

Dairy Situation and Outlook

October 2016



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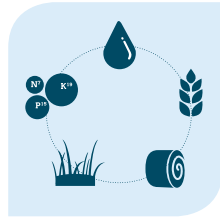
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Six key drivers of the Australian Dairy Industry

Inputs



Situation: ▲
Outlook: ▲

Seasonal conditions have improved sharply on 2015/16, with good spring rainfall across much of south-eastern Australia – too much in many cases. This has boosted dam levels, lowered temporary water prices, and set the stage for good pasture growth. Feed prices are also easing.

Global supply



Situation: ■
Outlook: ▲

Milk production is now falling across three of the world's four largest exporting regions, plus South America. Large stockpiles and the potential for resurgent growth pose some risks, but overall the market is finally seeing supply settings conducive to higher commodity prices.

Global economy



Situation: ■
Outlook: ■

The global economy has slowed slightly since the IMF's last update, with ongoing geo-political crises and uncertainty surrounding events such as Brexit affecting confidence and investment.

Australian market



Situation: ■
Outlook: ■

The Australian domestic market remains characteristically steady, though there have been some notable changes within key categories. Consumers are increasingly shifting to more natural foods, and brands that are perceived to be more supportive of farmers.

Global demand



Situation: ■
Outlook: ■

Global demand remains fragile, though growth in import volumes for Greater China and Mexico more than offset declines in Russia, Africa and the Middle East in 2015/16. Despite greater volumes, lower commodity prices have cut the aggregate value of dairy shipments.

Exchange rates



Situation: ■
Outlook: ▲

Despite the continued buoyancy of the AUD, the general consensus remains that the AUD is set to depreciate against the USD over the course of 2016/17. This should improve the competitiveness of Australian dairy exports over the course of the season.

▲ Positive ■ Neutral ▼ Negative

Executive summary

- › **Dairy commodity prices** have increased sharply as the market rebalances; some consolidation is likely
- › **Australian farmers** face an ongoing margin squeeze, and milk production will likely be lower in 2016/17
- › **The domestic market** continues to evolve, as consumers pursue more natural products and look to support farmers

International dairy commodity prices have staged a significant recovery in recent months, increasing by over 20% as global supply and demand slowly return to a more balanced outlook. In a familiar pattern, sentiment has raced ahead of the fundamentals, with price increases arriving earlier and more rapidly than expected. With this in mind, caution is advisable, as current pricing remains vulnerable to reverses in sentiment until the fundamentals catch up. Nonetheless, the oversupply issue that has maintained downward pressure on commodity pricing for so long looks to be receding, as New Zealand, Australia, and (increasingly) Europe are seeing milk production track below year-ago levels. Demand is presenting a mixed picture, with China returning to growth, while other markets are more sluggish. Buyers have been more actively seeking product, but resistance to further price increases is building. On balance, further recovery into 2017 is likely, albeit overlaid with ongoing price volatility.

In Australia, the tumultuous end to the 2015/16 season gave way to a grim 2016/17 margin outlook for many southern farmers as opening prices were announced. Weather conditions have helped offset some of the pain, although rainfall has gone well beyond useful levels in large parts of northern

Victoria, New South Wales, Tasmania and South Australia. The wet conditions are impacting farm operations, milk quality, fodder conservation, and in some cases causing direct damage via flooding. Domestic-focused regions have experienced relative stability in margins and weather conditions, and milk production is steady or higher in Queensland and Western Australia. Combined with the enormous variation that already exists in margins and farm business management strategies between regions, processors and individual farms, these factors are making an 'overall' view of the season difficult to define. Having commenced with two months of significant year-on-year declines in national milk intakes (averaging 9%), 2016/17 is still expected to be better than the preceding season in terms of both costs (feed, fertiliser and water prices are well down), and seasonal conditions.

Farmgate prices remain low however (though variation of around \$1.00/kg MS exists between individual farms and processors in southern regions alone), keeping margins tight or negative for most farmers. This, the ongoing impacts of the 2015/16 price step-down, and the current flooding are likely to limit production through 2016/17. The impact on milk volumes is expected to moderate as the season progresses and

the benefits of higher rainfall and lower costs accrue, equating to a 5% fall over the full season.

The Australian domestic market remains characteristically steady, though there have been some notable changes within key categories. While total milk sales volumes have grown roughly in line with population growth, (increasing by 1.5% to 1,358 million litres over the 12 months to September), fresh white full cream milk sales have increased their share, up 7% in terms of volume, and 9% by value. This reflects an ongoing shift by consumers away from modified (reduced fat) milk varieties, which fell 6.7% in both volume and value. Full cream now accounts for 61% of the fresh white milk category, up from 54% only three years ago as consumer attitudes towards dairy fats evolve.

Branded milk has regained market share from supermarkets' private label in the fresh white milk category, with branded sales volumes increasing by 7%, while private label fell by nearly 2%. The apparent reversal of the long term trend of increased private label share stems from consumer responses to the media coverage of the 2015/16 milk price step downs.

Cheese volumes have grown steadily over the last 12 months to April 2016, increasing by 2.2%, while cheese

In terms of the supply/demand balance, the market is in a much better place than this time in 2015, but downside risks remain.

values have grown by 1%. Within the cheese category, growth in sales of deli cheese have outstripped those of chilled cheese, increasing 5.6% in terms of volume and 3.8% in terms of value. This is a continuation of a trend observed over the past 5 years, where deli cheese growth has repeatedly outpaced that of chilled cheese. Growth in butter sales has slowed, but remains notable at 3.6% in volume terms, and 3.8% in value terms.

The yoghurt category saw a continuation of the shift from sweetened (down 10% in value) to traditional, unsweetened (up 9%) varieties of yoghurt. In volume terms, sales of sweetened yoghurt have fallen by 8%, while those of traditional yoghurt have grown by nearly 9% in the past 12 months.

As part of (and despite) a tumultuous few months, there have been a range of developments in the corporate sector. Fonterra has announced a further investment of \$4.3 million in its Wynyard

(Tasmania) cheese plant, streamlining of its warehousing operations, and the sale of its Wagga (NSW) Riverina Fresh milk business. Midfield Group's new powder dryer at Penola, South Australia continues to take shape, with the group inking an agreement with Louis Dreyfus that will see the latter market the finished product across the US, Middle East and southern Asia. Camperdown Dairy International is shelving its planned \$500 million vertically integrated milk powder operation, while Murray Goulburn has reiterated plans to build a new nutritionals plant, originally flagged for Koroit, Victoria. Inner Mongolia Fuyuan Farming Co Ltd obtained a 79% stake in Burra Foods, while Warrnambool Cheese and Butter raised \$142 million via rights issue, with major shareholder Saputo failing to dislodge Lion Dairy and Drinks from its 10% blocking stake.

As the returns from international markets recover, an active processing sector will once again be seeking extra milk to capitalise on renewed export

opportunities. The pain that many farmers experienced last season, and the ongoing challenges around margins will prove significant obstacles for some in securing supply – in the short term at least. Overall milk production will remain constrained as farmers defer investment and focus on management to breakeven points, and conserving equity where margins are negative.

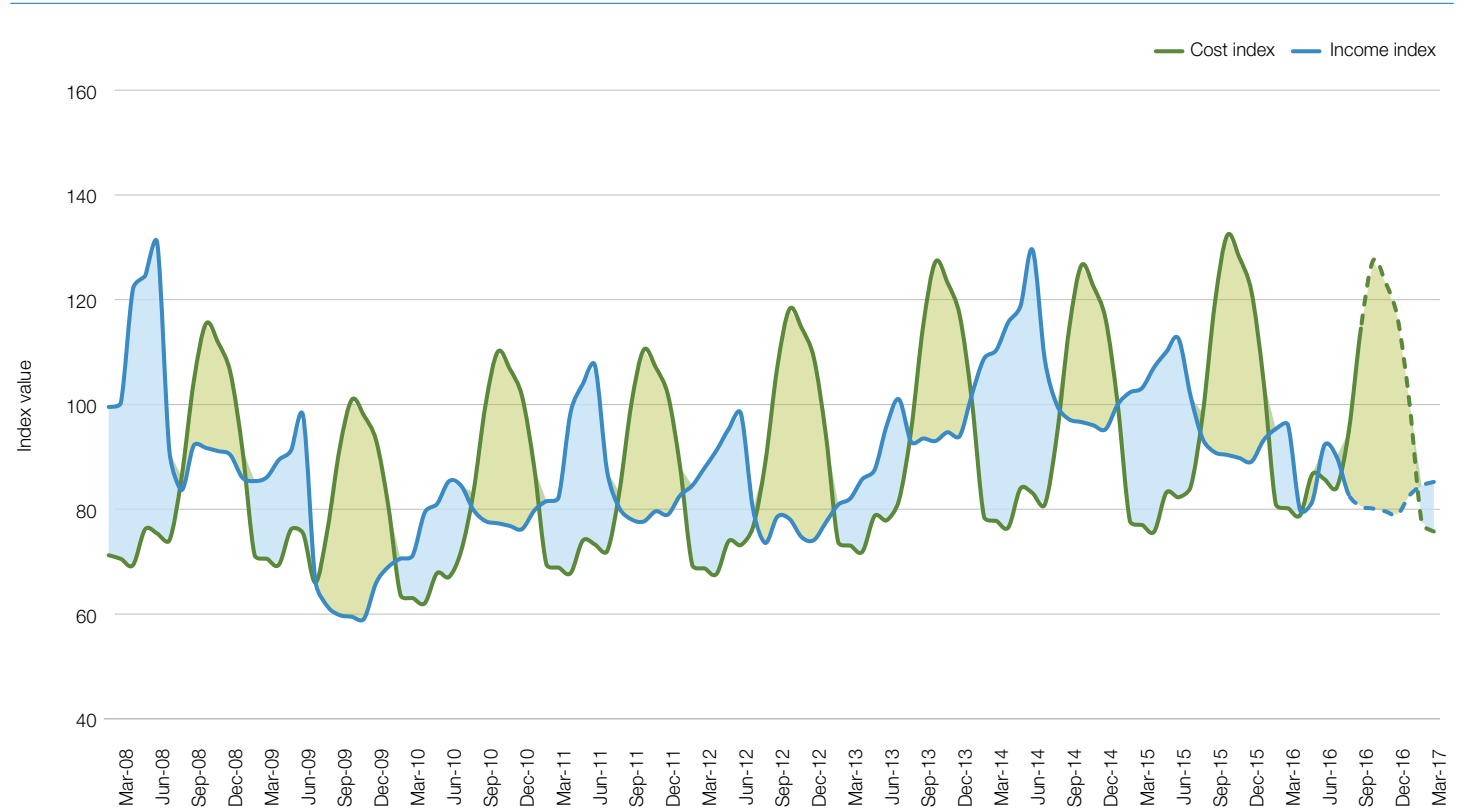
The capacity and inclination of processors to offset this by passing market upside through in the form of higher farmgate prices will be influenced by the inherent risks in a largely sentiment-driven recovery. In terms of the supply/demand balance, the market is in a much better place than this time in 2015, but downside risks remain. The perennial challenge for both processors and farmers is to secure adequate milk flows to capitalise on market opportunities, maximising profitability while protecting against damaging price shocks. This will remain top of mind as the industry finds its feet in 2016/17.

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:

- › Late season cuts dramatically altered the income profile for those farmers affected by the 2015/16 step-downs, creating an unexpected margin squeeze.
- › The base case outlook assumes no significant additional step-ups before the final quarter of the season, when the recent commodity price recovery is likely to have consolidated.
- › Upside potential exists for farmgate prices, but the recovery in commodity markets is at an uncertain phase, and milk processors are likely to remain cautious when determining the extent and timing of passing through expected gains.
- › Indications continue to support lower costs this season, though as suggested in the June update, overall margins will remain tight (or negative) for much of 2016/17.
- › For a closer look at the numbers, see page 25 (Farm business performance).

Figure 1 Export region weighted cost and income indices



Source: Dairy Industry Farm Monitor Project, Dairy Australia analysis

Inputs

Fertiliser

Urea (granular Middle East)

196 US\$/t

▼ -30% LY ▼ -38% 5Y

DAP (US Gulf)

328 US\$/t

▼ -24% LY ▼ -22% 5Y

MOP (granular Vancouver)

228 US\$/t

▼ -27% LY ▼ -32% 5Y

Price is August 2016 average, compared to the 2015 August average (LY) and 5-year (5Y) August average.

Source: Bloomberg

Water and weather

Northern Victoria

224 \$/ML

▲ +64% LY ▲ +125% 5Y

1,575,352 ML

▼ -16% LY ▲ +2% 5Y

Murray Irrigation System

221 \$/ML

▲ +66% LY ▲ +119% 5Y

108,365 ML

▼ -35% LY ▼ -37% 5Y

Price of water traded is 12 month average and volume of water is 12 month total, both to August 2016, and compare to year earlier (LY) and last 5 years (5Y).

Source: Victorian Water Register, Murray Irrigation Ltd

Cows

Cull cows

513 c/kg

▲ +10% LY ▲ +39% 5Y

109,102 head

▲ +33% LY ▲ +27% 5Y

Dairy cattle exports

71,716 head

▼ -7% LY ▼ -9% 5Y

Price is August 2016 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 2016) compared to year earlier (LY) and 5-year (5Y) averages.

Source: NLRS, ABS



Weather

Following an El Niño event that persisted well into the season, causing a dry summer and delaying the autumn break, Australia has experienced one of the wettest winters on record. Rainfall has been very much above average for much of central and eastern Australia since June, with the only regions to miss out on the unseasonably wet weather being parts of northern Western Australia and the top end. Excessive rain has been a mixed blessing for the fodder and grain industries, as crop growth has been exceptional in some areas, but hampered by waterlogging and supply issues in others. On the plus side, there has been a reduction in many multi-year rainfall deficits, water storages are high and soil moisture levels are close to ideal across much of the country, excluding isolated regions of south-eastern New South Wales, eastern Victoria, eastern Tasmania and Western Australia.

In regards to temperature, autumn of 2016 was Australia's warmest on record and winter has also tended to be warmer than average. The main driver of the current Australian climate is a negative Indian Ocean Dipole, which has persisted since late May 2016. The Bureau of Meteorology is predicting that this will have returned to normal

values by the end of the year, making a wetter than average spring likely in the meanwhile. Warm ocean temperatures surrounding northern Australia are also contributing to the recent warm, wet weather. While a La Niña-like pattern has recently been observed in the seas around Australia, this does not necessarily translate to atmospheric La Niña thresholds being reached. However, a La Niña watch is remaining in place, as several climate models suggest that a weak La Niña is possible despite being unlikely.

Water

Widespread winter rains have finally enabled water prices to fall following several expensive seasons. For the past four months the average temporary water prices for both Northern Victoria and the Murray Irrigation System have been dropping and have now broken through the \$100/ML mark. However, given the very high prices seen over summer, the cost of temporary water is still dramatically elevated on a 12 month average basis. Looking at the year to August 2016, the average price in Northern Victoria was \$224/ML and in the Murray Irrigation System it reached \$221/ML. These equate to increases of 64% and 66% respectively when compared to the year prior. In terms

of entitlements, prices of high reliability water shares for nearly all trading zones are also elevated relative to last year. In saying this, the short-term outlook regarding the cost of water is a positive for dairy farmers. Water levels in Murray Darling basin are at their highest in almost two years and good runoff into dams has seen the total volume of water held in the major storage sites increased by 7.3% during August, with many dams subsequently filling and spilling during September and October. Furthermore, current climate outlooks predict that average to above average rainfall for spring is likely. As such, state authorities are expecting end of season allocations to be higher in 2016/17 than they were in 2015/16 and 2014/15.

In regards to the volumes of water being traded, demand for temporary water has dropped off in both systems. This is due to above average rainfall delaying the irrigation season, milk price cuts and the speed at which water prices have fallen. Compared to last year, volume traded has decreased by 16% for Northern Victoria and 37% for the Murray Irrigation System. Demand is holding somewhat higher in the Northern Victoria system due to large water requirements from horticulturists, particularly nut producers.

Australia has experienced one of the wettest winters on record.

Cull cow prices have been climbing to record highs over the last 18 months and are currently up 39% on the 5 year average.

Favourable growing conditions and improved productivity enabled global wheat production to reach its highest level ever in 2015/16.

Fertiliser

International benchmark prices for fertilisers fell consistently throughout the 2015/16 financial year and analysis of global market factors gives no indication of this trend reversing in the next few months. Global demand for both phosphate and potash are subdued and this, along with robust supply levels, has pushed respective DAP and MOP prices down significantly. DAP prices are 24% lower than the same period last year and MOP prices are down by 27%. The urea price has been pressured by a similar global supply-demand mismatch, while also being impacted by current low energy costs driving down nitrogen production costs. As a consequence, the price of urea was 30% lower in August 2016 compared to August 2015.

Despite these trends, Australian fertiliser prices do tend to be unpredictable, as they are significantly influenced by the volatile USD/AUD exchange rate and global freight charges. Furthermore, the impending merger of two of the largest fertiliser producers, Agrium Inc. and Potash Corp., will see 23% of global production capacity controlled by one entity. This will potentially reduce competition in the sector, thus pushing up prices.

Cows

Cull cow prices have been climbing to record highs over the last 18 months and are currently up 10% on August 2015 prices and up 39% on the 5

year August average. Taking this into account along with milk price cuts, it comes as no surprise that the number of dairy cull cows in saleyards has also risen markedly. In the past 12 months to August 2016, 109,102 head were sold, an increase of 33% on the previous year.

Record cull cow prices have been triggered by limited supply, with beef cattle herds still in the re-building phase following drought periods, as well as strong international demand. This demand has resulted from a smaller than usual US herd and the ongoing popularity of Australian beef. It has been noted however, that in recent months price growth has slowed to single digits, hinting that a correction in the cattle market is imminent. Local prices are likely to be pressured somewhat by recent surges in beef production in the US, India and Brazil as well as increased competition from cheaper proteins. In this regard, ABARES forecasts that import demand for beef products will drop to \$21.0 billion in 2016/17, from an estimated \$21.9 billion in 2015/16. Despite this, the tight beef supply is unlikely to be corrected in the near future, and as such a higher than average local price range has been predicted up until 2020.

In regards to live exports, figures for dairy cattle exports are down 7% for the last 12 months compared to last year and down 9% on the 5 year average. This is a result of low global milk prices, which have put pressure on markets in most countries that typically import dairy

heifers, including China. China currently accounts for over 80% of Australia's live dairy cattle exports.

Grain

Favourable growing conditions and improved productivity enabled global wheat production to reach its highest level for the 2015/16 financial year, at over 733 million tonnes, according to UN and USDA estimates. As these factors continue into the new season, and on the back of very high carry-over stocks, it is forecast that this year's wheat crop could be even larger, with September 2016 UN figures placing global annual production at over 740 million tonnes. The glut of available wheat has led to a collapse in prices, with saw the Chicago Board of Trade wheat price fall to 10 year lows at just US\$370c/bushel at the end of August. While the price recovered slightly in the weeks following, the commodity is still being pressured down as the Black Sea region, Canada, India and Brazil have all recently increased their production estimates. Given that corn traditionally acts as an alternative form of animal feed, the fact that global corn prices are currently very low is also helping to keep wheat markets depressed.

In Australia, wheat production estimates for 2016/17 are also forecast to be exceptionally high, with ABARES providing a provisional figure of 28.1 million tonnes. If this is realised it would be the second-highest production on record after 2011/12.

This has pushed local wheat spot prices lower in all states. ASX futures for East Coast wheat have also dropped considerably, and are currently sitting at \$227/t for Jan 17 compared to \$280/t this time last year. Although Australian prices are low, they are still trading about US\$15/tonne FOB higher than Black Sea wheat. It is difficult to predict whether local prices will drop any further given that despite excellent seasonal conditions for many growing regions, yields have been significantly affected by unfavourable weather in some areas. Recently, excessive rains in parts of eastern Australia have led to waterlogging and disease losses, while frost across Western Australia has caused a significant amount of damage to crops.

Following a similar narrative to wheat markets, global and local production of coarse grains has also been extremely high and is forecast to rise in 2016/17. Increases to Australian coarse grain production reflect higher barley and oats production and the excess in supply has resulted in spot prices for the commodities decreasing across Australia for the past several months. Barley is particularly inexpensive as of late, currently fetching \$194/t (delivered Melbourne) compared to \$296/t last year. Canola meal is also likely to be readily available, with a global oilseed shortage of 4 million tonnes driving canola production increases. Locally,

canola production is forecast to reach 3.6 million tonnes in 2016/17, a 23% increase compared to last financial year.

Hay

The Australian hay market has been sluggish for the past few months, challenged by a lack of demand and difficult growing conditions. This is also reflective of the time of year, as growers either begin harvest or wait for the curing conditions to get underway and buyers sit out of the market in anticipation of the new season price. While the price of cereal hay for August was elevated in nearly all reporting regions compared to August 2015, increases tended to be small, usually only a few dollars per tonne. This slowness seen in the market is attributable to limited urgency for farmers to purchase feed. Much of this can be put down to the excellent autumn break followed up by good winter rainfall, which resulted in decent pasture availability for most regions. In fact, with grass feed widely on hand, straw may be the only product moving quickly, as many livestock farmers need the straw to increase the effective fibre in their herd rations.

Several more localised factors have also been at play to deter purchasing of fodder. This includes reduced demand from dairy farmers following milk price cuts as well as high freight costs, which have been particularly prevalent in the

south in recent months. In northern Australia, where feedlotters tend to be the main buyers in the market, destocking of the beef industry due to strong beef prices has been dampening demand. This leaves Western Australia as possibly the only region where interest in hay is still strong. The fact that limited supply is available in the region at present has been keeping prices at a premium compared to other states. It is also important to keep in mind that in Western Australia the export hay industry maintains a strong influence on prices, often keeping the market afloat when neighbouring regions are stagnant.

Currently the outlook for the new season is uncertain for most types of fodder. The majority of growers are predicting extremely large crops given the favourable growing conditions over winter. This would inevitably lead to softening of the hay price. On the other hand, feed quality is a huge unknown. The heavy spring rainfall in parts of Western Australia and much of the south east of the country has resulted in increasing reports of crop damage, waterlogging and flooding. Dry, warm weather is required to enable months of promising growth to be converted into quality product, and to allow sufficient time for proper curing and baling conditions. As such, hay prices for the upcoming months will depend predominantly on the weather.



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

Australian dairy regions – Grain and hay



The relevant stockfeed wheat available in a region: ASW, AGP, SFW1 or FED1.



Shedded cereal hay: mid-range product without weather damage, of good quality and colour.

Prices are estimates in \$/tonne at September 2016. GST exclusive but including delivery and (for grain) an allowance for storage and marketing costs.

Percentage price change compares to the equivalent date 2015.

Source: AFIA, Lachstock Consulting



The Australian market

Milk

Total milk sales volumes have increased by 1.5% to 1,358 million litres over the 12 months to September, with a boost in fresh white full cream milk contributing strongly to the lift in overall liquid milk sales, growing by 7% in terms of volume, and 9% in terms of value. This strong growth in the full cream milk segment marks an ongoing shift by consumers away from the modified fat milk varieties, which fell 6.7% by both volume and value. Full cream now accounts for 61% of the fresh white milk category, up from 54% only three years ago.

Company branded ('branded') milk has regained market share from supermarkets' retailer branded ('private label') fresh white milk category, with branded milk sales volumes increasing by 7% over the past 12 months while private label volumes fell by nearly 2%. The apparent reversal of the long term trend of increased private label share stems from consumer responses to media coverage following the sudden late season milk price step-downs. Spurred by mainstream and social media campaigns, many consumers pointedly refused to buy private label milk from May onwards. The result has

been quite dramatic, with market share of private label milk in the fresh white category falling by almost 10% to 55% by volume, and less than 50% by value. This marks a significant change to the long-term trend of an otherwise growing share of private label milk, as shown in figure 3, overleaf.

Sales volumes for UHT milk fell 3% (to a total of approximately 187 million litres), although value of the category declined by more, down nearly 4%, as UHT was subject to frequent discounting. Additionally, the proportion of UHT being sold under private label (average price \$0.94/L, down 4%) has increased, relative to branded UHT milk (average price \$1.54, up 2.9%). Within the white UHT milk category, the private label share of sales volume has increased from around 25% in 2012 to over 38% in 2016. This has left major processors increasingly dependent on sales in the 2L pack size category for their branded milk sales, which have no direct private label competitors. Within the 1L pack size category, processors depend heavily on higher-margin, specialty products, such as lactose-free or vitamin-fortified ranges, which account for a disproportionate share of total sales value.

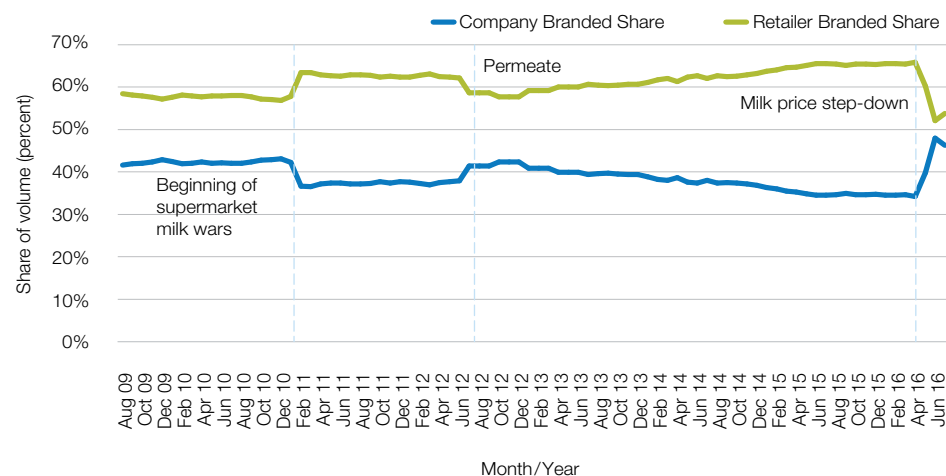
Figure 2 Supermarket sales



Source: IRI

Note: Available data is taken from differing periods; milk and dairy spreads figures from MAT 21/08/2016; cheese, yoghurt and dairy snacks from MAT 03/04/2016.

Figure 3 Fresh white milk sales share by volume – weighted grocery sales



Source: IRI, Dairy Australia analysis

Figure 4 Supermarket chilled cheese

Supermarket chilled cheese market							
Select Packsizes	Share of Market	Price	Price Growth	Kilo-tonnes	Volume Growth	Value (\$M.)	Value Growth
100–199g	5.3%	\$30.13	-1.7%	6.3	7.3%	189.8	5.5%
200–299g	21.5%	\$18.15	2.3%	25.5	-4.1%	463.1	-1.8%
400–649g	44.8%	\$11.82	-0.9%	53.2	-0.3%	629.5	-1.3%
650–999g	10.2%	\$10.29	-1.4%	12.1	6.1%	124.0	4.6%
1–1.49kg	17.5%	\$7.97	-8.7%	20.7	10.0%	165.4	0.4%
Total chilled cheese	99.3%	\$13.38	-1.6%	118.7	1.6%	1,589.3	0.0%

Source: IRI

Cheese

Cheese volumes have grown steadily over the last 12 months, up by 2%, while values have grown by 1%. Within the cheese category, growth in sales of deli cheese have outstripped those of chilled cheese, increasing 5.6% in terms of volume and nearly 4% in terms of value, in part because the average price per kilogram declined by 1.7%. Taking a medium term view, over the past 5 years deli cheese growth has outpaced that of chilled cheese, growing from 17,691 tonnes in 2011 to 22,125 tonnes in 2016, and \$399.5 million to \$555.5 million over the same period. By comparison, chilled cheese sales fell from 119,293 tonnes to 118,726 tonnes from 2011 to 2015 (the sales value grew from \$1.53 billion to \$1.59 billion).

Within the chilled cheese segment, sales of larger bulk-sized 1–1.5kg bulk packs have grown strongly, up 10% by volume, and now accounting for 17.5% of the chilled cheese market. An 8.7% decrease in average per kilo price of cheese (to \$7.92) means that these bulk packs are now the most affordable option for many consumers chasing value for money, particularly when purchasing cheddar and mozzarella. Specialty and snacking cheeses have also performed well, growing by 17%

and 8% by volume respectively. More importantly, these chilled cheese segments have maintained their higher price points, resisting the general downward trend towards discounted cheeses, accounting for an outsized and increasing share of the market by value.

Dairy spreads

Total dairy spreads grew 3.6% in volume, to 47,633 tonnes, and almost 4% in value to \$432.8 million, in the 12 months to September 2016. Butter sales increased 3.4% by volume to 25,461 tonnes, and total sales value increased by 2.6% to \$212.8 million, with average price for butter sitting at \$8.36 a kilo. Within the butter category, unsalted butter has grown 10.2% in volume, while value has grown by about 8.5%. In part this has been due to the increased popularity of larger 500g blocks of butter, primarily used for cooking, which have a lower per kilogram price. Sales of butter blends grew 3.6% by volume, and nearly 5% in total value, as the average price increased by 1.6% to \$9.92/kg.

Yoghurt

Within the yoghurt and dairy desserts category, the dairy yoghurt sub-segment has seen sales volumes fall slightly (by 0.4%) to 160,000 tonnes, whilst total value has remained flat, at \$1,076 million for the 12 months to April.

This compares with the performance to January, where volume and value were both down. The main driver of this volume/value differential is the ongoing transition by consumers from sweetened to traditional, unsweetened varieties of yoghurt, which have fallen by 8% and grown by 9% in volume, to 57,500 and 83,900 tonnes respectively.

Given the price difference between sweetened and traditional yoghurt types (retailing at \$5.29 and \$7.36 per kg), the difference between the two segments is even more stark in value terms. The value of traditional yoghurts rose by 9.1% to \$617 million, whilst sweetened varieties fell by 9.5% to \$304 million. To provide a bit of context to the size of the shift within the yoghurt category: Slightly over three years ago, annual sales volumes of traditional and sweetened yoghurt by volume were around 52,000 and 78,000 tonnes respectively, whilst sales values for the two different segments were \$357 million and \$415 million respectively.

Greek-style, natural yoghurt

A noticeable trend within the yoghurt category has been the increased popularity of Greek-style and natural yoghurt. Generally full fat and unflavoured, it has a slightly sour taste as a result of the fermentation process. Whilst popular in many cuisines such as Greek, Persian and Indian, consumers in Australia and other western countries have generally preferred flavoured and sweetened varieties of yoghurt, which until recently accounted for the majority of all yoghurt sold in Australian supermarkets. Reflecting public health concerns regarding the fat content of dairy, many of these flavoured yoghurt varieties label themselves as 'lite' or 'fat-free'. Whilst these varieties of yoghurt remain popular, many consumers have reduced their consumption of these products, and switched over to more 'natural' unflavoured, traditional varieties of yoghurt without added sugar.

Aside from containing high amounts of calcium and protein, consumption of yoghurt, including Greek-style and natural yoghurts (and other dairy foods) offer a variety of health benefits, including:

- › Stronger bones leading to reduced risk of osteoporosis;
- › Reduced risk of Type 2 diabetes and;
- › Reduced risk of heart disease and stroke.

In addition, consumption of dairy foods, including yoghurt do not lead to weight gain. Studies have even shown consumption of two to four serves of dairy may assist in weight loss, and retention of lean muscle, when included as part of a calorie controlled diet.

While there is considerable scientific evidence to support the health benefits of natural and Greek-style yoghurt, there are still

misconceptions regarding the fat content of yoghurt, and dairy foods more generally. Some health professionals may recommend consuming only reduced-fat sources of dairy, citing risks of weight gain, heart-disease and high-blood pressure from consumption of regular-fat dairy which contains saturated fat. In some instances, these concerns have led to less processed, full-fat yoghurt varieties being penalised, and assessed as less 'healthy' than perhaps is the case. However, the Government-developed Australian Dietary Guidelines recognise that both regular and reduced fat dairy foods are associated with health benefits. More important is the package of nutrients that comes with eating whole foods, and the combination of foods that make up healthy dietary patterns, so taste and personal preference should ultimately guide yoghurt choice.

Impacts of \$1.00 per litre supermarket milk – Additional analysis

The Australian drinking milk market accounts for approximately 25% of total Australian milk production, or around 2.5 billion litres of milk.

The drinking milk market is essential to dairy farmers, milk processors and the overall health of the industry. This is especially true in Queensland and Western Australia, where the local drinking milk market accounts for around 100% and 80% of production, respectively.

Whilst the total retail sales value of the drinking milk category has grown, in the 5 years since the introduction of \$1/litre milk (as outlined in the June S&O), further analysis shows that the value of supermarket sales in the fresh white drinking milk segment has declined during the same period. The fresh white milk segment remains the single most important segment of the liquid milk category, accounting for 75% of all supermarket drinking milk sold. This segment was directly affected by the \$1/litre decision, which applied to full cream and modified fresh white milk varieties, and saw private label increase its share of the segment by approximately 5%.

Dairy Australia analysis shows that after an initial response to discounted milk, consumers have since become accustomed to paying a lower price for fresh white milk, and consumption has reverted to pre-discounting levels. In 2015 Australian per capita consumption of fresh white milk was estimated at 84.2 litres, compared with 84.3 in 2010, in line with the

long-run average consumption for fresh white milk since 2000. This suggests that the implementation of this supermarket discount pricing strategy has not led to sustained higher levels of fresh white milk consumption, on a per capita basis.

Supermarket milk sales data suggests that pressure on processor profit margins by the consumer shift to private label milk after the \$1/litre decision encouraged processors to seek alternate revenue streams – particularly UHT and flavoured fresh milk products. It is DA's understanding that processors consider returns for branded and private label milk across their portfolio of milk (both white and flavoured), while factoring in any efficiency benefits generated by additional private label milk throughput. The growth in consumption and turnover value for these segments has boosted the total value of the drinking milk category as a whole. However, it should be emphasised that an increase in turnover does not necessarily equate

to increased profitability, especially if processors have increased expenditure on development and marketing of new product lines. With a wide-ranging ACCC inquiry in to the dairy industry due to begin in November, DA is hopeful that information obtained will allow for definitive analysis of the effect of \$1/litre pricing on profitability across the supply chain.

Aside from questions of profitability arising from the \$1/litre price point, there is also an intangible impact on the perception of the industry. Pricing milk at \$1/litre (in many cases less than bottled water) suggests to farmers that the hard work, capital investment, and management skill that goes into producing the product are not valued. Research commissioned by Dairy Australia in June 2016, confirms that consumers share concerns about the fairness of these prices and the inherent value of milk.

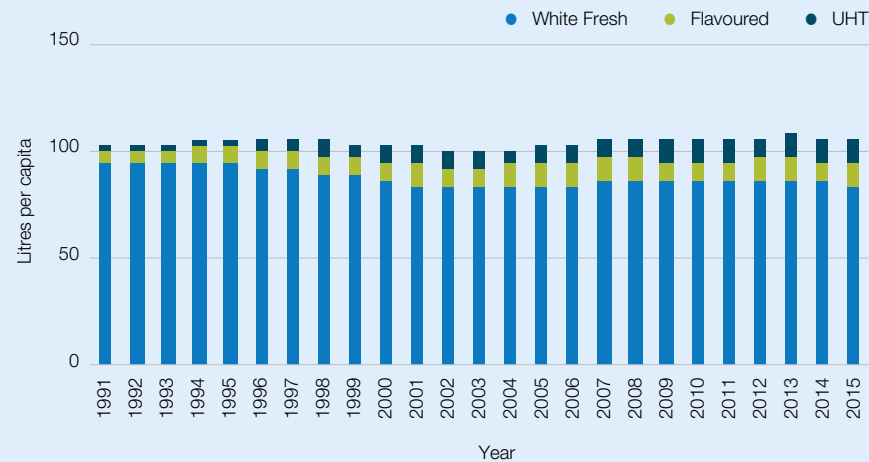
\$1.00/litre milk – Consumer research

Some key themes to emerge were:

- 1. The price of milk is too low.**
Around 70% agree that milk should cost more than \$1/litre, and that it should cost more than a bottle of water.
- 2. Farmers are struggling and the future of the industry is uncertain.**
Around 90% agreed that farmers are struggling because of low prices.
- 3. Farmers aren't being treated fairly, particularly by supermarkets.**
74% felt that supermarkets were not treating farmers fairly.

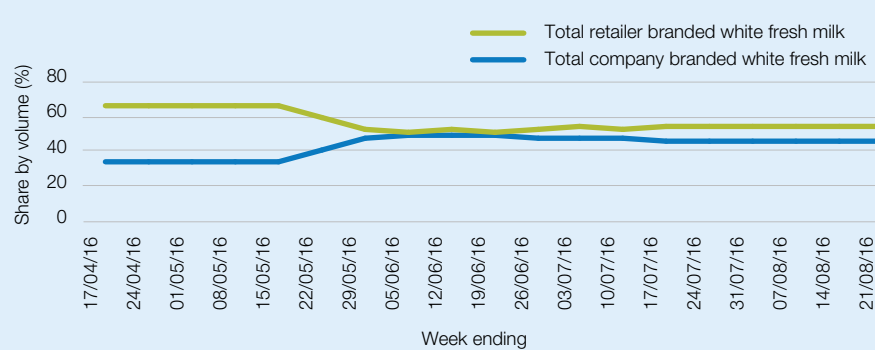
These consumer attitudes have also been borne out by the very sudden and large shift in consumer behaviour following the price step-down in April 2016, with consumers switching to branded milk in favour of private label milk, as shown in figure 6. Placed in context, the magnitude of the consumer shift in terms of private label versus branded milk sales is unprecedented, exceeding the consumer response to the beginning of the so-called 'milk wars' in 2011, or the controversy over permeate in June 2012.

Figure 5 Per capita milk consumption



Source: IRI, Dairy Australia

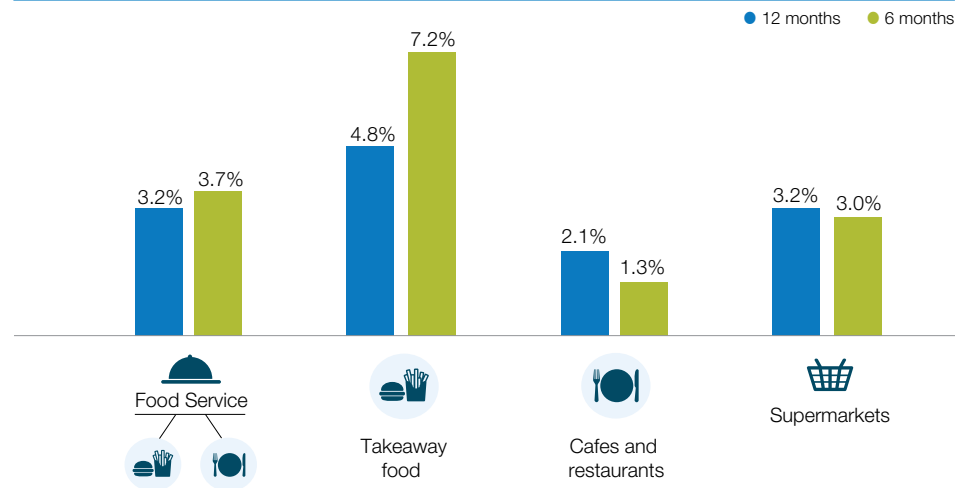
Figure 6 Australia fresh white milk-sales volumes



Source: IRI, Dairy Australia analysis

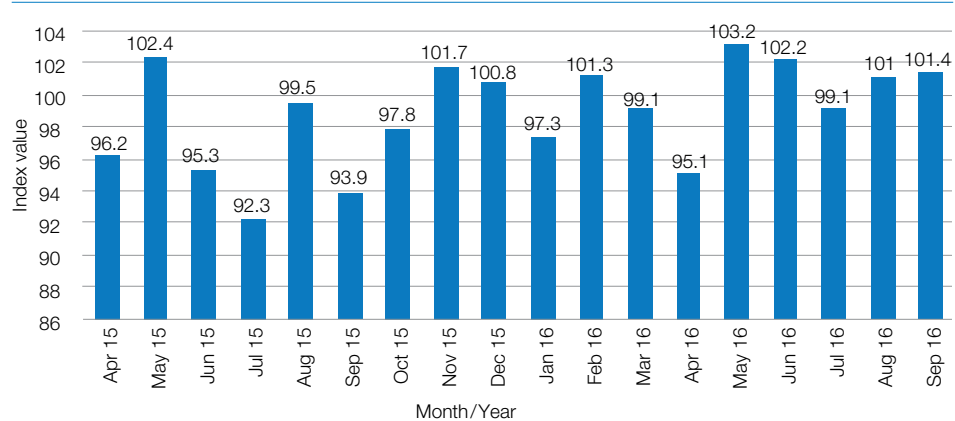
Consumer attitudes have also been borne out by the very sudden and large shift in consumer behaviour following the price step down in April 2016.

Figure 7 DA Food Service Index (YOY turnover growth to July 2016)



Source: Dairy Australia, ABS

Figure 8 Australian consumer confidence



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

Economic settings

The Westpac-Melbourne Institute Consumer Sentiment Index rose by 2% in August from 99.1 to 101.0 in August, representing a recovery from jitters over the Brexit vote and the uncertainty of the Australian federal election. This was then capped off with a further gain of 0.3% in September, lifting the Consumer Sentiment Index to 101.4. Beyond the headline figure of 101.4, the latest September result suggests consumer sentiment is stabilising in more positive territory, and consolidating the gains made in earlier 2016. Confidence is now above the level it was the same time 12 months ago (99.5), and the latest rise is the third time the index has exceeded 100 in the last four months.

Dairy Australia's Food Service Index shows improved growth in the food services sector, compared with the results in March, with expenditure growing by 3.2% in the 12 months to July. The index reflects year-on-year growth in turnover of the food service channel, which aggregates hospitality turnover from takeaway food, cafes, restaurants and catering services. The Index shows that overall growth in food service spending has picked up 0.5% over the last 6 months compared to the same time last year, growing by 3.7%. Whilst growth in the total value of supermarket sales has slowed

slightly, this likely reflects weak food inflation numbers, discussed below. Slowing growth in café and restaurant expenditure has been offset by stronger recent growth in takeaway turnover, which grew by 7.2% in the six months to July. The strong growth in the takeaway category is partly due to growth in mobile app-based food delivery services.

Inflation remains below the RBA's medium term target of 2–3%, increasing just 0.4 percentage points between the March and June quarters. Over the 12 months to June, this marks just a 1% annual increase in the CPI. Within the headline CPI figures, the food and non-alcoholic beverages category declined slightly, from 104.1 to 103.8 between the March and June quarters, but was steady over the last 12 months, down only 0.1 from June 2015. Over the past 12 months the dairy CPI has fallen 1.3%, with decreases in each of the underlying indexes: milk fell 0.6%, cheese 2.7%, and ice cream and other dairy products 1.0%.

The RBA expects inflation to remain low over the remainder of 2016, before increasing to around 1.5-2.5% over the first half of 2017. Whether the next set of inflation data will prompt the Reserve Bank to further lower interest rates in November remains to be seen.

Global economy and exchange rates

The latest update to the World Economic Outlook (WEO) from the International Monetary Fund (IMF) (July), projects global economic growth at 3.1% in 2016, a 0.1% downward revision of the updated April forecast of 3.2% growth for the year 2016. This revised forecast reflects the impact of the Brexit vote, chiefly increased economic and political uncertainty. In turn, this uncertainty has reduced confidence and investment by businesses and individuals, primarily in developed European economies. Meanwhile the United States is on track to record moderate economic growth for 2016, with growth in employment and relaxed monetary policy. Near-zero or extremely low interest rates across most developed countries have limited the scope for monetary policy to close

output gaps, whilst high levels of public debt make increased fiscal stimulus politically difficult.

Beyond the developed economies, the outlook becomes more positive. Higher oil and commodity prices have allowed for some fiscal consolidation, and reduced risk premiums for oil exporting countries. In China, growth has continued to slow, as the central government attempts its difficult rebalancing of the economy. Concerns about macroeconomic stability and a slowdown in growth have been partially allayed, with expansionary fiscal policy and a strong increase in infrastructure spending.

Currencies of major dairy commodity exporters have remained fairly weak, improving their cost-competitiveness.

The Australian dollar averaged 0.75 USD/AUD during the June quarter 2016, down slightly on the average for the previous March quarter of 0.77 USD/AUD. Delays to expected rate rises from the United States' Federal Reserve as well as a partial recovery in commodity prices have led to slight upward revisions to the expected exchange rate going forward, with the median consensus forecast fluctuating around the 0.74 USD/AUD mark over the year to first quarter 2017. Forecasts for the New Zealand Dollar point to a continued devaluation over the next two quarters, and then settling at around 0.68 USD/NZD out to the end of 2017. A slight depreciation of the Euro against the USD is anticipated later in 2016, before stabilising in 2017 at around 1.09 EUR/USD.



Global supply and demand overview

Overall traded volumes are up 4.5%, but more importantly, supply and demand are better balanced than this time last year.

United States

Higher domestic market prices saw US cheese and butter retreat further from international markets. Booming cheese production made more lactose available for global buyers though.

Export volume trends (Tonnes)
1,935,947

Total volume change:
▼ -7%

Significant product shifts

- ▲ Lactose (+3%)
- ▼ SMP/NDM (-1%)
- ▼ Cheese (-18%)
- ▼ Butter and blends (-57%)

Mexico

Demand for dairy imports in Mexico remains strong, evidenced by large increases in cheese and SMP shipments.

Import volume trends (Tonnes)
671,095

Total volume change:
▲ +10.9%

Significant market shifts

- ▲ New Zealand (+61%)
- ▲ European Union (+15%)
- ▲ United States (+10%)
- ▼ South America (-13%)

European Union

Rapid growth in European milk production continued to be directed to international markets, though sales into intervention were the channel of choice for many SMP manufacturers.

Export volume trends (Tonnes)
4,987,350

Total volume change:
▲ +17%

Significant product shifts

- ▲ Butter and blends (+53%)
- ▲ Liquid milk (+34%)
- ▲ Cheese (+13%)
- ▼ Skim milk powder (-5%)

Russia

Continued embargoes and marked depreciation of the Rouble have seen global exports to Russia fall for a second consecutive year, including (notably) from non-embargoed South American suppliers.

Import volume trends (Tonnes)
115,885

Total volume change:
▼ -33.5%

Significant market shifts

- ▲ New Zealand (+55%)
- ▼ Switzerland (-11%)
- ▼ South America (-33%)
- ▼ European Union (-52%)

Greater China

Low international prices and subdued local production saw strong growth in imports, particularly in liquid milk (+53%).

Import volume trends (Tonnes)
2,417,106

Total volume change:
▲ +20%

Significant market shifts

- ▲ European Union (+40%)
- ▲ Australia (+30%)
- ▲ New Zealand (+22%)
- ▼ North America (-21%)

Southeast Asia

Imports fell slightly, driven by strong growth in SMP and whey powder. Excess supply from Europe poses a challenge to Australian exporters.

Import volume trends (Tonnes)
2,297,912

Total volume change:
▼ -1%

Significant market shifts

- ▲ European Union (+13%)
- ▲ New Zealand (+3%)
- ▲ Australia (+2%)
- ▼ North America (-16%)

Japan

Despite dairy imports being at the most affordable level in over 5 years, imports softened, with importers drawing down already sizeable stocks.

Import volume trends (Tonnes)
487,214

Total volume change:
▼ -3.2%

Significant market shifts

- ▼ Australia (-1%)
- ▼ New Zealand (-3%)
- ▼ North America (-8%)
- ▼ European Union (-9%)

Australia

Australian manufacturers capitalised on better returning cheese markets, at the expense of WMP production. Butter production is increasingly consumed domestically, while liquid milk exports saw further growth.

Export volume trends (Tonnes)
816,944

Total volume change:
▲ +7%

Significant product shifts

- ▲ Liquid milk (+21%)
- ▲ Cheese (+9%)
- ▼ WMP (-17%)
- ▼ Butter and blends (-24%)

Middle East

Imports are down slightly, following the accumulation of large stocks and a subdued economic outlook.

Import volume trends (Tonnes)
1,676,146

Total volume change:
▼ -3%

Significant market shifts

- ▲ European Union (+5%)
- ▼ New Zealand (-8%)
- ▼ North America (-24%)
- ▼ North Africa (-27%)

New Zealand

Investment in cheese production and a focus on 'value add' commodities like milk and infant formula are reflected in New Zealand export data.

Export volume trends (Tonnes)
3,213,156

Total volume change:
▲ +6%

Significant product shifts

- ▲ Liquid milk (+38%)
- ▲ Cheese (+13%)
- ▲ Butter and blends (+2%)
- ▼ WMP (-1%)

Changes 12 months to June
Source: GTIS, Dairy Australia

 Four largest exporters

Global demand

The volume of dairy products traded over the past twelve months to June 2016 grew by 4.5%, with a recovery in demand from Greater China offsetting declines in other major importing markets. Overall volumes to Southeast Asian countries (ASEAN) declined, while export volumes to the Middle East and Japan also fell. The value of global exports fell by 19%, with falls across all major markets, largely reflecting the lower global prices for key dairy commodities.

Greater China

Exports to Greater China (PRC, Macau and Hong Kong) grew by 19.6% in volume terms over the 12 months to June 2016, while the export value declined by 0.5% to US\$7.2 billion. Demand for milk powder is mixed, with WMP imports up 8% on 2014/15 to 460,000 tonnes, whilst imports of SMP have eased slightly, down 0.3% to about 228,000 tonnes. Sales of butter increased by 46% to over 76,000 tonnes, whilst liquid milk imports rose 39%, to over 658,000 tonnes. Infant formula remains the single highest value category of imports, totalling around US\$2.5 billion.

Australia-China export volumes grew by 30%, from around 136,000 tonnes to 178,000 tonnes, while their USD value increased by almost 65% year-on-year, from US\$350 million in 2014/15 to US\$579 million in 2015/16. This exceptionally large growth in the value of Australian dairy trade with China reflects the changing composition of Australian exports, towards higher value categories such as liquid milk and infant formula. Australian exports of infant formula have increased fivefold from 3,000 tonnes in 2014/15 to over 15,000 tonnes in 2015/16, valued at US\$217 million.

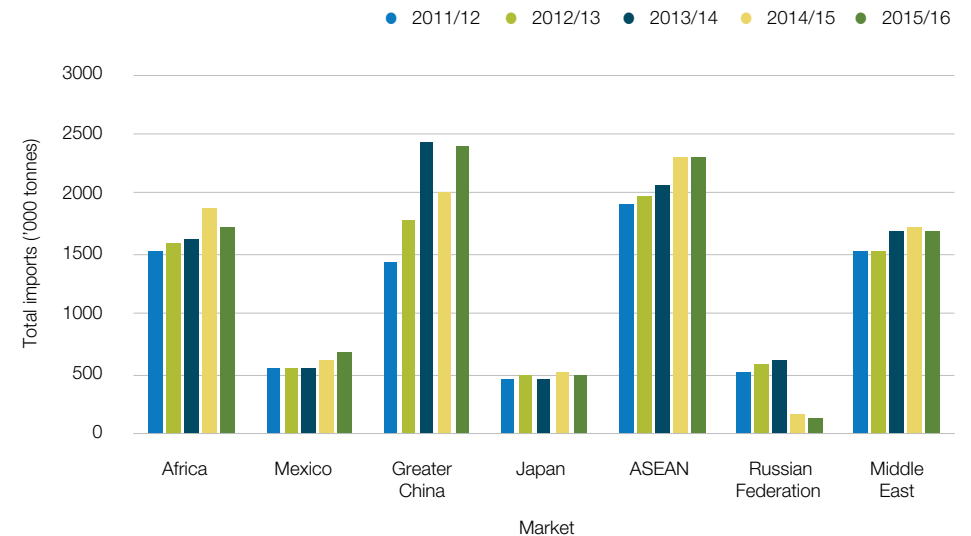
Japan

Falls in global prices combined with a strong appreciation of the Yen has seen the affordability of dairy imports improve significantly for Japanese consumers over the last 12 months. However, global dairy exports to Japan fell by 1% in volume over the course of 2015/16. SMP (-48%) and infant formula (-82%) saw the most significant volume falls. Overall cheese volumes saw no growth

in the 12 months to June 2016 and total value declined by 16.5%. WMP volumes grew by 14%, to around 34,000 tonnes, however, the value of WMP imports declined by 27% to approximately US\$74 million.

Over the same period the volume of Australian exports to Japan remained steady, easing by less than 1% and totalling around 103,000 tonnes.

Figure 9 Exports to key demand markets (twelve months to June)



Source: Dairy Australia, GTIS

However, the value of Australian dairy exports to Japan fell by around 16% from US\$397 million in 2014/15 to US\$335 million due to lower world prices. The volume of Australian cheese exported to Japan increased by 5,000 tonnes to over 90,000 tonnes, valued at almost US\$300 million, with most of the growth in cheddar-type cheeses. These increases were offset by a fall in SMP exports, from over 8,000 tonnes valued at US\$25 million in 2014/15 to around 1,600 tonnes in 2015/16, worth approximately US\$4 million.

Southeast Asia

Overall demand growth in the Southeast Asian region slowed, with 2015/16 import volumes falling 1% year-on-year, whilst the USD value fell 27%. SMP export volumes to the region fell by 5.4% to 604,000 tonnes, whilst total volumes of WMP fell by 12% to 298,000 tonnes. The value of dairy exports to the region fell across all major categories, and overall USD value for the 12 months to June declined by 27%. Exports to Malaysia, Singapore and Thailand declined by 7%, 5% and 6%, due mostly to declines in volumes of SMP exported, which declined by 14%, 29% and 13% respectively. Exports to Vietnam grew by 5% to 314,000 tonnes, with strong growth in SMP and whey powder (+14%, and +31%) offsetting a decline in WMP exports (-24%).

Australian export volumes to the region grew by just under 2%, from 292,000 tonnes in 2014/15 to 297,000 tonnes in 2015/16, whilst the value of Australian exports fell by 28% US\$849 million to US\$609 million in 2015/16. This fall in value occurred largely in the milk powder categories, with the value of Australian SMP exports falling from US\$335 to US\$216 million, despite volumes remaining almost unchanged at around 110,000 tonnes. The value of Australian WMP exports declined by proportionately more, falling over 50% from US\$83 million in 2014/15 to around US\$36 million in 2015/16.

Mexico

Mexico saw strong growth in overall volumes of dairy imports up by 11% on last year to 671,000 tonnes, led by increases in SMP (+23%), butteroil (+86%) and WMP (+138%). Overall value of Mexican imports declined however, and fell by 12% to US\$1.6 billion. Butteroil imports grew by 86% to 48,600 tonnes, WMP imports grew from 14,000 tonnes to 34,000 tonnes, an increase of 138%, while SMP grew by 23% to almost 28,000 tonnes. Exports of whey powder fell by 17% to around 45,000 tonnes, whilst cheese imports have eased slightly since the June Situation and Outlook, down 2% to approximately 113,000 tonnes over 2015/16.

Middle East

Export volumes to the Middle East decreased slightly in 2015/16, falling 3%. Cheese volumes were down 12% to 292,000 tonnes, which was the single largest category change, followed by butter – down 9% to 131,000 tonnes.

Following the removal of production quotas and substantial production increases, the market share of exports from the EU has increased from 51% in 2013/14 to 57% in 2015/16. This has come largely at the expense of the United States' market share, which has fallen from 11% to 4% over the same period.

Australia's dairy export volumes to the region fell by 17% from 71,000 tonnes in 2014/15 to around 58,800 tonnes in 2015/16, and was down over 38% in value terms over the same period, to US\$155 million. Australia's market share declined slightly over the same period, to 3% of product sold. The largest declines were in SMP, where volumes declined some 13% to 23,000 tonnes, whilst the value of these exports fell from US\$84 million to US\$47.5 million in 2015/16, representing a decrease of around 43%.

Russia

Russian embargoes remain in place on dairy imports from United States, European Union, Australia, Canada and Norway. With the EU voting to retain its own sanctions on Russia for at least another six months, these embargoes will likely remain in place for the foreseeable future.

The ban on key suppliers has seen Russian dairy imports drop from 601,000 tonnes in 2013/14 to 116,000 tonnes in 2015/16. Russia has turned to smaller dairy producers such as Argentina, China and Belarus for supplies, and also approved dairy imports from the world's largest dairy producer, India. In spite of depressed global prices for dairy commodities, marked depreciation of the Russian Rouble has meant that dairy imports are less affordable for Russian consumers. This has seen import volumes decline even from countries not subject to embargoes, and meant that in the unlikely event of a normalisation of trade relations, the Russian demand for imports would not be comparable to the pre-sanction period in the short term.

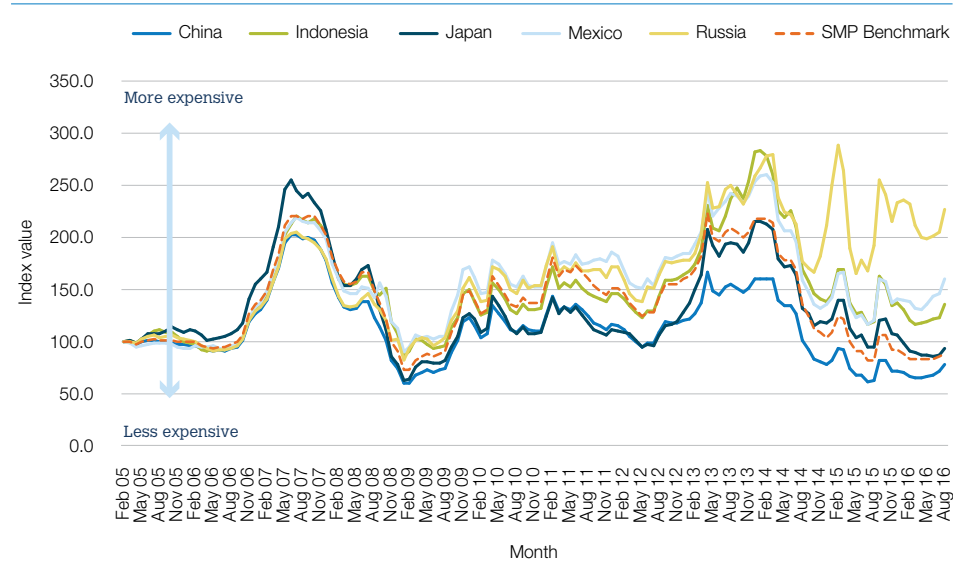
Dairy affordability

Dairy Australia's affordability index has risen slightly from its reported level in the June Situation and Outlook, with the SMP price index inching up 5.4% from 83.1 to 87.6 in August, reflecting an increase in the cost of importing dairy products. This marks a gain of 8.3% on its value of 80.9 in August last year, although the index is still almost 50% below its three year average, reflecting the fact that dairy products are highly affordable compared to historical prices. After a general depreciation against the USD by most global currencies, the delay of any long-expected US interest rate rise has seen many currencies regain ground, which has partially offset the effect of stronger prices, and helped preserved importers' purchasing power with regards to dairy products. In the case of Japan, the Yen has appreciated by 4.0% since June against the USD, and this exchange rate effect has largely outweighed the increase in USD denominated dairy prices. In the case of Russia, despite an improved exchange rate for the Rouble since January 2016, the affordability of dairy products in Russia remains poor, with ongoing financial sanctions weighing on the exchange rate and making dairy imports 18% more expensive compared to the same time last year.

Dairy substitutes

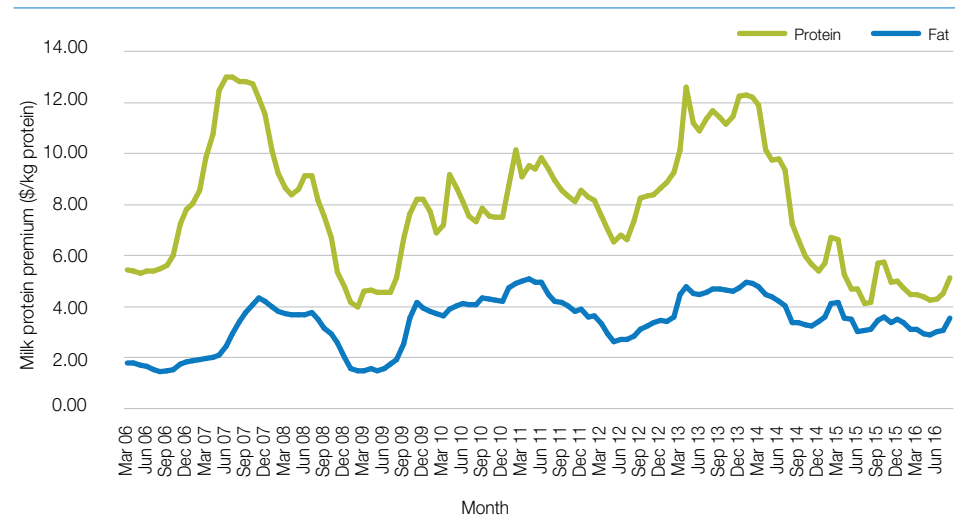
Premiums for dairy fats and proteins continued to weaken from March, before recovering slightly in June, up 5.5% to US\$3.03/kg for butter fats and 2.0% to US\$4.31/kg for dairy proteins, relative to palm oil and soy meal substitutes. Butter fat premiums are down by 5.46% on the 12 month premium average, and still almost 20% down on the historical 5-year average. For dairy protein, the protracted slump in dairy is even more pronounced, with premiums for dairy protein down 8% on the 12 month average, and down almost 50% on the 5 year average. These increases represent a break from six months of consecutive falls in the premiums of dairy products compared to non-dairy substitutes. Demand for soybeans may see prices rise, causing the relative price difference between dairy and soy-derived proteins to fall, in the absence of further strong increases in SMP prices. However, uncertainty remains regarding the size and yield of South American soybean plantings. Whilst dairy fat premiums remain historically low, some easing in palm oil prices has seen the premium increase slightly. This is due to some relief from the unusually hot and dry conditions in Malaysia and Indonesia since May, which had lowered yields and caused supply to contract earlier in the year. Supply remains tight however, with low stocks and continued strong demand from importing countries, so any further adverse weather events may yet cause dairy fat premiums to narrow again.

Figure 10 Dairy affordability



Source: Dairy Australia, Bloomberg

Figure 11 Dairy price premium vs palm/soy substitutes



Source: Dairy Australia, Oil World

Global supply

Overview

Milk production is now falling in year-on-year terms across three of the world's four largest exporting regions, plus South America. Large stockpiles and the potential for resurgent growth pose some risks, but overall the market is finally seeing supply settings conducive to higher prices.

Figure 12 Farmgate price movements – four largest exporters

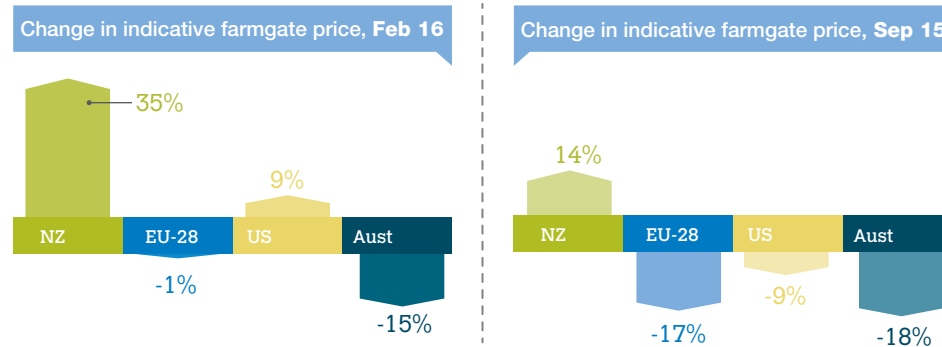
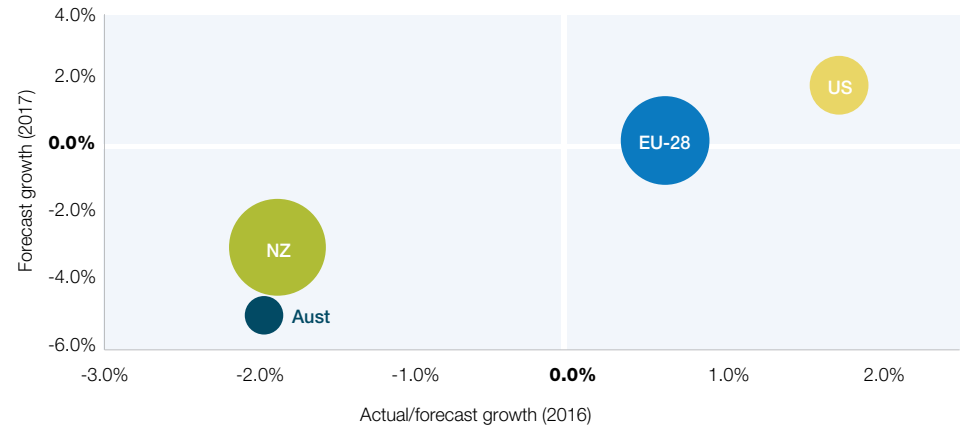
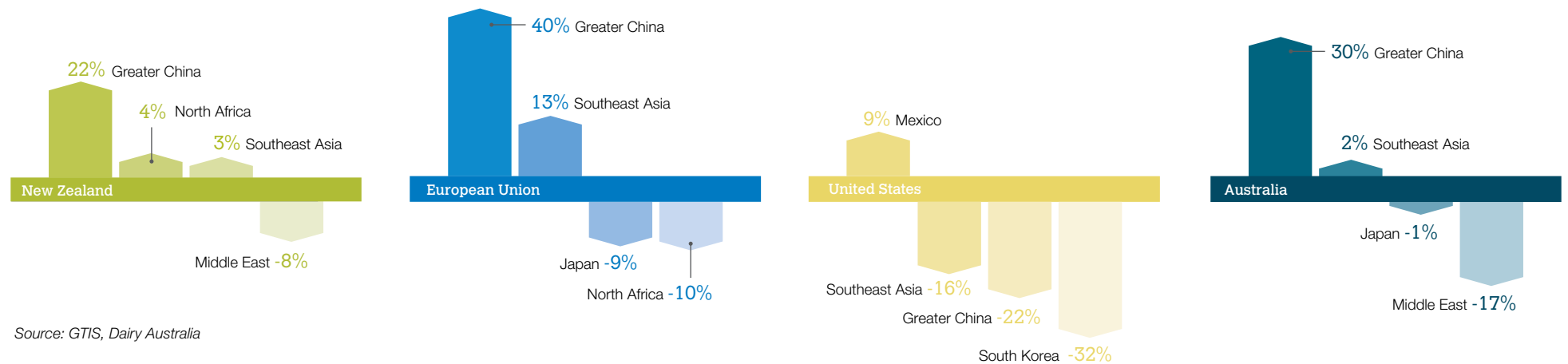


Figure 14 Actual and forecast milk production growth – four largest exporters



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

Figure 13 Significant market shifts – four largest exporters



Source: GTIS, Dairy Australia

European Union

Milk production in Europe finally dipped below year-ago levels in June, down around 2% compared to June 2015. Most member states are now showing decreases, most notably major producers the UK (down 8%), Germany and France (down 1%). However, milk output in the Netherlands (up 5%) and Ireland (up 3%) remains above 2015 levels. These two countries have contributed over half of the extra volume of milk produced in Europe for the first year after quotas were removed.

Despite only a modest slowdown in production, European supplies have tightened noticeably for a number of commodities, pushing prices higher. In particular, butter buyers have been caught short at times, as spot availability has been limited by forward sales, and cream production having taken precedence. Wholesale prices have lifted accordingly, with butterfat products leading, and SMP rising more slowly – likely due to the large volumes in intervention programs. Sales into intervention have slowed sharply from early September onwards however, as prices have moved above the €1,698/t (US\$1,900/t) floor price. Around 330,000 tonnes of SMP is currently in intervention stocks, whilst another

50,000 tonnes is in the Private Storage Aid (PSA) subsidised storage program. PSA stocks also include around 100,000 tonnes of butter, and 25,000 tonnes of cheese.

The nascent recovery in commodity prices is beginning to be reflected in EU farmgate prices, which lifted overall in August for the first time in eight months. Milk production is likely to continue slowing though, as the EU average price remains around 14% below the August 2015 level – though this varies by member state. In addition to low prices, the European Commission has bowed to demands and funded a €150 million (A\$220 million) program to pay farmers (around €14 cents per litre) to reduce milk production below year-ago levels. If fully subscribed, this would support the removal of around 3% of the region's milk production in the final quarter of the year – material, but likely to be overshadowed by other influences.

Be it through market or policy pressures, European milk production is expected to continue to slow, from the current year-to-date increase of 3.5% across the 28 member states, to a full year figure of 0.6%. This implies a forecast total of slightly over 148 billion litres for 2016.

United States

Farmers in the United States have benefited from a relatively robust domestic market combined with falling feed prices in recent months, keeping margins relatively stable in comparison with other major dairy regions. Milk production expanded by 1.4% in July, driven almost entirely by increases in per-cow production. Seasonal conditions have varied by state, but remain generally favourable, especially as the hottest part of summer passes.

The recovery in international markets has placed US wholesale prices for most products back in a competitive position after a long period of trading well above global benchmarks. This is likely to provide further support to current pricing in that market, which continues to benefit from respectable growth in foodservice sales. Butter is something of an exception, with US prices having tracked well above international levels for many months, and now under pressure from increased production and imports. Stocks of US cheese have also accumulated, prompting calls for the USDA to intervene – despite prices remaining above the five year average. A US\$20 million (A\$26 million) intervention was announced in September, comprising

purchases of cheese for delivery between November 2016 and March 2017. The purchased product will be distributed through the USDA's food aid programs.

The combination of improving commodity prices and weak feed costs has pushed the USDA's calculated farm margins to their highest point (US\$8.59/cwt) since the start of 2016. This level is considered to support an expansion in production, which the USDA forecasts will amount to almost 2% over the full 2016 year (for a total of 96 billion litres). Cheap feed will continue to play a key role, with the national dairy herd expected to be stable or slightly larger.

New Zealand

After two bruising seasons, New Zealand's farmers are reportedly much more optimistic as 2016/17 proceeds, buoyed largely by an improving price outlook. Consecutive commodity price increases at GlobalDairyTrade (GDT) events through August and September have now been reflected in farmgate price forecasts, with Fonterra flagging a NZ\$5.25/kg MS (A\$5.32/kg MS) farmgate price at its September review. This is above the NZ\$5.05/kg MS (A\$5.12/kg MS) required for the 'average' kiwi farmer to break even,

but production expectations remain muted. Given the speed and timing of the recovery in GDT values, farmers are likely to remain cautious about pricing forecasts in the short term. Fonterra has suggested an increase in production for the season is 'unlikely', while local analysts AgriHQ are forecasting a 3% drop for the season to May.

Supplementary feeding rates have reportedly been lower than usual for the early part of the season, with funding constraints limiting farmers' ability to utilise purchased feed. According to AgriHQ, early spring milk flows are likely to show the effects of this. So far, milk production for 2016/17 is down almost 2% for the season to August. As is always the case in New Zealand, much will depend on weather conditions, which have improved from mid-August after below-average winter pasture growth. Favourable pasture growth through the 'shoulder' season following the milk production peak in October, together with a consolidation of the recent price gains, could drive some upside to the current forecasts.

Australia

Australian milk production finished the 2015/16 season down 2% compared to 2014/15, with a national total of 9.54 billion litres for the full year. After a positive start, dry conditions and high input costs squeezed margins and constrained production as the season progressed. The announcement of milk price 'step-downs' by a number of processors from late April onwards abruptly changed the profitability equation, further depressing milk intakes despite the subsequent arrival of a good autumn break. The impact of the late-season step-downs for affected farmers in southern regions culminated in a sharp drop (9% year-on-year) in June, as feeding was reduced, herds were dried off and culling ramped up. In addition, severe flooding in parts of Tasmania caused widespread damage and contributed to an 18% year-on-year drop in June milk production for the state.

The effects of the 2015/16 step-downs on farm business strategies, finances and confidence have continued to reverberate in 2016/17. The announcement of opening milk prices that were generally lower than expected has kept the pressure on both margins, and milk production. Preliminary data

for the season to August reflects a 9% drop for the first two months of 2016/17. The south-eastern states are most heavily affected, and will likely see further pressure from the ongoing wet conditions and floods. Victoria, Tasmania and South Australia all saw milk production fall by more than 10% for this period.

Outside southern export regions, farmgate prices are stable to slightly lower, and while some areas have experienced severe flooding, others remain dry. New South Wales is down 7%, while Queensland has seen slight growth (up 1%). Western Australia (currently up 1%) is likely to see an end to its growth spurt, with clear signals from processors that current milk intakes are in excess of requirements and several farmers yet to secure renewed contracts for supply. Dairy Australia's current forecast for the 2016/17 season is for a national milk production total around 9.06 billion litres (down 5%). This forecast assumes a moderation of the year-on-year drop in the later half of the season, as lower costs, and better soil moisture pay dividends. It will continue to be reviewed, particularly with respect to the downside risk posed by the current floods.

Latin America

Milk production in Argentina has fallen sharply in 2016, tracking around 13% below 2015 levels as at August. Severe flooding drove a year-on-year drop of 20% for April, which has since moderated to around 12% for August. Farmgate prices have risen strongly, however structural increases in costs, together with a difficult economic environment, have kept margins (and access to credit) under pressure. Flooding also hit milk flows in Uruguay, which have followed a similar pattern – down 13% for the year to August (and 9% for the month itself). While Uruguay's political environment has been more stable than its larger neighbour, high beef prices and challenging terms of trade for dairy farmers have driven an accelerated culling rate. For 2016 to July, around 67,000 cows have been culled, nearly 8% more than for the same period in 2015. Brazil's milk production has contracted by a more modest 5% for the first half of the year (due to early hot and dry weather), less than aggregate demand (down 3%), suggesting that the country will remain a net importer for the foreseeable future.

Farm business performance

The industry accepted measure of profitability is Earnings Before Interest and Tax (EBIT) where;

EBIT = Gross Farm Income minus Variable costs, Cash overheads and Non cash overheads.

By considering both cash and non cash elements of the farm business EBIT is considered a more complete representation of farm business performance. This is not to say that the cash position of the business is not important particularly in the current low milk price environment where the focus naturally shifts to the total cash demands of the business versus cash income.

Net Farm Income (NFI) is calculated by subtracting Finance costs (interest and lease) from EBIT, as seen in Figure 15 below.

The 2015/16 season started positively across the dairying regions of southeastern Australia, however the ‘terms of trade’ for many farmers

deteriorated as the season progressed. Favourable early season conditions gave way to a short spring growing season and a heavier than planned reliance upon conserved and purchased feed. The impact of lower than average home grown feed was amplified as the season progressed by a steady increase in prices of purchased fodder and temporary water. For many farmers the deterioration in terms of trade culminated in the unexpected late season reduction in farm gate milk price.

The impact of the series of events through 2015/16 are highlighted in the recently released results of the Victorian Dairy Farm Monitor Project (South Australian Dairy Farm Monitor results are estimates only). Details of average EBIT and Net Farm Income across southeastern Australia are detailed overleaf. While the average results showed a slightly positive EBIT, the average Net Farm Income (EBIT less Interest and lease payments) was negative across the three Victorian DFMP regions while similar results are

estimated for South Australia.

Net Farm Income calculation does not include provisions for capital expenditure, principal repayments or tax. In response to the ongoing challenging conditions farmers where possible will trim costs, defer capital expenditure and principal payments and reduce personal drawings.

The 2016/17 season began poorly for many farmers with generally lower than expected opening milk prices. Notwithstanding the challenges caused by low farm gate prices and ongoing wet conditions there are some positive signs starting to emerge. An average or better growing season coupled with lower input prices could negate some, though not all of the milk price impact. Farmers will be hoping that the flip side of the early season wet conditions is lower demand and prices for purchased feed throughout 2016/17. For many farms the reduced reliance and lower prices for purchased feed and water together could see total feed costs (purchased plus home grown) fall by up

to \$0.50–1.00/kgMS when compared to the 2015/16 season.

Forecast EBIT and NFI are slightly better than 2015/16, however this relies on;

- › average or better seasonal conditions for the remainder of the 2016/17
- › final farm gate milk prices in line with processor indications
- › ongoing lower input prices
- › full season milk production falling no more than 5%
- › tighter short to medium term cost control applied across businesses.

For more information on farm business management visit:

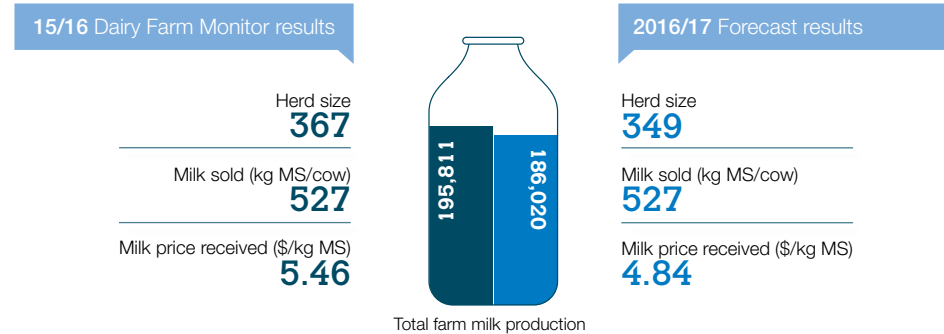
- dairybase.com.au
- tfft.dairyaustralia.com.au
- dairyaustralia.com.au/Business-and-financials.aspx

Figure 15 Farm business performance

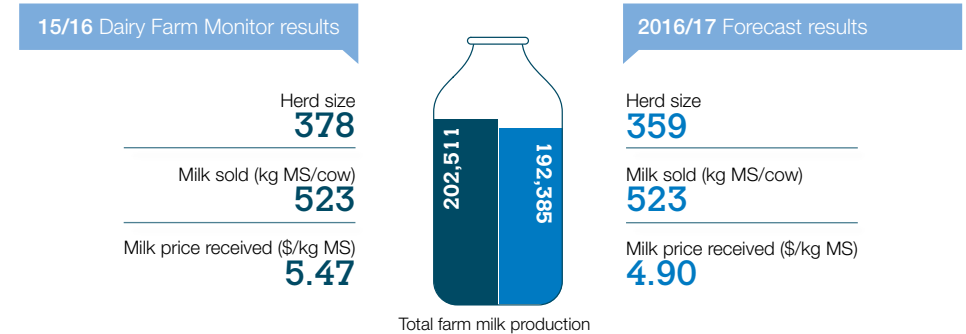


2015/16 Dairy Farm Monitor results, and 2016/17 Dairy Australia forecast

Northern Victoria



Southwest Victoria

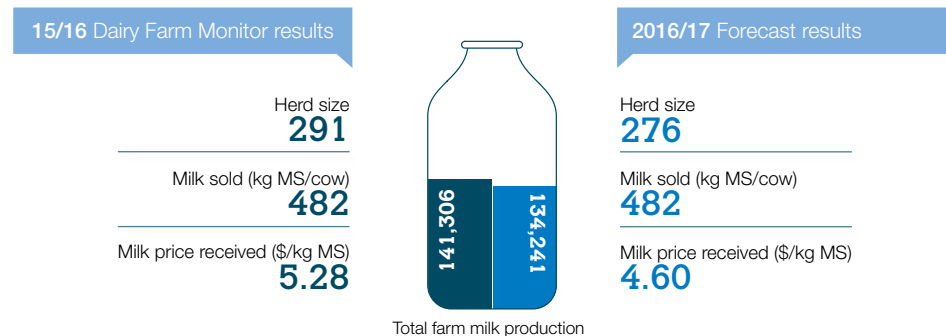


Income				
	15/16 Dairy Farm Monitor results		16/17 Forecast results	
Milk income (net)	\$5.46	\$1,128,273	\$4.84	\$900,339
Livestock trading profit	\$0.58	\$116,850	\$0.52	\$96,188
Other farm income	\$0.02	\$6,491	\$0.03	\$6,491
Gross farm income	\$6.06	\$1,251,614	\$5.39	\$1,003,018
Total variable costs	\$4.15	\$838,974	\$3.11	\$578,646
Total overhead costs	\$1.88	\$362,795	\$1.89	\$350,818
Total operating costs	\$6.03	\$1,201,769	\$5.00	\$929,464
Earnings before interest and tax	\$0.03	\$49,845	\$0.40	\$73,554
Interest & Lease	\$0.46	\$85,972	\$0.46	\$85,972
Net Farm Income	-\$0.43	-\$36,127	-\$0.07	-\$12,418

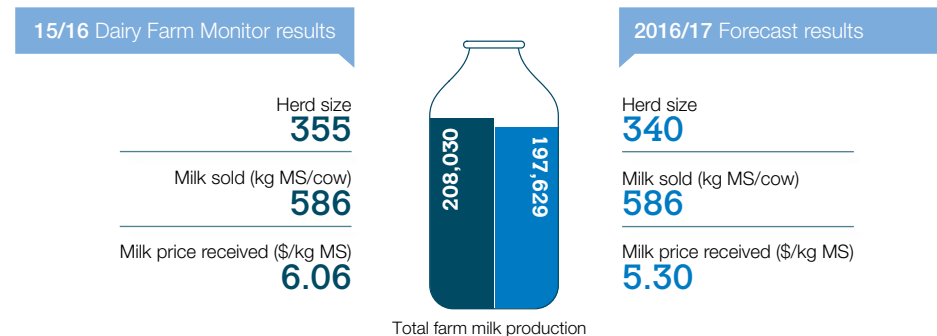
Income				
	15/16 Dairy Farm Monitor results		16/17 Forecast results	
Milk income (net)	\$5.47	\$1,138,346	\$4.90	\$942,689
Livestock trading profit	\$0.50	\$124,398	\$0.55	\$106,742
Other farm income	\$0.06	\$15,722	\$0.08	\$15,722
Gross farm income	\$6.03	\$1,278,466	\$5.54	\$1,065,153
Total variable costs	\$3.66	\$770,524	\$2.73	\$525,363
Total overhead costs	\$2.19	\$417,683	\$2.10	\$403,210
Total operating costs	\$5.85	\$1,188,207	\$4.83	\$928,573
Earnings before interest and tax	\$0.18	\$90,259	\$0.71	\$136,580
Interest & Lease	\$0.68	\$161,274	\$0.84	\$161,274
Net Farm Income	-\$0.50	-\$71,015	-\$0.13	-\$24,694

Data for other states and regions is not yet available

Gippsland



South Australia*



Income	15/16 Dairy Farm Monitor results		16/17 Forecast results	
	Milk income (net)	\$5.28	\$748,451	\$4.41
Livestock trading profit	\$0.48	\$70,589	\$0.50	\$66,680
Other farm income	\$0.14	\$19,243	\$0.14	\$19,243
Gross farm income	\$5.90	\$838,283	\$5.05	\$677,924
Total variable costs	\$3.35	\$477,780	\$2.53	\$339,369
Total overhead costs	\$2.22	\$288,191	\$2.08	\$278,651
Total operating costs	\$5.57	\$765,971	\$4.60	\$618,019
Earnings before interest and tax	\$0.33	\$72,312	\$0.45	\$59,905
Interest & Lease	\$0.64	\$88,486	\$0.66	\$88,486
Net Farm Income	-\$0.31	-\$16,174	-\$0.21	-\$28,581

Income	15/16 Dairy Farm Monitor results		16/17 Forecast results	
	Milk income (net)	\$6.06	\$1,260,640	\$5.30
Livestock trading profit	\$0.69	\$143,223	\$0.69	\$136,364
Other farm income	\$0.07	\$14,843	\$0.07	\$13,834
Gross farm income	\$6.82	\$1,418,706	\$6.06	\$1,197,629
Total variable costs	\$3.58	\$755,279	\$3.01	\$594,862
Total overhead costs	\$2.44	\$506,668	\$2.32	\$458,498
Total operating costs	\$6.02	\$1,261,947	\$5.33	\$1,053,360
Earnings before interest and tax	\$0.80	\$156,759	\$0.73	\$144,269
Interest & Lease	\$0.61	\$125,943	\$0.63	\$124,506
Net Farm Income	\$0.19	\$30,816	\$0.10	\$20,803

* Estimated results

Data for other states and regions is not yet available

Corporate sector update

As part of (and despite) a tumultuous few months, there have been a range of developments in the corporate sector.

Investment in processing facilities took the form of Fonterra's flagged \$4.3 million upgrade to its Wynyard cheese and whey plant in Tasmania (boosting production capacity by some 8,000 tonnes). The company is also streamlining and modernising its Melbourne warehousing operations through a single provider, and tipping \$6.2 million into increased cold-store capacity at its Cobden spreads plant.

Fonterra has also agreed to sell its Riverina Fresh business, based in Wagga Wagga, to Blue River Group, an impact investment firm. Riverina Fresh will continue to produce fresh dairy products, including its 'barista favourite' Riverina Fresh milk. Fonterra has indicated the sale (along with the divestment of its yoghurt and dairy desserts business to Parmalat) reflects a refocussing of its efforts on key products lines such as cheese, spreads and infant formula.

Midfield Group's new powder dryer at Penola, South Australia continues to take shape, with the group inking

an agreement with Louis Dreyfus that will see the latter market the finished product across the US, Middle East and southern Asia. Midfield plans to produce milk powder and fats from mid-2017, creating 40 new full-time jobs over the next six months. The company has estimated that 50 to 100 dairy farmers will be contracted to supply the 220 million litres required for stage one of production. Stage two, likely to ramp up over the next year and a half, would likely call for double this quantity.

Camperdown Dairy International has announced it is shelving its \$500 million plans for a large, vertically integrated milk powder operation, initially proposed as a large milk dryer and a portfolio of dairy farms. Citing recent market volatility and concerns about Chinese market regulations for infant formula, the company has indicated it will focus on its blending and canning operation at Braeside.

Murray Goulburn (MG) has reaffirmed plans to invest in a new nutritional plant (the location of which is now under review), but has toned down expectations around its previously flagged liquid milk plant investment. Citing an increased European presence

and lower prices for liquid milk beverages in the Chinese market, MG is reconsidering the merits of investing in a new greenfield facility, and may pursue other options. The most likely of these is a program of modernisation for MG's existing UHT facilities. From January 2017, the company will no longer supply Woolworths private label cheese, UHT, milk powder and cream products; with Bega Cheese (cheese), Pactum Dairy (UHT), Parmalat (UHT and cream), Bulla (cream) and Fonterra (milk powder) securing this business. MG will continue to sell branded products as well as private label mozzarella and butter through Woolworths, and from February 2017 will fill Coles' private label cheese contract, as announced in April.

In addition to the Woolworths UHT contract, Pactum Dairy secured an agreement to supply around 400,000 litres of UHT milk for the Victorian government's School Breakfast Club initiative.

Burra Foods' \$300 million takeover by Inner Mongolia Fuyuan Farming Co Ltd, took another step forward, with approval by the Foreign Investment Review Board in August. Fuyuan will acquire 79% of the Gippsland

company's equity, with the balance to be retained by the founding Crothers family, and Itochu Japan.

Warrnambool Cheese and Butter completed a \$142 million capital raising exercise, citing the need for capital works and to retire debt. Whilst Saputo marginally increased its equity in WCB, from 87.9% to 88%, Lion Dairy and Drinks maintained its blocking stake by taking up its entitlement. This has prevented Saputo from increasing its shareholding above 90%, and means that WCB will remain publicly listed.

Coles has controversially launched a new milk brand to be sold in Victoria, to operate along similar lines to Coles' SADA Fresh and WA Farmers' First milk lines in those states. Sales of the Farmers' Fund brand (processed by MG) will see 40 cents per 2 litre pack diverted to a fund to finance business improvement projects undertaken by dairy farmers. The Victorian Farmers Federation will take 10 cents per 2 litre container to cover set up and administration costs of the fund, to which Coles has contributed \$1 million.

Policy updates

Responses to milk price step-downs

The milk price step-downs and subsequent controversy have prompted a number of policy-related interventions. Through its recently established Agriculture Unit, the Australian Competition and Consumer Commission (ACCC) is currently investigating the notice and timing of the cuts by both Murray Goulburn (MG) and Fonterra. The terms of reference for the investigation are unclear, but according to chairman Rod Sims, "The ACCC will consider whether the changes have involved misleading conduct or whether there are elements of unconscionable conduct." The ACCC is expected to announce its findings in November 2016.

The Australian Securities and Investments Commission (ASIC) is concurrently investigating MG, with a view to establishing whether the company fulfilled its continuous disclosure commitments as a publicly listed company in the lead up to the profit downgrade and step-down announcement in late April.

Deputy Prime Minister and Agriculture Minister Barnaby Joyce has also become involved, meeting with both MG and Fonterra managers and convening a dairy symposium in

late August. Following the event, Mr Joyce announced that the ACCC will be conducting a more extensive investigation into the industry as a whole, suggesting that this would go 'well beyond a market study' and that the ACCC will have the power to compel processors to divulge information. This inquiry is due to begin in November, after the abovementioned investigation into Fonterra and MG is concluded.

Following the symposium, Australian Dairy Farmers (ADF) convened a workshop with state farmer organisations and processors who attended the event, to begin an industry-led process of improving contractual arrangements and the balance of risk along the supply chain. The ACCC, Australian Small Business and Family Enterprise Ombudsman, and federal and state government representatives were also in attendance.

The Australian Senate will also be conducting its own inquiry, initiated by crossbench senators and tasked with investigating the means to achieve 'a fair, long term solution to Australia's dairy crisis.' This will be done 'with particular reference to fresh milk security, the legality of retrospective elements of milk contracts, the behaviour of Murray Goulburn and

any other related matters.' The Senate Economics References Committee is expected to report its findings by 24 February 2017.

In the meantime, the focus of government intervention has been the \$579 million Dairy Support Package. Of this, \$555 million was allocated to Dairy Recovery Concessional Loans with \$55 million made available immediately and the remaining \$500 million to be accessed over 2016/17 and 2017/18. Concessional loans are offered at an interest rate of 2.66% for a term of 10 years to MG and Fonterra suppliers directly affected by the milk price step-downs in April 2016. The concessional loans can be used for restructuring existing debt, to pay for operating expenses and allow for new investment in productivity enhancing technologies. Farmers will be eligible for loans up to \$1 million. The Dairy Recovery Concessional Loans are being administered by state delivery agencies.

The Federal Government has also provided \$20 million to upgrade the Macalister Irrigation District, and made efforts to improve dairy farmers access to government services such as the Farm Household Allowance through the appointment of a specialist Dairy Industry Liaison Officer at the Department of Human Services.

The milk price step-downs and subsequent controversy have prompted a number of policy-related interventions.

Dairy Australia's Tactics and Taking Stock business support programs for farmers have also received additional funding. A number of initiatives have also been funded by the state governments of Victoria, Tasmania and South Australia.

Small business contract legislation

New laws regarding unfair contract terms between large and small (less than 20 employees) businesses will apply to standard form contracts entered into after 12 November 2016. Contracts with an upfront value of less than \$300,000 over 12 months, or less than \$1 million over more than 12 months are explicitly covered, though the ACCC has indicated it would interpret the law as covering contracts without a specified value as well. If a term in a contract is deemed 'unfair', it will be voided and considered non-binding on the party, however, the remainder of the contract will remain valid.

China: Regulatory market access for dairy products

Dairy Australia has been working extensively with the Department of Agriculture and Water Resources (DAWR) to assist the Australian dairy industry to deal with changes to infant formula registration and market access.

In July this year the China Food and Drug Administration (CFDA) advised release of new legislation 'Administrative Measures for Registration of Infant and Young Children's Milk Powder Formula Recipes'. The release of the new legislation had been widely anticipated by industry within China and in supplier countries around the world.

The new legislation includes a number of requirements, including restrictions on the number of brands and recipes that an approved infant formula manufacturer can supply into the Chinese market. According to the new rules a maximum of 3 series of infant formula products can be approved for each manufacturer. Each series can in turn have 3 variations (or recipes) as

follows: Infant Formula (0-6 months; stage 1); formula for elder infants (6-12 months, stage 2); and formula for young children (12-36 months, stage 3). There is a specific requirement for 'significant difference' between recipes, supported by scientific evidence. The new rules come into effect from 1 October 2016, however Chinese Government advice is that transitional arrangements will apply until 1 January 2018 to allow suppliers to work through issues and prepare for the new requirements.

More recently Chinese regulatory authorities have signalled an increased focus on liquid milk imports – particularly fresh pasteurised and Extended Shelf Life (ESL) products. Again Dairy Australia has been working with industry and DAWR to help industry deal with the specific requirements advised by the Chinese authorities, including holding a workshop for exporters to better understand and respond to increased requirements for information by the Chinese regulatory agencies on liquid milk products.



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