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ISSN 1839-0781

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# **Inputs**



Situation: Outlook:

This winter was one of the driest on record, with parts of the country receiving close to no rain. The grain market rallied while the hay prices remain subdued. The dry winter led to low inflows into water storages, but the wet start to spring improved the water outlook for irrigators. Fertiliser prices are at an all-time low.

# Global supply



Situation: Outlook:

Dairy market balance has benefited from a slower than expected recovery in milk production, particularly in Europe and New Zealand, however improved farmgate prices are likely to see growth accelerate as weather conditions improve.

# Global economy



Situation:

Outlook:

The IMF's outlook for global economic growth remains unchanged, with growth forecast to reach 3.5% in 2017, and 3.6% in 2018. Low inflation, rising political tension and a prolonged period of policy uncertainty are seen as key risks.

# Australian market



Situation: Outlook:

Supermarket milk sales volume and value continued to grow strongly, as volume growth in dairy spreads moderated - in part due to retail price increases. Average per-kilo values of cheese remain under pressure as consumers trade to larger packsizes and lower price points.

# Global demand



Situation: 
Outlook:

The volume of dairy products traded during 2016/2017 rose by over 4%, with solid growth in Greater China, Japan and Mexico serving to offset continued slowing in the Middle East and North Africa and a more measured rate of expansion in Southeast Asia.

# **Exchange rates**



Situation: Outlook:

During the second quarter of the year the AUD strengthened to its highest level for two years against the US dollar. At the same time, the Euro appreciated and NZD also appreciated as the US dollar weakened; limiting the impact on competitiveness relative to other dairy exporters.







# **Executive summary**

- > Australia's dairy industry has entered a period of recovery after two challenging seasons, with modest growth in national milk production anticipated.
- Cash flow and profitability remain under pressure, although favourable weather has helped keep costs down in a number of regions.
- > The global dairy market has benefited from slow milk production growth and resilient demand, however risks to the current balance continue to mount.

Against a backdrop of much corporate and policy conjecture, Australia's dairy industry has entered a period of recovery after two challenging seasons. Milk production is beginning to show modest growth as farmers make the most of slightly higher farmgate prices, reasonable weather, and generally contained input costs. None of these factors are universally better across all production regions, but the overall picture is one of incremental improvement, tempered by the lingering risk aversion and financial limitations that will take longer to overcome.

Dairy market settings remain supportive of a gradual recovery. Internationally, commodity prices reflect a relatively balanced supply/demand equilibrium, changing little over the past few months. Butter prices are near record highs, whilst skim milk powder (SMP) values continue to be suppressed by the large volumes held in European public storage. Most other products remain somewhere closer to 'average', and the combination of reasonable demand and re-emergent supply suggest they are likely to remain so. Closer to home, the Australian domestic market is stable, with liquid milk sales buoyant as growth in dairy spreads slows.

On farm, seasonal conditions have been typically varied, however southern regions have seen generally favourable weather through much of 2016/17 and

the start of 2017/18. This is reflected in the latest Dairy Industry Farm Monitor Project (DIFMP) results, showing similar or slightly improved Earnings Before Interest and Tax (EBIT) outcomes. despite lower farmgate milk prices. That said, cash flow remains tight, and the priority for any surplus cash is most likely to be debt reduction or expenses such as repairs and maintenance deferred from last season.

Domestic-focused regions have experienced more extreme seasonal conditions at times, with particularly challenging wet-dry cycles across parts of NSW and Queensland. As the DIFMP results show, this has impacted profitability for those farmers who have faced milk price reductions; challenges which will take time to overcome. Western Australia saw a particularly abrupt shift from dry to wet conditions. amidst wide variation in farmgate prices.

The El Niño outlook is expected to remain neutral for the remainder of the vear, despite cool water in the Pacific (which usually points to wetter than average weather conditions). The Indian Ocean Dipole outlook is also neutral though Indian Ocean temperatures have cooled (indicating drier than average weather). The two effects are considered likely to cancel each other out and the outlook for spring suggests equal chance of above or below normal rainfall across Australia. Prospects for

irrigators have continued to improve, with recent inflows boosting storage levels and forecast water allocations.

Market conditions for other key inputs remain reasonably balanced in favour of buyers. Supply competition, overcapacity and oversupply continue to dominate the fertiliser industry and keep prices under pressure, even as local manufacturers face escalating gas prices. Despite dry winter conditions denting hav production prospects. late winter and early spring rains went some way to alleviating anticipated supply pressure. Meanwhile, ABARES' September crop report suggests winter wheat production will drop 38% compared to last year's record, largely due to a dry winter in major cropping regions. Grain price increases have already been observed in response to this, and further pressure remains a risk. Internationally, production of grain (wheat and coarse grains) in 2017/18 is forecast to reach 2.0 billion tonnes, a 4% decrease from last year but higher than earlier estimates.

Based on the combination of contained input costs and a modest improvement in farmgate milk prices, growth in milk volumes is expected in southern regions. In domestic-focused regions, uncertainty and pessimism surrounding the direction of farmgate milk prices remains a feature, and recent weather conditions have generated extra

Dairy Australia's forecast for 2017/18 milk production remains a growth range of between 2 and 3% on the 2016/17 total of 9.0 billion litres. This implies a forecast total of around 9.2 billion litres for 2017/18.

challenges. Ongoing financial and confidence impacts from previous years, together with a constrained herd and the potential for weather and input cost setbacks are likely dampeners to growth. Dairy Australia's forecast for 2017/18 milk production remains a growth range of between 2 and 3% on the 2016/17 total of 9.0 billion litres. This implies a forecast total of around 9.2 billion litres for 2017/18.

The global dairy market has benefited from slow growth in milk production across a number of key exporters. In particular, European production remained below expectations due to sub-optimal weather through the northern spring and summer, and the post-downturn recovery in New Zealand has only recently begun to gather pace. A market-driven acceleration in output is now underway in both cases, and the US – where production never really slowed – is once again eyeing international markets as their solution to a growing domestic surplus.

International dairy demand has shown welcome growth and remains supportive overall, with total traded volumes for the year to the end of June up by 4.1%, whilst value grew 7.1% in US dollar terms as commodity prices recovered through the period.

By region, the story is mixed, with solid growth in Greater China, Japan and Mexico combining with a more modest pace in Southeast Asia to offset the continued slowdown in the Middle East and North Africa. Whilst the rate of buying has been adequate to support prices in the current environment, a key concern amongst exporters remains the ability of the market to absorb additional milk production growth. This season's Oceania spring peak is of particular interest, coinciding with out of season supply pressure from the northern hemisphere.

The Australian domestic market has delivered some surprises, with total supermarket milk sales volumes growing by 2.5% over the 12 months to September, outpaced by a 4.6% boost in value on robust sales of branded milk. Such growth in the sales volume and value of the fresh milk category in a well-established and mature market like Australia is unusual, given the ongoing decline in sales seen in comparable markets such as the United States and many European countries. Flavoured milk sales continue to grow strongly, whilst dairy spreads volume growth moderated, in part due to retail price increases reflecting earlier moves in commodity markets.

In the corporate sector, a significant amount of activity has taken place, with processors selling old plants, upgrading existing ones, and commissioning new facilities - notably the rebuilt Fonterra cheese factory at Stanhope, and Union Dairy Company dryer at Penola. The past few months have also been dominated by speculation surrounding the situation and future direction of Murray Goulburn. The cooperative is currently undertaking a strategic review and has confirmed receipt of a number of unsolicited investment proposals, indicating that further details will be provided at its October 27th AGM.

Whilst rumours continue to swirl, most farmers will be getting on with the task of shoring up their businesses following a financially and emotionally draining period. Though not without challenges, both the international and the domestic market are delivering opportunities at the top line, and input prices have kept some of the pressure off costs. In the current season, profitability will be influenced more by the dynamics currently at play in these key markets than the noisy debates around longer term corporate investment and policy issues.

# **Export region weighted cost and income indices**

The weighted cost and income indices consider the near-term outlook and highlight the net impact of market changes. The latest update suggests:

- > 2016/17 was undoubtedly a tough season in cash flow terms, but the ability of many farmers to reduce or defer costs led to modest improvements in EBIT outcomes for southern regions, as detailed in the Dairy Industry Farm Monitor summary (from page 24).
- > Improved milk prices and a continuation of at least some of the favourable cost settings suggest 2017/18 will provide some scope for recovery.
- > Key risks in the current season are the deterioration of seasonal conditions in mid to late spring, and potential consequent escalation in feed input costs. A further, important caveat is the ongoing significant spread in farmgate prices between different processors and farms.

Figure 1 Export region weighted cost and income indices Income index Cost index 160 140 120 100 60

Source: Dairy Industry Farm Monitor Project, Dairy Australia analysis

# **Inputs**









**Urea** (granular Middle East)

199 US\$/t

+9% LY

-29% 5Y

DAP (US Gulf)

338 US\$/t

-1% LY

-21% 5Y

**MOP** (granular Vancouver)

217 US\$/t

-1% LY

-28% 5Y

Price is August 2017 average, compared to the 2016 August average (LY) and 5-year (5Y) August average.

Source: World Bank



# Water and weather

# **Northern Victoria**

79 \$/ML

▼ -65% LY

-27% 5Y

2,292,124 ML

+45% LY

+29% 5Y

# **Murray Irrigation System**

64 \$/ML

-71% LY

-39% 5Y

224,669 ML

+ 107% LY

+22% 5Y

Price of water traded is 12 month average and volume of water is 12 month total, both to August 2017, and compare to year earlier (LY) and last 5 years (5Y).

Source: Victorian Water Register, Murray Irrigation Ltd



# **Cull cows**

426 c/kg

-17% LY

+16% 5Y

74.999 head

-31% LY

-2% 5Y

# **Dairy cattle exports**

69,463 head

-3% LY



-30% 5Y

Price is August 2017 average, compared to August last year (LY) and 5-year (5Y) averages. Number of head is last 12 months (cull cows to August dairy cattle exports to July 2017) compared to year earlier (LY) and 5-year (5Y) averages.

Source: NLRS, ABS

The El Niño outlook is currently neutral and the Bureau of **Meteorology forecasts** that this will continue for the remainder of the vear.

# Weather

The 2017 winter was unseasonably dry and warm across most of Australia with rainfall well below average. The El Niño outlook is currently neutral and the Bureau of Meteorology forecasts that this will continue for the remainder of the year. This is despite cool water in the Pacific, which usually points to wetter than average weather conditions. The Indian Ocean Dipole outlook is neutral and most climate models suggest it will also remain neutral for the balance of 2017. In the Indian Ocean, temperatures have cooled - indicating drier than average weather. The two effects are likely to cancel each other out and the climate outlook for spring suggests an equal chance of above or below average rainfall across Australia.

During winter, rainfall tracked well below average in most of the country due to high sea level pressure reducing cloud cover. National rainfall in June was the second lowest recorded, only 33% of the average. Western Australia, Queensland, parts of South Australia and Tasmania all recorded below average rain with areas in coastal New South Wales receiving little-to-no rain all winter. Toward the end of winter and beginning of spring Victoria, south Western Australia and parts of South Australia received above average rainfall.

Reduced cloud-cover led to very cold nights with frosts in winter. Daytime temperatures were above average and during some months amongst the highest recorded. The Bureau of Meteorology has forecasted above

average daytime temperatures this spring, especially in southeast and north Australia. Night time temperatures are predicted to be warmer than usual this spring.

#### Water

A warm and dry winter resulted in lower inflows into major dams, whilst unusually high evaporation rates further impacted storage levels. At the time of writing, water levels in Lake Glenmaggie and the Waranga Basin are tracking below last year, while Lake Eildon and the Hume dam are now close to long term averages. Goulburn Murray Water's seasonal outlook suggests improved water accessibility in spring given current conditions.

Following the drier than average winter, water trade levels are elevated in southern New South Wales. The dry winter has seen price increases in northern Victoria, southern New South Wales and the Murray Irrigation area after a prolonged period of well below average prices. In northern Victoria August prices were \$126/ML after three consecutive monthly increases, however prices remain 4% below this time last year, following late winter rain. Trading volumes were down 21% compared to last year and 17% below the five year average. Water trading in Zone 6 (Hume to Barmah) fell the most, down 58% compared to last year.

Meanwhile, trading volumes in the Murray Irrigation area have tracked well above the previous year, up 53% in August. Prices increased during the winter to an average of \$127/ML in August, up 21% compared to last year and 38% above the five year average.

# Fertiliser

Over-capacity and oversupply continue to dominate the fertiliser industry and keep prices under pressure, and well below long-run averages. Potash (MOP) and nitrogen (urea) prices are down 28% and 29% respectively compared to the five year average, while the phosphate (DAP) market is tracking 21% below the long-run average.

Demand for urea and nitrogen fertilisers remains low as many buyers already have access to sufficient supply. The urea market is described as being in a state of chronic oversupply and producers have plenty of stock available. Several producers have cut back production in the past few months and prices in August are up 9% compared to last year as a result. Urea demand is expected to increase towards the end of the year, potentially further strengthening prices. However as production is predicted to expand this might yet limit any price increases.

MOP rices in August tracked 1% below last year, and a recent supply contact between Russia and China is likely to act as a pricing benchmark going forward. MOP prices are well below average but remain stable. In the face of lower prices the market has seen many suppliers reduce or consolidate production, as in the case of the recent merger between two major Canadian producers.

Demand for phosphate fertilisers (DAP)

increased slightly during winter, however demand is still relatively slow as buyers hold out in anticipation of lower prices. DAP supply remains stable and prices are subdued, down 1% compared to last year despite the increased demand.

# Cull cows

The trend of elevated cattle sales, appears over as the national herd continues to rebuild and beef prices ease. In the 12 months leading up to August 75,000 cows were culled compared to 109,000 the year prior, a 31% decrease, whilst culling rates are down 2% on the five year average. Female cattle slaughter rates over the period were 45%. The low proportion of female cattle culled is expected to continue throughout 2017, despite poor pasture availability in some regions.

Over the 12 months to August, prices fell 17% to an average of 426 cents/kg, the lowest since May 2016. However, prices remain elevated compared to the five year average, up 16%. The Meat and Livestock Industry Projection for 2017 suggests the cull cow market will face downward pressure for the remainder of the year. Prices are not expected to drop below 2013 levels however, as farmers continue to rebuild stock and export demand grows.

US exports posed some challenges for Australia in Asian markets, however the rise in US cattle prices offered some support to the Australian market. The Meat and Livestock industry projection predicts Australia will export more than 1 million tonnes of beef in 2017.

# Hay

Prospects for this season's hay harvest deteriorated following an unusually dry winter, with increased demand and some price movement. Subsequent late winter and early spring rains have alleviated some drought-and-crop concerns. This has led to a more positive harvest outlook, which may track close to last year's record breaking yields in parts of the country.

Pasture availability across the country is varied with some areas enjoying good access to fodder. Last season's harvest was of generally poorer quality and many farmers are choosing higher quality hay to ensure output and animal health. Growers are hoping for a better year in term of quality, for the season ahead.

# Northern Australia

Demand for hay grew in northern regions, as a lack of rainfall stunted pasture growth and increased the need to buy in hay. Limited local supply has led some farmers to buy hay from further afield, often freighted from southern regions to meet the shortfall. Whilst new season cereal hay from the region has entered the market and lowered some prices, the outlook remains challenging. Northern regions will likely have to freight hay from southern regions for the remainder of the season.

### Southern Australia

Rainfall in late winter and early spring improved the new harvest outlook in southern regions, and growers are predicting yet another season of oversupply. Growers are hoping for a better season quality wise, with large carry-over from last season making disposal of lower quality hay difficult.

Demand is limited, as many sheds are still full from last season's harvest and farmers have good pasture growth in paddocks. Given the good harvest outlook, a lift in prices and buying activity is unlikely at this stage.

#### Western Australia

Demand in western regions is varied, following mixed weather during winter. Some parts of the region received good amounts of rain and are reporting strong supplies in sheds. Other parts received close to no rain and are in desperate need of significant rainfall during spring in order to secure a reasonable production outcome.

The export industry continues to dominate the Western Australian market and acts as a solid indicator of pricing in the region.

### Grain

World production of grain (wheat and coarse grains) in 2017/18 is forecast to reach 2.0 billion tonnes, a 4% decrease from previous year but higher than estimates earlier this year. Reduced production compared to previous year is a result of lower planting areas and lower average yields following

The trend of elevated cattle sales may be over as the national herd continues to rebuild and beef prices ease.

Late winter and early spring rains alleviated drought concerns, creating a more positive harvest outlook.

unfavourable weather events. Expected higher grain consumption during the year may result in the first global stocks reduction for five years. Nonetheless, if realised, the forecast total for global grain production would be the second largest ever recorded.

Increasing wheat production, especially in the Black Sea region, forms a large part of this outlook. Wheat production is forecast to be the second highest on record. In addition, huge stockpiles of wheat remain globally, following last year's large carry-over crop, the majority being held in stockpiles in India and China. Wheat consumption in 2017/18 is expected to increase less than global output and inventories are forecast to grow. Wheat production is expected to contract 11 million tonnes to 743.2 million tonnes this year, according to the USDA World Agricultural Supply and Demand Report. Unfavourable weather conditions in Australia. Canada. Europe and the United States threaten wheat output in those regions and led to price rallies in winter. Australian prices also jumped following these events, especially in northern regions, however with the improved outlook towards the end of winter and early spring prices have eased somewhat.

Production of coarse grain is expected to drop to 1.3 billion tonnes in 2017/18. Maize production is forecast to decrease 56 million tonnes compared to last year, accounting for much of this drop. Barley, sorghum and oats production are also predicted to shrink this year compared to 2016/17. Grain consumption is expected to increase to record levels

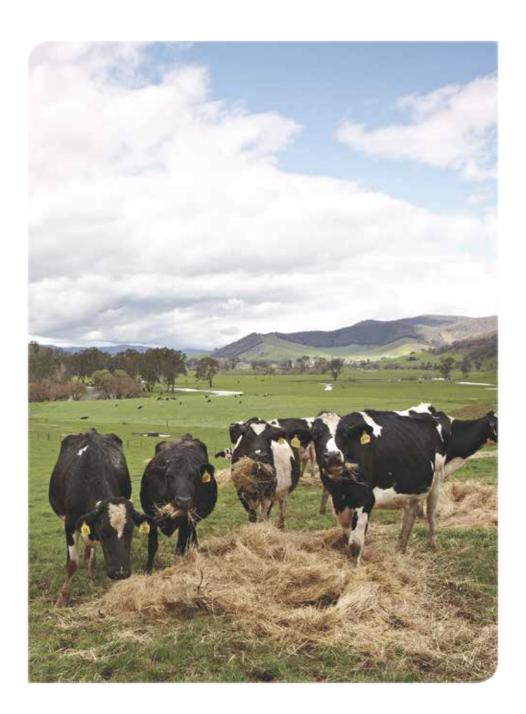
this year, which could decrease global stockpiles for the first time in five years.

The dry winter reduced average yields and resulted in mixed crop conditions during winter and the start of spring, with ABARES' September crop report suggesting total winter crop production in Australia is expected to drop 39%. Winter wheat, barley and canola production are expected to drop 38%, 40% and 33% to 21.6. 8 and 2.8 million tonnes respectively. January 2018 wheat futures prices have increased accordingly, and are up 9% since January 2017.

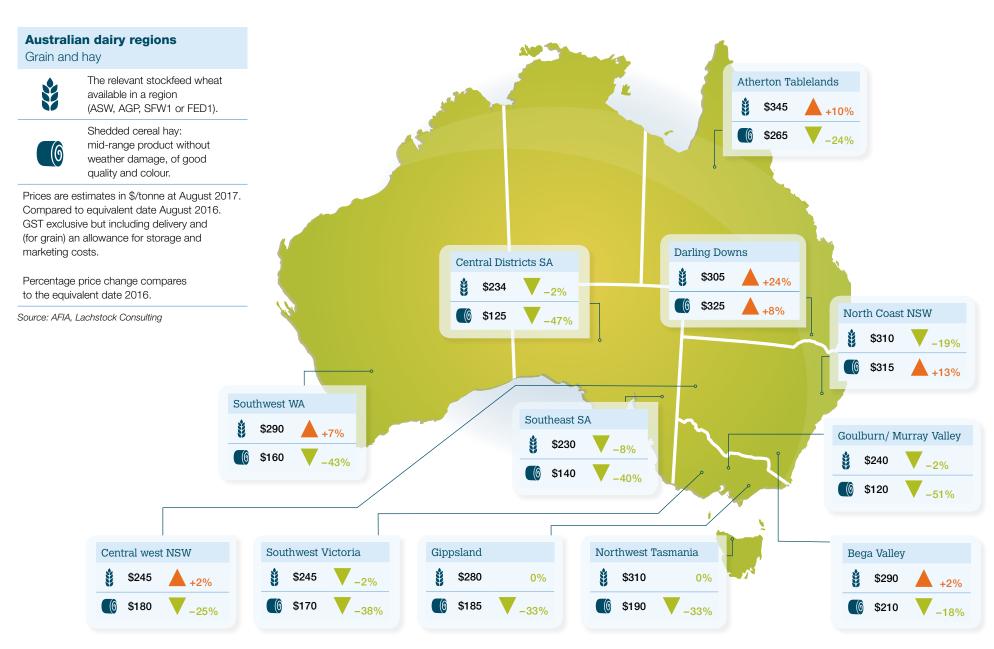
For ongoing information and updates on farm inputs, subscribe to Dairy Australia's monthly Production Inputs Monitor, or the weekly Hay and Grain Report, found on the Dairy Australia website at: http://www.dairyaustralia. com.au/Markets-and-statistics/Farminputs-and-costs.aspx.

The 'Grain and Hay Report' provides a comprehensive overview of the market and indicative pricing by dairying region, and is published most weeks.

**The Production Inputs Monitor** provides statistics and commentary for grain, hay, fertiliser, weather, water and cull cows on a monthly basis.



# Grain and hay prices



# The Australian market

## Milk

Total supermarket milk sales volumes grew by 2.5% to 1.414 million litres over the 12 months to September, while the category's sales value grew 4.6% to almost \$2,235 million. Fresh white milk grew strongly, up 3.2% in volume to 1,225 million litres, and total sales value of the segment grew 5.3%, reaching \$1,985 million. This growth in the sales volume and value of the fresh milk category in a well-established and mature market like Australia is unusual, given the ongoing decline in sales seen in comparable markets such as the United States and many European countries. Whilst private label milk has steadily regained market share, this recovery has been markedly slower than many commentators expected. Supermarkets have also increased their own offerings of higher priced, specialty private label milks which have benefited from the same consumer intention to support dairy farmers through their choice of products.

Within the fresh white milk segment, volumes of full cream milk have grown by 8.3%, to 706 million litres, reflecting the ongoing change in consumer preferences towards full fat products that has been observed across dairy categories. In contrast, sales of modified (skim and no fat) milk have continued to decline. falling by 6.0% to 388 million litres. Full cream milk now accounts for 65% of total fresh white milk, up from 55% in the four years ago, as consumers' attitudes towards dairy fats continue to evolve. In comparison to the growth in the fresh

white milk segment, total white UHT milk sales volumes declined by 1.7% to 181 million litres, pulled down by a decline in volumes of modified fat milks which eased by 6.6%, whilst full cream UHT milk sales volumes increased by 2.8%. Lactose-free milk remains a small, but important component of the UHT segment, accounting for 14% of all UHT sales by volume but almost a quarter of the category sales value, with sales volumes growing by 9% annually.

Flavoured milk sales continue to grow strongly with volumes sold in the 12 months to September growing by 6.8% to 137.3 million litres, whilst the sales value of the category grew by 5.9% to \$488.3 million. Flavoured milks enjoy a higher unit price, are not subject to the same level of competition from private label brands and have seen a number of new products developed and marketing campaigns from beverage companies. Flavoured functional and sports nutrition drinks also represent an area of increased interest, with new product innovations and offerings from dairy companies.

Non-dairy alternatives have seen continued growth, with sales volumes up 12.9% to 99 million litres, while sales value grew by 12.3 to \$254 million. Whilst sov milk remains the most popular non-dairy variety growing by 6.8%, almond milk is rapidly gaining market share and grew by 34%, to 28 million litres.

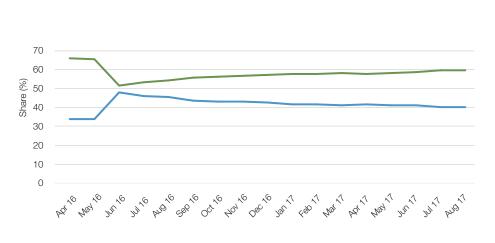
Figure 2 Australian supermarket sales (As of 2/4/17)

Milk (As of 20/8/17)	Cheese (As of 2/7/17)	Dairy spreads (As of 20/8/17)	Yoghurts and snacks (As of 2/7/17)	
Volume (m. litres)	Volume (kt)	Volume (kt)	Volume (kt)	
Year-on-year growth +2.5%	Year-on-year growth +2.9%	Year-on-year growth +1.7%	Year-on-year growth +1.0%	
Retail value (\$ m) 2,235 Year-on-year growth 4.6%	Retail value (\$ m) 2,166 Year-on-year growth +1.2%	Retail value (\$ m) 478 Year-on-year growth +9.2%	Retail value (\$ m) 1,427 Year-on-year growth -0.9%	

Source: Aztec-IRi

Note: Available data is taken from differing periods; milk and dairy spreads from MAT 20/8/2017; cheese and yoghurt and snacks from MAT 2/7/2017.

Figure 3 Company branded vs P/L fresh white milk share of supermarket sales volume



Source: IRI

- Private label

Branded

# Cheese

Supermarket sales volumes of cheese grew by 3% over 2016/17, whilst the overall value of supermarket cheese sales grew by 0.6%. Within the cheese category, sales of deli-section cheese have increased 5.4% to 23,425 tonnes, and 4.0% in terms of value to \$584 million. Sales volumes of chilled cheese grew 2.6% to 124,300 tonnes, whilst sales values eased by 0.6% to \$1.6 billion.

Within the chilled cheese category there has been an ongoing divergence between the growth in sales volume and sales value. Sales volumes of chilled cheese continue to grow at a healthy rate, however the growth in the category value has consistently lagged behind and now appears to be under severe pressure. This is partly due to an ongoing trend of consumers towards larger cheese pack-sizes, with the 650-999g (+49%) and 1-1.49kg pack-sizes (+1.8%) showing continued growth, and sales now totalling 18,900 tonnes and 21,600 tonnes respectively. This has largely come at the expense of the 300-400g and 400-650g pack-sizes. These larger pack-sizes also include a lot of ingredients and cooking cheese such as shredded cheese for pizzas, which retail at a considerably lower price on a per kilogram basis.

Beyond this, cheese prices across most major cheese types (with the exception of cream cheeses) and all pack-sizes have come under concerted pressure, with average chilled cheese prices falling 3% over 2016/17 compared to the

previous 12 month period. Whilst higher margin segments such as snacking and sliced cheeses have shown continued growth in volumes and value over the same period, their market share is relatively small. By contrast, the growth in the value of deli cheese sales remains robust at 4%. Deli cheese now accounts for around 27% of the total value of supermarket cheese sales, despite only accounting for 16% of sales volumes.

# Yoghurts

Growth in the yoghurt and dairy desserts category remains subdued, with overall volumes increasing 1.2% from 210,500 tonnes to 213,100 tonnes between 2015/16 and 2016/17. More encouragingly, total sales values over the same period returned to positive growth, up 1% to \$1.46 billion after a number of quarters of successive declines. Within the category, yoghurt sales grew by 1.4%, pulled upwards by continued strong growth in traditional and natural style yoghurts (up 6.7% to 83,000 tonnes) and dampened by ongoing declines in sales of sweetened voghurts (down 4.4% to 60,600 tonnes).

Within the yoghurt segment, the ongoing growth of snacking yoghurts and single-serve yoghurt packs has been important for growing the overall value of sales, as these products generally retail at twice the per kilo price of bulk yoghurt tubs, and increasingly appeal to time poor but health conscious consumers and families. The growing popularity of newer packaging formats such as yoghurt pouches, or pre-mixed muesli and yoghurt single

serve breakfasts also speaks to these consumer trends.

# **Spreads**

Total dairy spreads sales grew 1.7% by volume, to 49,142 tonnes, and 9.2% in value to \$478 million, in the 12 months to September 2017. Butter sales increased 1.9% by volume to 26.360 tonnes, whilst total sales value increased by 12.2% to \$242 million, with average price for butter increasing by \$0.85/Kg to \$9.20/kg over this period. After fluctuating within a range of \$6.90/kg to \$7.20/kg since 2014, consumers have seen three significant price rises in the last nine months for pat butter, as the protracted period of record high bulk butter pricing finally begins to impact retail values. The latest and largest such step-up occurred in August saw the average pat butter price rise from \$8.90/kg to over \$10/kg and attracted considerable media attention.

As the Australian market heads into the Christmas holiday season, butter demand is expected to build up from mid-to-late November, spiking over the three weeks to Christmas. Beyond the holiday season it remains to be seen whether these higher prices will start to affect consumer demand and continued growth in sales volumes. Within the butter category, company branded butter sales grew by 6.3% to 13,495 tonnes, while private label butter sales declined by 2.5% to 12,830 tonnes. Unsalted butter sales volumes grew

by 9.9% to 6,536 tonnes, whilst salted butter sales volumes grew by 4.7% to 17,644 tonnes.

What's happening in the butter market?

Australian consumers have been treated to a spate of stories about rocketing butter prices at the checkout and a looming butter shortage in the lead up to Christmas. So what's going on with butter? Essentially, a confluence of short and longer term trends has seen the average monthly supermarket price of butter in August 2017 up almost 32% on the same time last year.

In the short run, this price increase has largely been driven by the larger worldwide movements in dairy

Figure 4 Supermarket chilled cheese sales

Packsize	Share of market	Price	Price growth	Volume '000 (t)	Volume growth
100-199g	5.2%	\$29.71	-2.5%	7.0	12.7%
200-299g	21.7%	\$17.95	-1.0%	25.4	-0.8%
400-649g	45.3%	\$11.66	-1.9%	52.0	-2.9%
650-999g	9.9%	\$9.62	-6.6%	14.5	23.5%
1.0-1.49kg	17.1%	\$7.87	-3.3%	21.3	5.2%

commodity prices, with average GDT butter prices in late August (Event 194) up 75% on a year ago. As discussed in the dairy price premiums and substitutes section (page 20), the global supply/demand relationship for butter is fundamentally out of balance, partly due to EU SMP stockpiles. This has contributed to lower butter production, despite record high prices.

On a more long-term basis, there has been a growing consumer appetite for butter once again at the expense of vegetable oil substitutes. In part this is due to an evolving understanding of the risks posed by consumption of saturated fats suggesting they

may not be directly responsible for cardiovascular disease, and also the health-risks posed by modified or fat-free products often containing either highly refined carbohydrates or trans-fats (most products have been re-formulated to remove trans-fats). A growing preference for more natural, less processed foods in home cooking have also contributed to a growing consumer demand for butter, both in Australia and in countries such as the US, and a decline in sales of margarine substitutes, even in the face of higher butter prices.

Figure 5 Weekly pat butter sales and prices Kg (000) Price (\$/kg) 600 \$12.00 500 300 \$6.00 \$4.00 Paffed 200 \$2.00 100 \$0.00 22/05/16 19/06/16 09/10/16 04/12/16 18/06/17 16/07/17 01/01/17 29/01/17 26/02/17



# Flavoured milk

Flavoured milk is an important and growing segment of the drinking milk market in Australia. Strongly regional in terms of flavours, brands and consumption habits these beverages are often characterised by well-established brand loyalties. However, not content to rest on their laurels this market segment has also been characterised in recent years by new entrants, new products and ongoing tweaks and innovations to existing offerings.

One of the most immediate and striking differences about flavoured milk sales are the enormous differences between states and regions across Australia. National per capita consumption of all flavoured milks, based on Dairy

Australia's Domestic Sales Database, is around 11 litres per person per year. However this national average figure is highly misleading. Drill down a little further and some very quirky figures emerge- such as the fact that South Australian and Northern Territorians quaff down over 20 litres of flavoured milk a year- almost double the national average, and almost three times as much as Victoria and New South Wale on a per capita basis. This goes some way to explaining how Farmers' Union Iced Coffee is one of the few local beverages (and the only milk drink) out-sell Coca Cola. South Australia is also unusual in that the popularity is year-round, whereas other big flavoured milk drinking states are quite seasonal, peaking in the warmer summer months.

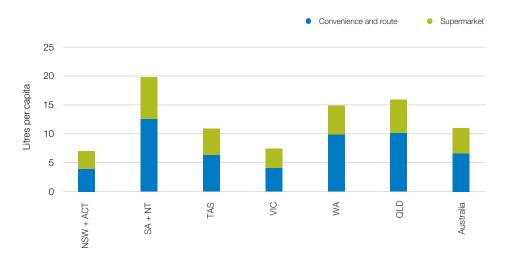
Coffee, followed by chocolate are the well-established favourites when it comes to flavour, pointing to the product's ongoing popularity with adults as well as children. Again, South Australia and the Northern Territory are unusual for the popularity of coffee flavoured milk, which accounts for 70% of milk sold. This high proportion of coffee flavoured milk suggests that consumers in these states may be drinking iced-coffee in preference to actual hot coffee, also accounting for the steadier year-round consumption profile.

Flavoured milk sales are an increasingly important category for milk processing companies, given that flavoured milk consumption has grown on a percapita basis, and is also not subject to

competition from discounted private label brands. Furthermore, flavoured milk generally retails at a 200%-300% mark-up to regular, company branded fresh white milk making it a high margin category. For dairy companies flavoured milk allows for greater product innovation, as well as more points of difference to market when seeking to differentiate their product from competitors and convince consumers to pay for it.

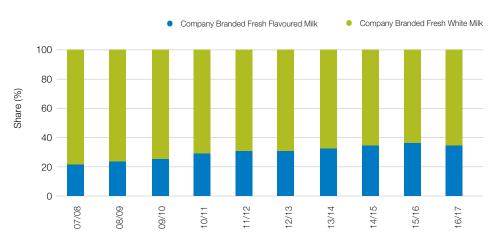
Indeed, as the graph above shows, flavoured milk's share of total company branded fresh milk supermarket sales has steadily increased, and now accounts for over a third of companies' fresh milk sales. Over the period shown, the total sales value of fresh flavoured

Figure 6 Australian flavoured milk shares



Source: Dairy Australia domestic sales database and dairy processors

Figure 7 Share of sales value



Source: Dairy Australia domestic sales database and dairy processors

milk has grown at a constant average growth rate of 8%, compared to 2% for fresh white milk.

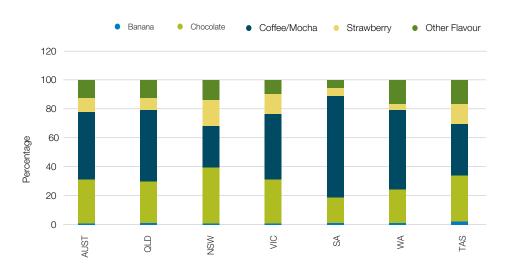
The faster growth seen in the flavoured milk segment has also been aided by considerable marketing, new product releases and reformulations, with some processors looking to reduce the added sugar content of their products. Indeed, part of the growth in flavoured milk beverages may stem from consumers ditching carbonated beverages in favour of milk, which is seen as a more nutritious beverage. Some of the newer products in the flavoured milk segment have specifically sought to cater to the so-called health and wellness trend, releasing flavoured milks with enhanced protein content for post-exercise recovery. Globally, food and beverage giants such as PepsiCo and Coca-Cola have increased their portfolio of dairy-based drinks, with significant releases in markets such as the US. India. Brazil and Mexico, whilst locally Coca-Cola has made a foray with the release of their Barista Bros iced Coffee. Whilst the local entry by Coca-Cola can be viewed as an effort to gain exposure from a fast growing segment, in a broader context this a deliberate global strategy. Faced with slower or even negative growth in sales and revenue for soft drinks, these companies have sought to diversify beyond their core soft drink business. Furthermore, as the links between sugar consumption and obesity and diabetes problem become clearer, governments in both developed and developing

countries have sought to address the mounting costs of a public health crisis with taxes on sugary-sweetened beverages. These regulations have generally targeted soft-drinks rather than fruit juices and flavoured milks, creating a clear incentive for companies to expand their product range.

As yet, flavoured milk has not been severely affected by any regulatory changes in Australia, with some limits on the portion size and sale of flavoured milk in NSW school canteens and hospitals. However, with the introduction of a health star rating system and ongoing discussion around a sugar tax, further changes are to be expected. Dairy Australia is working closely with regulatory bodies and industry to ensure

that the nutritional benefits of flavoured milk are reflected in any public health initiatives. As a convenient, delicious source of vitamins, protein and minerals, more consumers than ever are likely to enjoy an iced-coffee this summer.

Figure 8 Market share by flavour and state



Source: Dairy Australia domestic sales database and dairy processors

# **Economic settings**

The Westpac-Melbourne Institute Consumer Sentiment Index for September 2017 was 97.9, an improvement on the prior three months but still indicating that pessimists outnumber optimists amongst consumers. The September result was the tenth consecutive month of consumer pessimism, capturing ongoing weakness in sentiment amidst concerns regarding family finances, and energy prices.

Dairy Australia's Food Service Index shows continued, albeit slowing, growth in the food services sector, with turnover increasing 5.2% for the full 12 months of 2016/17, but only 4.4% for the most recent 6 month period. The index reflects year-on-year growth in revenue in the takeaway, cafe, restaurant and catering businesses. Growth in hospitality and food service has been most buoyant in east coast metropolitan areas, whilst the performance of the sector has been more subdued in Western Australia. Supermarket sales turnover has been more subdued, but otherwise steady at 2.9%.

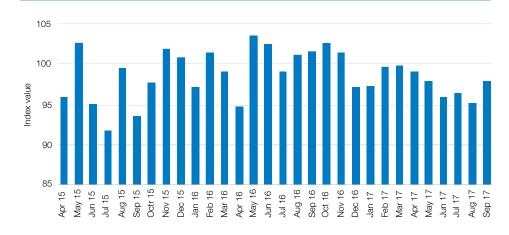
Heading into Christmas and the summer holiday season food service and retail trade is expecting a boost in turnover, however it remains to be seen how a protracted period of depressed consumer sentiment as well as concerns such as cost of living (particularly energy prices) and family finances will affect spending. So far, shaky consumer confidence does not seem to have deterred consumers from eating out, which has traditionally been considered a discretionary item sensitive

to budget pressure. Looking towards the next 12 months this pressure may become more acute for many Australian households, with an increased likelihood of interest rate increases likely to dampen consumer spending. Whilst the RBA has not committed to any timeframe for monetary tightening, the signals from other central banks suggest that the period of ultra-low interest rates may be coming to an end.

Whilst Dr Philip Lowe of the RBA has indicated that 'People should prepare for higher interest rates', the timing of this is obviously contingent on a number of factors, such as stronger economic growth and an increase in inflation.

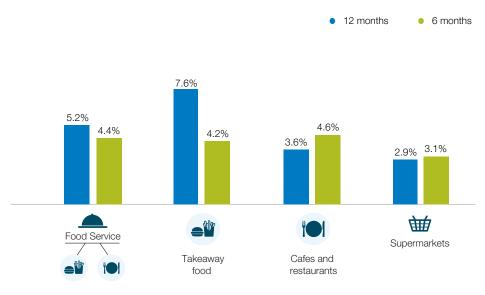
The most recent data shows annual inflation at 1.9% for the 12 months to June 2017, compared to 2.1% for the 12 months to March. Beneath the headline CPI figures, the food and non-alcoholic beverages category eased slightly from the March Quarter, down 0.2%. For the 12 month period, the food and non-alcoholic beverages category rose 1.9%, from 103.8 to 105.8. Meanwhile over the same period the dairy sub-group price levels declined by 2.1% from 99.0 to 96.9 basis points. The largest decrease amongst the dairy sub-groups was within cheese which fell 4.3% over the past 12 months, while the ice cream and other dairy sub-group eased by 2.2%. Adjusting for seasonal and volatile CPI components, underlying inflation to June was 1.8%. This annual inflation rate is still below the RBA's medium-term target of 2%-3%, and has led some prominent economists such as Bill Evans forecasting no increase in interest rates until 2019.

Figure 9 Australian consumer confidence



Source: www.tradingeconomics.com, Westpac Banking Corporation, Melbourne Institute

Figure 10 DA Food Service Index (YoY turnover growth to February 2016)



Source: Dairy Australia, ABS

# Global economy and exchange rates

In the latest (July) World Economic Outlook from the International Monetary Fund (IMF), global economic output in 2017 is expected to grow 3.5% increasing slightly to 3.6% in 2018. This projection remains unchanged from previous forecasts. Global growth in 2016 increased 0.1% from earlier predictions, to 3.2%.

Strong growth in the Eurozone, China and Japan is underpinning the global economy and contributed to this revision. Growth in the Eurozone benefited from reduced political risks in the region, while more supportive fiscal policies led to higher growth in China. In the United States, fiscal policy developments are now expected to be less supportive than previous forecasts, reducing growth expectations.

Increasing growth rates indicate that the global economy is recovering from the financial crisis, however growth is still below pre-crisis levels. Low inflation, rising political tension and a prolonged period of policy uncertainty pose ongoing economic risks. Inflation continues to track below target in many developed countries and been decreasing in several developing countries. The difficulty of predicting policy outcomes of post-Brexit agreements and new US fiscal policies also threatens global economic growth.

During the second quarter of the year the AUD strengthened against the US dollar, reaching 0.79 USD/AUD, the highest level for two years. During the same period, the Euro also appreciated against the USD. The 0.85 USD/Euro rate is the Euro's strongest since early

2015. The NZD followed a similar trend, appreciating against the USD to 0.72 USD/NZD. The weak US Dollar is driven by fiscal policy uncertainty as confidence in the reality of proposed tax-reform (cutting corporate tax rates) ebbs. Furthermore, the Federal Reserve has not increased cash rates in line with expectations, which together with low inflation has also contributed to the depreciation of the USD. The AUD remains supported by growth in the Chinese economy generating demand for Australian exports, as well as recovering commodity prices.

A weaker USD improves the costcompetitiveness of US exports, while a strong AUD deteriorates Australian export competitiveness. In this case, the impact of the strong AUD is expected to be less pronounced, given that other

major dairy exporters' currencies also have appreciated against the USD. Since January the USD has fallen about 10% in value against the Euro and 6% against the AUD. In turn, the AUD has depreciated by 4% against the Euro, meaning that the competitiveness of Australian exports has actually been boosted, relative to European rivals.

Forecasts suggest the AUD will depreciate during the second half of the year, down to 0.75 USD/AUD by December. The Euro is predicted to depreciate slightly against the USD during the final quarter of 2017, before strengthening again in 2018. The NZD is expected to depreciate during the second half of the year, down to 0.70 USD/NZD.



# Global supply and demand overview

Increased (+4%) demand and higher prices delivered a 7% increase in the value of global dairy exports in 2016/17

# European Union



Cheese is the product of choice for EU manufacturers at the moment, with exporters also keen to shift SMP.

## **Export volume trends**

Total volume change:

V 2%

# Significant product shifts

▲ SMP (8%)

▲ Cheese (5%)

▼ Liquid milk (-8%)

▼ WMP (-20%)

### Russia

Russian import volumes have grown strongly from the low levels of 2015/16, with the EU, NZ and South America all increasing their exports.

# Import volume trends

Total volume change:

**+**46%

# Significant market shifts

▲ Middle East (406%)

▲ New Zealand (236%)

▲ European Union (21%) ▲ South America (15%)

### Southeast Asia

Steady growth in volumes, with a notable recovery in SMP tonnage. EU and US have gained share in the region.

# Import volume trends

Total volume change:

**+3%** 

#### Significant market shifts

North America (+16%)

▲ European Union (+13%) ▲ Australia (+2%)

▼ New Zealand (-3%)

# Middle East/North Africa

Dairy import volumes fell for a second consecutive year. Shipments to Saudi Arabia and Egypt are down the most, offsetting increases in other countries.

#### Import volume trends

Total volume change:

**▼** -4%

# Significant market shifts

▼ European Union (–1%)

▼ New Zealand (-6%)

V North America (-8%)

▼ Australia (-42%)

### **United States**



US exports have begun to recover as growth in the domestic market lags that of milk production.

#### **Export volume trends**

Total volume change:

**12%** 

#### Significant product shifts

- ▲ Whey powder (23%) ▲ SMP/NDM (17%)
- ▲ Cheese (14%)
- V Lactose (0%)

#### Mexico

Slower growth than preceding two years, but so far uncertainty about NAFTA yet to be reflected by any major changes in trade patterns.

# Import volume trends

Total volume change:

**+**4%

### Significant market shifts

- ▲ European Union (36%)
- ▲ North America (6%)
- ▼ New Zealand (-10%) V South America (-45%)

# **Greater China**

Restrained growth in imports compared to previous years, but changing product mix and higher prices driving value growth.

### Import volume trends

Total volume change:

**▲** 5%

# Significant market shifts

- ▲ North America (38%)
- New Zealand (13%) ▲ Australia (8%)
- V European Union (-8%)

# Japan

A recovery in Japanese import volumes, led by SMP and whey powder, with a corresponding increase in import values.

#### Import volume trends

Total volume change:

**5**%

- ▲ European Union (31%)
- North America (4%)

# Significant market shifts

- V New Zealand (-3%)
- ▼ Australia (–7%)

# Australia



Growth in liquid milk exports has slowed in the face of stiff competition, whilst WMP has seen a lift after successive declines.

# **Export volume trends**

Total volume change:



# Significant product shifts

▲ WMP (8%)

▲ Liquid milk (5%) ▼ Cheese (-3%)

▼ SMP (-15%)

# New Zealand



Whilst maintaining WMP volumes, NZ continues to push milk into other product streams.

#### **Export volume trends**

Total volume change:

**1**%

# Significant product shifts

Liquid milk (7%)

▲ Cheese (3%)

▼ SMP (-3%) **WMP** (0%)

Changes 12 months to June Source: GTIS. Dairy Australia



Four largest exporters

# Global demand

### Overview

The volume of dairy products traded over 2016/17 rose by 4.1%, with solid growth in Greater China, Japan and Mexico serving to offset a continued slowdown in the Middle East and North Africa. Total dairy export volumes to Southeast Asia grew by 2.8%, whilst exports volumes to the Middle East and North Africa fell 4.4%. Overall, the value of global exports was up 7.1% on 2015/16 to US\$38.8 billion, with improved global prices for key dairy commodities reflected by large increases in the value of butter, cheese. WMP and whev powder traded.

The volume of Australian dairy exports to the rest of the world over 2016/17 fell by 2.7%, totalling 711,000 tonnes. This fall in Australian export volumes occurred predominantly in SMP and butter, export volumes of which declined by 16% and 36% respectively. Australia exported 153,000 tonnes of SMP in 2016/17, compared to 181,000 tonnes in 2015/16, while Australian butter exports totalled 13,500 tonnes, the smallest volume recorded since 1989.

Despite lower export volumes, the value of Australian exports grew by 3.4% to US\$1,958 million. The value of Australia's SMP exports fell by 8.7% to

US\$342 million compared to US\$375 million in 2015/16 and US\$560 million in 2014/15. Australian cheese exports declined slightly by volume however they increased in value, with the majority of Australian cheese exports going to Japan. The decline in export volumes and value in other product categories were largely offset by extraordinarily strong growth in infant formula, export volumes of which increased by 25%. The value of Australian infant formula exports in 2016/17 totalled US\$309 million, compared to US\$246 million in 2015/16 and US\$55 million in 2014/15.

# **Greater China**

Global dairy exports to Greater China (PRC, Macau and Hong Kong) grew by 5.3% in volume over 2016/17, while the value of world dairy exports to China grew by 12.2% to US\$8,321 million. The strong growth has been underpinned by a pronounced pick-up in May and June exports, with the value of exports in May and June 2016/17 both up 51% on corresponding months in 2015/16. This is consistent with industry commentary pointing to lower domestic production and depleted inventories in China driving stronger import demand in the second half of calendar year 2017. Shipments of liquid milk declined by 10%, from 662,000 to 599,000 million tonnes, with a corresponding decline in the value of the category. Exports of AMF to China

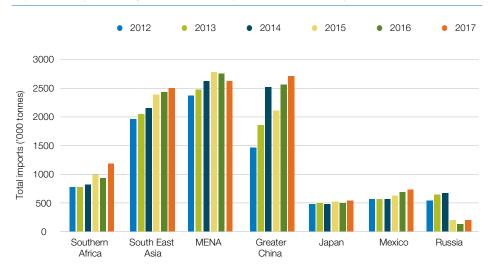
also fell markedly, down 46% on 2015/16 volumes from 50,000 tonnes to 27,000 tonnes.

Australian export volumes grew by 7.5%, from around 172.000 tonnes to almost 185,000 tonnes, while the value Australian exports increased by 17% vear-on-vear, from US\$533 million to almost US\$625 million over 2016/17. The value of infant formula exports continue to grow, and is up 31% on 2015/16 and is now the single most valuable dairy export category for Australia, Australian exports of cheese to Greater China have also shown strong growth, with volumes up 16% to 24,500 tonnes, whilst the value of Australian cheese exports grew 18% to US\$89 million.

# Japan

World dairy exports to Japan grew by 5%, from 492,000 tonnes to 518,000 tonnes, whilst the value of dairy exports to Japan grew by 8.4%, from US\$1,449 million to US\$1,571 million. Volumes of cheese exported to Japan grew slightly, up less than 1% and sitting around 239,000 tonnes, but with the value of the category increasing 5.9%, from US\$ 834 million to US\$883 million. SMP volumes grew 61% to 42,000 tonnes, up from 26,000 tonnes in 2015/16. Whey powder exports saw a significant increase of around 8%, from 57,000 tonnes to 62,000 tonnes with a total value of US\$196 million. Over the

Figure 11 Exports to key demand markets (twelve months to June)



Source: Dairy Australia, GTIS

course of 2016/17 the European Union increased its share of the Japanese market, from around 22% of Japanese imports to over 27%, by volume.

Over 2016/17 the volume of Australian exports to Japan fell by 7%, from 102,000 tonnes to 95,000 tonnes, while the value of Australian exports declined by around 4%. The largest decline was in the cheese category, with an actual fall of around 9.200 to around 81.000 tonnes. Over the same period, the value of Australian cheese exports fell by 5% from US\$298 million to US\$282 million. For the first four months of 2016/17, Australian cheese export volumes to Japan were between 20% and 40% below corresponding months in 2015/16, before regaining some ground in year-to-date terms from between December to March. Australian SMP export volumes grew strongly, up by 90% albeit from a low base of 1.600 tonnes. Australian exports of whey powder were also higher.

# Southeast Asia

The volume of dairy exports to southeast Asia grew by 2.8% from 2,384,000 tonnes to 2,451,000 tonnes, while the value of exports grew by 10% to a total value of US\$5,195 million reflecting improved global prices for dairy commodity prices. The largest changes were in milk powders, with strong growth in SMP and a decline in volumes of WMP. Exports of SMP were up 10% by volume, with strong growth in exports to Malaysia (+20%), the Philippines (+11%) and Indonesia (+15%), while the total value of SMP

exports grew almost 13% to US\$1,340 million. Declines in WMP imports were fairly consistent across most major markets within southeast Asia.

Exports to Malaysia grew by 5%, with increases in SMP, cheese and infant formula serving to offset declines in imports of WMP. Dairy exports to Singapore fell by 11% to 335,000 tonnes, with falls in imports of ice cream and whey powder. The Philippines continue to be a large and rapidly growing, albeit price sensitive market, with export volumes increasing by 8.9%, from 467,000 to 509,000 tonnes. This was driven by growth in exports of whey powder, lactose and buttermilk in addition to growth of the SMP category. Exports to Indonesia grew by 12%, from 423.000 tonnes to 475.000 tonnes. lifted by strong increases in SMP, whey powder and ice cream. Exports to Thailand fell 2%, with a continued slump in imports of SMP and WMP pulling down volumes. Export volumes to Vietnam grew by 6%, with the majority of growth coming from dairy proteins such as whey powder, SMP, milk proteins and caseins.

Much of the increased SMP exports to southeast Asia have come from the US, which has seen volumes of SMP grow by 32% in 2016/17, from 154,000 tonnes to 203,000 tonnes. The EU also increased its exports of SMP to the region, with volumes growing by 23% to 191,000 tonnes. The EU also saw growth export volumes of whey powder (3% to 234,000 tonnes), lactose (+43.4% to 27,000 tonnes) and buttermilk powder (+46% to 29,000 tonnes). New Zealand's

exports to southeast Asian markets have been affected by the increased competition from the EU and US, with milk (-17%), SMP (-3%) and WMP (-7%) volumes all easing over 2017.

Australian export volumes to southeast Asia grew by 1.9%, from 263,000 tonnes to 268.000 tonnes. Increased volumes in liquid milk (+14% to 80,000 tonnes) and WMP (+31% to 24,000 tonnes) offsetting the fall in SMP exports (-15% to 94,000 tonnes). Despite weak growth in export volumes and increased competition from the US and EU, the value of Australian exports to southeast Asia grew by 6% to US\$550 million. Australian export volumes grew most strongly in Malaysia with export volumes up 6% and values up 8%. Singapore remains Australia's largest export market in southeast Asia, with total Australian exports to Singapore totalling 81,000 tonnes, worth almost US\$141 million.

### Mexico

Dairy exports to Mexico over 2016/17 grew 4%, totalling almost 706,000 tonnes, with the total value increasing by 11%. Cheese volumes grew from 114,000 to 126,000 tonnes, while SMP/NFDM imports grew by 7% from 287,000 tonnes to 306,000 tonnes. Shipments of whey powder remained largely stable, down 1.8% to 44,500 tonnes, while exports of cheese were up 1.3%, to 117,000 tonnes. Increases in smaller categories such as lactose and liquid milk also boosted volumes.

# Middle East and North Africa

Volumes of dairy exported to the Middle East and North Africa (MENA) have continued to fall, with the total volume of exports down 4% to 2,577,000 tonnes. Exports of butter to the MENA region fell 21% from 200,000 tonnes to 158,000 tonnes, while volumes of WMP fell 12% from 558,000 tonnes to 494,000 tonnes. However, the total value of exports to the region was largely stable; down only 0.1% to US\$6,735 million.

Export volumes to Egypt were down the most in the region (-27%) to 190,000 tonnes, with exports of butter down 49% to 21,000 tonnes, with volumes of SMP and WMP down 22% and 40% respectively. Exports to Saudi Arabia were down 15% from 421,000 tonnes to 358,000 tonnes with declines in cheese (-8%), SMP (-26%) and WMP (-30%), while total exports to the UAE were down 3%. Total exports to Algeria rose 13%, lifted higher by stronger volumes of milk powders with SMP up 20% to 145,000 tonnes and WMP up 18% to 208,000 tonnes.

Australia's dairy export volumes to the Middle East and North Africa have continued to fall, down 42% to 28,000 tonnes. This marks the sixth successive year of declining Australian exports to the region- in 2011/12 Australian exports totalled 82,000 tonnes. The value of Australian exports fell 35%, down to US\$79 million. SMP remains the most significant export category for Australia worth US\$34 million, with cheese exports the second most valuable category valued at US\$30 million.

# Russia

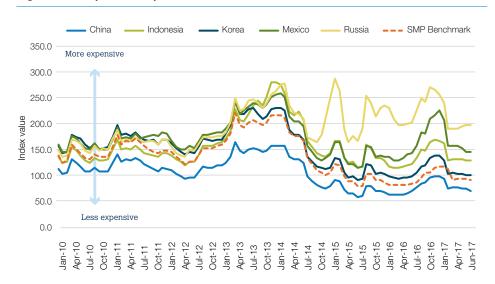
Dairy exports to Russia have grown exceptionally over 2016/17, albeit from a very low level in 2015/16. Volumes were up 46% from 129,000 tonnes to 189,000 tonnes, which is still well below Russian import volumes of 2013/14. prior to the trade embargoes placed on dairy imports from United States, European Union, Australia, Canada and Norway. Export volumes of butter (+59% 24,000 tonnes), lactose (+79% to 25,000 tonnes), SMP (+111% to 28,000 tonnes) and WMP (up 287% to 27,000 tonnes) all grew. The total value of dairy exports to Russia rose 43% to US\$609 million with the value of WMP exports increasing almost fourfold to US\$71 million. Infant formula remains the most valuable category at US\$134 million, however total sales of this product have fallen, down 17% to US\$134 million. With the trade embargoes in place, the chief beneficiaries have been South American exporters and New Zealand, with the latter's export volumes to Russia growing 236% over 2016/17.

# Dairy affordability

Dairy Australia's Affordability Index measures changes in global commodity prices adjusted for local currency effects, to track affordability of dairy imports for consumers in importing countries. An increase in the index reflects worsening affordability for importing countries, and indicates a potential slowdown in import volumes, particularly in more price sensitive markets. The improved affordability of dairy commodities is due largely to currency effects, with the currencies of major importers appreciating against the US dollar. The Chinese Yuan has appreciated by 6.5% since April 2017, the Mexican Peso has appreciated 5.6% whilst the Japanese Yen and Indonesian Rupiah have remained largely stable, gaining 0.2% and 0.1% respectively.

The SMP Affordability Index has remained flat since the last report in June, with the Index for August 2017 flat at 92.1, however most major importing markets have seen an improvement in import affordability over the same period, with an average fall in local indices of 4%. In specific local markets such as China. Mexico and Thailand local prices have fallen by 8.3%, 7.6% and 5.9% respectively since the last reporting period. The improvement in affordability of SMP has also been reflected in the increased volume of global exports, which grew 7% for the year and picked up markedly in the last quarter of 2016/17.

Figure 12 Dairy affordability



Source: Dairy Australia, Bloomberg

# Dairy price premiums and substitutes

The price premiums for dairy fats and proteins continue to show significantly divergent trends, with the dairy fat premium increasing month on month from since December 2016 and remaining at record highs, while dairy protein premiums have weakened continuously and are at all-time lows. The butterfat premium is measured as the difference in US\$/kg prices between palm oil substitutes and dairy butter fats. Many food and ingredient manufacturers will typically alter the relative proportions of dairy fats and cheaper vegetable oils and shortening, substituting between them as the relative prices and associated dairy premiums change.

The butterfat price premium for July 2017 was \$6.05/kg, well above the historical average of \$3.53/kg. The persistence of these high price premiums despite reported shortages and cost pressures suggests a strong willingness to pay for butter on the part of consumers. As dairy markets head towards the Christmas season and the northern hemisphere winter, the consensus holds that this strong world demand for butter and dairy fats is unlikely to weaken in the next few months. Beyond the peak demand of the Christmas holiday season, it is uncertain how long these dairy price premiums can last, given the reported scarcity of butter and higher prices and the ready availability of nondairy alternatives.

In marked contrast to butterfats, protein price premiums are at historically low levels, due in large part to the significant SMP stockpiles in the European Union. These stockpiles overhang the market, and the lack of clarity about the EU Commission's plans to dispose of the stockpile undermining any likelihood of a serious improvement in the market, and effectively placed a ceiling on SMP prices. With SMP prices so low and abundant supplies, there is currently little pressure for substitution towards non-dairy protein sources. Indeed with SMP in many cases effectively an unwanted by-product of butter manufacture, we may yet see new applications for the product.

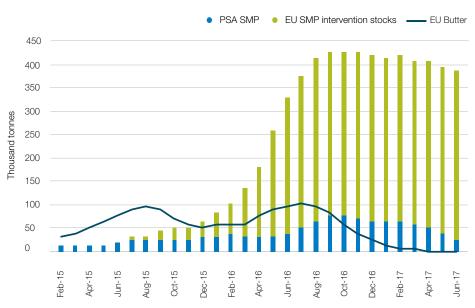
The large EU intervention stocks will likely be a source of instability in dairy commodity markets going forward and be a source of continued divergence. So long as uncertainty around the EU's Intervention Stocks continues, SMP prices will remain low, supressing total returns from the SMP/butter manufacturing stream below that of alternative streams such as WMP and cheese, meaning that less butter will be made, in turn leading to continued shortages of butter and higher butter prices.

Figure 13 Dairy price premium vs palm/soy substitutes



Source: Oilworld, Dairy Australia

Figure 14 EU Intervention stocks



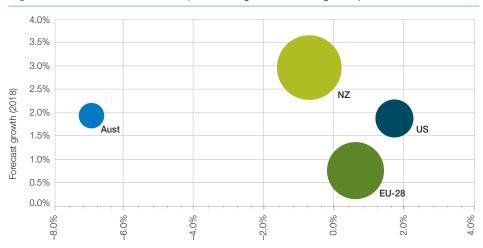
Source: European Milk Market Observatory

# **Global supply**

# Overview

Dairy market balance has benefited from a slower than expected recovery in milk production, particularly in Europe and New Zealand, however improved farmgate prices are likely to see growth accelerate as weather conditions improve.

Figure 15 Actual and forecast milk production growth – four largest exporters



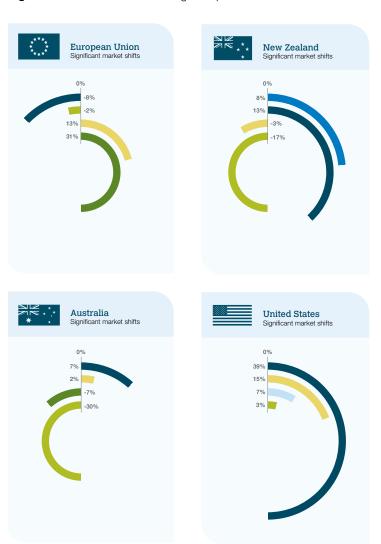
Note: Size of bubble represents share of global dairy exports. Data covers production seasons for Aust and NZ, calendar years for US and EU.

Source: USDA, DCANZ, Eurostat, Dairy Australia

Figure 16 Farmgate price movements – four largest exporters

Compared to prior year (Oct 2016)	<b>A</b> 29%	<b>1</b> 4%	<b>4</b> %	<b>1</b> 6%
Compared to last report (Jun 2017)	<b>A</b> 4%	<b>4</b> %	0%	▲ 3%
Change in indicative farmgate price	NZ	EU-28	US	Australia

Figure 17 Market trends – four largest exporters



Source: GTIS, Dairy Australia

North Africa

Middle East Greater China Southeast Asia

Japan

Mexico

# **European Union**

European milk production is returning to growth, up 2.1% for July (compared to a relatively weak July result last year). Higher farmgate prices have incentivised a return to growth, however weather conditions have only recently proven favourable. Temperatures that were too cold - then too hot - for optimal cow comfort kept production constrained, whilst the impact on forage quantity and quality is ongoing. At a member state level, a number of the major producers (France, Germany, the Netherlands) remain below year-ago levels, whilst Ireland, Italy, Poland and the UK are amongst those posting noteworthy increases.

Within Europe, commodity prices have surged, but significant divergences between products remain. Butter supplies have been tight for months due to lower milk production, low SMP prices limiting stream returns, and demand pressure from both retail and commercial buyers replacing margarine and palm oil. As prices languish around the support level of €1,698/t (around US\$2,020/t) SMP has again begun to flow into intervention stocks, with 6,114 tonnes entering since August 7th (for a total of 14.051 tonnes in 2017 to

date). Having failed to sell more than 140 tonnes of the stockpile amassed last season, current publicly held stocks total 357.360 tonnes - for which the disposal strategy is as yet unclear. WMP values have increased on the back of firmer fat pricing, but production has fallen, as cheese remains marginally more lucrative for manufacturers with both options. Domestic demand has been 'good', according to local sources, as has demand from international buvers, however export business has been dealt a blow by the recent appreciation of the Euro, which has pushed European commodity prices in USD terms from being the most to the least competitive, amongst major exporters.

Looking ahead, milk production is expected to maintain the current growth, finishing 2017 up 0.6% compared to 2016, according to the European Commission. This is tipped to be driven by continued growth in Ireland, as well as expansion in Poland, the UK and Italy. Germany and France expected to see some further declines – mainly due to the lasting impacts of adverse weather, whilst the burden of compliance with phosphate limits will keep the Netherlands constrained. A reduced national herd will keep overall

Dutch milk production in check (perhaps not as much as some believe), and the cost of buying additional phosphate quota (around €8,500/cow - A\$12,800 - and expected to rise) poses enormous hurdles for individual producers looking to expand. Whilst the Netherlands may see continued culling to meet its phosphate requirements, culling rates have slowed down for the EU as a whole - down around 3% for the first four months of 2017. A more stable herd, and more intensive use of feed and fertiliser (reversing the cost cutting of recent years) are seen as the levers of growth in the coming months.

# **United States**

US milk production has maintained its rate of growth, up 2% in August compared to the same month in 2016. Cooler-than-average summer weather helped boost production in the Midwest (particularly Wisconsin), whilst the powerhouse of the west, California, was slightly lower. With a 0.7% increase in the national herd size relative to July last year, the gains in milk production were evidently a product of both more cows, and higher per-cow production.

The US domestic market has cooled a little at the same time that international

prices have been recovering, and combined with a weaker US dollar. American exports are now relatively price competitive with European. Kiwi and Australian offerings. This is particularly the case for cheese – which the US has large inventories of – but even US butter prices are now back to 'world' levels after a long period of significant premium. The likely continued growth in exportable surplus, combined with a favourable exchange rate and competitive pricing (plus Cooperatives Working Together subsidies) suggests that the US will be a renewed force in international markets in the not-toodistant future. Despite this and earlier predictions, US exports haven't lifted substantially in recent months, and local sources report that there is a lot more 'interest' than there are deals being done, at least for now.

Political developments also continue to disrupt market opportunities for US exporters, with the South Korea-US Free Trade Agreement (KORUS) the latest to face threats of withdrawal by President Trump. Furious lobbying has so far forestalled any such outcome, which would see tariffs on US dairy exports to Korea revert to their pre-KORUS level of 36%.

Farm level economics are still supporting expansion, with the USDA's Margin Over Feed Costs (MOFC) calculation for July of \$9.75/cwt representing the 13th consecutive month of 'expansionary' on farm margins. Both higher milk prices, and lower corn/soybean prices have contributed. Consequently, the year-to-date trend of 1.7% growth in milk production has persisted since February, and according the USDA is likely to change little in the rest of 2017, with the agency forecasting 1.7% growth overall.

### **New Zealand**

New Zealand has commenced the 2017/18 season with a favourable farmgate price forecast (currently NZ\$6.75/kg MS - around A\$6.65/kg MS) and weak comparable months through the winter and spring of 2016. suggesting that significant growth will be observed. So far, production has increased by 1.6% for the first three months of the season, however this period represents only 8% of NZ annual milk intakes.

Local sources have suggested that August and September production may be constrained by saturated soils following heavy late winter rainfall,

however given the weak comparable months last year, this may not prove readily apparent. With culling rates much slower than last year, there are slightly more cows in the herd this spring (it's around 1% larger according to AgriHQ), and the higher forecast payout is giving farmers some confidence and cash to purchase supplementary feeds as required.

New Zealand exporters moved significant volumes of extra product to China through the winter, although suggestions that Chinese buyers may have been boosting inventories have dampened expectations that similar levels of growth will continue to soak up the extra milk produced. AgriHQ are forecasting a 3% growth in milk intakes for the full season to May 2018, whilst Rabobank anticipate a 2.5 to 3.5% increase.

# Australia

Australian milk production slightly exceeded expectations for the final guarter of 2016/17, ending the season 6.9% below the 2015/16 level.

As foreshadowed in previous Situation and Outlook reports, the most significant reductions in milk intakes occurred in southern, export-focused

regions. Victoria averaged an 8% decline, although there were significant differences between hardest-hit northern Victoria (down 17%) and the southwest and Gippsland (each down 4%), South Australian milk production also fell 8%, whilst Tasmania was down 5%. Of the domestic-focused states, New South Wales produced 5% less milk, whilst WA saw production ease 2% and Queensland was the only state to expand for the season, up 1%. Against weak comparables, the season has commenced in recovery mode across most regions, generating around 2% growth for the season to August.

Seasonal conditions are highly varied; from dry in Queensland, parts of NSW and east Gippsland, to very wet conditions in WA, western Victoria, and much of SA. Notwithstanding the challenges at the extremes, for most farmers, the season is still lookina promisina.

Despite the recent tightening in grain prices, costs remain contained overall, and together with a modest improvement in farmgate milk prices, operating margins offer a little more breathing space than in the 2016/17 season. For many in southern regions, the focus will remain on recovery, and

only modest growth in milk volumes is expected. Emerging threats such as the potential for further grain price spikes, energy costs and uncertainty around the processing landscape will combine with the more immediate risks of stretched balance sheets to encourage a risk averse approach. In domestic-focused regions, uncertainty and pessimism surrounding the direction of farmgate milk prices remains a feature, with most farmers having experienced some degree of price reduction following the significant drops in export regions.

The 2017/18 season has brought a number of improvements to operating conditions for Australian dairy farmers. However, the effects of previous years continue to have an impact on finances and confidence, together with a smaller herd and the potential for weather and input cost setbacks are likely dampeners to growth. Dairy Australia's forecast for 2017/18 milk production remains a growth range of between 2 and 3% on the 2016/17 total of 9.01 billion litres. This implies a forecast total of around 9.2 billion litres for 2017/18.

# 2016/17 Dairy Farm Monitor results, and 2017/18 Dairy Australia forecast

Dairy Australia has been involved in the Dairy Farm Monitor Project since 2007. This project collects high-quality comprehensive physical and financial data from 250 participating dairy farms across Australia. The data is collected on-farm by trained and experienced data collectors and is validated to ensure quality and accuracy.

Participants are selected for the project in order to represent a distribution of farm sizes, herd sizes and geographical locations within each region. The results presented do not represent population

averages as the participant farms are not selected using random population sampling. While the data presents results and trends, these need to be interpreted carefully as participant farms may not be representative of the whole dairy industry and not all farms participate every year.



# Gippsland

16/17 Dairy Farm Monitor results

Herd size 290

Milk sold (kg MS/cow) 486

Homegrown feed tDM/Ha 8.7



Herd size 295

Milk sold (kg MS/cow) 490

Homegrown feed tDM/Ha

8.0

Income	2015/16	2016/17	2017/18 (f)
Farm operating cash surplus¹ (\$/kgMS)	1.5	1.7	2.3
Gross farm income <sup>2</sup> (\$/kgMS)	5.9	5.5	5.9
Variable costs³ (\$/kgMS)	3.3	2.7	2.6
Overhead costs <sup>4</sup> (\$/kgMS)	2.3	2.2	2.3
Cost of Production incl. inventory changes <sup>5</sup> (\$/kgMS)	5.6	4.9	4.9
Earnings Before Interest and Tax <sup>6</sup> (\$/kgMS)	0.3	0.6	1.0
Net Farm Income (\$/kg MS) <sup>7</sup>	-0.4	0.0	0.3
Return on Total Assets (%)	1.0	2.1	3.3
Return on Equity (%)	-2.8	0.1	1.9

<sup>&</sup>lt;sup>1</sup> Farm cash income minus farm working expenses (herd, shed, homegrown feed, purchased feed, cash overheads)

- <sup>2</sup> Milk income + livestock trading profit + other farm income
- <sup>3</sup> Herd, shed, purchased feed and homegrown feed costs +/- feed inventory changes
- <sup>4</sup> Cash overhead costs + non cash overheads (imputed labour & depreciation)
- <sup>5</sup> Cost of production (variable costs + overhead costs +/- feed inventory changes +/- livestock inventory changes - purchases)
- <sup>6</sup> Gross farm income minus total variable and total overhead costs.
- <sup>7</sup> Net Farm Income = EBIT minus Interest and Lease costs
- <sup>8</sup> Useable hectares are defined as both milking and support areas

## Seasonal conditions and overview

Despite the late autumn break, for the majority of rain-fed regions in Gippsland, 2016/17 was an 'average' to 'better than average' season while the Macalister Irrigation District (MID) received full irrigation allocation. Seasonal conditions were reflected in the estimated average pasture harvest being approximately 1.0 tonne of dry matter per hectare (t DM/ha) higher in 2016/17 when compared to 2015/16. The higher pasture harvest per hectare<sup>8</sup> and higher than normal early season culling rates resulted in lower reliance upon purchased concentrates and fodder. Cow numbers and milk production were on average slightly lower than 2015/16 (seven fewer cows on average in each herd, and a reduction of 3.0 kg MS per cow respectively).

- > A lower average milk price (\$4.84/ kg MS vs \$5.28/kg MS) and higher cull cow prices drove higher livestock income as farmers on average culled more heavily.
- > Total operating costs were lower. Purchased feed costs fell as a result of both lower purchase prices and total tonnes purchased due to the longer growing season. Home grown feed costs were effectively unchanged including inventory change. Herd costs and cash overheads were lower, while shed costs were unchanged.
- > From an EBIT (Earnings Before Interest and Tax) perspective, the

drop in average milk price was offset by an increase in livestock income and a reduction in total operating costs. This resulted in a slightly higher EBIT in 2016/17, with Net Farm Income (EBIT minus Interest & Lease Costs) averaging -\$0.03/ kg MS in 2016/17 compared with -\$0.38/kg MS in 2015/16.

# 2017/18 Outlook

Based on opening prices and processors' published forecasts, 2017/18 milk prices are expected to close around 10% higher than 2016/17 closing prices. To date, seasonal conditions have been mixed. While dry winter conditions provided ideal conditions for most of the high rainfall Gippsland regions, the risk of below average spring rainfall remains a concern, particularly for East Gippsland and the MID which has experienced a dry start to the 2017/18 year.

Expenses are more difficult to estimate with uncertainty around grain prices and seasonal conditions. The potential impact on feed costs could be between to \$0.20-0.80/kg MS higher compared to 2016/17. With a slight increase in milk production forecast (due to both an increase in production per cow and an increased number of cows) Herd, Shed and Overhead costs could be expected to fall slightly which, together with a continued focus on cost control, could see these combined costs drop by \$0.05-0.20/kg MS in 2017/18.

# Northern Victoria

16/17 Dairy Farm Monitor results

Herd size 370

Milk sold (kg MS/cow)
499

Homegrown feed tDM/Ha 7 6



# **2017/18** Forecas

Herd size 375

Milk sold (kg MS/cow) 540

Homegrown feed tDM/Ha

Total	farm	milk	production
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Income	2015/16	2016/17	2017/18 (f)
Farm operating cash surplus¹ (\$/kgMS)	1.1	1.1	2.3
Gross farm income <sup>2</sup> (\$/kgMS)	6.0	5.9	6.4
Variable costs³ (\$/kgMS)	4.2	3.4	2.6
Overhead costs <sup>4</sup> (\$/kgMS)	1.9	2.2	2.3
Cost of Production incl. inventory changes <sup>5</sup> (\$/kgMS)	6.3	5.8	4.8
Earnings Before Interest and Tax <sup>6</sup> (\$/kgMS)	-0.1	0.3	1.6
Net Farm Income (\$/kg MS) <sup>7</sup>	-0.5	-0.3	1.0
Return on Total Assets (%)	-0.5	0.7	5.4
Return on Equity (%)	-5.0	-2.5	5.8

- <sup>1</sup> Farm cash income minus farm working expenses (herd, shed, homegrown feed, purchased feed, cash overheads)
- <sup>2</sup> Milk income + livestock trading profit + other farm income
- <sup>3</sup> Herd, shed, purchased feed and homegrown feed costs +/- feed inventory changes
- <sup>4</sup> Cash overhead costs + non cash overheads (imputed labour & depreciation)
- <sup>5</sup> Cost of production (variable costs + overhead costs +/- feed inventory changes +/- livestock inventory changes purchases)
- <sup>6</sup> Gross farm income minus total variable and total overhead costs
- $^{7}\,$  Net Farm Income = EBIT minus Interest and Lease costs

# Seasonal conditions and overview

In addition to lower milk prices, the irrigated regions of northern Victoria were hit with one of the wettest winter and spring periods in living memory. Production per cow and involuntary culling rates due to mastitis and lameness were significant. This was partially offset by 100% irrigation allocations in most systems, and a delayed start to irrigation on most farms. Whilst fodder crop yields were above average, in many cases the delayed harvest resulted in lower quality conserved fodder, further impacting milk production. In contrast, the mostly rain fed farms in Victoria's northeast benefited from the wet season with a longer growing season and higher fodder reserves. While lower prices for temporary water and purchased feed were welcomed, it was not until the second half of the season that these prices were seen on farm.

- Average milk price in 2016/17 (\$5.13/kg MS) was lower than 2015/16 (\$5.46/kg MS), and the variation between the highest and lowest paid farms was at record levels. Total farm income fell, due to both lower production per cow, as well as smaller herd sizes due to culling.
- Despite an obvious focus on cost control the extended wet conditions saw a sharp and unexpected drop in total farm milk production and unplanned additional expenditure in areas such as Animal Health and Repairs & Maintenance. Purchased feed costs were significantly lower due to both lower prices and smaller volumes purchased, and total feed costs also fell due to lower

- purchased water costs.
- While Northern Victoria did see an improvement in EBIT, the result was considerably smaller due to the impact of the prolonged wet period through winter and spring. Net Farm Income (EBIT minus Interest & Lease Costs) did improve in 2016/17, but remained negative. Given the unusually large range in milk prices received and the variation in the impact of seasonal conditions, these averages may not reflect individual farm experiences.

# 2017/18 Outlook

Based on opening prices and processor forecasts milk prices are expected to finish around 10% higher in 2017/18. Despite the early season being dry and cold, seasonal conditions to date are well above average. With the major water storages at 70%-90% full (10%-15% higher the corresponding period in 2016/17) and higher than usual fodder reserves, there is potential for a further drop in the cost of production in 2017/18.

While firming grain prices have the potential to increase feed costs the main focus will be on the temporary water market. Demand for fodder may also increase, however this is likely to be met by drawing down farm reserves. Despite improving conditions many farms are still experiencing very tight cashflow, and this will continue to temper confidence. An improvement in milk prices, a reduction in temporary water prices and flat or softening grain prices would be required for most farmers to generate significant profits in the 2017/18 season.

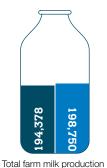
# South West Victoria

16/17 Dairy Farm Monitor results

Herd size 368

Milk sold (ka MS/cow) 525

Homegrown feed tDM/Ha 6.7



Herd size 375

Milk sold (kg MS/cow) 530

Homegrown feed tDM/Ha 70

Income	2015/16	2016/17	2017/18 (f)
Farm operating cash surplus¹ (\$/kgMS)	1.5	1.9	2.3
Gross farm income <sup>2</sup> (\$/kgMS)	6.0	6.0	6.4
Variable costs³ (\$/kgMS)	3.7	2.6	2.6
Overhead costs <sup>4</sup> (\$/kgMS)	2.3	2.3	2.3
Cost of Production incl. inventory changes <sup>5</sup> (\$/kgMS)	6.1	4.8	4.8
Earnings Before Interest and Tax <sup>6</sup> (\$/kgMS)	0.1	1.1	1.6
Net Farm Income (\$/kg MS) <sup>7</sup>	-0.6	0.4	0.9
Return on Total Assets (%)	0.3	3.9	5.3
Return on Equity (%)	-3.4	3.5	5.2

<sup>&</sup>lt;sup>1</sup> Farm cash income minus farm working expenses (herd, shed, homegrown feed, purchased feed, cash overheads)

### Seasonal conditions and overview

Southwest Victoria experienced an average to above average growing season for the first half of 2016/17 due to the exceptional autumn break across most of the region. While prolonged wet conditions through winter and into spring made winter grazing difficult, they did guarantee hay and silage vields, albeit in many cases at lower quality due to delays in harvest. A dry June following the autumn growth allowed high pasture utilisation while still maintaining a significant feed wedge heading into the colder wetter months.

- At \$5.25/kg MS compared to \$5.92/ kg MS, average milk price was lower in 2016/17, whilst livestock income (sales less purchases) was relatively unchanged compared to 2015/16.
- > Total operating costs were \$1.00/ kg MS lower in 2016/17 compared to 2015/16. This was despite below average conditions between July and September. Purchased feed costs were significantly lower due to lower prices for concentrate and fodder, lower feeding rates and an increase in fodder reserves.
- > The region was less affected by the drop in milk price, whilst more favourable seasonal conditions saw EBIT improve, with a corresponding improvement in Net Farm Income (EBIT minus Interest & Lease Costs).

### 2017/18 Outlook

Based on opening prices and processor forecasts, milk prices are expected to finish approximately 10%-15% higher in 2017/18. Following the ideal 'one in twenty year' autumn break, good conditions continued through winter and early spring across most of the region.

With some firming of grain prices there is potential for feed costs to increase. however, will likely be offset by ongoing seasonal conditions that will secure fodder reserves and guarantee average or above directly grazed feed. With milk production expected to be slightly higher, there is some potential for further reduction in average fixed and overhead costs.

Despite the prospect of improving profitability through 2017/18 for many businesses, cash flow remains tight with any surplus cash likely to be directed towards debt reduction and catching up on such items as repairs and maintenance.

<sup>&</sup>lt;sup>2</sup> Milk income + livestock trading profit + other farm income

<sup>&</sup>lt;sup>3</sup> Herd, shed, purchased feed and homegrown feed costs +/- feed inventory changes

<sup>&</sup>lt;sup>4</sup> Cash overhead costs + non cash overheads (imputed labour & depreciation)

<sup>&</sup>lt;sup>5</sup> Cost of production (variable costs + overhead costs +/- feed inventory changes +/- livestock inventory changes - purchases)

<sup>&</sup>lt;sup>6</sup> Gross farm income minus total variable and total overhead costs

Net Farm Income = EBIT minus Interest and Lease costs

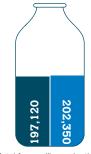
# South Australia

16/17 Dairy Farm Monitor results (p

Herd size 352

Milk sold (kg MS/cow) **560** 

Homegrown feed tDM/Ha 8.5



# 2017/18 Forecas

Herd size 355

Milk sold (kg MS/cow) 570

Homegrown feed tDM/Ha8.0

Total	farm	milk	production
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Income	2015/16	2016/17 (p)	2017/18 (f)
Farm operating cash surplus¹ (\$/kgMS)	1.5	1.6	1.9
Gross farm income <sup>2</sup> (\$/kgMS)	7.0	6.9	7.0
Variable costs³ (\$/kgMS)	3.6	3.1	3.2
Overhead costs <sup>4</sup> (\$/kgMS)	2.7	2.8	2.8
Cost of Production incl. inventory changes <sup>5</sup> (\$/kgMS)	6.1	6.1	6.0
Earnings Before Interest and Tax <sup>6</sup> (\$/kgMS)	0.7	1.0	1.0
Net Farm Income (\$/kg MS) <sup>7</sup>	0.2	0.5	0.5
Return on Total Assets (%)	2.9	2.5	3.9
Return on Equity (%)	0.0	0.6	2.2

- <sup>1</sup> Farm cash income minus farm working expenses (herd, shed, homegrown feed, purchased feed, cash overheads)
- <sup>2</sup> Milk income + livestock trading profit + other farm income
- <sup>3</sup> Herd, shed, purchased feed and homegrown feed costs +/- feed inventory changes
- <sup>4</sup> Cash overhead costs + non cash overheads (imputed labour & depreciation)
- Osst of production (variable costs + overhead costs +/- feed inventory changes +/- livestock inventory changes purchases)
- <sup>6</sup> Gross farm income minus total variable and total overhead costs
- Net Farm Income = EBIT minus Interest and Lease costs

# Seasonal conditions and overview

Both the southeast and central dairving regions experienced average to above average seasonal conditions through 2016/17 with higher rainfall further into spring and early summer extending dryland growth rates and reducing the demand for irrigation. This had the combined effect of lowering demand for purchased grain and fodder, and significantly lower prices for what was purchased. The favourable conditions continued with an earlier than average autumn break for most regions. While both regions experienced a drop in milk prices, the central region, with a greater proportion of local fresh milk market and niche manufacturers, was less exposed.

- Average milk price was lower in 2016/17 when compared to 2015/16 (\$5.77/kg MS versus \$6.16/kg MS), whilst livestock income (sales less purchases) was slightly higher.
- > With favourable seasonal conditions resulting in ample supplies of locally grown fodder and grain, lower prices coupled with lower usage saw purchased feed costs significantly lower in 2016/17. The longer growing season also saw an increase in home grown feed reserves carrying over into 2017/18. Herd costs and shed costs remained relatively unchanged from 2015/16, whilst overhead costs were higher – with most of the cost increases coming from employment and repairs & maintenance costs. The net effect was that total operating costs were \$0.27/kg MS lower in 2016/17 when compared to 2015/16.

A combination of a less severe drop in milk price than other regions, and more favourable seasonal conditions resulted in an improvement in both EBIT and net farm income (EBIT minus interest & lease costs), relative to 2015/16.

### 2017/18 Outlook

The 2017/18 season has begun with average to above average seasonal conditions across most regions.

Coupled with a higher opening and forecast milk prices, carryover fodder reserves and limited upward pressure on input prices, prospects for improved results 2017/18 are cautiously positive.

Based on processor forecasts milk prices are expected to be \$0.40-0.60/kg MS higher in 2017/18 while livestock income is expected to be down \$0.10-0.15/kg MS due to reduced culling.

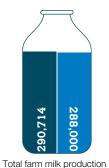
While firming grain prices have the potential to increase feed costs by \$0.20-0.80/kg MS the prospect of average or better seasonal conditions continuing could reduce requirements for purchased fodder. With a modest recovery in total milk production expected and an ongoing focus on cost control Herd, Shed and Overhead costs could be potentially be \$0.05-0.20/kg MS lower.

### **Tasmania**

Herd size 633

Milk sold (ka MS/cow) 452

Homegrown feed tDM/Ha 9.9



Herd size 640

Milk sold (kg MS/cow) 450

Homegrown feed tDM/Ha 11.0

Income	2015/16	2016/17 (p)	2017/18 (f)
Farm operating cash surplus¹ (\$/kgMS)	1.4	1.3	1.8
Gross farm income <sup>2</sup> (\$/kgMS)	6.0	5.9	6.4
Variable costs³ (\$/kgMS)	3.2	3.0	3.0
Overhead costs <sup>4</sup> (\$/kgMS)	1.9	1.9	1.9
Cost of Production incl. inventory changes <sup>5</sup> (\$/kgMS)	5.3	5.1	5.0
Earnings Before Interest and Tax <sup>6</sup> (\$/kgMS)	0.9	0.9	1.1
Net Farm Income (\$/kg MS) <sup>7</sup>	0.3	0.5	0.6
Return on Total Assets (%)	3.8	3.7	4.3
Return on Equity (%)	0.6	2.6	3.2

- <sup>1</sup> Farm cash income minus farm working expenses (herd, shed, homegrown feed, purchased feed, cash overheads)
- <sup>2</sup> Milk income + livestock trading profit + other farm income
- <sup>3</sup> Herd, shed, purchased feed and homegrown feed costs +/- feed inventory changes
- <sup>4</sup> Cash overhead costs + non cash overheads (imputed labour & depreciation)
- <sup>5</sup> Cost of production (variable costs + overhead costs +/- feed inventory changes +/- livestock inventory changes - purchases)
- <sup>6</sup> Gross farm income minus total variable and total overhead costs
- Net Farm Income = EBIT minus Interest and Lease costs

# Seasonal conditions and overview

2016/17 saw a welcome return to more normal conditions, after extremes of record low rainfall for the majority of 2015/16 followed by severe rain and flooding events late in the season. The wet conditions at the beginning of 2016/17 gave way to an average to above average spring with good pasture growth continuing into the summer months. Improving milk price forecasts and downward pressure on input prices have seen confidence starting to return to the Tasmanian industry with milk production declining less than in other regions.

- > With a lower average milk price (\$5.11/kg MS compared to \$5.55/ kg MS) average milk income fell, but livestock income (sales less purchases) was higher as many farmers culled heavily in response to lower milk prices and higher cull cow prices.
- With return to average or above average seasonal conditions and lower input prices Total Operating Costs in 2016/17 were lower than 2015/16. This was mostly due to a significant reduction in purchased feed costs due to both lower prices and a reduced amount of purchased feeds. Home grown feed costs were also lower.
- > With the better seasonal conditions and the lower input prices, the drop in average milk price was offset by an increase in livestock income and a reduction in Total Operating Costs,

resulting in a slightly higher EBIT in 2016/17 compared to 2015/16. Net Farm Income (EBIT minus Interest & Lease Costs) was slightly higher as well.

# 2017/18 Outlook

Based on opening prices and processor's published forecasts, 2017/18 milk prices are expected to close 10%-15% higher than 2016/17 closing prices. Despite some concerns around grain prices, prospects for the 2017/18 season remain positive, with average to above average seasonal conditions and rainfall expected to continue. Combined with some cautious optimism regarding milk prices EBIT and overall milk production are expected to improve.

# **New South Wales**

Herd size 375

Milk sold (ka MS/cow) 493

Homegrown feed tDM/Ha 8.5



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362	185	Міі <b>5</b>
90,092	187,500	Ho

Total	farm	milk	production	

2017/18 Forecast	
Herd size	
375	
Milk sold (kg MS/cow)	
500	
Homegrown feed tDM/Ha	
8.0	

Income	2015/16	2016/17 (p)	2017/18 (f)
Farm operating cash surplus¹ (\$/kgMS)	2.3	2.0	2.1
Gross farm income <sup>2</sup> (\$/kgMS)	8.2	7.9	8.0
Variable costs³ (\$/kgMS)	4.0	3.9	3.9
Overhead costs <sup>4</sup> (\$/kgMS)	3.2	3.1	3.1
Cost of Production incl. inventory changes <sup>5</sup> (\$/kgMS)	7.1	6.9	6.9
Earnings Before Interest and Tax <sup>6</sup> (\$/kgMS)	1.0	0.8	1.0
Net Farm Income (\$/kg MS) <sup>7</sup>	0.5	0.4	0.5
Return on Total Assets (%)	2.7	2.3	2.8
Return on Equity (%)	1.7	1.6	1.7

- <sup>1</sup> Farm cash income minus farm working expenses (herd, shed, homegrown feed, purchased feed, cash overheads)
- <sup>2</sup> Milk income + livestock trading profit + other farm income
- <sup>3</sup> Herd, shed, purchased feed and homegrown feed costs +/- feed inventory changes
- <sup>4</sup> Cash overhead costs + non cash overheads (imputed labour & depreciation)
- <sup>5</sup> Cost of production (variable costs + overhead costs +/- feed inventory changes +/- livestock inventory changes - purchases)
- <sup>6</sup> Gross farm income minus total variable and total overhead costs
- Net Farm Income = EBIT minus Interest and Lease costs

# Seasonal conditions and overview

Northern NSW experienced tough seasonal conditions for pasture and crop growth. A dry spring gave way to a very hot and dry January/February followed by the extreme rainfall and flooding associated with Cyclone Debbie. The southern regions of NSW started the season with unusually wet conditions that made grazing and fodder conservation difficult. The wet winter and spring did however underpin irrigation supplies, home grown pasture and fodder crop yields and significant lower purchase prices for both concentrates and fodder.

- > While the domestic market focused northern regions experienced a slight drop in milk price, this was overshadowed by the significant drop in southern NSW regions similar to most of Victoria and Tasmania. Overall, the average farmgate milk price fell from \$7.34/kg MS to \$6.82/ kg MS. Livestock income (sales less purchases) was slightly higher compared to 2015/16 due to higher cull cow prices.
- > Total operating costs for 2016/17 were slightly lower on average: purchased feed costs were slightly lower compared to other regions, whereas home grown feed costs were slightly higher. This was a result of the tougher seasonal conditions experienced across most of the year for the northern regions and the first half of the year for the southern regions.

> From a profit perspective, the reduction in operating costs was not enough to offset the drop in average milk price across NSW. This result in an average reduction in EBIT. Correspondingly, Net Farm Income (EBIT minus Interest & Lease Costs) also fell slightly.

### 2017/18 Outlook

A slight improvement in milk price is expected across most of the state, however the dry start to the season is impacting on dryland pasture growth rates. The ongoing dry conditions are also affecting grain and fodder crop yields, meaning that increased feed costs particularly for dryland farms may offset any expected increases in milk price.

# **Oueensland**

Herd size 264

Milk sold (ka MS/cow) 525

Homearown feed tDM/Ha 6.7



Total farm milk production

# Herd size 270

Milk sold (kg MS/cow) 530

Homegrown feed tDM/Ha 7.0

Income	2015/16	2016/17 (p)	2017/18 (f)
Farm operating cash surplus¹ (\$/kgMS)	2.5	2.7	2.4
Gross farm income <sup>2</sup> (\$/kgMS)	9.1	8.8	8.6
Variable costs³ (\$/kgMS)	4.6	4.3	4.4
Overhead costs <sup>4</sup> (\$/kgMS)	2.7	2.8	2.9
Cost of Production incl. inventory changes <sup>5</sup> (\$/kgMS)	7.3	7.1	7.3
Earnings Before Interest and Tax <sup>6</sup> (\$/kgMS)	1.7	1.7	1.4
Net Farm Income (\$/kg MS) <sup>7</sup>	1.1	1.1	0.8
Return on Total Assets (%)	4.4	4.5	3.9
Return on Equity (%)	4.8	5.1	4.4

- <sup>1</sup> Farm cash income minus farm working expenses (herd, shed, homegrown feed, purchased feed, cash overheads)
- <sup>2</sup> Milk income + livestock trading profit + other farm income
- <sup>3</sup> Herd, shed, purchased feed and homegrown feed costs +/- feed inventory changes
- <sup>4</sup> Cash overhead costs + non cash overheads (imputed labour & depreciation)
- <sup>5</sup> Cost of production (variable costs + overhead costs +/- feed inventory changes +/- livestock inventory changes - purchases)
- <sup>6</sup> Gross farm income minus total variable and total overhead costs
- Net Farm Income = EBIT minus Interest and Lease costs

# Seasonal conditions and overview

Far north Queensland experienced relatively favourable seasonal conditions for most of 2016/17 with good spring conditions giving way to a summer without any extreme rainfall events. Southeast Queensland on the other hand, experienced a tough second half season, with an extremely hot and dry February followed by extreme rainfall associated with Cyclone Debbie. Conversely, the same rainfall event provided finishing rain for crops in southeast Queensland and the Darling Downs, underpinning fodder supplies and lower purchased feed prices.

- Average milk price was lower in 2016/17 when compared to 2015/16 (58.2c/L vs 59.1c/L, or \$7.97/kg MS vs \$8.08/kg MS), whilst livestock income (sales less purchases) was slightly higher due to higher cull cow prices.
- Overall total operating costs for 2016/17 were lower on average than 2015/16. Purchased feed costs fell, with the price per tonne for most feeds significantly lower during 2016/17 and farmers taking the opportunity to forward contract some of their requirements, and protect against price rises experienced towards the end of the year. Home grown feed costs were down slightly on the back of lower fertiliser costs. Cash overheads were higher mainly due to higher paid labour and repairs and maintenance.

 On average, EBIT was relatively unchanged from 2015/16 with the slight reduction in milk price being offset by lower expenditure on purchased and home grown feed costs. Net Farm Income (EBIT minus Interest & Lease Costs) also remained relatively unchanged.

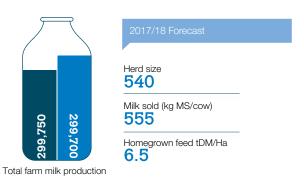
### 2017/18 Outlook

Profitability will be further pressured by a softening in farm gate milk prices, while the drier than average conditions toward the end of 2016/17 have continued into 2017/18. While the prospect of ongoing dry conditions is a concern, the shorter term impact has been moderated by the higher on farm and off farm feed reserves, lower prices and prepurchasing strategies.

### Western Australia

Herd size 545 Milk sold (ka MS/cow) 299,700 550 299,750 Homegrown feed tDM/Ha

7.8



Income	2015/16	2016/17 (p)	2017/18 (f)
Farm operating cash surplus¹ (\$/kgMS)	2.8	2.4	2.4
Gross farm income <sup>2</sup> (\$/kgMS)	8.3	7.8	7.8
Variable costs³ (\$/kgMS)	4.0	3.8	3.8
Overhead costs <sup>4</sup> (\$/kgMS)	2.4	2.5	2.5
Cost of Production incl. inventory changes <sup>5</sup> (\$/kgMS)	6.3	6.4	6.4
Earnings Before Interest and Tax <sup>6</sup> (\$/kgMS)	2.0	1.5	1.6
Net Farm Income (\$/kg MS) <sup>7</sup>	1.4	1.1	1.1
Return on Total Assets (%)	6.4	5.4	5.4
Return on Equity (%)	9.1	9.7	9.8

- <sup>1</sup> Farm cash income minus farm working expenses (herd, shed, homegrown feed, purchased feed, cash overheads)
- <sup>2</sup> Milk income + livestock trading profit + other farm income
- <sup>3</sup> Herd, shed, purchased feed and homegrown feed costs +/- feed inventory changes
- <sup>4</sup> Cash overhead costs + non cash overheads (imputed labour & depreciation)
- <sup>5</sup> Cost of production (variable costs + overhead costs +/- feed inventory changes +/- livestock inventory changes - purchases)
- <sup>6</sup> Gross farm income minus total variable and total overhead costs
- Net Farm Income = EBIT minus Interest and Lease costs

# Seasonal conditions and overview

The 2016/17 season started well for most dairy regions, following an ideal autumn break and finish to the 2015/16 season. Favourable conditions continued into the spring across the majority of the southwest region, resulting in well above average pasture growth rates in the dairying regions and higher crop fodder and grain yields.

2016/17 saw a much wider than usual range in farm gate milk prices, as processors looked to cope with surplus milk. Seasonal conditions towards the end of 2016/17 were less favourable. with most regions experiencing a late autumn break and cold conditions through early winter.

- > Average milk price was slightly lower in 2016/17 although the average price (49.3c/L compared to 52.3c/L) does not necessarily reflect the wide range of prices received by farmers. Livestock income (sales less purchases) was slightly lower.
  - Total operating costs were relatively unchanged for 2016/17. Purchased feed costs fell as a result of both lower purchase prices and smaller purchases, as a result of a longer growing season.
- > From a profit perspective, the drop in average milk price and moderate increase in operating costs saw EBIT decline. Similarly Net Farm Income (EBIT minus Interest & Lease Costs) fell.

### 2017/18 Outlook

The drier than average conditions toward the end of 2016/17 initially continued into 2017/18, before giving way to heavy rain and widespread flooding. Whilst on farm fodder reserves are high and purchased feed prices are below long term averages, the consequences of any impact to the growing season will be reduced. Milk prices remain similar to 2016/17. although the unusually wide range in farm gate prices remains.

# **Corporate sector update**

The past few months have been dominated by speculation surrounding the situation and future direction of Murray Goulburn, with the cooperative reporting the loss of a significant number of suppliers, and embarking on a wide-ranging strategic review. According to MG, the review has three key components, namely; a commercial review to restore MG's competitiveness, a business improvement program to ensure optimum efficiency across MG's cost base relative to milk intake. and a structural review of strategy, corporate structure and capital structure. Supported by Deutsche Bank, the structural review aspect has generated significant rumour and speculation in the wider industry, following the receipt of a number of third party investment proposals. Whilst no details have been released regarding these proposals, their very existence has led to suggestions that the business is for sale. Such a transaction (only one possible outcome) would require the support of 90% of MG supplier-shareholders. MG has flagged the provision of further updates regarding the review for its Annual General Meeting on October 27th.

Investment journalists have also been occupied by rumours of a potential sale of Kirin's Lion Dairy and Drinks

business. Whilst the company has not confirmed any sale process is underway, media reports claimed that Kirin has 'quietly tested market appetite' for Lion amongst potential buyers.

In other developments, MG announced the sale of the cheese processing line from its Leitchville facility near Cohuna in July, with a potential sale of the land and buildings under consideration. The Leitchville plant was closed in 2010, and MG has until recently refused to sell it. MG has also sold the Kiewa Country fresh milk brand and some processing equipment from its Kiewa plant to the Kyvalley Dairy Group of Kyabram. The Kiewa factory in north eastern Victoria was one of three sites slated for closure as part of MG's 2017 asset and footprint review, following a sharp decline in milk intakes.

Fonterra Australia is also freeing up capital from mothballed facilities, with the equipment, land and buildings at its Cororooke cheese factory listed for sale in August. Some of the cheesemaking equipment has been listed for sale to offshore buyers only, whilst the factory site reportedly comes with a covenant preventing its use for dairy processing.

Whilst old factories are being sold, two major new facilities commenced

operations recently. Fonterra's rebuilt Stanhope cheese plant made the first of a potential 45,000 tonnes per annum of cheese in June, whilst the Midfield-Louis Dreyfus joint venture Union Dairy Company began operations at its new WMP. SMP and AMF-capable plant at Penola.

Tasmanian-based Bellamy's Organic took a step into the physical ownership of processing assets in June, purchasing the Braeside blending and canning plant owned by Camperdown Powder, via a cash and share offer totalling \$28.5 million. An important element of the purchase was the CNCA (Certification and Accreditation Administration of the People's Republic of China) licence that came with the plant, and the physical plant, whose possession addresses some of the regulatory risks contractmanufactured brands are increasingly facing in China. Bellamy's intends to begin processing a proportion of its own brand at the facility in the second half of 2018. Bellamy's has contract pack agreements in place with both Bega Cheese, and Fonterra Australia.

Fonterra has announced an overhaul of its relationship with suppliers, flagging the creation of a new agreement to replace the current supply arrangements with the Bonlac Supply Company (BSC). The BSC agreement benchmarks Fonterra's farmgate milk price against that of Murray Goulburn, an arrangement which Fonterra says is now outdated. The company has suggested that a new structure would incorporate better farmer input and enhance governance; likely as part of a new organisation within Fonterra Australia. The current BSC agreement ends in 2019, but farmers will be given an opportunity to vote for an early switch, once the drafting and consultation stages of the new agreement have been completed.

Parmalat Australia has reportedly reached agreement on new supply agreements with farmers in the Premium Milk collective bargaining group. Negotiations had been underway since January, and the matter ultimately went to arbitration after a conclusion could not be reached.

# **Policy updates**

The Australian Government has introduced new country of origin labelling rules for food products, to provide clearer and more consistent origin information to Australian consumers regarding the origin of products. The new labels are appearing in the marketplace already and will be mandatory from 30 June 2018. The scheme should make the origin of dairy products clearer to consumers, including where these are used as ingredients in other foods. However the application to dairy is quite complex and may initially lead to some confusion.

The requirements split Australian foods into:

- Non-priority foods which require a basic statement such as 'Product of', 'Made in' or 'Packed in' Australia.
   For dairy this applies to ice-cream (counted as 'confectionery') and ready to drink coffee beverages (counted as 'tea and coffee')
- Priority foods which require a more complex three part label with a logo (kangaroo in a triangle symbol), as well as a bar chart and text statement to show the proportion of Australian ingredients. This applies to most dairy products.

To add to the complexity for Australian dairy producers the test for 'Product of Australia' is different for priority foods than non-priority foods. For priority foods, instead of all 'significant

ingredients' needing to come from Australia, 100% of ingredients (including all additives, cultures, vitamins and minerals – but not processing aids such as rennet) need to come from Australia. This means that Australian cheese, voghurt and modified milk that may previously have been labelled as 'Product of Australia', will now have the label 'Made in Australia from at least 99% Australian ingredients'. These products are just as Australian as they have always been, with all of the milk coming from Australia, but the new requirements mean the addition of necessary ingredients such as cultures or vitamins and minerals, which cannot be sourced in Australia, prevent a 'Product of Australia' claim being made.

The scheme is not compulsory for Australian dairy exports, and the more complex labels do not apply to imports, but a clear country of origin claim (eg 'Product of' or 'Made in') must be made (in a defined box on the label for priority foods). Given the complexity of the requirements for dairy products, the ACCC have released a guide specifically for the dairy industry.

In other news, on August 17 the Senate Economics References Committee released their long-awaited report, "Australia's dairy industry; rebuilding trust and a fair market for farmers". Following the sudden, late season price step-downs in 2015/16 the Senate

referred an inquiry to the committee with a view to establishing a fair, long term solution to Australia's dairy crisis and specifically examine:

- the legality of retrospective elements of milk contracts
- > the behaviour of Murray Goulburn; and
- any other related matters.

The committee made 12 recommendations including an independent review of the federal government dairy industry support package, that the government discontinue the dairy commodity price index and that there be an independent of the Dairy Services Levy and Dairy Australia. However, a dissenting report by Coalition senators has suggested that the government will not will not move to implement these recommendations. The committee also made a number of recommendations for further investigation within the ACCC inquiry in to the Australian dairy industry.

On September 28th, the ACCC was granted an extension for its own inquiry, and is now due to report its full findings by April 30th, 2018. In the meanwhile, the ACCC is due to release an interim report by November 30th, and will seek industry feedback.





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