth, up 16,000 MT and 13,000 MT respectively.

## Middle East & Africa

0% Import change for 12 months to

May 2017

Imports for the 12 months to May were flat compared to the same period last year.

Declines in cheese, infant formula and butter were offset by increases in fluid and fresh dairy, WMP and SMP, leaving the overall year-on-year movement flat.

Middle East and Africa<sup>3</sup> dairy imports decreased -2% in May compared to the same month the previous year. The decrease in May was primarily caused by lower imports across all key categories except fluid and fresh dairy which was up +15% compared to May last year.

<sup>3</sup> Includes estimate for Algeria and Egypt (May) Asia (excluding China)



Import change for 12 months to May 2017

Imports for the 12 months to May were up +10%, or 391,000 MT, compared to the same period the previous year.

This growth was driven by the four largest categories SMP, fluid and fresh dairy, cheese, up a combined 261,000 MT or +10% for the year.

Asia (excluding China)<sup>1</sup> dairy imports increased +3% in May compared to the same month last year.

The increase was primarily driven by cheese, SMP and fluid and fresh dairy, up a combined +9%, offset by declines in WMP and whey powder, down -7% in total.

<sup>1</sup> Includes estimate for Indonesia and Macao (October-May)

#### Latin America



Imports for the 12 months to May were up +11% or 187,000 MT. Growth for the year was largely driven by increased imports of cheese and SMP, up a combined +15% or 107,000 MT.

Latin America<sup>1</sup> dairy import volumes increased +13% or 21,000 MT in May compared to the same month the previous year.

Imports of SMP and cheese, which make up almost 50% of imports in May, increased +62% and +20% respectively compared to the same month last year.

<sup>1</sup>Excludes Venezuela. Includes estimate for Belize (May)

#### Russia



Imports to Russia are down -11% or -121,000 MT for the 12 months to July compared to the same period the previous year. The main drivers are Fluid and Fresh Dairy, Cheese and Whey powder down -19% (-64,000 MT), -14% (-32,000 MT) and -33% (-45,000 MT) respectively.

Russia import volumes are down – 18% or -19,000 for July compared to the same month the previous year. The main drivers are Fluid and Fresh Dairy, Cheese and SMP down -26% (-8,000), -11% (-2,000), -16% (-2,000).



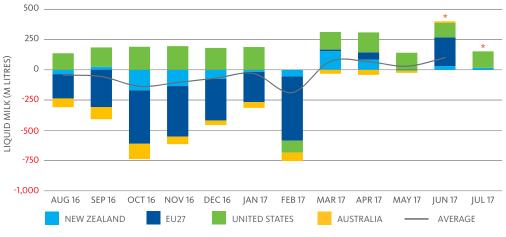
## Global Dairy Market

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

Where countries are not shown, this is likely due to data not yet being available at time of publication.

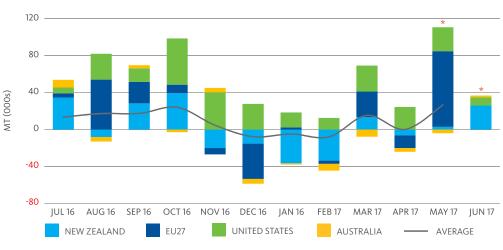
For further information **click here** 

## PRODUCTION

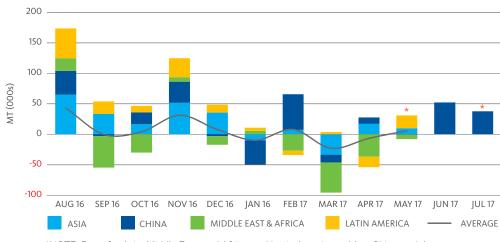


\*NOTE: Data for EU and Australia to June and New Zealand and US to July.

## **EXPORTS**



\*NOTE: Data for EU to May, New Zealand, US and Australia to June.



#### **IMPORTS**

\*NOTE: Data for Asia, Middle East and Africa and Latin America to May, China to July.

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

# **GLOBAL INDICATORS**



FAO Food Price Index averaged 176.6 points in August 2017, down slightly -1.3%, but still +6% above its value a year ago. The Dairy Price Index averaged 219.7 in August 2015, up +1.4% from July, but remains -20% below the peak reached in February 2014. Butter and WMP prices increased due to reduced export capacity resulting from greater domestic demand. By contrast, SMP price declined, while the cheese market remained stable.



The OECD's composite leading indicators continue to point to stable growth momentum in the OECD area as a whole. United States, Japan, Canada, Italy and France show stable growth momentum. Germany shows signs that growth is stabilising and United Kingdom shows signs of growth easing. Growth in India, Brazil and China's Industrial Centre is expected to gain momentum. Russia shows signs of easing growth.

Source: OECD



Source: FAO

The Economist Intelligence Unit (EIU) has modified its estimate of global growth in 2017 from +2.8% to +2.9%, on the back of strong economic data in a number of key countries. In the US and Canada, EIU increased forecast growth of +2.2% and +3.1% in 2017 (up from +2.1% and +2.6% respectively), supported by an acceleration in credit growth and a decline in unemployment EIU also revised the forecast for growth in the euro zone from +2.0% to +2.2%. Brazil's economy continues to recover from recession, EIU forecasts a GDP growth of +0.7% in 2017. China's economy is expected to grow from +4.8% to +5.8% in 2018.

Source: Economist Intelligence Unit



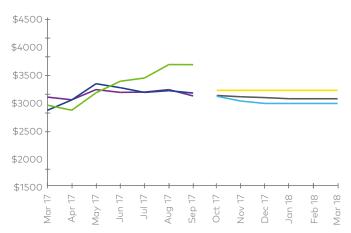
Wet weather in New Zealand dairy regions is beginning to stall production with August -1.5% below year ago levels. Additionally, last year's poor spring weather in New Zealand has had an ongoing impact with poor mating results resulting in late calving and now late production. October is the seasonal production peak for New Zealand. Australia's dairy region received average rainfall. Europe experienced warm wet conditions however dry weather at the end of the month balanced this out. US dairy production does not seem to have been impacted by adverse weather.

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

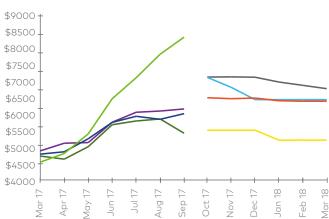
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# COMMODITY PRICES

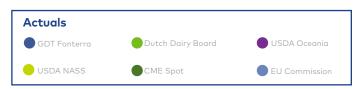
# WMP



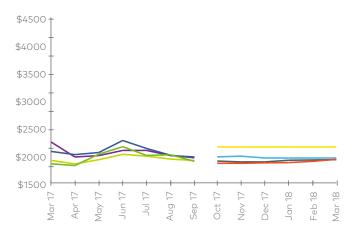
- WMP prices declined in September, with the exception of the Dutch Dairy Board (DDB) price, that stayed flat at -0.1% to USD 3658/MT. USDA Oceania declined by -3.5% to USD 3100/MT and GDT is down by -1.3% to USD 3151/MT.
- Average futures and forecasts for the next six month period, September to February 2018, were mixed. NZX Futures average price from October to February 2018 declined by -5.1% to USD 3069/MT and average forecasts from Rabobank Oceania rose by +1.6% to USD 3200/MT. Informa Oceania average price slightly decreased by -2.1% to USD 2995/MT



- Butter price variations were mostly positive. DDB pricing increased by +6.6% to USD 8301/MT, GDT rose by +2.9% to USD 5996/MT and USDA Oceania also slightly up by +1.0% to USD 6138/MT. CME Spot was down by -7.4% to USD 5406/MT.
- Forecast and futures were varied for the average price from September to February 2018. NZX Futures up by +3.6% to an average price of USD 5975/MT and Informa Oceania rose by +4.0% to 5594/MT. Rabobank Oceania down by -2.2% to USD 4350/MT, with CME Futures also down -4.1% to USD 5421/MT.

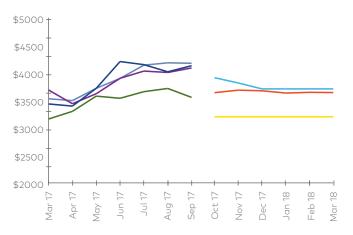


# SMP



- SMP prices continued to decline in September. DDB was down by -5.8% to USD 1891/MT. GDT decreased -2.4% to USD 1953/ MT, USDA Oceania down by -1.3% to USD 1969/MT and USDA NASS down -1.3% to USD 1905/MT.
- Variations to futures and forecasts were mixed for the next six months' average pricing. CME Futures were down -3.2% to an average price of USD 1876/MT and NZX Futures decrease by -6.3% to USD 1900/MT. Informa Oceania decreased their forecasts down by -10.3% to USD 1959/MT. Rabobank Oceania increased by +2.0% to USD 2150/MT.

# Cheese



- Cheddar cheese prices were mixed. Cheddar prices increased month on month, with GDT increasing by +2.8% to USD 4129/MT and USDA Oceania up by +2.0% to USD 4088/MT. CME Spot declined by -4.4% to USD 3553/MT. EU Commission remained flat at -0.2% to USD 4173/MT.
- Futures and forecasts were mixed for the average prices for the next six months. CME Futures declined -4.2% to an average price of USD 3652/MT. Informa Oceania increased +2.0% to an average USD 3759/MT. Rabobank stayed flat.



# Butter





The New Zealand dollar began strongly in August however was impacted by economic news out of the United States and by uncertainty around the New Zealand election build up.

**PRICE INDEX** 

**TRADING EVENT 196** 





# **USDA, DAIRY OUTLOOK** Published 18 September 2017

## **Recent developments**

USDA reported July 2017 milk production of 18.2 billion pounds, +1.8% above July 2016. Milk cow numbers increased to 9.40 million head, +1,000 head less than previous month. Milk per cow averaged 1.904 pounds per head, +20 pounds higher than July 2016. July was the first month since September 2016 that milk cows declined in comparison to the previous month.

Wholesale prices reported from 5 August to 9 September in the USDA National Dairy Products Sales Report were mixed for most dairy products, with the biggest increase seen in cheddar cheese. The biggest decrease was seen in the price for butter, down -6 cents per pound.

US exports on a milk-fat basis were 744 million pounds, an increase of +68 million pounds more compared to July

## Dairy forecasts for 2017

USDA milk production forecast for the US is 216.0 billion pounds for 2017, +0.3 billion pounds higher than last month's forecast. Milk cow forecast for 2017 has been lowered to 9.395 million head. Conversely milk per cow has been raised to 22,980 pounds per head.

On a milk-fat basis, USDA has slightly increased import forecast to 6.1 billion, due to higher expected imports of butter and several other products, and lowered export forecast on a milk-fat basis to 9.2 billion pounds. USDA raised domestic use forecast on milk-fat basis to 211.8 billion, as recent consumption and price data indicates stronger domestic demand. With the high ending stocks for cheese in July, ending stocks for the year on a milk-fat basis are forecast at 12.8 billion pounds, an increase of +0.3 billion on last month's forecast.

Dairy forecasts for 2018

USDA Milk production forecast for US for 2018 has been lowered to 220.1 billion pounds. Milk cow numbers have been slightly lowered to 9.450 million head, however, milk per cow is unchanged at 23,295 pounds.

On a milk-fat basis, USDA slightly lowered the import forecast for 2018 to 5.7 billion pounds. 2018 export forecasts on a milk-fat basis is unchanged at 9.2 billion pounds, as higher expectations for exports of butterfat are balanced out by lower forecasts for cheese exports. USDA increased the forecast for domestic use on a milk-fat basis 2016. US exports on a skim-solids basis were down, with July exports of 3.121 billion pounds below both the previous month and year ago levels. Cheese exports were 60.1 million pounds in July, up +7.2 million pounds from July 2016.

Imports increased MOM in July. Imports on a milk-fat basis increased +51 million YOY to 514 million pounds in July 2017. Imports on a skim-solids basis increased +9 million YOY to 540 million pounds in July 2017.

Ending stocks remained relatively high for July 2017, with YOY increases for cheese, NDM and whey products. Butter stocks were below that of the previous year, but remained +21% higher than July 2015.

On a skim-solids basis, import forecast for 2017 is slightly higher at 6.4 billion pounds, mainly due to higher expected imported of milk protein concentrate and WMP. Export forecast has been lowered to 40.6 billion pounds, based on flagging exports of NDM/SMP and cheese. Domestic use forecast on a skim-solids basis has been raised to 181.1 billion pounds for 2017. Ending stocks on a skim-solids basis have been lowered to 10.2 billion pounds.

Most dairy product price forecasts for 2017 have been lowered, except for cheddar cheese. Butter price forecasts have fallen in recent weeks, as export growth has failed to materialise. With high stocks and lower expectations for exports, NDM price forecast has been slightly lowered. Dry whey price forecast has also been lowered.

to 216.3 billion pounds for 2018. Ending stock on a milk-fat basis has been raised to 12.1 billion pounds for 2018.

On a skim-solids basis, USDA import forecast has been lowered to 6.2 billion pounds for 2018, as milk protein and cheese imports are expected to be lower. The skim-solid basis export forecast has also been lowered to 41.8 billion pounds. Domestic use forecast on a skim-solids basis has been decreased to 184.3 billion pounds for 2018. USDA forecast ending stocks on a skim-solids basis for 2018 increased to 9.4 billion pounds.



# **BLIMLING, FORECAST UPDATE** Published 5 September 2017

Blimling's September forecast update focuses on the dairy commodity price planning for 2018.

Blimling predicts butter prices will average \$2.40 per pound in 2017 and current futures prices for 2018 are expected to be at \$2.35, which compares to \$1.95 average per pound over the previous five year period. Cheese prices for 2017 could average around \$1.65 per pound. For 2018, futures are pointing to similar prices at \$1.70 average; nearly 40 cents below the 2014 high average prices, but 12 cents above the 2016 prices. In 2017, NDM prices will likely be around \$0.90 cents. 2018 prices for NDM are expected to increase slightly to \$0.95 cents, however, at a below five year average levels of \$1.30.

In the cheese market, ample supply of cheese and slow demand will limit upward price movement not

far from present levels. However, holiday demand and seasonally softer fresh cheese supply could keep the cheese market supported.

Butter prices will likely to strengthen heading into the holiday season due to constrained EU supply. Market will likely remain unsteady.

Surplus of NDM/SMP will continue to weigh down prices. Despite the stronger global demand that may aid to work down some of the excess, strong return for Butter/SMP production will maintain dryers active.

In the WMP market, global over supply will keep prices lower into the New Year. Without an increase in demand, or slowdown in supply, the values are expected to remain flat into 2018.

# **INFORMA ECONOMICS, GLOBAL DAIRY REPORT** Published 19 September 2017

Informa recognises that strong international dairy prices have been supported by strong import demand. However, Informa remains bearish with their long-term outlook, expecting strong production in major exporters and lacklustre demand across a large number of smaller players.

Chinese (and to a lesser extent Philippines) imports have been strong despite high prices. Chinese imports were up 43% in July, the strongest growth in 3 years. SMP and WMP prices declined, as did dry whey. Informa speculates that China's increased purchases of SMP and WMP indicate they are making the most of declining prices and stocking up. US demand for cheese and butter remains stable which is putting pressure on prices. EU milk production has been lower than expected resulting in tighter than expected butter and cheese supplies and new highs for EU butter prices. However, Informa notes that the EU price increases are waning and speculates this is because end users are pushing back and production recoveries are expected in NZ. China showed strong imports for cheese and butter where it is less price sensitive. Strong Asian demand and seasonally tight supplies are supporting more increases in Oceania Cheddar prices.



# GLOSSARY

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

**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.





Ingredients by Fonterra Dairy for life

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