

IN THE AUSTRALIAN COMPETITION TRIBUNAL

of 2013

**MURRAY GOULBURN CO-OPERATIVE CO LIMITED**

**RE: PROPOSED ACQUISITION OF WARRNAMBOOL CHEESE  
AND BUTTER FACTORY COMPANY HOLDINGS LIMITED**

**Certificate identifying annexure**

This is the annexure marked RAP15 now produced and shown to Robert Arthur Poole at the time of signing his statement on 28 November 2013.

Annexure RAP15

Dairy Australia report titled 'Dairy 2013 Situation and Outlook'

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**Dairy 2013  
Situation and Outlook**





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This report has been prepared for the Australian Dairy Industry to provide participants and stakeholders with a comprehensive and objective assessment of the industry's position and outlook, as a resource to the dairy industry for information and planning purposes. The work has been funded by Dairy Australia.

The report has been written by Dairy Australia's Strategic Analysis team with assistance from dairy farmers, management of Australia's major dairy companies, farm consultants and advisers, Dairy Australia management and importantly the participants in the 2013 National Dairy Farmer Survey.

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## Executive Summary

### The industry in 2013: challenging convictions

- The 2012/13 season has proved a difficult one for many dairy farmers, as falling farmgate prices, higher input costs and unfavourable seasonal conditions combine to challenge the profitability of farm businesses. While many farmers realise the opportunities offered in growing international dairy markets, short-term oscillations in returns and profitability have strained finances and are challenging confidence.
- Variable seasonal conditions in south-eastern Australia, combined with reduced farmgate margins, means there has been little incentive to expand production.
- In northern 'drinking milk' regions there was once again flooding affecting southern Queensland and northern New South Wales, although not as extensive as in previous seasons. Production has declined in both QLD and NSW, while improved farmgate prices in Western Australia have not been enough to lift production above last year.
- Cashflow challenges were brought sharply into focus as many farm businesses struggled to manage milk-to-feed price ratios and variable weather reduced homegrown fodder yields. In some cases falling land prices and higher debt loadings pushed businesses beyond prearranged credit limits and into relying on extended payment terms from suppliers.
- Confidence as measured in this year's National Dairy Farmer Survey (NDFS) has taken a significant step backwards. Challenging production conditions, rising input costs and a persistent focus on the supermarket milk price war have undermined confidence—particularly in northern milk production regions. Significant variation remains in confidence around the nation as farmers adjust to milk pricing and market dynamics.
- The Australian dollar has stabilised between 100-105 US cents, but there is still significant potential for rapid currency fluctuations due to the precarious economic circumstances in the USA and Europe.
- In exporting regions, opening price announcements for the 2013/14 season are being developed in a context of elevated global dairy prices, favourable demand and challenging production conditions. While prices for some commodities have hit fresh highs, concern is mounting around the market's ability to bear such rapid increases in commodity prices without cannibalizing long-term demand.
- The outlook for indicative southern farmgate milk prices, based on current commodity price and exchange rate expectations is for an opening price

around \$5.00/kgMS, up from an average opening price around \$4.30/kgMS in 2012. This implies a potential full-year average price around \$5.50/kgMS, up from \$4.90 to \$5.10/kgMS in 2012/13.

- The sharp increase in commodity prices during calendar Q1 2013 suggests there is upside potential to a \$5.00/kgMS opening price depending on processor carryover benefits and value-added sales late in the 2012/13 season.
- Farmgate pricing expectations are indicative given the range of pricing options available to farmers, variations in seasonal pricing, incentives, manufacturer conversion costs and contract arrangements.
- The two major supermarkets have announced new sourcing strategies intended to increase farmgate price transparency and improve public relations associated with milk price discounting. Long-term contracts between Coles and east coast cooperatives and a direct sourcing trial for Woolworths suggest a changing landscape for suppliers.
- Nevertheless in drinking milk focused regions, the balancing act between fresh supply and demand continues as processors adjust their intake requirements and pricing to meet the demands of a highly competitive retail marketplace. While the long-term contracts in place are positive, those falling outside of new agreements harbour some concern around how the situation will develop.

### World market

- Despite challenging economic conditions in the US and EU economies continuing over the past 12 months, demand has remained steady. The focus of growth continues to be China, South-East Asia, and parts of the Middle East, supported by more prosperous economic conditions.
- Dairy commodity markets have flipped from supply driven softening to a rising market driven by supply constraints from the major export producers. This began in September 2012 as drought conditions in the US significantly cut production expectations. Commodity prices accelerated to new peaks following drought declarations in New Zealand during early 2013.
- Prior to the NZ drought, buyers approached increased market prices by reducing purchase volumes and running down stocks in anticipation of declining prices. However, reduced availability post-NZ drought has sent buyers scrambling, driving up prices, but also increasing substitution risk at a time when vegetable fat and protein prices are fairly stable (and thus attractive).

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### World supply

- All major dairy regions have experienced production challenges during the last 12 months. This situation, combined with farmgate margin pressure has seen supplies on global markets tighten considerably.
- Northern Hemisphere production in the lead up to the season peak is expected to be flat, suggesting the next opportunity for increased global market supplies is the Southern Hemisphere spring.
- EU milk output is forecast to expand by 0.4% in 2013, with slower growth and/or declines at the start of the year expected to be offset by a stronger production recovery during later months as climatic conditions revert to more favourable norms and farmgate margins improve.
- In the United States, assuming climatic conditions moderate and average crop yields return, feed prices will ease over 2013, lowering costs and reducing financial pressure on farmers in the western states. USDA forecasts indicate potential US milk production growth of 0.7% compared to calendar 2012.
- Current industry forecasts suggest New Zealand milk production will finish the season around 1% either side of the 2011/12 season, with a strong early season and irrigation in the South Island moderating the full season effects of the recent drought.
- Aggregate production in South America is expected to grow around 3% to just over 35bn litres in 2013. A slow start is expected to give way to modest full-year growth as feed prices decline and milk prices increase. Growth forecasts for the two bigger producers are 2-3% for Argentina and 3-4% for Brazil.
- The US and NZ are the most likely contributors in the short term to incremental growth in product volumes going onto the global market. Global prices are very attractive in comparison to internal US prices and seasonal conditions could support an early NZ supply recovery. EU internal prices are constraining export appetite, Brazil continues to absorb most South American production growth and Australia has limited short-term export growth potential.

### Australian market

- Australian consumers remain cautious in their overall spending on household essentials in addition to reduced spending on discretionary or 'premium' items. Consumers have maintained high household savings levels in response to a softening housing market and unemployment fears, but have been challenged by rising costs of health, education, energy and transport.

- Retail sales have grown slowly as consumers continue to seek value in response to a slow recovery in consumer confidence in 2012/13 following successive interest rate cuts and improved stock market performance.
- In response to these settings, intense price competition between the two major supermarket chains and the expanding discounter Aldi remains the most significant influences on the retail food market in 2012/13.
- The shift in sales volumes from route trade to the supermarket channel has slowed. Despite a recent recovery in branded milk sales, over the longer term, a loss of retail sales value in the milk category has occurred due to the change in sales mix as private label lines have increased share of sales and branded modified milk sales declined.
- There is likely to be an increase in retailers seeking additional product label information in response to consumer concerns. Themes may include nutrition, sustainability, environmental impact, energy use and animal welfare standards. This follows the lead of US and European retailers.

### The farm sector in 2013

- Production conditions have been challenging across most dairying regions in Australia. Many parts of south-eastern Australia have been characterised by a dry spring, and a late or inadequate autumn break.
- Western Victoria has suffered from extended dry conditions and a second season of reduced pasture production. Gippsland experienced overly wet conditions throughout winter and early spring, followed by a dry summer, as well as bushfires. Good irrigation allocations in northern Victoria allowed farmers to maximise pasture production. Whilst production growth has been slowing, northern Victoria is the only region tracking ahead of milk production last year.
- Pastures struggled amidst dry conditions in Tasmania, while SA has been heavily exposed to high feed and fodder prices. Flood events set back production in southern QLD and northern NSW, while high grain prices and challenging conditions early in the season reduced WA milk production.
- Confidence as measured by the NDFS was significantly lower in 2013 with just 43% of farmers positive about the future of the industry. This compares with 66% of positive farmers in 2012, and is the lowest level of confidence recorded since the inception of the NDFS in 2004 – a year that followed a significant market downturn and a widespread, severe drought.
- Asked to compare the current season's profitability with the average of the past five years, 4 out of 5 farmers surveyed in this year's NDFS expected lower profit



## Executive Summary

in 2012/13. SA had the greatest proportion of farms expecting lower profitability (92%) while WA had the lowest (57%).

- In line with lower expected profits and declining confidence, the proportion of surveyed farmers intending to invest on farm over the coming year has declined from 38% in 2012 to 28% in 2013.
- ABARES Farm Survey estimates for 2012/13 indicate average farm cash incomes fell to \$95,300, down 33% from the 2011/12 average of \$143,000, but close to 2% below the preceding 10-year average.

## Milk production outlook

- Australian milk production is expected to reach 9.35bn litres in 2012/13 – down 1.4% on 2011/12 output of 9.48bn litres.
- The outlook for 2013/14 is for modest production growth to between 9.4 and 9.6bn litres, based on surveyed herd growth intentions, cow condition and assuming normal seasonal conditions provide an offset to limited fodder reserves. Southern exporting regions should lead growth given positive global prices. Production in domestic supply regions is likely to be flat in response to market signals and uncertainty around supply contracts.
- Based on production intentions for three-year growth recorded in the 2013 NDFS and assuming reasonable seasonal conditions and prices, milk production could range between 9.8 and 10.2bn litres by 2015/16.

## Medium-term prospects

- Global markets continue to hold significant potential for the future of the Australian dairy industry. Population growth and increasing incomes in developing countries paint a positive picture for dairy demand. However, questions persist about the most effective way to seize the market opportunity given the Australian industry's resources and structure and translate it effectively into a prosperous farm sector.
- Challenging production conditions and declining profitability have drawn attention to the immediate problems on farm. However, the key question of what role Australian processors want to play in global markets in the medium term remains.
- A renewed focus on production costs, equity levels, flexible farming systems and farm business and risk management skills (to manage volatility) will be critically important to surviving and thriving in future global dairy markets.

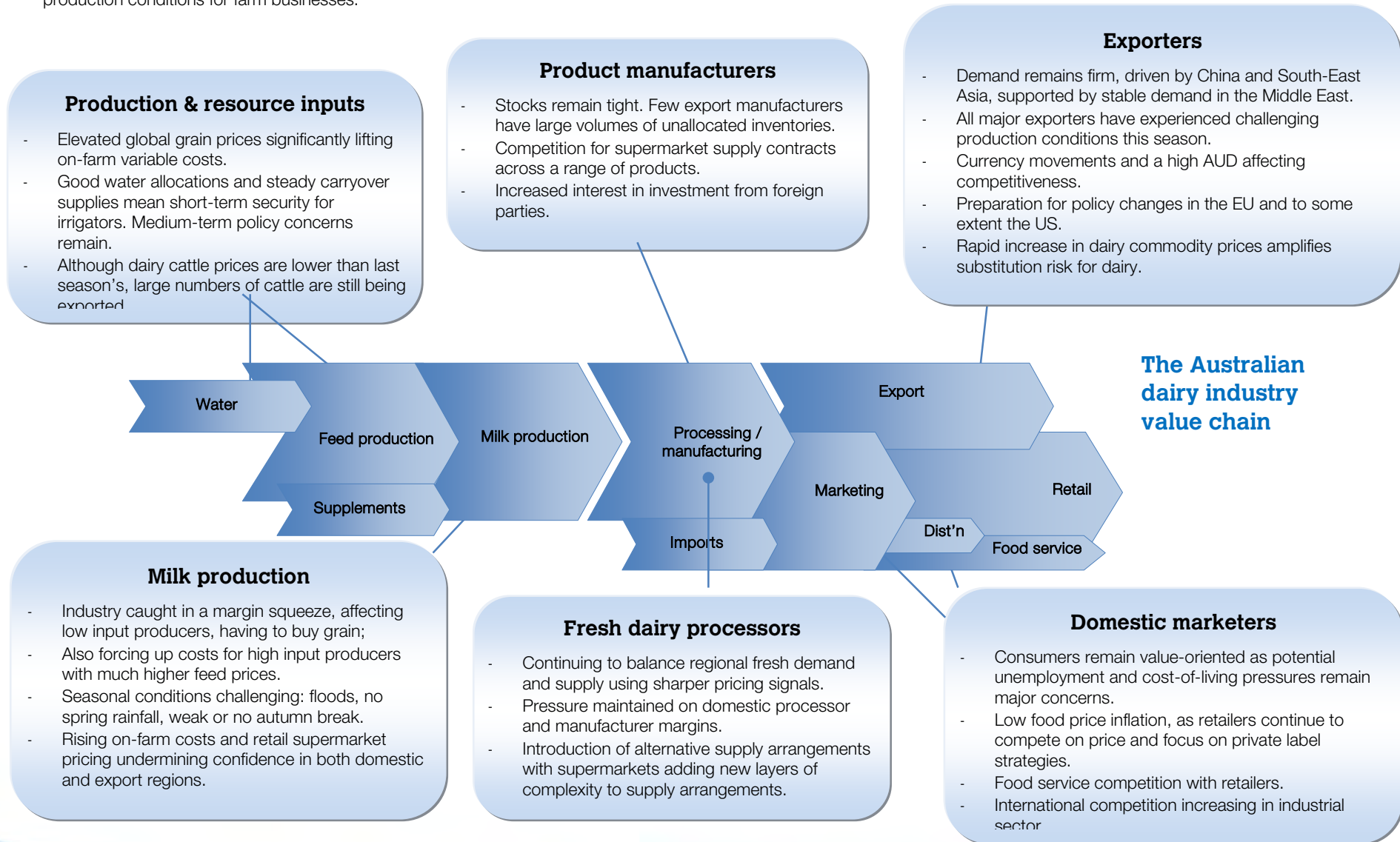
Successfully balancing cyclical dairy markets with profitable and sustainable production systems is fundamental to future dairy industry prosperity.

- Major global food corporations are expanding into more 'traditional' dairy categories through innovation and leveraging supply chains and brands. As transparency around production costs and retail prices improve, efficient supply chains are becoming the new battle-front for improving profit margins. For the processing sector, this is likely to mean more right-sizing, optimisation, new business models and attempts to leverage the improved investment environment.
- In anticipation of the removal of production quotas, expansion of EU milk supply and future consumption expectations, more than \$1.2bn US dollars has been, or is planned for processing investment in Europe. Initial expectations were for this to go into cheese production facilities for the domestic market. However, it would appear that large investments are being made in powder drying facilities for export markets.
- Each of the major supply regions has challenges and impediments to further growth. Be it political contests or production cost structures in the US, turbulence surrounding the removal of production quotas in the EU, logistics and infrastructure challenges in South America or environmental constraints linked with production intensification in NZ.
- Additionally, key demand regions including China, India and Russia are trying to build self-sufficiency, balancing sustainability and securing food to feed growing populations.
- Policy settings will continue to play an important role in Australian dairy farmers continuing to be competitive and profitable into the future. Not only in terms of competitive access to key demand markets, but to maintain the social licence to farm and sell dairy.
- While decisions on these topics are being made at present, the persistent volatility of a tight global market balance for dairy will challenge the convictions of dairy leaders around the globe.

## Executive Summary

### Challenging convictions

High input costs and unfavourable seasonal conditions have created challenging production conditions for farm businesses.

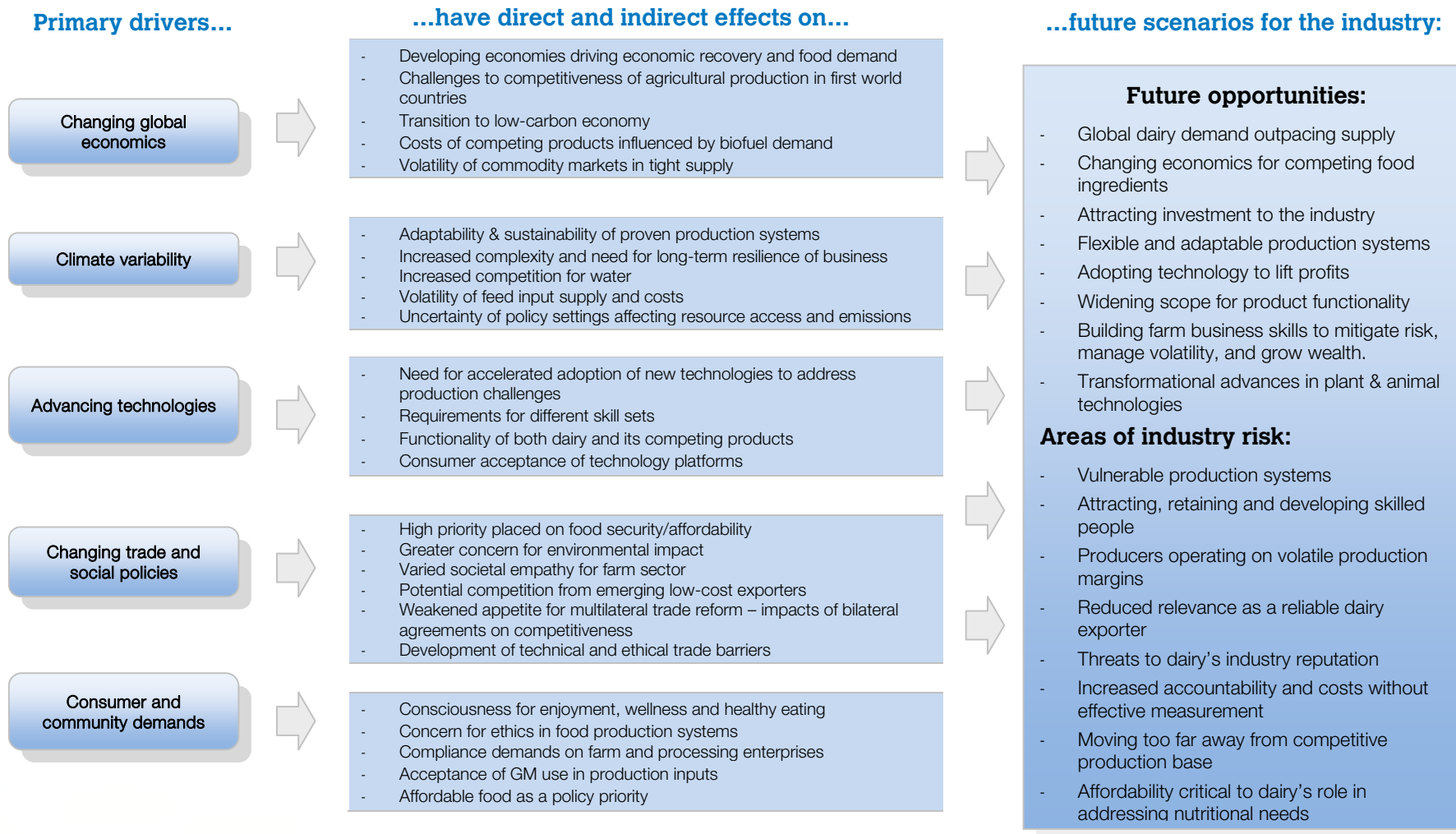


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## Executive Summary

### Fig E.1 - Drivers of the industry's future

The scenarios for the future size and structure of the Australian dairy industry in the medium to long term will be shaped by a number of primary drivers. The ultimate outcomes will be based on how well the Australian dairy industry responds to such future opportunities and risks affecting the industry's competitiveness and sustainability. Outcomes are also determined by how well the sectors of the value chain align their responses, as this will affect the industry's capacity to adapt, innovate and differentiate.





## Overview

### What drives the returns to the industry?

- The Australian domestic market's share of total industry milk production is expected to be just under 60% in 2012/13—with the export share estimated at around 42%—given relatively flat milk production.
- The Australian market is open to dairy product imports, with a longstanding Free Trade Agreement (FTA) with New Zealand and a more recent FTA with the USA that allow access for most major dairy products. Imported product contributed an estimated 25% of domestic cheese consumption in 2011/12.
- New Zealand is the major source of Australian dairy product imports – contributing 60% of total cheese imports and 93% of butter imports in 2012. The New Zealand share of cheese imports has fallen from 78% in 2009 to 60% in 2012; while the US share has lifted from 1% to 15% over the same period.
- The majority of wholesale dairy product prices in the domestic retail, food service and industrial markets are directly influenced by the international market. Due to longer term contracts, local retail prices do not reflect the short-term volatility of export commodity prices.
- The transparency of world market prices, the open market for dairy imports, and the structure and practices of the retail supermarket sector, mean there is no effective sustainable premium over time for sales into the domestic market compared to export returns, when all costs are considered.
- As a result, farmgate prices—particularly in the regions of Victoria and Tasmania where the majority of milk is used in the manufacture of dairy products—are closely aligned to returns from exports.
- Supermarket pricing is clearly an important factor in setting industry margins in the drinking milk market, and therefore, pricing in regions that are largely dedicated to its supply.
- The export production mix favours bulk ingredient products, while the production for domestic consumption is packaged consumer goods. The export breakdown by value reflects this with over half of dairy export value in milk powders, cheddar and other cheeses; by contrast, consumer packaged cheeses, milk, yoghurt and ice cream account for the bulk of total value in the domestic retail market.

Fig E.1 Australian industry market mix since 1990

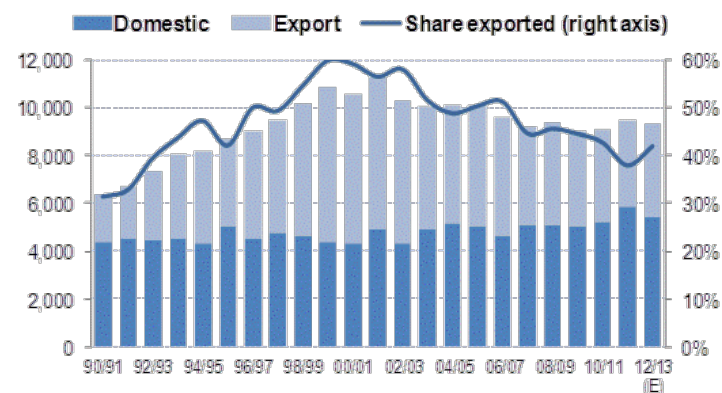
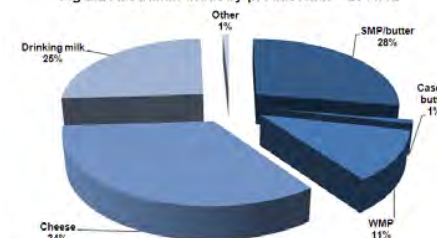
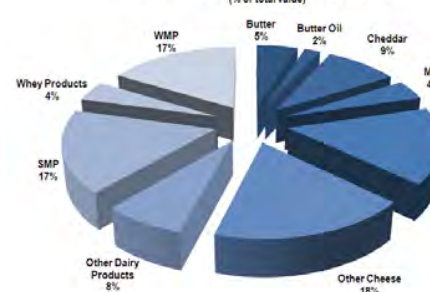


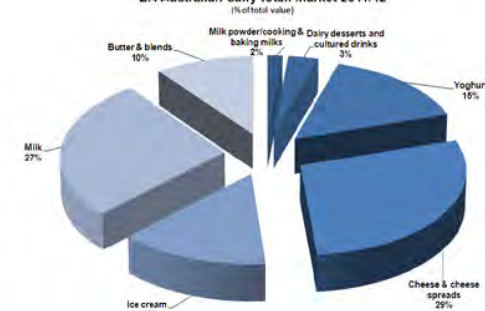
Fig E.2 Australian industry product mix – 2011/12



E.3 Australian dairy exports 2011/12 (% of total value)



E.4 Australian dairy retail market 2011/12 (% of total value)



## Glossary of terms

<i>ABARES</i>	Australian Bureau of Agricultural and Resource Economics and Sciences
<i>ABS</i>	Australian Bureau of Statistics
<i>ACCC</i>	Australian Competition and Consumer Commission
<i>ASEAN</i>	Association of Southeast Asian Nations (ASEAN) [Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam]
<i>B.P.D</i>	Barrels per day – crude oil production
<i>BRIC</i>	Brazil, Russia, India and China
<i>CAP</i>	EU's Common Agricultural Policy
<i>CDIA</i>	China Dairy Industry Association
<i>CO<sub>2</sub>e</i>	Carbon Dioxide equivalent
<i>CWT</i>	Cooperatives Working Together
<i>DA</i>	Dairy Australia
<i>DEIP</i>	Dairy Export Incentive Program
<i>DFMC</i>	Dairy Farmers Milk Co-operative
<i>Doha Round</i>	The round of WTO negotiations that commenced in 2001
<i>EU</i>	European Union
<i>FAO</i>	Food & Agricultural Organisation of the United Nations
<i>FAPRI</i>	Food & Agricultural Policy Research Institute
<i>FTA</i>	Free Trade Agreement
<i>GCC</i>	Gulf Cooperation Council (Saudi Arabia, Bahrain, Kuwait, Oman, Qatar and the United Arab Emirates)
<i>GDP</i>	Gross domestic product
<i>GDT</i>	GlobalDairyTrade online auction platform
<i>GHG</i>	Greenhouse gas
<i>Gipps</i>	Gippsland
<i>ICE</i>	IntercontinentalExchange
<i>IDFA</i>	International Dairy Foods Association
<i>IMF</i>	International Monetary Fund
<i>Intervention</i>	A process whereby a government buys products from the market to reduce commercial availability
<i>Mercosur</i>	A trade alliance between a number of South American countries including Brazil, Argentina and Uruguay
<i>MENA</i>	Middle East and North Africa
<i>MD</i>	Murray Dairy region incorporating northern Victoria and the NSW Riverina

<i>MS</i>	milk solids
<i>NDFS</i>	The National Dairy Farmer Survey conducted as part of the preparation of this study
<i>NSW</i>	Central and Southern NSW (including the Hunter Valley)
<i>NZ</i>	New Zealand
<i>NZX</i>	New Zealand stock exchange
<i>OPEC</i>	Organisation of Petroleum Exporting Countries
<i>PSA</i>	Private Storage Aid
<i>QSR</i>	quick service restaurant, e.g. McDonalds, KFC
<i>RBA</i>	Reserve Bank of Australia
<i>SA</i>	South Australia
<i>SDP</i>	Sub-Tropical Dairy region incorporating Queensland and northern NSW
<i>TDP</i>	Tasmanian Dairy Products
<i>TPP</i>	Trans-Pacific Partnership
<i>TRQ</i>	Tariff Rate Quota
<i>UDP</i>	United Dairy Power
<i>US</i>	United States
<i>USDA</i>	United States Department of Agriculture
<i>WA</i>	Western Australia
<i>WCB</i>	Warrnambool Cheese & Butter Factory
<i>WTO</i>	World Trade Organisation





# Chapter 1

## The international market

### Highlights

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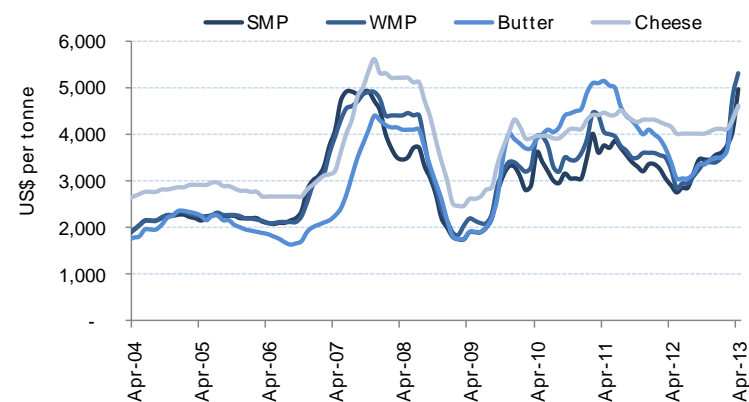
## The international dairy market

### International markets: a window of opportunity

- Production economics and weather have developed as the primary drivers of global commodity markets since late 2012.
- In the past 18 months, the global dairy market has transitioned from demand-driven price rises, followed by supply-driven price declines, to a period of rising commodity prices driven by tight global supply.
- Although commodity prices were already tracking steadily upward, declaration of drought on New Zealand's North Island has pushed some commodity prices beyond historic highs (in USD terms) achieved in late 2007.
- Unfortunately the timing of this US dollar price spike and practice of forward selling product in global markets has meant that these elevated prices were not fully reflected in the 2012/13 season. However they will influence where companies open the 2013/14 milk production season.
- Depending on weather patterns, the window of opportunity in which Australian dairy exports can recapture a significant global market share without a negative impact on market pricing could be available until at least November 2013 assuming NZ milk production recovers with a strong season peak.
- However, the unpredictability of production conditions and trade policy outcomes have the potential to hold the window open a little longer into 2014 and the northern hemisphere production season.
- Global demand for dairy products and ingredients has held relatively firm in the wake of economic crises and climbing commodity prices. But the rapid pace of price growth is significantly increasing substitution risk and potentially reducing long-term dairy demand.
- Manufacturers and traders are yet to report a sharp decline in demand, but remain concerned about consumers' ability to absorb increased prices in challenging economic conditions.
- While farmgate prices declined across all major dairy exporting regions, the rapid escalation of feed costs has made growth uneconomic for many producers and put farm businesses under pressure.
- US milk production growth has slowed, but there are vast amounts of US milk supplying the domestic market that could be exported.

- Unfavourable weather has hampered EU milk production which is no longer expected to grow this year. After a massive 10.8% increase in NZ milk production last season, the sharp deterioration in weather has prompted most analysts to expect no growth in the 2012/13 season.
- Adding a further layer of complexity to markets are current exchange rates—given a number of governments are implementing policies to devalue currencies and boost export competitiveness. Already, fluctuations in relative currency values are altering the competitive dynamics.
- Dairy markets seem comfortable with flat production during the northern hemisphere production peak and forward pricing factors in easing constraints moving into the southern hemisphere spring.
- Farmers from all major dairy producers are aware of the rapid increase in international commodity prices, which is expected to encourage global supply. Weather in the lead-up to calving and also in key feed production regions will determine how quickly, and how much, additional milk is produced in response to higher prices.

Fig 1.1 - Indicative commodity prices



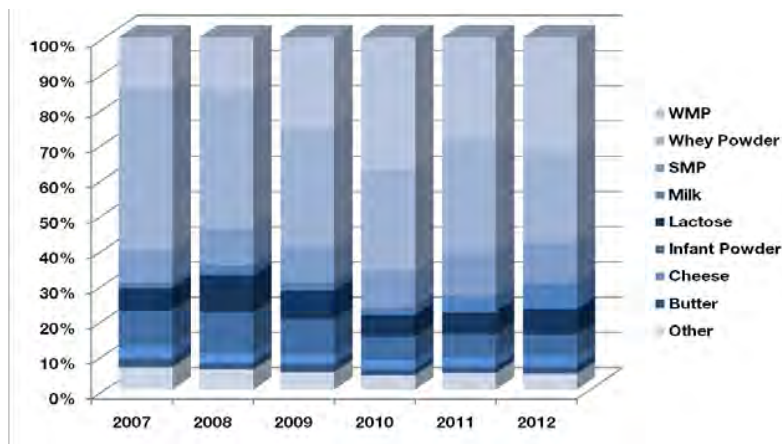
## The international dairy market

### Chinese import growth continues

- Chinese import demand continued to strengthen in 2012, increasing 22% on 2011 to almost 1,350,000t. The value of Chinese dairy imports also increased 20% to almost US\$4.2bn. Exports to the wider 'greater China' (mainland China, Hong Kong, Macao and Taiwan) were around 1,600,000t.
- The top three Chinese imports by volume were WMP (33% of total), whey powder (26%) and SMP (12%). After a pause in import growth in 2011, Chinese WMP imports increased 116,000t to almost 440,000t. Whey powder import volumes decreased marginally, while SMP imports increased 14% to 155,000t.
- Younger Chinese consumers are driving cheese import growth—increasing 34% in 2012 to 40,500t. Other growth categories are infant powder (up 15% to 84,000t), lactose (up 41% to 96,000t), liquid milk (up 97% to 100,000t) and butter (up 45% to 26,000t).
- Food safety remains a major concern, and continuing reports of questionable integrity product being sold locally serves to reinforce Chinese consumers' favourable perception of 100% imported dairy products.
- New government regulations to build confidence in local product are reducing sales channels. Restrictions of grey market imports from neighbouring Hong Kong have been tightened to prevent unauthorised imports and preserve safety; although proposed regulation on banning online infant formula sales unless the online retailer also has a physical store front was not enacted.
- New Zealand remains the largest supplier of dairy products to China, supplying 98% of WMP, 67% of SMP, 4% of whey powder (EU and USA dominate this category) and 44% of cheese in 2012. Trade media reports Fonterra NZ are planning to construct a new UHT plant in China before 2016 and Miraka is also building a new NZ UHT plant to supply China.
- In 2012, Australian dairy exports to China increased 17% to 86,400t when compared to 2011. Growth categories were WMP (up 13% to 6,541t), liquid milk (up 167% to 13,210t), infant powder (up 50% to 2,325t), cheese (up 39% to 8,837t) and butter (up 175% to 1,791t).
- Official monitoring of raw milk production prices in the 10 main dairy production provinces including Inner Mongolia and Heilongjiang have

increased around 4% on last year to AUD\$0.56/litre, high input costs make imported milk powder cheaper than local product in many instances.

Fig 1.2 – Chinese imports 2007-2012



### Russian demand stable

- Russian dairy imports increased modestly during 2012, increasing 1% on 2011 to 534,300t. Russian imports of dairy products have increased 10% over the past five years.
- Cheese and butter imports (together comprising around 68% of import volumes) both increased during 2012 to 298,500t and 60,700t respectively. Available data indicates that Europe supplied almost 70% of total Russian dairy import requirements, consistent with previous years.
- Higher global commodity prices are also expected to improve Russian domestic farmgate returns which have been under pressure during the past few seasons.
- Though Australia supplies very little dairy product to Russia (1% by volume), Russia is a critical balancing market in the context of global trade.

## The international dairy market

### Japan imports rising modestly

- Japan is Australia's most important export market for dairy products. During 2012, Japanese dairy imports increased 3% to 466,000t. Cheese imports (51% of total import volumes) increased 6% to 237,000t.
- Australia's share (by volume) of the Japanese market during 2012 increased to 25% compared to 2011, regaining market share from US suppliers. New Zealand and the EU are the two other major suppliers, both comprising around 20% of total annual volumes.
- Within the cheese category, Australia supplied 98,600t, (42% of total cheese imports), the EU 43,400t and NZ 64,700t and US supplied 3,000t.
- Some buyers are concerned about the strategic devaluation of the yen increasing the price of dairy imports in a traditionally price sensitive market. While it is expected that the yen will depreciate across major currencies and not disadvantage any one supplier in particular, demand may suffer as a consequence. A potentially larger concern is USD or EUR weakness making European or US prices cheaper than Australian offer prices.

### South-East Asia import demand flat

- South-East Asian dairy imports were flat during 2012, at 1,887,300t. Growth in Indonesia, Laos, Malaysia, Philippines and Vietnam during 2012 offset reduced import volumes in Singapore (-5%) and Thailand (-8%). Import values were down 3% to US\$5.3bn in 2012.
- Strong economic growth prospects are expected to continue supporting dairy consumption in these markets—particularly in Indonesia where the World Bank notes middle-class consumers have increased from 81m people in 2003, to 131m people in 2010.
- Indonesian imports of SMP and whey powder (the two largest categories, accounting for around 60% of total import volumes) increased 4%. Cheese imports increased 31% to 23,500t, to comprise about 6% of total dairy imports during 2012.

### Middle East dairy imports stable

- Despite persistent unrest in parts of the Middle East, dairy imports during 2012 were stable at 1,479,000t.
- Syrian and Saudi Arabian dairy imports decreased by 42% and 13% respectively. Though Syria is a small importer, the Kingdom of Saudi Arabia (KSA) is consistently the largest importer in the region.
- However, strong import growth in Iran, Iraq, Bahrain and the United Arab Emirates was enough to offset the drop in imports from the KSA.

### Algerian and Egyptian imports down

- Egypt is another important global dairy market that has maintained dairy import volumes despite civil unrest. Egyptian dairy imports during 2012 increased 9% to 205,000t compared to 2011. Butter imports increased 29% to 38,300t while SMP imports increased 16% to 57,500t.
- Algeria, one of the world's largest milk powder importers, has actively worked to reduce its reliance on dairy imports. As a result imports have decreased 20% by volume in 2012 compared to the previous year. Algeria reduced WMP imports by 32% to 136,000t and SMP imports by 13% to 108,000t.

### Mexican and Brazilian import demand increased marginally

- Mexican dairy imports increased 2% to 542,000t during 2012. Mexico is a significant global balancing market because of the volume of dairy products imported from the US.
- Mexico is largely a milk powder market with SMP, WMP and whey powder comprising 55% of total import volumes. SMP imports during 2012 increased 14% to 225,300t—with the US supplying 88%.
- Dairy demand in Brazil has been critical for absorbing production growth in nearby Chile, Argentina and Uruguay. Compared to 2011, Brazilian dairy imports rose 2% in 2012 to 211,900t. Growth categories were WMP, whey powder and lactose.

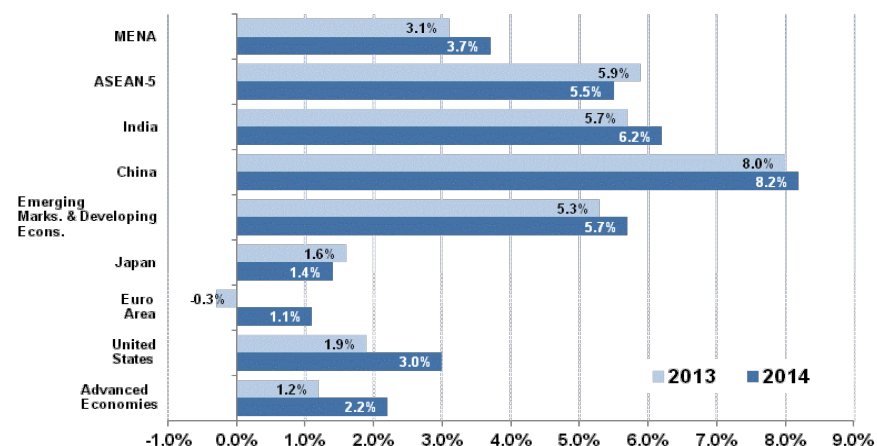


## The international dairy market

### Global economic settings

- Economic conditions have an important bearing on demand for dairy products, especially in emerging markets where food expenditure represents a higher proportion of household budgets and consumption of less traditional foods such as dairy is highly sensitive to changes in price or income.
- The latest International Monetary Fund (IMF) World Economic Outlook released in mid-April revised its outlook for global economic growth downwards given the persistent recessionary conditions in Europe and the impact of spending cuts in the United States. Growth is expected to moderate in spite of continued 'quantitative easing' by major developed economies and the relatively stronger performance of emerging economies.
- The IMF expects world output to grow 3.3% in 2013, 0.2% down on the 3.5% forecast earlier in January, with advanced economies expanding just 1.2% year on year, down 0.1% on the previous forecast.
- Despite policy responses in the US and the EU having eased the short-term risks, the global economy remains vulnerable. Renewed escalation of the Eurozone crisis and a US contraction remain the most immediate risks.
- European economic conditions are testing, with a -0.2% contraction expected in the 17-member Euro area. Uncertainty around the political outcome in Italy on top of concerns about debt and financial stability of the Euro area remain. Following the recent bailout of Cyprus, concerns have mounted about the financial stability of Spain and Slovenia. Record high 12% unemployment and fiscal consolidation in the Euro zone may dampen overall consumption.
- US fiscal tightening (the 'sequestration,' USD\$85bn of federal spending cuts) is expected to impact US growth as job cuts take effect.
- Growth in emerging markets and developing economies continues to outpace that in advanced economies with the IMF projecting 5.3% growth in 2013, slightly down on 2012.
- China's growth has progressively slowed since mid-2011, and recent annual GDP growth was lower than expected at 7.7%. China is expected to make some progress on re-orienting the economy toward a more consumer-focused economy with pending reforms of the *hukou* (mandatory household registration) system. These reforms are expected to improve the status and therefore the wages of many rural migrants living in China's second tier cities—and this is expected to support further consumption growth.

Fig 1.3 Year-on-year changes in GDP (%)



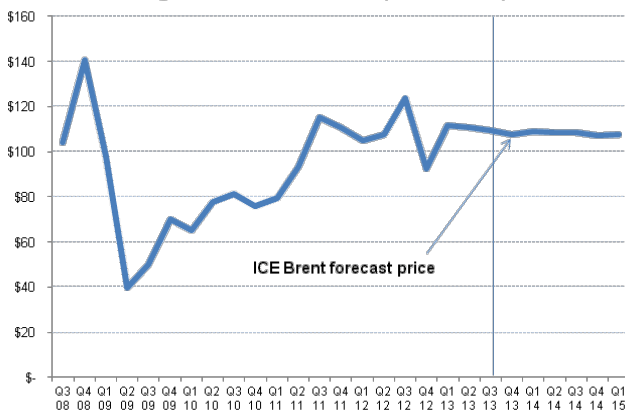
- ASEAN-4 economies are also sustaining Asian economic growth, with electoral cycles in Indonesia, Malaysia, the Philippines and Thailand underpinning expansionary fiscal policies and providing a boost to consumption. However, concerns are emerging about asset bubbles and rising inflation; IMF forecasts growth of 5.5% for ASEAN-5 (ASEAN-4 plus Vietnam).
- Brazil has been responding to recently sluggish growth by cutting taxes and lifting infrastructure investment but now faces a stronger currency and inflationary pressures, both of which have the potential to slow consumption.
- Despite Indian economic growth being expected to slow in the absence of accelerated government reform, and in the face of inflation and increased corporate debt levels, the IMF and Reuters-pollled economists in April were still expecting India to achieve solid YoY GDP growth (6.2% and 6.0% respectively).
- Ongoing conflict in Syria and tensions in Egypt and elsewhere continue to threaten the wider economic situation in the Middle East. The conflict and political changes occurring in the region along with unemployment levels are expected to dampen growth. Some upside could come from internal political stabilisation. However, the IMF forecasts growth in the wider MENA region to slip back from 4.75% in 2012 to 3.0% in 2013.

## The international dairy market

### Oil prices

- While relatively stable at the moment, rising oil prices remain a significant risk to the global economic recovery, and an acute risk for net oil importers in Asia. Higher oil prices could increase inflationary pressures and reduce discretionary consumption.
- Both the IEA (International Energy Agency) and OPEC have recently trimmed their forecasts for global oil demand in 2013 reflecting increased US domestic shale oil production offsetting imports and weaker economic activity in Europe.
- OPEC nonetheless estimates global oil demand growing by 800,000 barrels per day (+0.9%) in 2013. Meanwhile, the IEA estimates that inventory levels in key nations remain elevated and analysis by the US EIA (Energy Information Administration) forecasts a continued over-supply situation in the short term. But increased demand from China and emerging economies in Asia and the Middle East is expected to offset decline in demand from US and Europe.

Fig 1.4 - Brent crude oil (USD/Barrel)

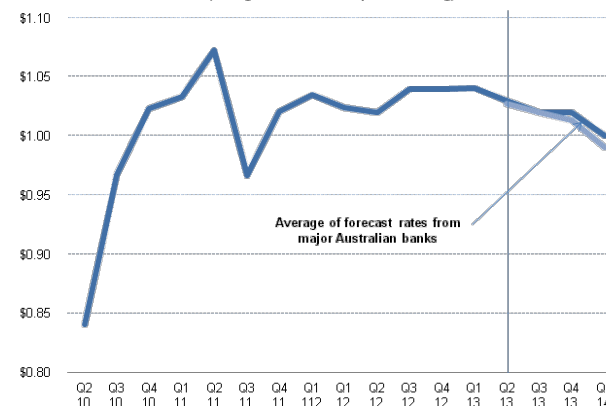


- IEA revised downwards the volume of non-OPEC supply due to reduction in forecast output from the North Sea offsetting increases in supply from the US, Canada and Brazil.
- Bloomberg's current median forecast for ICE Brent is at US\$110/bbl for Q4 13, declining slightly to US\$109.5 in 2014.

### Currency movements

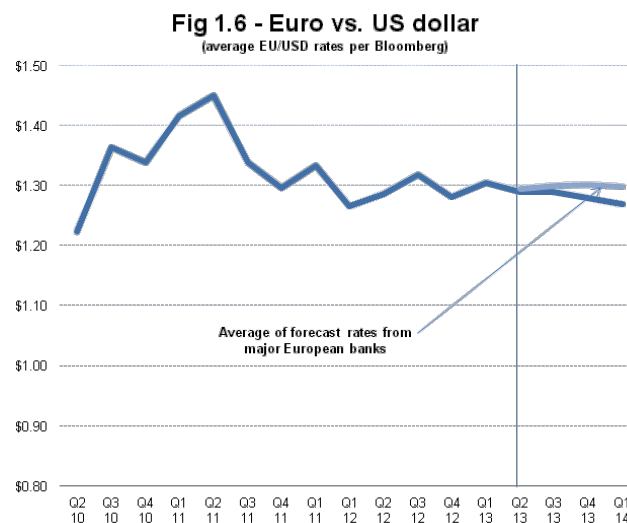
- Since most international dairy trade is carried out in US dollars, the exchange rate is important in determining how international prices will translate to local returns.
- Currency movements for other dairying regions and markets are also important in determining the competitiveness of Australia's exports and the affordability of dairy for importers.
- Although the Australian dollar (AUD) nudged closer to 106 cents in August 2012, AUD volatility lessened during the early months of 2013 with the currency trading in a narrow range of between 101 and 105 cents. After a further interest rate cut by the RBA, from 3.00% to 2.75%, the AUD has traded closer to 100 cents.
- Upward pressure on the AUD continues to stem from a combination of the relatively soft USD, Australia's relatively higher interest rates, the AUD's perceived 'reserve currency status,' and the AUD role as a proxy for exposure to Asian economic growth.
- On top of the higher interest rate differentials, forecasters cite recent data from the US indicating a tenuous economic recovery and signs that China is still experiencing relatively favourable growth as factors expected to maintain short-term to medium-term support for a high AUD.

Fig 1.5 - Australian vs. US dollar  
(average AUD/USD rates per Bloomberg)



## The international dairy market

- A Bloomberg-based survey of 44 financial institutions' foreign exchange rate forecasts puts the AUD/USD trading in a range of between 0.92 and 1.12 for Q413 widening to between 0.85 and 1.15 for 2014. Available forecasts from Australia's big four banks put the AUD/USD hovering between 1.01 and 1.04 for Q413 and 0.94 and 1.02 for 2014.
- Analysts point to potential downwards pressure on the AUD resulting from a combination of an abrupt slowdown in China and attendant fall in hard commodity prices along with a reversal in interest rate differentials.
- Japan has seen the yen (JPY) depreciate significantly against all major currencies. While this has not put significant upwards pressure on consumer prices in Japan in the short term, the weaker JPY is effectively raising the costs of imports from all of Japan's key trading partners.
- Despite the euro strengthening since the Cyprus bailout crisis, continued concerns about longer term recession, banking sector weakness and broader financial stability issues in Europe are combining to keep the euro relatively weak and thereby making EU exports more competitive.
- The recent move to direct trading between the AUD and China's yuan (RMB) from 10 April is ultimately expected to provide for some reduction in transaction costs for exporters because exporters will no longer have to convert AUD to USD prior to converting to RMB.
- A Bloomberg-based survey of 61 financial institutions' forecasts puts the EUR/USD rate between 1.15 and 1.40 for Q413 moving to between 1.12 and 1.40 for 2014. Top European banks forecast the EUR/USD rate between 1.24 and 1.35 for Q413 and 1.23 and 1.37 for 2014.



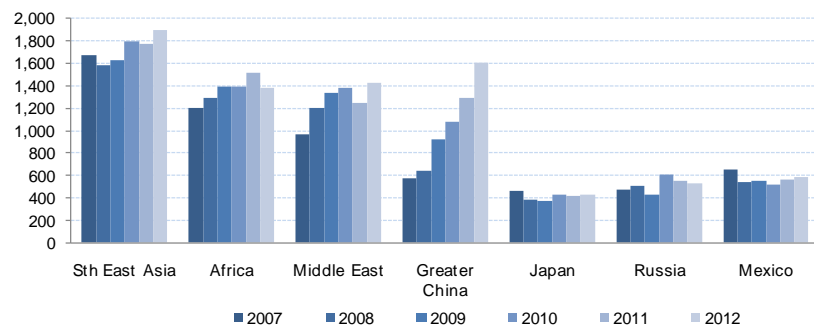


## The international dairy market

### Demand factors

- Global demand was sufficiently robust to absorb supply growth from all major dairy exporting nations—most notably the 11% growth in New Zealand milk production last season. Demand remains steady, but is likely to come under pressure from the current rapid increase in global commodity prices.
- For some products, most notably WMP, prices have shot above peaks achieved during the 2007 boom and are in uncharted territory. With a seasonal slowdown in buying from China, commodity prices should have time to consolidate, minimising the chances of widespread substitution or reformulation away from dairy ingredients.
- While economic uncertainty persists in major Western economies, the past two years show that emerging markets have suffered to a lesser extent and that future expectations of economic growth are positive for dairy consumption.
- Economic uncertainty and nations employing specific policies to devalue their currencies are altering competitive dynamics. For local exporters the AUD seems likely to remain firm for the balance of the year, with a weakening yen eroding purchasing power of Australia's key customer. But with the yen also softening consistently against competitor currencies (EUR, USD) this should maintain a level playing field.
- Growth in Chinese dairy imports continues. New Zealand is still supplying the majority of product (48% by volume), but opportunities for Australian supply are emerging in rapidly growing products of cheese and butter.
- The Chinese government is also trying to improve perceptions of locally produced food. However, the burgeoning level of government supervision to assure safety is significantly increasing local food production costs.
- Uncertainty around changes to China's *hukou* (mandatory household registration) system and their impact on local consumption has potential to undermine economic stability. Changes to the *hukou* system could allow the approximately 200 million rural registered Chinese citizens working in cities to access housing, health care and education—previously not possible—stretching government budgets and potentially increasing migration to cities. Yet the positive income benefits that could result from these changes would support dairy consumption.
- Economic stagnation and high unemployment have undermined confidence and sapped consumption growth in parts of Europe—especially for countries like Spain where processors report decreasing fresh dairy consumption and increasing consumer take-up of private label dairy products.
- Despite economic problems, European cheese consumption volumes are forecast to remain steady, mostly due to consumers trading down to more modestly priced cheese brands. In France, during the first eight months of 2012, household cheese consumption increased by 2.1%. Cooler weather is also more favourable for cheese consumption in comparison to above average temperatures.
- In the US, the challenging economic environment has encouraged competition for discretionary income among quick service restaurants (QSR), particularly within the pizza segment. In addition to stuffed crust pizzas, consumers are now being offered 'caramelised cheese crust' and 'crazy cheesy crust' pizzas. One US dairy expert estimates these pizza varieties contain around 25% more cheese than a stuffed crust variety.
- Higher prices for some vegetable oils have supported consumption of butter and dairy spreads, although health concerns are limiting growth among some consumer categories.
- Depending on the market, innovations in packaging (to extend product life, or make consumption more convenient) have supported consumption, while functional and health benefits have also been important consumption drivers in particular dairy categories.

Fig 1.7 - Major importer by volume ('000 tonnes)



## The international dairy market

Fig 1.8 - Demand regions at a glance

### Russia

- The IMF forecasts growth in the Russian economy will hold at 3.4% in 2013 and increase modestly to 3.8% in 2014.
- Challenging production conditions and delays in building the national herd will support ongoing dairy imports.
- Russian dairy imports were steady in 2012 at 534,300t. Key products imported remain butter and cheese—the majority of which is supplied by Europe.

### China

- Chinese dairy import growth continued in 2012, increasing 22% on 2011 to almost 1,350,000t. WMP, whey powder and SMP were the three major import categories.
- Local production is exposed to high global feed prices and is facing major cost pressure due to increased regulation and supervision by government authorities.
- Chinese domestic supply is not expected to keep pace with demand and import growth is forecast to continue.
- Consumers still perceive 100% imported dairy products to be the safest.

### South America

- Imports to the region totalled 741,500t in 2012, up 8.5%.
- Economic growth continues to support dairy consumption. This is particularly the case for Brazil which has become critical to absorbing production growth from the region.
- Future demand relies on steady economic growth - the IMF is forecasting improved economic activity from 0.9% in 2012 to 3.0% in 2013.

### Middle East

- Dairy imports were stable around 1,480,000t despite unrest in parts of the region.
- While Saudi Arabia imports dropped 14%, strong growth in Bahrain, Iran, Iraq and the UAE offset this decline.
- The economic outlook remains uncertain for the region, but elevated oil prices should support dairy consumption.

### South-East Asia

- Dairy exports to the region were flat during 2012 at 1,887,300t. Singapore and Thailand markets shrunk, but this was offset by growth in Indonesia, Malaysia, Philippines and Vietnam.
- Growing food service penetration and increasing disposable incomes are the key factors behind demand growth.
- While a number of markets are keen to build local production, they are heavily reliant on imported know-how and technical skills.

## The international dairy market

### Dairy substitute products

- Supply dynamics for dairy fat and protein substitutes remain complex due to competition between food and biofuel uses of vegetable oils. Vegetable proteins have experienced a volatile 12 months as a result of supply challenges in major production regions.
- Vegetable fat and protein filled products are often pitched at the lower end of the retail pricing spectrum. Given price sensitivities at this retail point, manufacturers have flexible product recipes that permit the most economical alternatives to be used—whether they are vegetable or dairy ingredients—to maximise profits.
- US production of soy meal during April to September 2013 is forecast to shrink by almost 5m tonnes from the October 2012 to March 2013 growing season, and around 2m tonnes below Apr-Sep 2012. A significant impact on export markets is expected.
- The drought-induced decline in US soybean production is yet to be offset by growth from South American suppliers. Argentinian harvests have been delayed due to late plantings and some farmers are holding back sales as long as possible hoping that the government will devalue the Argentine peso and improve farmer returns.
- Delays in supplying China has meant internal stocks in South American nations are being depleted faster than usual and should keep prices elevated until later into the season as stocks are replenished.
- Global vegetable oil demand is caught between a slowdown in the biofuel sector, while food consumption requirements, predominantly in Asia have picked up, mostly due to lower prices.
- Demand for palm oil is expected to grow as supplies of alternative oils and fats shrink. Strong oil per hectare yields in comparison to other vegetable oil crops are encouraging farmers to switch production to palm oil. Palm oil has grown to become the dominant vegetable oil produced (by planting area).
- Large global soy meal stocks are expected to minimise soy price growth during challenging production conditions, but strong demand from Iran and domestic consumption within India have underpinned soy meal prices for some regions.

Fig 1.8 - Dairy protein price premium vs. soy meal (US\$/kg protein)

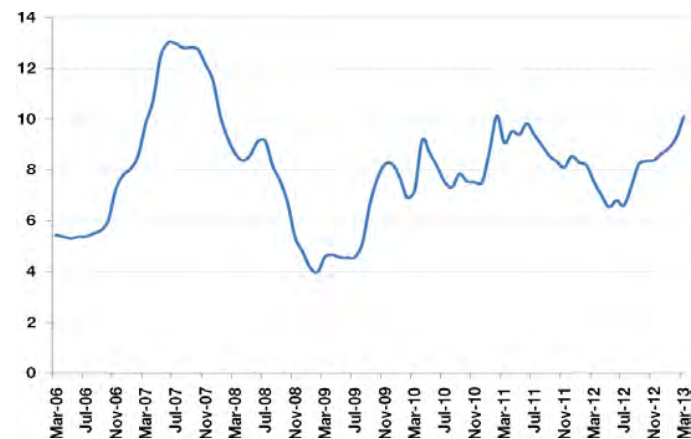
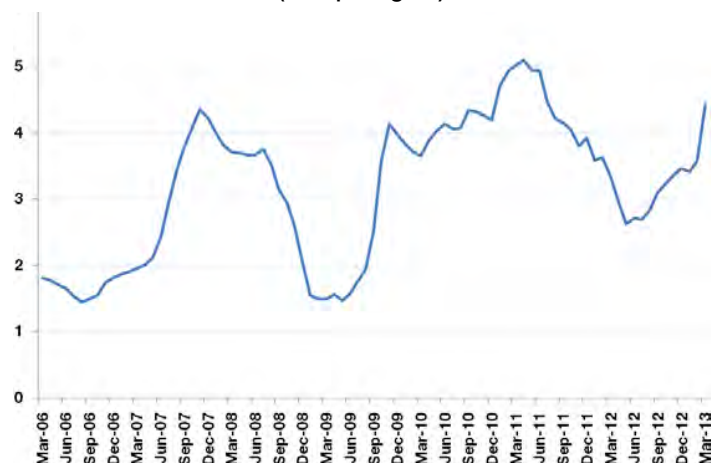


Fig 1.9 - Butterfat price premium vs. palm oil (US\$ per kg fat)





## The international dairy market

### Supply factors

- Overall, milk production in key supply regions is expected to grow by just under 1% in 2013. Most countries expect a slow start to the calendar year and then production to recover as high international commodity prices encourage a farm-level supply response.
- However, global supply growth could readily deviate from expectations, particularly in the US, which retains the potential to increase production rapidly given the right combination of market and climatic conditions.
- US production has been surprisingly resilient given the severe financial pressure facing many producers. Continued growth in eastern states such as the Great Lakes region, contrasts with contraction in the west and south. While many farms—most notably in western states—declared bankruptcy and culling rates reached record highs in 2012, a large proportion of cull cows were retained in the industry on other farms in more secure financial positions.
- US milk production per cow increased a further 0.3% in February 2013 (leap year adjusted), against 3.4% growth in February 2012. Yield growth is driving production increases despite shrinking herd numbers
- Growth in US export volumes slowed markedly in 2012. Although bolstered by the activities of Cooperatives Working Together (CWT), cheese exports climbed 15.9% to 260,000 tonnes, with 40% going to Asia (66% of this to Japan) and 28% to the Middle East (mainly Egypt and Saudi Arabia). The US share of global dairy trade has risen from 7% to 13% in the last few seasons.
- A new US Farm Bill is yet to be completed, with finalisation now expected 'sometime in 2013.' Supply management provisions are generating significant opposition at the same time that the other aspect of last year's draft 'Dairy Security Act,' margin insurance, looks likely to face significant changes in order to survive in an environment of severe budgetary pressures.
- The European Commission's Private Storage Aid (PSA) program saw 133,305 tonnes of butter stored through the steady growth phase of early 2012. When sales closed for the season in early 2013, all but 19,359 tonnes had left storage. Storage re-opened for product intakes in mid-February.
- Feed costs also remain high for European farmers, which combined with equal to or lower than 2012 are squeezing margins. Silage production has been limited during 2012 due to excessive moisture (UK and Ireland) or excessive heat and drought (southern Europe). The resulting shortage of home grown fodder has increased feed costs for dairy farmers.

Fig 1.10 – Incremental change in milk production

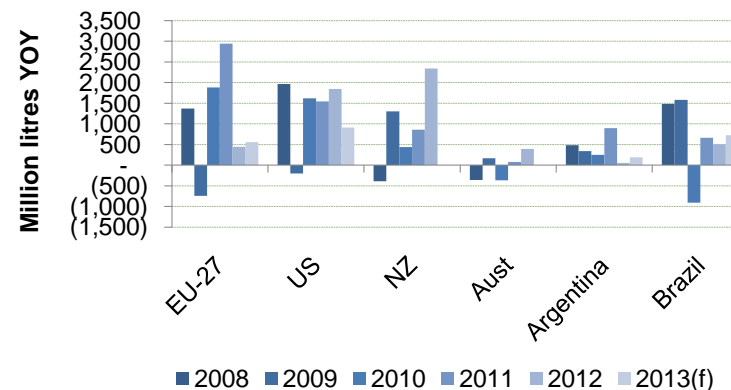
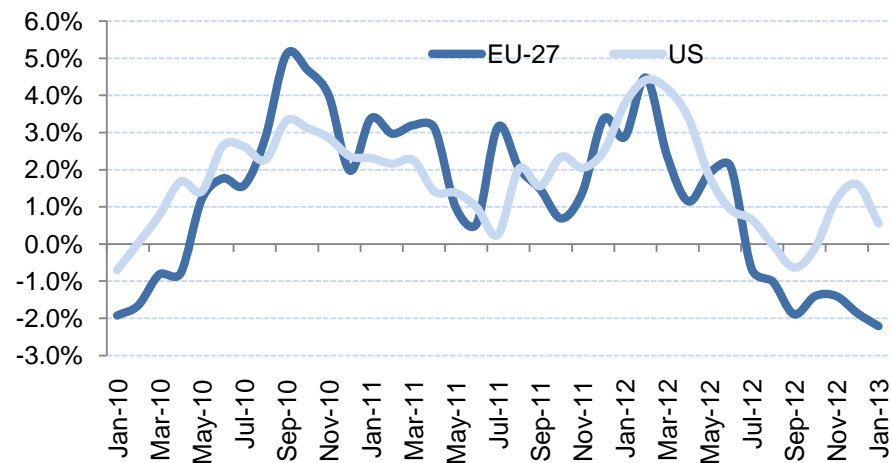


Fig 1.11 - EU and US milk supply % changes on same month of prior year



## The international dairy market

- Milk production growth in southern and eastern EU member states has continued despite the less favourable economic climate; though a number of north-western member states have seen large reversals. Of the five largest EU dairy producers (France, Germany, UK, Italy and the Netherlands), only Germany entered 2013 with positive growth, while three of the six countries that exceeded their 2011/12 quota (Germany, Austria and Cyprus) have maintained growth into the current year.
- High feed costs and sluggish milk prices also impacted milk production in Latin American countries in the second half of 2012. After strong growth in the first part of the year, tight margins through the later months saw production slow considerably, with this situation persisting into early 2013.
- Great climatic conditions and reasonable farmgate milk prices drove a strong 2011/12 result for New Zealand milk production, but the second part of the 2012/13 season has been less favourable. Data to February 2013 shows milk production up a comparatively modest 5% on last season (down 3% for the month), and reports suggest drought across the North Island has since seen a further sharp decline in output, with many cows dried off early, culled or reduced to once-daily milking.
- For the 2013/14 NZ season, moderate growth around 3-5% is likely, based on the continued South Island farm conversions and rainfall approaching the long-term average in the lead-up to the spring flush. The ability of farmers to maintain cow condition and in-calf rates heading into the new season will be critical to fulfilling growth targets.

## Medium to long-term outlook

- The ability to be a low cost dairy producer is increasingly important as markets swing from lows to highs. Low cost suppliers are the first to recover from challenging times and also best placed to maximise gains.
- A renewed focus on production costs, farm business equity levels and flexible farming systems—to cope with volatility—will be key success factors in surviving and thriving in the future. Successfully balancing the cyclical nature of dairy markets with profitable and sustainable production systems is fundamental to future dairy industry prosperity.
- Other important factors are continuity of supply, price competitiveness and innovation in key demand markets. Buyers in dairy import markets need to feel confident about the Australian dairy industry to build their business around Australian products and ingredients.

- The growing interconnectedness of global grain, fertilizer, fuel and electricity markets encourages input cost convergence. Similarly, global consumer habits are also becoming more similar as more and more information is being shared around the globe.
- Australia has the opportunity to continue to leverage our well-earned reputation for quality, safety and security of dairy exports.
- There are still massive opportunities for dairy: consultancy Global Demographics expects Asia's total household expenditure to grow from US\$10 trillion to US\$13 trillion over the next decade.
- Additionally the changing nature and composition of households in key demand markets means that today's young people are growing into the young families, and 40-plus year old households of the future. The dairy industry needs to be developing and positioning consumer products now in anticipation of this future demand.
- Major global food corporations are expanding into more 'traditional' dairy company space and leveraging supply chains and brands. Global supply chains are becoming the new battle-front, integrating previously discrete organisations and seeking the critical mass to be able to influence trade flows and market access arrangements.
- In anticipation of the removal of production quotas, expansion of EU milk supply and future consumption expectations, more than US\$1.2bn has been—or is—planned for processing investment in Europe. Initial expectations were for this to go into cheese processing facilities largely aimed at internal consumption. However, it would appear that large investments are being made in powder drying facilities for export markets.
- Each of the major supply regions has challenges and impediments to growth: political contests or production cost structures in the US, turbulence surrounding the removal of production quotas in the EU, logistics and infrastructure challenges in South America or environmental constraints linked with production intensification in NZ.
- Additionally, key demand regions such as China, India and Russia are trying to build self sufficiency, balancing sustainability and securing food to feed a growing population.

## The international dairy market

Fig 1.12 – Competing supply regions at a glance

### United States

**Last season:** Milk production UP 1.8%

- Exports UP 2.5% to 1.7 million tonnes - biggest growth in cheese (up 15.9%)

**Current season:** Milk production UP 0.3% year to February

**Outlook:** Assuming climatic conditions moderate and a return to average crop yields, feed prices should ease over 2013, lowering costs and reducing financial pressure on farmers in the western states in the second half of the year. USDA forecasts indicate growth of 1.0% in production compared to 2012.

### Latin America

**Last season:** Milk production:

- Argentina: UP 0.74%, Brazil: UP 2-2.5%
- Chile: UP 0.7%, Uruguay: UP 6%
- Exports from region up 0.2% to 788,000 tonnes. Strong consumption in countries such as Brazil and Chile means that a significant proportion of dairy production remains in the region.

**Current season:** Production remains weak but is recovering as margins improve. Aggregate production is expected to grow by around 3%, to just over 35 billion litres in 2013.

**Outlook:** A slow start is expected to give way to modest full-year growth as feed prices reduce and milk prices increase. Growth forecasts for the two bigger producers are in the range of 2-3% for Argentina and 3-3.5% for Brazil.

### European Union

**Last season:** Milk production UP 0.6%,

- Exports DOWN 5.2% to 3,400,000 t. WMP continued to lose share, dropping 50% to 193,000 t. Cheese exports up 6% to 715,000 t—now representing over 20% of EU export sales.

**Current season:** Milk production DOWN 2.2% for January. EU milk output is forecast to expand by 0.4% in 2013

**Outlook:** Slower growth and/or declines at the start of the year are expected to be offset by a stronger production recovery during later months as climatic conditions revert to average and farmgate margins improve.

### New Zealand

**Last season:** Milk production UP 10% to almost 20bn litres.

- Exports UP 12.9% to 2,851,000 t – biggest growth in WMP (up 13% to 1,260,000 t)

**Current season:** Milk production UP 5% on last season to February according to official (DCANZ) data.

- Fonterra data to April show intakes tracking 0.5% DOWN on 2011/12 – 5% down in the North Island, 8% up on the South Island.

Current forecasts suggest production will finish the season around 1% either side of 2011/12's result.

**Outlook:** Strong early season production and irrigation in the South Island are expected to moderate the full season effects of the drought.

## The international dairy market

### International trade policy update

- While policy settings have long had an important influence on world dairy markets, the interaction between policy developments and international market opportunities and outcomes is likely to intensify during 2013/14.
- The US and European Union are both nearing crucial decision points on the future shape and direction of their domestic support policies for dairy and other agricultural sectors. While the nature of support may change significantly in both countries, one objective of policy will be to maintain (and in the case of the US expand) their dairy export capabilities over the next decade.
- Stagnation of the WTO Doha Round has seen a renewed push for bilateral deals, including several third-party deals that could significantly affect the competitive position of Australian exporters in key markets in future years.

### Australian trade policy activity

- This section outlines the current status of international trade agreements and negotiations in place, or under way, in order to grow export volumes and improve farmer returns by saving around AU\$250m p.a. paid in tariffs alone.

### Completed agreements

- Australia has seven Free Trade Agreements (FTAs) currently in force: with New Zealand, Singapore, Thailand, Malaysia, the USA, Chile and the regional agreement AANZFTA (ASEAN-Australia-New Zealand Free Trade Agreement) with the Association of Southeast Asian Nations (ASEAN) and New Zealand.
- The Malaysia-Australia Free Trade Agreement (MAFTA) entered into force on 1 January 2013. The main benefits for Australian dairy are new country-specific quotas (CSQ) approximating to 210,000 litres of milk/cream without end-use restriction in 2013 (and growing in subsequent years).

### Current negotiations

- Australia is a World Trade Organisation (WTO) member and is also engaged in nine FTA negotiations: five bilateral FTA negotiations, with China, Japan, Republic of Korea (ROK), India and Indonesia; and four regional FTA negotiations: the Trans-Pacific Partnership Agreement (TPP), the Gulf Cooperation Council (GCC), the Pacific Trade and Economic

Agreement (PACER Plus), and the Regional Comprehensive Economic Partnership Agreement (RCEP).

### Multilateral negotiations

- The Doha Development Round is the current trade-negotiation round of the WTO which commenced in Nov 2001. Negotiations broke down in July 2008 after failing to reach a compromise on agricultural import rules. During 2012, Australia and several other WTO partners explored alternatives ('new pathways') for agreement on issues by a subset of members.

### Regional negotiations

- Gulf Cooperation Council (GCC): Negotiations with the Gulf Cooperation Council comprising Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE), commenced in July 2007. Australia is one of a number of countries negotiating FTAs with the GCC, however, the Council has paused its trade negotiations with all partners pending a review of its trade agreement policy. There is no indication that negotiations with the GCC are likely to move ahead significantly in the near future.
- Trans-Pacific Partnership (TPP): The sixteenth round of negotiations took place in Singapore in March 2013. Japan has formally sought, and been accepted for, membership of the TPP: the 11 existing members have agreed to Japan's request as of April 2013. The next round of TPP negotiations will be held in Lima, Peru, 15-24 May.
- PACER Plus: Negotiations were launched at the Pacific Islands Leaders Forum in August 2009. Participants are Australia, Cook Islands, Federated States of Micronesia, Kiribati, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. Australia's primary objective is to promote the economic development of Forum Island Countries through greater regional trade and economic integration.
- Regional Comprehensive Economic Partnership (RCEP): An ASEAN-centred proposal for a regional free trade area, RCEP initially included the 10 ASEAN member states and those countries that have existing FTAs with ASEAN – Australia, China, India, Japan, ROK and New Zealand. RCEP negotiations were during the East Asia Summit in November 2012.



## The international dairy market

### Bilateral negotiations

- FTA negotiations with China commenced in 2005. It appears unlikely that a final resolution will be achieved soon. The latest negotiation round (the eighteenth) was held in Canberra in March 2012. The major hurdles are non-agricultural issues like textiles and immigration. The Australian Government is aware of the commercial advantage that NZ dairy enjoys because of a successful FTA with China (market share increasing from 23% to 48% since coming into force in 2008). China is also currently interested in progressing trade agreement discussions with other countries such as Japan, Korea and ASEAN.
- Australia and Japan have been negotiating terms of an FTA since 2007. Negotiations have now transitioned to an advanced but delicate stage. There is potential for a conclusion in the first half of 2013; but there are concerns over the outcome for agriculture, including dairy.
- Korea FTA negotiations commenced in March 2009 and were almost complete in late 2011 before stalling. A key factor appears to be Investor State Dispute Settlement (ISDS). Unless the FTA with Korea is progressed, the phasing of tariff preferences for EU and US suppliers under their FTAs will put Australian exporters increasingly behind our competitors. It is hoped that newly elected President Park Geun-hye will agree to progressing FTA negotiations with Australia.
- The first round of negotiations with India on a Comprehensive Economic Cooperation Agreement (CECA) commenced in July 2011. The fourth round of negotiations was held in New Delhi in November 2012. Consensus is that this negotiation will be a long and difficult process. There are significant political and industry groups within India who are against increased market access for food products. Australian negotiations are behind those of the EU and NZ who are also negotiating FTAs with India.
- The Indonesia-Australia Comprehensive Economic Partnership Agreement (IA-CEPA) negotiations commenced in Jakarta in September 2012. These are still at an early stage, with little progress evident in the broad economic partnership agreement.
- For more information on these agreements please visit the DFAT FTA website: [www.dfat.gov.au/fta](http://www.dfat.gov.au/fta)

Fig 1.13 Trade policy negotiation summary

Trade event	Completion outlook	Potential benefit to Australian dairy industry
WTO Doha Round	Unlikely in short term	Very significant, benefits for multiple dairy products and markets
GCC-Australia	Challenging/unlikely in short term	Major access improvement to demand market
TPP	Target is end 2013	Significant benefits for multiple dairy products and markets
PACER plus	Likely, end 2013-2014	Niche product and market
RCEP	Possible, 2014 +	Advantage against EU and USA, lineball with NZ
China FTA	Unlikely in short term Non-agriculture issues	Resolve current trade disadvantage with NZ
Japan FTA	New momentum, potentially by end 2013	Our biggest customer, significant dairy benefit
Korea FTA	Stalled by non-agriculture issues	Significant benefit to price sensitive customer
Indonesia	Initial phase, long timeframe	Major opportunities for rapidly growing dairy market
India	Initial phase, long timeframe	Significant opportunity, multiple products

## The international dairy market

### European policy update

- The next two years will see some major decisions made about the direction of EU agricultural support policies. Much debate has already occurred on possible reform of its Common Agricultural Policy (CAP) and on future funding of EU and CAP budgets between the Commission, the Ministerial Council and the European Parliament which now has 'co-decision' rights over major policy reforms confirmed by the Lisbon Treaty.
- EU milk production quotas are scheduled to end in April 2015. However, amongst the CAP 'reforms' proposed by the European Parliament is a measure that would penalise over-producing farmers in a time of crisis and reward those who cut production.
- The suggested reforms, which resemble a production quota under a different name, have met resistance from more market oriented member states. European dairy industry organisations from 13 countries including Germany, Denmark and the Netherlands have signed a joint declaration opposing these proposals on the grounds that they go against EU commitments to move towards greater market orientation.
- The core elements of the proposed CAP reforms are:
  - o budget funding for CAP programs to be frozen at 2013 levels from 2014 to 2020—effectively a real decline in funding over time;
  - o continuation of the current basic structure of direct income payments to farmers (Pillar I) and decoupled Rural Development funding (Pillar II); and
  - o further reductions in public intervention and private storage aid mechanisms, but a new safeguard clause that would allow the Commission to respond to 'general market disturbances.'
- Some elements of the broader CAP proposals that may have implications for future dairy production (and will require further assessment) include
  - o a shift to make payments to farmers more uniform per hectare (rather than based on historic production levels) and across member states and regions with convergence across all sectors by 2020;
  - o the 'greening' of payments by tightening the rules covering 30% of direct payments that are linked to farmers undertaking specific environmental and climate-related activities on farm; capping of

payments for large farmers, and redirection of funding in favour of small and 'active' farmers.

### United States policy update

- The Food, Conservation, and Energy Act (FCEA) five-year farm bill regulating commodity support, environmental, conservation, research, farm services and food assistance programs expired in September 2012.
- Congress was unable to agree on a new farm bill so the FCEA was extended by one year. The disagreement between the Senate and House versions centred on the extent of proposed cuts in program spending to assist in reducing the budget deficit.
- The extension means that a number of dairy programs that were targeted for elimination including the Dairy Export Incentive (subsidy) and the Dairy Product Price Support Program remain on the statute book until end September 2013 and end December 2013 respectively.
- From a dairy perspective the major point of contention remains the proposed safety net for producers. The National Milk Producers Federation is advocating a safety net providing risk insurance when farmgate milk prices are very low, offset by a mandatory supply management program to restore market balance.
- Proprietary and private processors, as represented by the International Dairy Foods Association (IDFA) are strongly resisting the supply management component. In their view, it could lead to disruptions in milk supply at a time when the US is expanding exports and cause adverse repercussions for domestic demand if a tightening of supply pushes up wholesale prices. This in turn could encourage more imports. IDFA is supporting a voluntary margin insurance program with no supply management component.
- Overhanging discussions on the new farm bill is 'sequestration,' with spending cuts to reduce national debt, totalling US\$1.2 trillion over the next 10 years and operable from 1 March. The most controversial cut for dairy was the temporary cessation of monthly milk production reports though after concerted pressure from producers and processors an estimate was reinstated.

# Chapter 2

## The Australian market

### Highlights

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## The Australian dairy market

### The Australian food market

- The Australian retail food and beverage market was estimated to be worth approximately \$150bn in annual turnover for the 2011/12 financial year. There are several major channels, but sales are dominated by the supermarket sector (which comprises major chains and independent stores) with an estimated 62% share of consumer spending.
- The retail food market is made up of a diverse number and type of outlets, as well as supply chains between food producers and manufacturers and the retail outlets servicing consumers.

### Consumer trends

- Australian consumers remain cautious in their overall spending on household essentials as well as reduced outlays on discretionary or “premium” items.
- A sustained attempt to increase savings aimed at warding off exposure to a softer housing market and employment risks have contributed significantly to this setting, along with increased and less avoidable household costs including those of health, energy and transport.
- Retail sales have grown slowly as consumers continue to seek value. While consumer confidence has slowly recovered in 2012/13, it remains fragile with lingering fears of the effects of further financial turbulence emanating from Europe, weakness in property values and in manufacturing and retail sectors of the labour market.

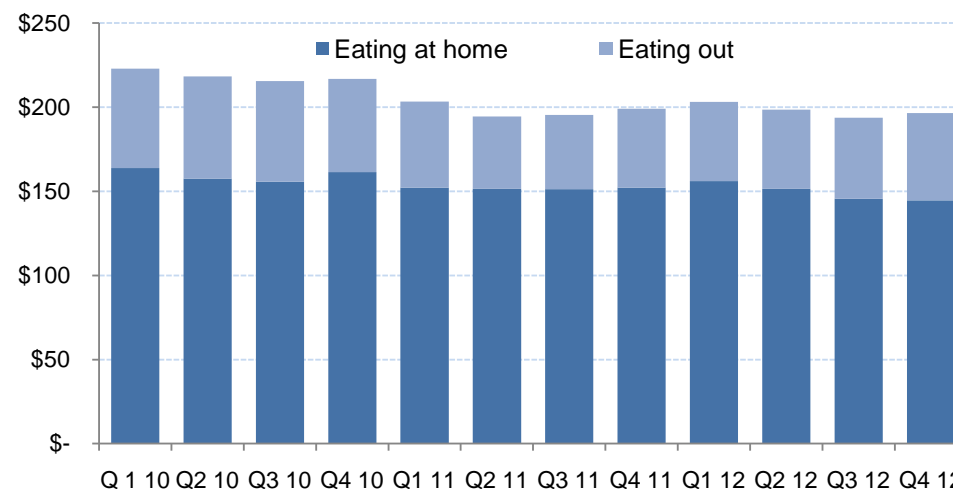
Fig 2.1 - Table of key indicators

<i>Consumer confidence</i>	Improving confidence in 2013 although remaining fragile and largely governed by household financial positions and mortgage interest rates. Spending growing close to 3% which is slowing in 2012/13.
<i>Housing</i>	Building approvals have been rising over the past year, while housing values are in recovery with lower interest rates on offer.
<i>Savings</i>	Household savings of 9-10% of household income.
<i>Retail sales</i>	Growing at 2.5% in the past half year, food sales growing at 4% in the same period.
<i>Inflation</i>	Remaining low (below 2.5%) but cost pressures are steadily building.
<i>Business confidence</i>	Confidence is in net-negative territory, having fallen throughout 2012 with pressure from the uncertainty of financial turbulence and the high AUD affecting the outlook.

### Spending on food

- Total food and drink retail sales have grown faster than overall retail sales, with an easing of deflationary pressures in the food market over the past year, which were driven by seasonal supply issues in fresh produce and persistent price-based promotions. The intense price-based competition in the supermarket sector has supported consumers’ cautious attitudes, but underlying robust preferences for convenience in meal preparation and casual dining are still evident in trends across food categories.
- Average household spending shows a continuing value shift in spending by consumers between major food market channels. In the latter stages of 2012 there has been a recovery in the share of spending on eating out as sentiment improved.

Fig 2.2 - Average household weekly food outlays 2008-12





## The Australian dairy market

### Supermarket sector

- Intense price-based competition in the supermarket market between the two major supermarket chains and the expanding discounter Aldi remains the major influence on the retail food market in 2012/13.
- The strong value-focus of loyalty and promotional campaigns supported by increased store numbers and productivity have combined to continue a steady expansion in supermarket share of retail food spending by consumers, although there has been a recovery in out-of-home spending recently.
- While the battle for the perception of “best value” for shoppers has remained intense, the trust propositions have widened to address practices in production systems and accountability for the origin of fresh food products across categories, which includes greater prominence given to ‘local’ supplies and the ‘provenance story.’

Fig 2.3 - Comparative recent retailer performance

	Coles	Woolworths
Food & liquor sales growth*	+4.1%	+4.7%
Same store sales*	+3.9%	3.1%
Food price inflation/(deflation)*	(2.6%)	(2.5%)
EBIT to sales margin 6 mths to Dec 2012	4.8%	7.7%
EBIT growth on last year	+14.6%	+6.0%

\*3<sup>rd</sup> quarter 2012/13 financial year, excludes fuel

- While the improved performance of Coles and its lead on most new initiatives has been a major driver of change in the supermarket sector, the recovery in sales growth by Woolworths, defending higher retail margins, has added to the intensity.
- Both major grocers have continued to report deflation in food prices after the effect of promotional campaigns, which contributed to lower priced food across the supermarket sector in 2012.
- The major chains have increased market share of retail food sales at the expense of independent stores, maintaining strong price pressure on bannered independent groups that are serviced by wholesaler Metcash. The traditional independent convenience store has also lost overall share as the networks of supermarket outlets in petrol stations continues to expand.

Fig 2.4 Retailer same-store sales & food CPI

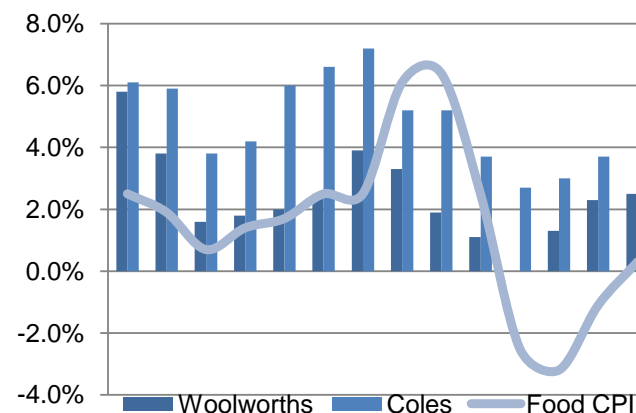


Fig 2.5 - Dairy sales by channel (2012/13)

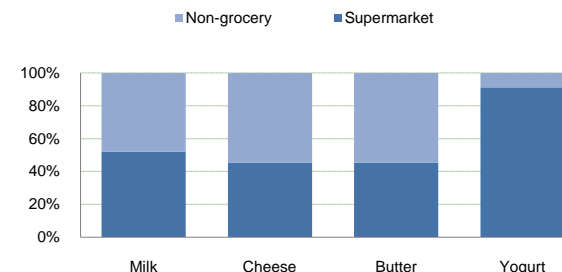
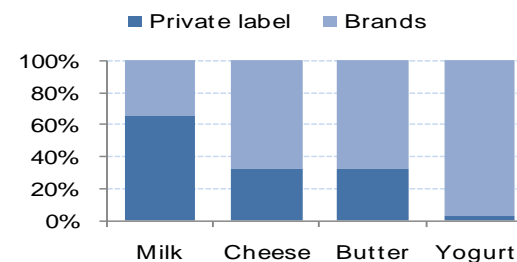


Fig 2.6 - Brand shares within supermarket (2012)



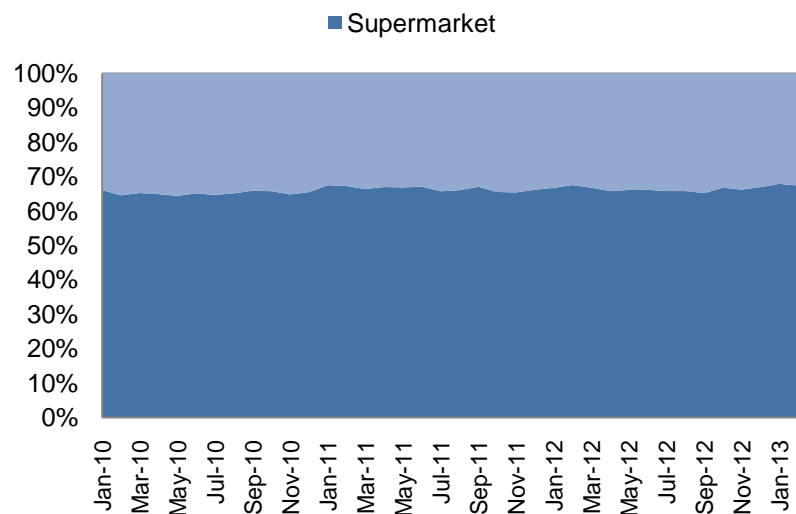
## The Australian dairy market

- Discount store operators such as Aldi (over 300 stores) and, to a far smaller extent, Costco (currently 3 stores) operate vastly different store models, and continue to expand their retail networks while taking a higher share of available growth of price sensitive segments of the retail food market. The expansion of Aldi is a major determinant of price points on staple food lines and the steady push of the private label presence by Woolworths and Coles.

### Private label v brands

- The expanded use of private label lines is a key component of retailer strategies. In recent years, their use has had a profound effect on milk, cheese and spreads categories. In 2012/13, dairy brands have resisted that expansion, albeit with investment in discounted prices in milk and cheese categories.

Fig 2.7 - Total milk sales supermarket v non-grocery 2010 to early 2013



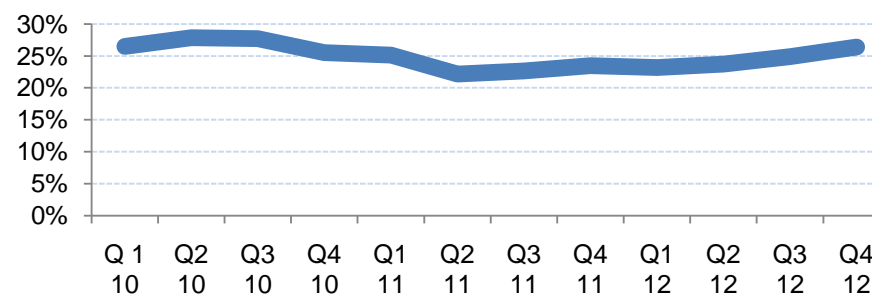
- The impacts on the milk category have been most profound with \$1/litre private label pricing (for 2 litre and 3 litre packs) in place since January 2011. While volumes have not significantly shifted into the supermarket channel since that change, loss of retail sales value in the category has occurred due to the change in mix as private label lines increased share of sales and higher value branded modified milk sales declined.

- The impact on retail sales and, ultimately, on wholesale returns has varied state to state, due to the differences in retail prices, brand and sales channel mix between states.
- Both major supermarket chains have announced plans to source a portion of their private label milk products through arrangements that provide a greater "line of sight" to milk producers and greater certainty with longer term contracts (5-10 years), which will take effect in 2013/14 and later.

### Non-grocery

- The most important product segments in non-grocery (outside the supermarket sector) are
  - o milk sold through convenience retailers (including 'impulse sales' of flavoured milk drinks) and used as an ingredient in high-turnover food service outlets such as cafes;
  - o cheese as an ingredient in the fast food or QSR market; and
  - o butter and cream as ingredients in a wide range of food service establishments.
- Available panel data suggests the share of food spend by households in non-grocery channels has staged a slow recovery in recent quarters, as household sentiment has gradually improved.

Fig 2.8 - % of household spend on eating out 2010-12



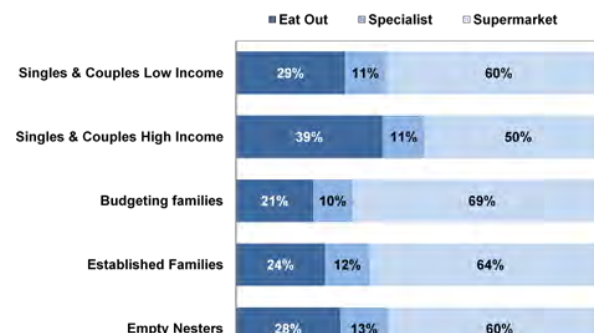
### Food service

## The Australian dairy market

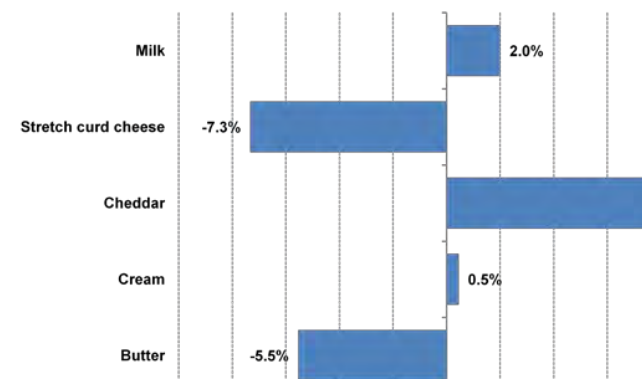
- Food service consists of an estimated 50,000 food outlets offering a diverse array of meals and snacking options for consumers (including takeaway, dining and event/leisure) with estimated sales of \$42bn p.a. These are serviced through varied and complex distribution channels, where the value added to meal preparation includes significant labour costs. The heaviest concentration of sales is made through QSR outlets.
- The significant difference from the retail sector is that dairy is sold as an ingredient rather than a finished product, with a variety of demands on input costs, product quality and functionality. The more successful marketers base their models on tailored distribution, packaging and solutions in product form.
- Household spending on meals and snacks consumed out of the home are driven by lifestyle, household structures, working week routines as well as available discretionary incomes. The propensity to dine out varies across consumer segments.
- Australian Bureau of Statistics (ABS) data suggests that sales through the café and restaurant channel grew at close to 5% in the year to February 2013, while takeaway outlets (including QSR) slowed to under 3%.
- In recent years the mix of dairy products sold into the food service sector have changed as discretionary spending weakened, affecting large sectors of the restaurant trade. The popularity of coffee has buoyed the café sector, while the value segment of the fast food market has expanded.
- Undifferentiated restaurants without the advantage of strong location or quality have suffered most, while experience-based fine dining outlets have performed strongest. The 'value' segment of the fast-food market has grown further, but competition has become more complex in those segments.
- Some large QSR chains (such as McDonalds and Domino's Pizza) have reported slowing growth in store expansions and same-store sales in 2012 as the effects of fast expansion in 2011, won through a strong focus on value and online convenience, has worn off and incremental growth has been harder to find.
  - o The pizza market remains one of the strongest growth areas which support sales of cheese as a topping. But there has been increased diversity of QSR offerings, including the emergence of smaller gourmet, agile and niche cuisine chains. This has shown consumer interest in higher quality, taste and variety remains strong while taking advantage of the convenience of fast-dining options.

- o The greater diversity of offering has forced more frequent menu refreshment and greater focus on the quality of ingredients by large chains to maintain competitiveness.
- o Consumers have supported emerging chains promoting perceived flair and quality in meal options (such as Nando's, Crust, Oporto and Grill'd) which are quickly growing their store networks despite meals at higher price points.

**Fig 2.9 - Average Household Spend by Channel as % of total (Dec Qtr 2012)**



**Fig 2.10 - Sales volumes in to non-grocery channels (change 20)**



## The Australian dairy market

### Overall

- The economic outlook tends to affect prospects for future household sentiment and food spending behaviour. Activity in the Australian economy is expected to recover in the short to medium term after slowing in 2012, provided there is continued easing in monetary policy that safeguards household property assets, stability in growth in the market for resources and no further impacts on the general availability of business credit from a major financial crisis.
- Diversity in conditions facing different sectors of the economy continues to weigh on business investment confidence, making economic activity patchy.
- The RBA's latest outlook for the Australian economy sees GDP growing at 2.5% in 2013 and 3% over 2014. Employment growth and business investment are expected to remain weak in the short-term, with an expected decline in mining activity.
- Underlying inflationary pressures are expected to be weak in the short-term, with the RBA not expected to increase the cash rate through to the end of 2014.

### Opportunities and challenges for the category

- The overall consumption of dairy products is expected to continue to increase with population growth; however, some sub-categories with greater exposure should grow more slowly.
- The dairy category has four secure pillars—health and nutrition, convenience, taste and indulgence—on which it can maintain a diverse dietary appeal that ensures robust demand across the major sub-categories.
- Of increasing importance over time are the many ways dairy can capitalise on growing demands for convenience which can in many cases avoid the price-sensitivity of shoppers.
- The supermarket channel will remain highly competitive, and both major supermarket retailers have stated intentions to retain a focus on value for the foreseeable future as a major element in their efforts to build shopper trust in their brands.
- The continued Aldi rollout on the east coast and in new markets of SA and WA will sustain pressure on the pricing of commonly purchased supermarket lines by the two major retailers.
- To a lesser extent, the gradual expansion of store numbers by Costco should aid this effect; although much of the focus of that group is to compete for the wholesale food service business and convenience store operators.
- Nevertheless there is scope in the future for dairy to lift unit values by responding to a number of emerging trends supermarket chains wish to exploit:
  - a) greater interest in 'provenance,' the story or origin of products is conveyed to consumers. This includes an interest in 'local' supply or a direct 'line of sight' to producers. The recently announced intentions of Woolworths to source milk direct from Manning Valley dairy farmers for a product priced between existing private label and brand price points is the most recent example.
  - b) Offering stronger traceability through to source, to support provenance initiatives such as those in (a).
  - c) Innovation in product convenience and packaging that cuts time for consumers in meal preparation or facilitates improved scope for snacking.
  - d) Product features that support health or lifestyle needs.
  - e) Other "sustainable sourcing" propositions that connect with consumers.
- Innovations in these areas should provide opportunity for greater diversity of dairy product ranges and retail market values, but will take investment in product and supply chain development. Within this environment, niche products across dairy categories have scope to flourish.
- There is likely to be an increase in the ethical requirements of retailers, with product-label information to establish points of difference in response to consumer concerns. These will increase in scope as sustainability measures have a greater influence on the food industry, covering issues such as environmental impact, energy use, animal welfare standards, and other ethical production issues—following the lead of US and European retailers.
- While the economic outlook remains mixed, sustained pressure on the food service sector to compete for pockets of growth will ensure a continued focus is applied to meal and ingredient costs. Operators will continue to look for lower cost but functional solutions.



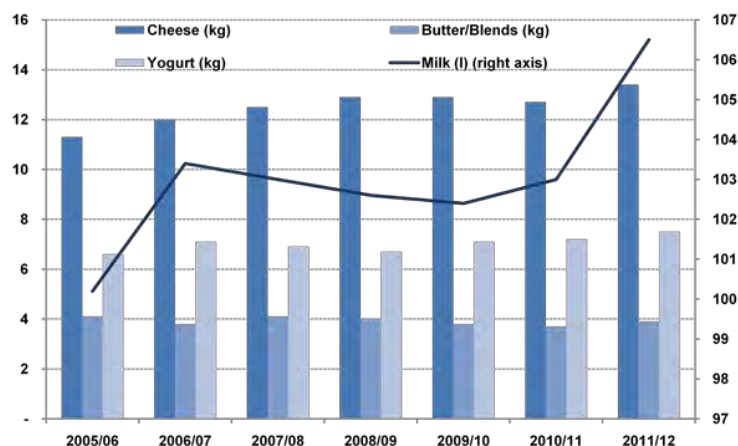
## The Australian dairy market

### Dairy market snapshot

#### Key points

- Domestic sales volumes (in milk equivalents) were higher in overall terms than the previous year. Value also increased, albeit at a slower pace compared to volume.
- The overall estimated wholesale value increased to \$7.1bn despite weaker non-grocery and industrial prices for the four major consumer categories. The total value of supermarket milk was up 0.4% from \$1.93bn to \$1.94bn.
- Domestic per capita consumption for key dairy categories increased by 5 litres to 302 litres in milk equivalents in 2011/12, mainly driven by growth in cheese sales.

Fig 2.11 - Estimated per capita consumption



#### Market structure

- The supermarket channel accounted for approximately 49% by volume (in milk equivalent terms) and 60% by total wholesale value across major consumer dairy categories of milk, cheese, dairy spreads and yogurt in 2011/12.

- In 2012, the level of penetration of private labels generally weakened across dairy product categories—down by 2% to 52% in milk; no change (32%) in cheese; down by 1% to 33% in dairy spreads; down 1% to 3% in yogurt.

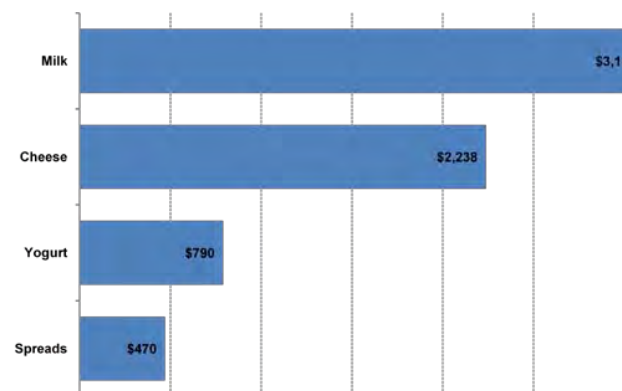
#### Key influences of category demand and value

- Consumer response to retailer promotional activity including discounting.
- Cautious spending on premium or discretionary food purchases in supermarkets and delicatessens.
- Sustained support for convenience across dairy categories.
- Healthy-eating consciousness and preferences for “natural” foods.

#### Promotional activity

- The volume of supermarket promotional placements has been sustained as price-based competition remained intense.
- It also appears that dairy products were part of promotional activity across the supermarket sector more often during the first half of 2012/13, suggesting higher promotional costs for manufacturers to facilitate sales volume growth.
- Activity has been strongest in cheese and ice cream due to warmer seasonal weather favouring consumption.

Fig 2.12 – Estimated wholesale value of categories in 2011/12 (\$m)



## The Australian dairy market

### Milk category

#### Key points

- The retail packaged milk market remains under extreme price pressure due to the pricing differentials between private label and branded products.
- Growth in milk sales was 2.1% in the 12 months to February 2013, with annual consumption of 2.41bn litres (25% of total annual production).
- In value terms, the total milk category grew 4.4% in supermarkets in the year to March 2013 to exceed \$2 billion for the year, with average price per litre across all products up 2c to \$1.56 per litre.
- Niche branded high-value products continue growing despite the price competition. A2 has reported a 57% increase in year-on-year sales in the past year to reach a share of almost 7% (by volume) of the milk market.

#### Major market dynamics

- Private label pricing of 2 litres for \$2 has been the biggest influence in the category, used by supermarket chains as a driver of shopper traffic.
- Branded milk products recovered share with increased marketing and the advent of permeate-free processing in June 2012, which was not available to private label lines until late 2012. Private label shares have since recovered some lost ground since February 2013.
- Non-grocery sales volumes are flat due to the supermarket price competition and weak consumer spending.
- UHT milk volumes have regained share from 12.1% to 13.1% of the total drinking milk market due to stronger promotion. The rate of growth in flavoured milk sales slowed.

### Market structure

- The supermarket sector share of total milk sales was 61% in the year to March 2013, which includes sales through independent food stores.
- Private label penetration of total fresh white milk sales is about 41% overall, but the share of sales in supermarkets is close to 52%.
- Flavoured fresh milk has a 10% share of total milk sales, of which 56% of flavoured milk is sold in non-grocery outlets.
- Retail prices for branded products historically differed between states due to the relative intensity of competition, but have recently converged.

### Consumer trends

- Per capita growth in consumption continues.
- There is evidence of strong interest in 'natural' product, evidenced by the support for permeate-free products marketed as being more natural.

Fig 2.15 - Major private label contracts by region

	Woolworths*	Coles
Qld	Parmalat	Lion
NSW	Parmalat	Lion
Sth NSW, Nth Vic	MG	Lion
Vic	Lion	Lion
SA	Lion	Lion
Tas	Lion	Lion
WA	Lion	Harvey

\*A tender process is underway at the time of this report

Fig 2.13 - Comparison of average retail prices for 2 litre branded milk (Jan 2011 to Feb 2013)

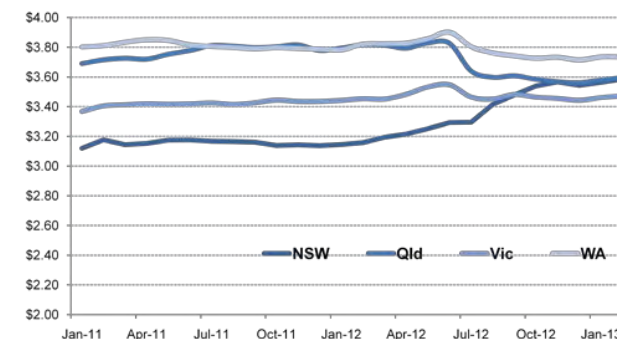


Fig 2.14 - Brand share of supermarket sales (Dec 2010 to Feb 2013)

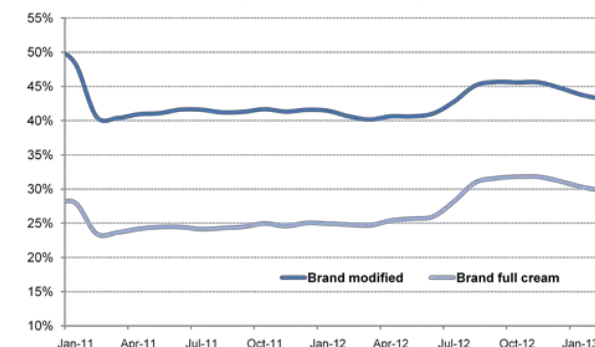
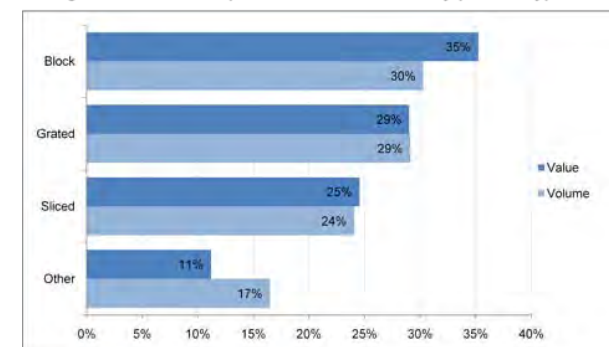


Fig 2.16 - Share of supermarket cheese sales by product type



## The Australian dairy market

### Cheese category

#### Key points

- The retail market remains subdued due to a squeeze on discretionary consumer spending. Domestic retail sales volumes fell 1.6% in the year to February 2013.
- Sales volumes to non-grocery customers fell by 5% across all cheese types over this period.
- Sales of the dominant type—cheddar—were flat in overall terms with non-grocery channels weakest.
- Average per kilogram supermarket prices across the category fell by 1.7% to \$14.51 in 2012 in a tight retail market. Speciality cheeses rose in unit value but major cheddar products generally lost unit value.
- Supermarket sales volumes for all cheese types increased marginally by 1.5% in 2012. Total supermarket sales value edged up from \$1.53 billion to \$1.55 billion in chilled cheese and from \$406 million to \$434 million.

#### Major market dynamics

- Weaker export prices have pressured wholesale values.
- Major changes have taken effect in 2012/13 in contract supply of private label to Coles—Bega replacing Fonterra with a 5-year agreement.
- Food service sales volumes have been weakened by a stronger focus on cost savings in the value segment of the QSR market and greater diversity in casual dining away from traditional fast food options.
- There is sustained competition from lower priced imported product.

#### Market structure

- The supermarket channel holds a 47% share of sales for the overall cheese category.
- Private label products represented 21% by value and 32% by volume in supermarket sales in the 2012 calendar year, which reflects a growth in share by brands.
- Cheddar is the major cheese type with almost two-thirds of sales volumes in 2012, of which 53% is sold into the supermarket channel.

#### Consumer trends

- Sales in supermarket outlets show a steady convenience trend towards sliced products in preference to block cheese sales.
- Consumers pay more for convenience: average retail prices for sliced and grated products exceed block prices.
- Eighty-six percent of adults consume cheese on a weekly basis. The consumption frequency is higher in the 60+ year age group, and lowest in the 18-24 year age bracket.

Fig 2.17 - Share of supermarket cheese sales by product type

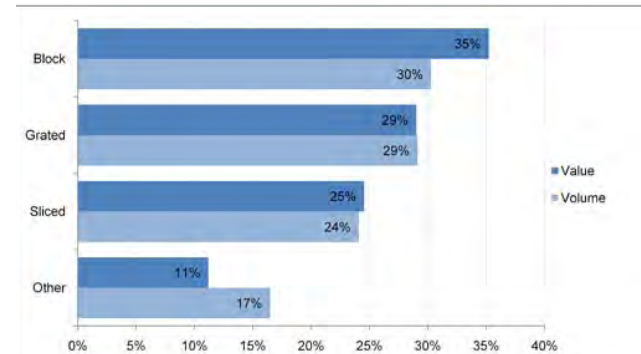
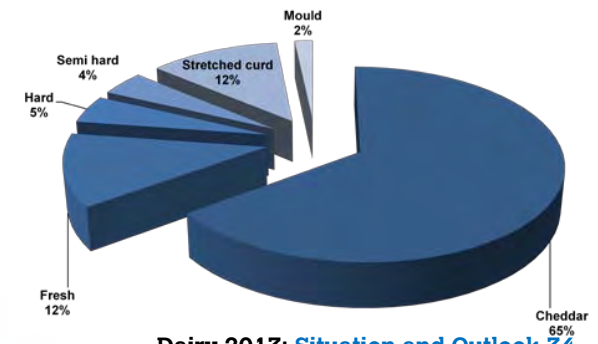


Fig 2.18 - Average supermarket retail prices for cheese packs in \$/kg



Fig 2.19 - Sales by cheese type (total volume) in 2012



## The Australian dairy market

### Dairy spreads category

#### Key points

- Supermarket sales of dairy spreads have lifted almost 5% in value (4% in volume) year-to-March 2013, but slowed in the first quarter of 2013 compared to the prior year.
- Butter sales are growing faster than dairy blends, especially in early 2013.
- Over the year to March 2013, average supermarket retail prices rose 1%. There have been limited gains in unit selling prices in the supermarket category over the past year, due to the fall in wholesale values of butter and price differentials between brand and private label lines.
- Non-grocery sales volumes were lower in the year to March 2013.

#### Major market dynamics

- Butter products remain a feature of the deep-discounting campaigns by supermarket chains.
- Strong price competition from margarine has added to the pressure on dairy blends sales in price and volume terms.
- Food service sales volumes have been affected by a decline in dining out and increased cost-sensitivity of food service outlets. Higher wholesale prices in the prior year have probably led to some substitution with vegetable oils.

#### Market structure

- The supermarket channel held a 78% share of wholesale sales for the overall dairy spreads category (butter and blend products).
- Private label penetration in supermarket sales for dairy spreads was 33% in the year to March 2013, much of which is in butter products.
- Manufacturer brands dominate sales of dairy blends.

#### Consumer trends

- 'Taste' and 'natural' are the primary drivers of preference for butter, although the perception of saturated fat levels is an ongoing concern for consumers.
- The trend to in-home cooking and baking has supported higher butter sales.
- Acceptance of innovation in the 'better for you' functionality of vegetable oil spreads has provided stronger competition in the premium end of the category.

Fig 2.22 - Changes in sales volumes in 2012 v 2011

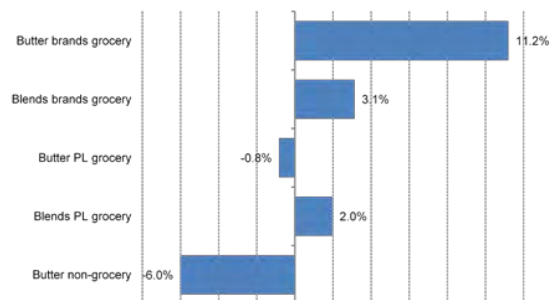


Fig 2.20 - Sales mix in Australia (total volume) in 2012

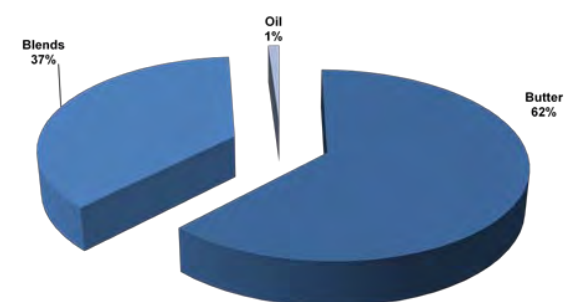


Fig 2.21 - Average supermarket prices in \$/kg

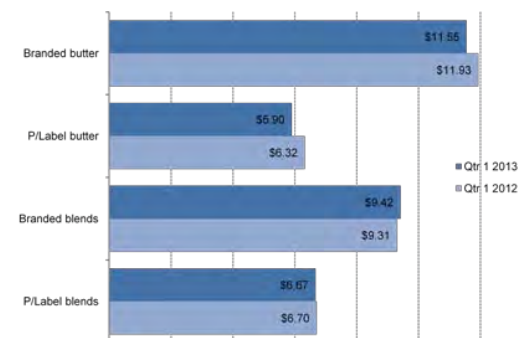
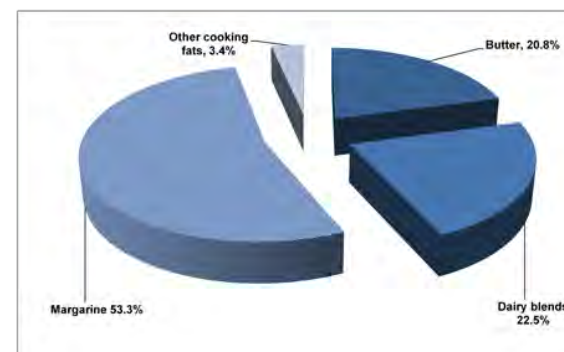


Fig 2.23 - Mix of supermarket sales by volumes in 2011/12





## The Australian dairy market

### Fresh dairy category

#### Key points

- Fresh dairy products (yogurt and desserts) were worth \$1.31 billion in supermarket sales in 2012 and grew 4% in total value, after posting 7% growth in 2011.
- A mix of value and convenience influenced product mix in the year, but changes in mix steadied this year compared to prior years. Multipack products continued to grow their share of product mix to 28%, reflecting the expanding importance of convenience snacking to the category.
- Despite intense brand rivalry and greater promotional activity based on price, average yogurt category prices rose 1.8%.
- Dairy snacks again lost supermarket sales volumes in 2012 by 1.6% but grew total value by 2%.
- Wholesale cream sales volumes in 2012 were steady with the prior year.

#### Major market dynamics

- Brand dominated categories of yogurt and desserts are highly important brand platforms for processors.
- Fresh dairy is a highly competitive category, with a number of major international brands (Ski, Yoplait, Dairy Farmers, Vaalia) and a set of local second tier brands (Bulla, Jalna, Gippsland/Chobani).
- The category offers diversity in product end use, appealing to convenience, health and indulgence preferences.
- Yogurt products have continued to increase their penetration of a range of meal and snacking occasions.

#### Market structure

- Supermarket share for the overall yogurt and dairy snacks category is close to 90%.
- Private label penetration in the yogurt category is low—measured at just 3.3% of volume in 2012.
- The supermarket share of sales of cream products was 53% in 2012.

#### Consumer trends

- Convenience and healthy snacking are the keys underpinning demand drivers in the yogurt category.
- There is ongoing acceptance of consumers of diversity in innovation in product flavours, styles and types, with an increasing focus given to health benefits of yogurt consumption.
- Strong uptake of 'better for you' and gourmet products ahead of traditional product styles.
- 57% of adults consume yoghurt on a weekly basis. Consumption is higher in the 60-plus group due to greater concern for well-being and awareness of the health benefits of products.

Fig 2.24 Share of yogurt sales by pack in supermarket

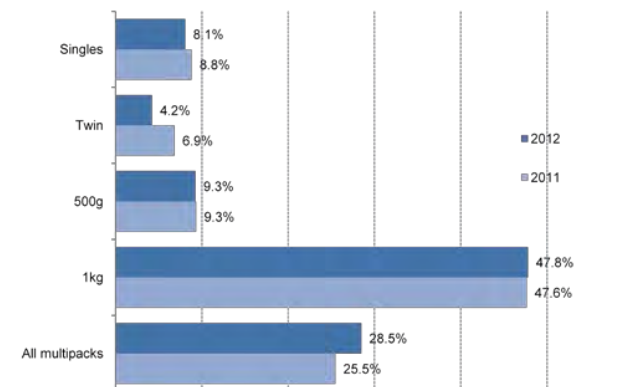
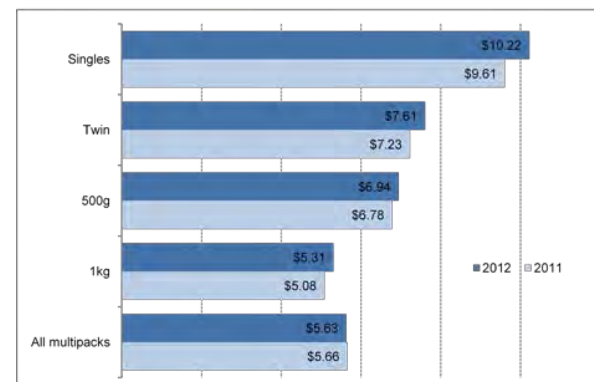


Fig 2.25 Unit prices of yogurt by pack in supermarket





# Chapter 3

## The industry value chain

### Highlights

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## The industry value chain

### Ongoing change in the processing sector

Major developments affecting the ownership of dairy businesses in the Australian industry over the past 12 months were:

- Murray Goulburn (MG) reached an agreement for a “strategic partnership” in Tasmanian Dairy Products (TDP) with Mitsubishi Corporation. The agreement sees MG retain a 56.1% majority shareholding while Mitsubishi acquired a 24% holding in TDP, and local Tasmanian investors hold 19.9%.
- MG raised its stake in MG Qingdao, its China-based infant formula joint venture, from 51% to 100%.
- Nestlé’s acquisition of Pfizer Nutrition in Australia was approved by the Australian Competition and Consumer Commission (ACCC) conditional on the global giant (a) selling an exclusive 10-year license for Pfizer’s local infant nutrition brand portfolio to an ACCC-approved independent purchaser, and (b) agreeing to a further 10-year ‘blackout period’ that prohibits Nestlé from marketing Pfizer’s brands.
- French company Lactalis, parent company of Parmalat Australia, purchased specialist cheese maker Jindi for a reported \$20m in late-2012 from Menora Foods, its distribution company.
- Bega Cheese increased its shareholding in Warrnambool Cheese & Butter (WCB), taking its stake from 16.1% to 17.1% (as at March 2013); roughly one month later, after offering \$4.60 per share, MG increased its shareholding in WCB from 11.4% to 16.3%. Although neither Bega nor MG has announced any formal takeover bid, 19.9% represents the threshold shareholding level allowed under the Corporations Act before triggering a takeover offer.
- Australian private equity group Pacific Equity Partners (PEP) acquired Nestlé’s Peters Ice Cream business and licences to market local and other global Nestlé ice cream brands.
- Brownes purchased Canning Vale-based Casa Dairy Products, a specialist cheeses and yoghurt manufacturer. This latest development in the consolidation of the WA industry gives Brownes an expanded line-up of value-added branded products.
- Brownes Dairy also purchased the Ravenhill Dairy brand, processing assets including an on-farm milk processing plant and exclusive milk supply—estimated at 8m litres p.a.—while the Ravenhill family retain ownership of the farm and the 1,100 cow dairy herd.

### Murray Goulburn (MG)

Significant corporate changes have continued over the last 12 months at MG in addition to those listed previously.

- In April, MG announced a 10-year contract to supply Coles with approximately 200m litres of fresh white drinking milk under Coles’ private label. Supply commences from 1 July 2014. In addition, MG reached an agreement to supply fresh milk under its own Devondale brand as well as return its Devondale-branded cheeses to the retailer’s shelves before the close of 2013.
- To fulfil its new drinking milk supply agreement with Coles, MG is investing \$120m in building two new state-of-the-art milk processing plants (See Farmgate Market for more details).
- In August 2012, MG announced a \$200m investment programme to expand capabilities in UHT processing, butter and cheese production to seize export opportunities in Asia and the Middle East.
- Goals under the programme include doubling UHT processing capacity to 500m litres pa, expanding butter production to 20,000 tonnes and cheese production to around 60,000 tonnes p.a. MG stated that it would achieve its goals by improving automation and developing new pack formats on UHT lines, installing a new butter line at its Koroit plant and setting up a new automated cheese cut and wrap facility. MG is expected to announce further details around mid-2013.

Other major developments for MG in FY13 include:

- MG opened its new offices in Dubai (as Middle East North Africa [MENA] office), Singapore (as a South-East Asian headquarters) and Vietnam;
- Tasmanian joint venture TDP moved its first shipment of milk powder from its \$75m Smithton plant in spring 2012. TDP is reported to have contracted 60-plus local suppliers and the company is planning to grow its milk intake to manufacture product mainly destined for Asian and Middle Eastern markets.

### Fonterra Australia

- Fonterra is investing \$6.5m to upgrade cheesemaking equipment at its Stanhope (Vic) facility to increase hard and cheddar cheese production. The company is also spending \$6m on upgrading its Tasmanian facilities at Spreyton and Wynyard to expand its processing and export capabilities.

## The industry value chain

- Fonterra is closing its Cororooke (Vic) plant and planning to upgrade its Cobden and Dennington sites in south-west Victoria in pursuit of achieving greater efficiencies and growth potential, investing \$20m over the next three years. Upgrade plans at Cobden include redevelopment of the former National Foods plant next to the Fonterra site.
- Fonterra has signalled it will reduce the number of its brands in Australia from over 20 to 4 or 5. The reduction in brands was flagged as Fonterra announced its financial results for first-half FY13 which saw earnings from the Australian consumer business down 31%.

## Lion Dairy & Drink Division (LDD)

- LDD confirmed in early April 2013 that it had lost contracts to supply Coles private label drinking milk (from 1 July 2014) in Victoria, NSW and QLD. At the same time, LDD reconfirmed that it was undertaking a 'strategic review' of its business. LDD's parent, Kirin, has recorded \$2.2bn in accounting write-downs over the last four years.
- Earlier in 2012/13, LDD continued rationalisation of its manufacturing capacity with the closure of its milk plant at Baulkham Hills in Sydney and centralisation of operations at the nearby Penrith plant to ensure 'long-term sustainability.'
- Construction and installation work is underway at 'The Heritage,' LDD's cheese production facility at Havenview, Burnie (Tas). LDD is committing \$140m to upgrade the site in a move which will lead to the company consolidating its cheese production from the Kings Meadow (Tas) and Simpson (Vic) plants by the end of 2013, two major cheese making technologies and up to five packaging lines will be installed at 'The Heritage.' Upon completion of the work, production at the site is expected to increase from 11,000 to 25,000 tonnes per year.
- LDD has purchased the 1,145ha Horizon Glen dairy farm properties on King Island (Tas) 'to meet current and projected volume requirements.'
- LDD doubled capacity at its Morwell (Vic) plant, spending \$50m, upgrading cooling, packing and logistics facilities to enable output of 70,000-80,000 tonnes.

## Bega Group

- Bega Cheese has announced investments in expanding cheese manufacturing capacity (\$2m) and bolstering milk protein manufacturing capabilities (\$8m). Bega concluded arrangements with Mead Johnson enabling one of Tatura's dryers to produce an additional 5,000 tonnes of product. Bega has also entered into an agreement to continue manufacturing milk protein concentrates for Ingredia for the next five years.
- Bega reported it is working on purchasing land and gaining approval for an expansion of the Tatura plant as part of its efforts to meet demand for high value-added products from Asia and the Middle East.

## Warrnambool Cheese & Butter (WCB)

- WCB has flagged several new initiatives expected to support improved financial performance through a focus on value-added projects:
  - o An agreement with NZ's Tatura Co-operative to construct a lactoferrin plant at WCB's Allansford site;
  - o An upgrade of existing whey protein concentrate (WPC) capability to enable the manufacture of instantised WPC with applications in sports nutrition and infant formula.
  - o A deal to supply Mitsubishi Corporation with premium milk powder over three years. WCB had undertaken an upgrade of its skim milk powder plant during the first half of the year to enable production of higher grade powders.
  - o WCB has signed a long-term agreement with Kraft Foods Australia under which Kraft Foods will manufacture up to 5,000 tonnes p.a. of cream cheese to be sold under WCB's Sungold label in Asia and the Middle East.
  - o WCB received \$1.3m in federal government funding to assist in the \$5.3m expansion of the company's facility at Mil Lel (SA) to facilitate production of specialty cheese and the cutting and packing of WCB's Great Ocean Road brand cheese products stocked in Coles (4,000 tonnes of cheese p.a., sold nationwide).

## Norco Co-operative

- Norco bought back the 'front end' of its milk business including licensing rights to its branded fresh milk and dairy products from Fonterra Brands. The deal saw the northern region cooperative re-enter the marketing, sales and



## The industry value chain

- distribution business for fresh milk and take back staff, processing and also packaging operations at its Raleigh and Labrador sites.
- Norco has subsequently announced a long-term fresh drinking milk supply agreement with Coles. Norco had previously been contractually prevented from dealing with retailers due to its arrangement with Fonterra Brands.
- Under its new contract with Coles, Norco will supply the supermarket in south-eastern Queensland and northern NSW. To deliver on its part of the 5-year deal, Norco is expecting to spend \$6m on upgrading its plant at Labrador, which will see the cooperative supply Coles with an additional volume of 50m litres of milk p.a., effective from 1 July 2014.

## Others

- Chobani significantly expanded its yoghurt manufacturing capacity in Australia at its Dandenong South (Vic) facility, formerly operated by Bead Foods, tripling potential annual output to over 30,000 tonnes.
- A2 Corporation opened its new Smeaton Grange facility near Camden (NSW), further increasing its production capabilities in Australia. At a cost of \$15m, the new plant is expected to process approximately 60m litres of milk p.a.
- Freedom Foods is reportedly raising a further \$15m with a view to growing its UHT business and building a plant in the Murray Dairy region. The company raised \$15m in December after selling shares in A2.
- Chinese company Funton Holdings purchased the former Bonlac facility at Toora (Vic), pending planning approvals. A planning application was submitted in late 2012 to redevelop the facility for milk drying, powder blending and canning capabilities with a view to exporting infant milk formula product to China. A locally registered joint venture company with local and foreign investors, Viplus Dairy, is expected to operate the facility.
- Tamar Valley Dairy, the Tasmanian based specialist in probiotic yoghurts and cultured milk drinks, secured a contract to supply Coles around 3,000 tonnes of Coles brand yoghurt annually over five years. Tamar expects to increase output by approximately 40%; however, the company has recently encountered cash flow difficulties connected with delays in expanding its factory.
- United Dairy Power (UDP) is investing \$2m in a new cheese shredding line at its Murray Bridge (SA) factory. UDP intends to shred and pack mozzarella cheese manufactured at its Jervois site, to be sold under the Caboolture brand.
- Aussie Farmers Direct (AFD) and Organic Dairy Farmers (ODF) are investing \$1.2m to manufacture butter at AFD's Camperdown (Vic) factory. The factory is expected to produce 1-2m butter packs in the initial 12 months of operations. Two butter lines will supply butter to be sold under the AFD brand in addition to a certified organic butter to be sold under ODFs' own brands.
- China's Wahaha is reportedly still pursuing opportunities to invest in Australian dairy in either Victoria or Tasmania after also showing interest in potential opportunities in WA.

## Further changes

- The scope for Australian dairy manufacturers as acquisition targets remains limited, despite the fact that there exist a number of diverse businesses within the Australian industry.
- Speculation about merger and acquisition activity in the Australian dairy industry was nonetheless revived over the last 12 months, particularly in the wake of both Bega and MG recently lifting their holdings in WCB.
- Changes in structure of private label supermarket milk contracts are likely to translate into more competition in branded milk as new brands are introduced amplifying pressure on existing fresh milk processors.
- The reduction in volumes required for some contracts in Victoria and NSW suggests operational adjustments will be required to accommodate possible cost increases resulting from reduced processing volumes.
- Ultimately, the longer term implications remain unclear as the fresh milk market remains in a state of flux following the introduction of new contracts and arrangements.

## The industry value chain

### Changes in the farmgate market

- While more than half of national milk production is processed into products sold on the domestic market, the returns available from dairy products sold in domestic markets such as cheese and butter remain governed by export market prices. As a result, the returns to more than 70% of milk production are set by world markets.
- MG remains the largest farmer-owned manufacturer operating in southern production regions, and accordingly plays a critical role in setting the farmgate value of milk in those regions, with which other milk buyers compete.

### Supply arrangements

- Fresh milk processors, under margin pressure in the milk category, continued to focus on matching milk supply volumes to monthly processing needs to avoid costs associated with handling surplus milk.
- In February this year Dairy Australia (DA) foreshadowed an increasing trend by supermarket retailers in their marketing effort to link product to provenance. This trend was earlier exemplified by Coles' initiative in sourcing product from WCB marketed under Great Ocean Road brand and by Woolworths' labelling the state of origin for products including its private label milk.
- In April this trend accelerated when Woolworths (WOW) and Coles announced direct supply arrangements with dairy farmer groups for the supply and marketing of fresh drinking milk. Both arrangements involve the supermarkets seeking to increase farmgate price transparency and improve public relations; each claim to be 'cutting out the middle man' by sourcing milk directly from farmer owned groups (see next page for further details).

### Victorian manufacturers

- MG has flagged several changes to its supplier payment system, including:
  - replacing the three existing base prices with one base price;
  - flattening the price curve by increasing the base price over Sep-Dec peak months vs. off-peak months;
  - simplifying the flat milk incentive ('Domestic Incentive');
  - altering the protein/fat ratio to 'better reflect the recent increase in market value of fat products;'

- simplifying productivity incentives/volume charges; and
- amending the milk pick-up charge to 'better reflect true costs.'
- MG also announced a range of new initiatives to assist its shareholder suppliers, including
  - 'Next Generation Dairy Rebate,' a rebate on the investment made in the start-up phase;
  - 'Workforce Support,' services including case management of immigration applications;
  - 'MG Partnerships,' MG attracting equity funding for land purchases and then leasing the land to farmer shareholders; and
  - a range of new finance options under the labels 'MG Supplier Finance' and 'MG Trading Finance' providing support to help manage cash flow and sustainability.
- Fonterra and the Bonlac Supply Company (BSC) have signed a new 5-year supply arrangement that would see BSC and Fonterra's other supplier group, Fonterra Milk Australia, come together as a single organisation when BSC's current supply arrangement expires in 2014. Under the new arrangement, BSC suppliers would be able to acquire an interest in the Fonterra Shareholders Fund (FSF). The FSF is dual-listed on the Australian and New Zealand stock exchanges and enables non-suppliers to hold non-voting economic interests.

### Woolworths Farmers' Own

- Woolworths (WOW) officially launched the 'Farmers' Own' brand at Sydney's Royal Easter Show. Also involving new entrant 'Milk2Market,' WOW's action sees the supermarket major move toward supply agreements with a farmer group from Manning Valley (mid-North Coast NSW), post ACCC approval. The initial trial of un-homogenised 'Farmers' Own' will involve Parmalat processing up to 15m litres of the group's milk p.a.
- The WOW deal involves 7-8 farmer members from a group of 54 farmers, originally formed to work with Parmalat several years ago. The group reportedly took the direct supply initiative to WOW having encountered difficulties in supplying Parmalat.
- Key goals for the Manning Valley farmers in seeking a direct supply agreement with WOW included securing (a) long-term supply arrangements, (b) higher

## The industry value chain

farmgate milk prices (10-15% higher is the stated expectation), and (c) influence on how the producers' product is marketed.

- Parmalat is expected to be involved on a fee-for-service basis in processing up to 15m litres of the group's milk per year of un-homogenised Farmers' Own.
- The Manning Valley farmers initially proposed that the Farmers' Own product would be un-homogenised, reflecting their desire to influence how the product is marketed; subsequent reports have included mention of both homogenised and unhomogenised milks, priced between \$2.00 and \$2.50 per litre.
- NSW supermarket retail sales of fresh white milk in the last three years average approximately 300m litres; so the 15m litres under the Farmers' Own initiative would represent less than 5% of fresh white milk sales in the state. Yet that 15m litres represents around 14% of WOW's annual private label sales in NSW. Farmers' Own products are expected to be on shelves in several months.

### Milk2Market

- The fledgling Milk2Market model represents a significant departure from traditional exclusive supply arrangements between farmers and processors or brokers. Offering milk supply management and a milk exchange, the model would enable individual farmers to sell to multiple buyers. Farmers can choose to forward contract for a fixed term for all or part of their milk supply, potentially offering similar risk management options for the dairy industry as other agricultural sectors have enjoyed for some time.
- For buyers of milk, the Milk2Market model would allow for direct contracts with individual farmers, facilitating increased transparency and traceability. For some processors and manufacturers, the benefits may be in more efficient supply management via Milk2Market.
- In a direct contracting scenario, there would be a toll processing arrangement which may not fit with the business models of all processors and manufacturers. Ultimately, the success of the Milk2Market model is expected to depend on the willingness of all participants along the supply chain embracing the reintroduction of an exchange-type system for buying and selling milk. While the establishment of an effective milk exchange should allow for greater price transparency for all industry participants, it could be some time before there is sufficient take-up and liquidity to make it an effective mechanism.

### Coles – MG

- The scale, investment and implications of the new Coles fresh drinking milk supply deals are expected to change the nature of domestic milk supply in Australia.
- MG has publicly stated that its 10-year agreement with Coles secures a premium for supply of 200m litres p.a. of fresh drinking milk (approximately 5% of its total production volume) along with rise and fall provisions, contingent on farmgate price movements.
- While Coles has said that the deal will usher in greater supply chain transparency because both MG and Norco publish their milk prices, there are not yet any details available that enable a full understanding of how the farmgate pricing will work in practice.
- MG also notes that the deal will be profitable due to the efficiencies gained in using the latest technology at the two new milk processing plants: a greenfield site in Sydney's western suburbs and one adjacent to MG's existing logistics centre at Laverton on Melbourne's western outskirts.
- MG maintains that it has locked in a fixed premium which is expected to deliver additional profits to farmers through higher farmgate prices.
- MG intends to grow its milk supply to meet Coles' requirements with new farmer-suppliers from both existing and new supply regions, including in NSW to supply the planned Sydney processing plant.

### Coles - Norco

- Having reacquired its own consumer brands and the associated marketing business from Fonterra Brands in November 2012, Norco has been freed to enter into a direct supply agreement with Coles.
- Under its 5-year agreement with Coles, Norco becomes from 1 July 2014 the supermarket major's supplier of fresh drinking milk for private label in southeast QLD and northern NSW, where Coles was previously supplied by LDD. Norco is expected to supply around 65m litres per year to Coles.

## The industry value chain

### Fresh milk processors

- Although Lion and Parmalat face changes from 1 July 2014, existing contracts for private label milk remain in place.
- Further supply chain disruption is expected in the lead-up to the changes in private label suppliers by supermarket retailers. Lion reduced milk intake in QLD and on the NSW south coast, citing the loss of private label supply contracts and freight costs as key factors in the decision to end the contracts of seven suppliers. Dairy Farmers Milk Co-operative (DFMC) ended contracts with its 22 Mt Gambier (SA) suppliers, following the sale of Lion's cheese factories at Murray Bridge and Jervois to UDP.
- Two-tier pricing systems were introduced to limit risks of exposure to potential changing product returns mix and to send clear signals as to the size and value of the available market milk volumes required. However, LDD in late 2012 announced that it would pay Tier 1 prices for all milk supplied by its NSW and southern QLD suppliers for the period from February-end of June 2013, with an average price around 48 cents per litre.
- Outside Victoria and SA, LDD and DFMC farmers were originally paid Tier 1 milk prices only on milk supply volumes corresponding to the processor's regional requirements ("anticipated full demand," AFD). Supply volumes in excess of these contracted Tier 1 volumes received Tier 2 prices.
- As milk volumes declined, LDD in November 2012 signalled that its requirements would change: the processor subsequently paid Tier 1 prices for all supply volumes received from farmers in Tasmania (effective Jan-Jun 2013), NSW and south-east QLD (effective Feb-Jun 2013). It remains unclear if LDD will reintroduce Tier 2 pricing.

### Farmgate prices in 2012/13

- Farmgate prices for southern producers will finish the 2012/13 season 8-10% weaker than the prior season, and are expected to average around \$4.90 to \$5.10 per kgMS.
- Milk prices in NSW and QLD have been lower than those in the prior year for most producers due to reduced Tier 1 prices, lower Tier 1 contract volumes and changes to contractual arrangements. Over time, the northern fresh milk market pricing has become increasingly complex as processors seek to balance fluid milk supply with demand.

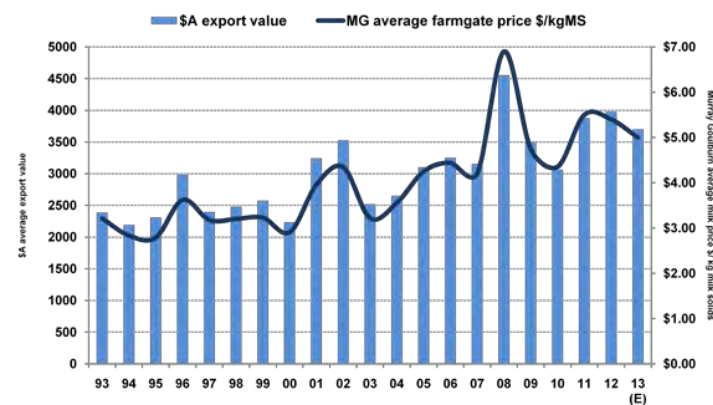
- A summary of historical average farmgate milk prices paid across Australia is set out on in Fig 3.3 page 44.

### Forecast milk prices in 2013/14

#### Southern regions

- The 2013/14 opening farmgate milk price announcements remain critical signals for farmers assessing short-term decisions and their longer term future in the industry.
- Challenging seasonal conditions, high input costs and uncertainty around how long commodity prices remain high could delay opening price announcements.
- Different exposures to world market conditions and company strategies are broadening the range of achievable milk prices. Full-year prices are forecast to be in around \$5.50/kgMS, implying opening prices are in the vicinity of \$5.00/kgMS.

Fig 3.1 - Average export returns and milk prices 1993 to 2013





## The industry value chain

- This outlook is based on the following assumptions:
  - dairy product prices realising the international commodity spot price levels in early 2013;
  - the Australian dollar valued between USD\$1.00 to USD\$1.05;
  - high input costs preventing major export growth from US suppliers;
  - no financial shocks that would significantly disrupt commodity trade and threaten economic growth;
  - the forecast is indicative given the proliferation of pricing options, variations in monthly pricing, incentives, volume and loyalty bonuses.

### Northern and western fresh milk regions

- Prices remain under pressure in QLD and NSW regions as regional milk flows are adjusted to meet fresh market demand requirements.
- Convergence in retail liquid milk prices across the states may add further pressure to the northern processors. The major unknown is the long-term impact of new supply arrangements currently being organised between major supermarkets and processors.
- Note the farmgate milk price forecast for southern regions does not directly apply to suppliers in north and western fresh milk production regions. The primary reasons are due to different market conditions, cost structures, flat milk production curves, and contractual arrangements. To illustrate differences in regional pricing, refer to fig 3.5, Typical factory prices paid.

Fig 3.2 Average farmgate milk prices paid

		2008/09	2009/10	2010/11	2011/12 (p)
NSW	cents/litre	52.4	48.7	48.3	47.4
	\$/kg milk solids	7.29	6.72	6.74	6.60
VIC	cents/litre	39.1	33.9	42.0	40.6
	\$/kg milk solids	5.14	4.49	5.58	5.46
QLD	cents/litre	57.2	55.8	53.1	53.6
	\$/kg milk solids	7.89	7.57	7.26	7.33
SA	cents/litre	44.6	34.6	38.0	41.0
	\$/kg milk solids	6.19	4.73	5.36	5.76
WA	cents/litre	49.0	42.4	43.4	41.9
	\$/kg milk solids	6.77	5.96	6.03	5.97
TAS	cents/litre	41.3	34.6	43.2	39.9
	\$/kg milk solids	5.40	4.46	5.59	5.19
AUST	cents/litre	42.4	37.3	43.2	42.0
	\$/kg milk solids	5.66	4.98	5.80	5.69

## Policy issues

### New NHMRC Australian Dietary Guidelines

- The National Health and Medical Research Council (NHMRC) Australian Dietary Guidelines form the basis of national nutrition policy and dietary healthy eating messages in Australia.
- Review of the 2003 Australian Dietary Guidelines commenced in 2009. Dairy Australia, on behalf of the dairy industry, has actively contributed to the consultation process.
- The new Australian Dietary Guidelines were released in February 2013. The Guidelines, based on whole foods provide *'up-to-date advice about the amount and kinds of foods we need to eat for health and wellbeing.'* The guidelines are accompanied by the 'Australian Guide to Healthy Eating' consumer resources and are available at [www.eatforhealth.gov.au](http://www.eatforhealth.gov.au).
- The guideline on dairy foods advise *'milk, yogurt, cheese and or alternatives, mostly reduced fat.'* which falls under the guideline to enjoy a wide variety of nutritious foods from the five food groups every day.

### Some key changes for dairy foods include:

- Strengthened evidence supporting the health benefits of milk, cheese and yogurt (regular and reduced fat). According to the NHMRC, 'Consumption of milk, yogurt and cheese can protect us against heart disease and stroke, can reduce our risk of high blood pressure and some cancers, may reduce our risk of type 2 diabetes and may contribute to stronger bones.' These are some of the most important causes of death and disability in Australia.
- The 2013 NHMRC Australian Dietary Guidelines evidence statements on dairy foods (milk, cheese and yogurt) and health are the envy of international dairy colleagues.

*"For now, on this side of the world, we can only dream of that kind of support for dairy as our regulators continue to focus on fat, salt and sugar, with dairy been seen as a transgressor rather than a wholesome food"*

Dr Judith Bryans in an article entitled "Aussie Style" Milk Industry 2012.

- The guidelines allow for increased number of recommended daily serves of milk, cheese and yogurt for most population groups. For women over 50 years the minimum recommended number of daily serves has doubled from 2 to 4

while for men 70 years and under, women 50 years and under, and teens the recommendations have increased by half a serve.

- Advice to individuals with lactose intolerance that milk may be well tolerated by those with lactose intolerance if consumption is spread throughout the day and if consumed along with other foods. Cheese contains little lactose and the lactose in yogurt is partially broken down by bacteria and should be well tolerated.

### Opportunity to encourage Australians to enjoy more dairy foods


- The majority of Australians are currently missing out of the many benefits to health dairy foods provide, with 9/10 women and 7/10 men not meeting these new recommendations.
- Experts at the University of South Australia have previously estimated that \$2bn in healthcare costs could be saved if Australians consumed the recommended amount of dairy foods (based on the lower 2003 recommendations)—a figure comparable to the entire public health budget.
- The stronger evidence base and increase in recommended number of daily serves of dairy in the new Australian Dietary Guidelines provide a significant opportunity to enhance efforts to change people's eating habits to consume more milk, yogurt and cheese. The more Australians that achieve their minimum recommended intake of dairy foods, the greater the improvements in health and wellbeing.
- For further information email [ecahill@dairyaustralia.com.au](mailto:ecahill@dairyaustralia.com.au)

Fig 3.3 New NHMRC Australian Dietary Guidelines

### How much is a serve of milk\*, yoghurt\*, cheese\* and/or alternatives?

**A standard serve is (500–600kJ):**

- 1 cup (250ml) fresh, UHT long life, reconstituted powdered milk or buttermilk
- ½ cup (120ml) evaporated milk
- 2 slices (40g) or 4 x 3 x 2cm cube (40g) of hard cheese, such as cheddar
- ½ cup (120g) ricotta cheese
- ¾ cup (200g) yoghurt
- 1 cup (250ml) soy, rice or other cereal drink with at least 100mg of added calcium per 100ml



**The following foods contain about the same amount of calcium as a serve of milk, yoghurt or cheese:**

- 100g almonds with skin
- 60g sardines, canned in water
- ½ cup (100g) canned pink salmon with bones
- 100g firm tofu (check the label as calcium levels vary)

\*Choose mostly reduced fat

Fig 3.4 Minimum recommended number of serves of milk, yogurt, cheese and /or alternatives per day

	Serves per day		
	19-50 years	51-70 years	70+ years
Men	2½	2½	3½
Women	2½	4	4
Pregnant women	2½	-	-
Breastfeeding women	2½	-	-

	Serves per day				
	2-3 years	4-8 years	9-11 years	12-13 years	14-18 years
Boys	1½	2	2½	3½	3½
Girls	1½	1½	3	3½	3½

### Australian Food Plan

- The Australian Government is developing Australia's first ever National Food Plan which will ensure that the government's policy settings are right for Australia over the short, medium and long-term. The aim of the plan is to foster a sustainable, globally competitive, resilient food supply that supports access to nutritious and affordable food.
- The National Food Plan will be developed through a green paper/white paper process. The next step, a white paper, was still under preparation at the time of writing.

## Murray Darling Basin Plan

- The Murray Darling Basin Plan was signed into law on Thursday, 22 November 2012. It aims to recover 2,750GL of water for the environment; 1,577GL has already been recovered since 2008, including 1,261GL bought back mainly from irrigators.
- Total buybacks are capped at 1,500GL under the current water recovery plan. However, the current Government reserves the right to revert to more buybacks if less than 600GL is achieved through planned infrastructure works (only 316GL so far contracted) and/or less than 650GL can be offset through environmental works to deliver similar or better outcomes with less water.
- The current water recovery strategy will reduce annual average water available for irrigation, trade and carryover by about 26% in the southern Basin. This presents challenge for dairy farmers, who will need to boost efficiency by 20-25% for milk production to recover to pre-drought levels.
- Under the Basin Plan, the reliability of water entitlements held by dairy farmers in QLD, NSW, Victoria and SA will remain the same. For those in the southern connected system who are more reliant on the temporary market, there may be some times when water is scarce and expensive. Conversely, dairy farmers with allocation to sell to horticulturalists in dry years should get a reasonable price.
- The commitment to keep the Lower Lakes at 0.4 metres above sea level in 95 out of 100 years will maintain access to water for SA farmers on the Murray Swamps. The commitment to maintain the lakes at sea level in the five in 100 years anticipated to be dry may cause river levels to drop out of reach of farmers' pumps and damage levee banks by allowing them to dry out.
- The Government has committed to funding on-farm works over the next 12 years to help farmers in the southern Basin improve their productivity.
- The current On-Farm Irrigation Efficiency Program involves 50:50 sharing of water savings, whereby farmers transfer entitlements equivalent to half the savings they achieve to the environment, in return for the government's investment on their farm. For more information, contact Murray Dairy, MIL or the SA Murray Darling Basin Natural Resources Management Board.
- The government has committed \$1.57bn for an additional 450GL primarily from on-farm works from 2014-2024. This would replace the current 50:50 sharing model with a program in which participating farmers transfer half their savings in return for the government investment, and the government then pays an additional market \$/ML rate for the other half of the savings.

- In QLD Basin catchments, on-farm water efficiency works funding is available via the Healthy Headwaters Water Use Efficiency project. Further information is available from the QLD Department of Natural Resources and Mines.
- Dairy Australia's water research and development programs will also assist dairy farmers to adapt to the Basin Plan. Current research includes
  - improving border check irrigation performance in the Murray region;
  - performance of lucerne under variable irrigation strategies;
  - cool temperature, pasture based forage systems; and
  - forage assemblies for increasing productivity in livestock systems.

## Energy and carbon policy

- Rising electricity prices and the carbon price continue to affect input costs for dairy farmers. The \$23/t CO<sub>2</sub>e carbon price introduced on 1 July 2012 has compounded underlying power prices rising 72% over the last five years.
- Drivers of rising power prices that are separate to the carbon tax include increased investment in power poles and lines, and power companies passing back the costs of mandatory participation in Commonwealth and State renewable energy incentive schemes. Examples include the federal Renewable Energy Target (RET, introduced 2001), requiring 20% of electricity to be sourced from renewables by 2020. This may appear on bills as LREC and SREC cents/kWh; other companies bundle the costs into their overall cents/kWh charges. A state example is the Victorian Energy Efficiency Target (VEET) scheme, introduced in 2007.
- The carbon tax only directly applies to facilities like power plants and milk factories that emit more than 25,000 tonnes a year each. It doesn't apply directly to dairy farmers, but power plants and milk factories are expected to pass on higher costs through to farmers. While many dairy firms are highly exposed to world markets, no dairy firm or product line qualifies for relief from the carbon price as an Emissions Intensive, Trade Exposed activity.
- The carbon price affects dairy farmers because electricity is their main energy source. ABARES identified that electricity accounts for 2.4% of total dairy farm operating costs, compared to 0.6% in cropping and 1% in beef and sheep.
- The estimated annual per-farm cost of the carbon price ranges from \$5,600 - \$7,250, with a national average of \$5,880.



- This estimate reflects the following:
  - ABARES estimates of an average 9.7% rise in farm power bills, adding on average \$1,240 a year; individual farms are reporting much higher costs depending on their power supplier and production systems.
  - Milk companies passing back the cost of the carbon price paid directly on any factories emitting more than 25,000/t CO<sub>2</sub>e pa, and indirectly through higher electricity bills for processing. The average cost per farm is an estimated \$4,640, assuming 100% pass back to suppliers.
- In 2015, the carbon tax will be replaced by an Emissions Trading Scheme (ETS), enabling a market based carbon price. In August 2012, the Government scrapped its \$15/t floor price for when the ETS starts in 2015. Instead, our ETS and therefore the carbon market price will be linked to Europe's ETS – equating to around \$A4/t CO<sub>2</sub>e as of April 2013.
- Three ways increased electricity prices can be offset are
  - improved energy efficiency on-farm;
  - switching to business tariffs for the dairy;
  - joining group supplier schemes negotiated by some milk companies and peak agricultural bodies, offering substantial discounts.
- Dairy Australia is rolling out 900 energy assessments under the Smarter Energy Use on Australian Dairy Farms program, co-funded with a \$1 million grant from the federal Energy Efficiency Information Grants program. In NSW, dairy farmers can apply for a subsidised assessment under the NSW Government's Energy Saver program. Farmers interested in energy assessments should contact their local [Regional Development Program](#) for more information.
- At present the Carbon Farming Initiative (CFI) has limited value for the dairy industry. Current industry modelling suggests that well-managed dairy farms have no cost-effective options to profitably reduce methane and nitrous oxide emissions. The carbon price would need to be higher than \$23/t CO<sub>2</sub>e when the ETS links to the EU in 2015, to make the CFI cost-effective for dairy.
- There are also no approved methodologies for reduced rumen methane emissions, although DA is developing methodologies where appropriate and researching new emission reduction possibilities. Soil carbon storage currently offers limited opportunities, as well-managed, well-established dairy pastures

have few prospects for increased storage. Conservation planting for the carbon benefit alone is unlikely to be cost-effective but planting for other reasons may attract an extra CFI benefit.

- Dairy companies are investigating and implementing new technologies and efficiencies to reduce carbon price exposures. These actions will reduce costs, and therefore the potential pass back to farmers.

### Australia in the Asian Century

- In response to the scale and pace of Asia's transformation the Australian Government has released its "Australia in the Asian Century White Paper". The intention of the document is to assist Australia to become a more prosperous and resilient nation by integrating within the region.
- Some items in the "Australia in the Asian Century White Paper" that could be beneficial for Australian dairy are
  - Implementation of the new \$1.75bn National Partnership Agreement on Skills Reform to ensure that vocational education and training responds to industry and student demand.
  - Improved financing options to attract more private investment, encourage entrepreneurship, leverage government investment in R&D and commercialise ideas.
  - Greater competition in retail energy markets, efficient energy network investment, and a review of third-party access regulation.
  - \$1.2bn Clean Technology Program to support energy efficiency in manufacturing; Carbon Farming Initiative for farmers to mitigate costs/generate income.
  - Work towards a free trade agreement of the Asia-Pacific region, and participate in negotiations for the Trans-Pacific Partnership Agreement, and the Regional Comprehensive Economic Partnership.
  - Promotion of rules of origin in trade agreements that lower business compliance costs and facilitate trade.
  - Work with regional partners on 'behind the border' initiatives to open up market opportunities for Australia, especially in agriculture and food.

- R&D to build the capability of the food supply system throughout the region, to ensure a competitive industry and stronger trade and investment partnerships.

### New Zealand price outlook

- Fonterra's most recent full-year milk price forecast for the 2012/13 production season is NZ\$5.80/kgMS (AU\$4.89/kgMS)– down 5% on last season's final payment of NZ\$6.08/kgMS (AU\$5.04/kgMS).
- Fonterra expects to pay a dividend of 32 cents per share for the current season, meaning the total payout for a fully shared-up supplier is expected to be around NZ\$6.12/kgMS (AU\$5.16/kgMS).
- At the time of writing, Fonterra are yet to announce a forecast for the 2013/14 payout, however local industry sources expect a significant increase, to around NZ\$6.50 (AU\$5.48/kgMS).
- Prices between Australia and New Zealand differ year-to-year because of
  - product mix between major commodity products and co-products,
  - market mix between domestic and export markets,
  - management of currency exposures,
  - business models operated by dairy companies,
  - profit retention practices by dairy companies,
  - treatment of protein measures in quoted milk prices, and
  - the extent of competition in each market.
- The breakdown of Australian and NZ dairy exports by product illustrates a number of divergences between the two countries.
- Not only have NZ exports expanded rapidly over the past decade as milk production has surged, but this growth has been manifesting itself in a trend towards increasing specialisation in WMP: WMP exports of 409,000 tonnes in 2000 accounted for 28% of NZ dairy exports by volume; by 2012, WMP shipments totalled 1.26 million tonnes, and represented 44% of NZ dairy exports.
- In contrast, while Australia's export volumes have trended downwards as drought affected milk production, the proportional share of major commodities

has remained relatively consistent. Butter and AMF have received less focus, while the share of milk directed to WMP for export has also fallen. Increased focus on speciality products that fall into the 'other' category has seen its share increase from 22% to 33% of exports, while SMP and cheese have retained shares of just over 20%.

Fig 3.5 - Aust v NZ farmgate milk prices in nominal \$A kgMS

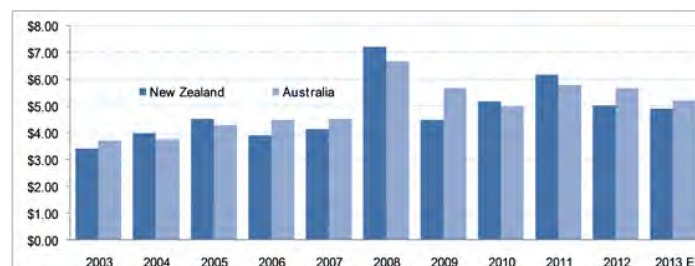


Fig 3.6 – Australia export mix 2000-2012

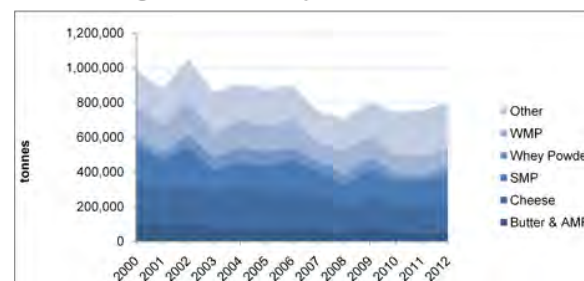
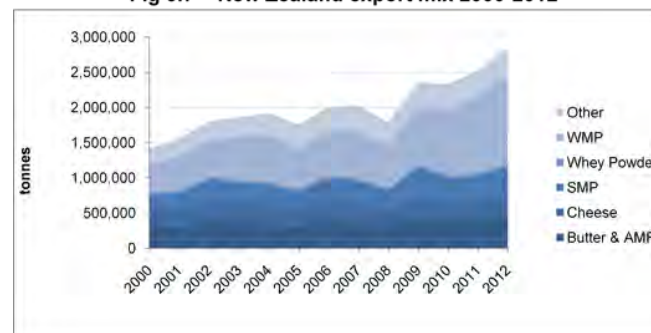


Fig 3.7 – New Zealand export mix 2000-2012





# Chapter 4

## The production sector

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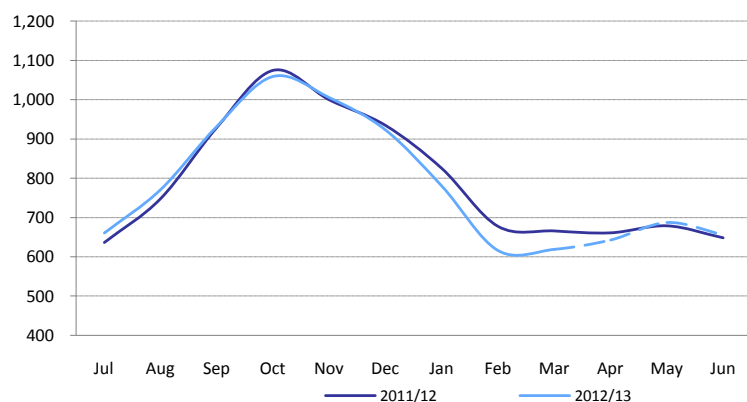


## The production sector

### Seasonal impacts 2012/13

- The 2012/13 season has proved a difficult one for many dairy farmers, as falling farmgate prices, higher input costs and unfavourable seasonal conditions have combined to challenge the viability of farm businesses.
- Spring conditions in south-eastern Australia were variable, and with reduced margins available to farmers, there has been little incentive to expand production. As a result, milk production is forecast to finish slightly down on 2011/12 at around 9.35bn litres.
- Cash flow challenges were brought sharply into focus as many farm businesses struggled to manage milk-to-feed price ratios and variable weather reduced home grown fodder yields. In some cases falling land prices and higher debt loadings pushed businesses beyond prearranged credit limits and into relying on extended payment terms from suppliers.

Fig 4.1 – Monthly national milk production (million litres)



- Western Victoria has been a focus for farm business distress as land prices declined sharply from 2007/08 and a second season of reduced pasture production has constrained production and added to costs. Six-hundred people attended the January Farmer Power meeting, highlighting the feeling of crisis in the region.
- Gippsland experienced overly wet conditions through winter and early spring, then a step-change to a dry summer with the added issue of bushfires affecting a small number of farms. Pastures struggled amidst dry conditions in western Victoria and Tasmania, whilst low carry-in fodder inventories limited mitigation

options in the former. Good irrigation allocations in northern Victoria allowed farmers to maximise pasture production and whilst slowing, production growth in this region alone remains positive for the season to date.

- In northern drinking milk regions there were once again floods affecting southern QLD and northern NSW, although not as extensive as in previous seasons. Production has fallen significantly in QLD and was also lower in NSW.
- In WA, processors increased farmgate prices in an effort to stabilise milk production; however, production continues to trail 2011/12.
- Retailer strategies and negative pricing signals from processors continued to weigh on confidence and willingness to reinvest in northern regions. The reversal of Tier 2 price cuts at the farmgate effective from early 2013 provided some relief, yet uncertainty remains as to the pricing environment going forward.

### Profitability

- When asked to compare the current season profitability with the average of the past five years, 4 out of 5 farmers surveyed in this year's NDFS expected lower profit in 2012/13.
- SA had the greatest proportion of farms expecting lower profitability (92%) while WA had the lowest (57%).
- In response to lower profitability, 30% of surveyed farms had obtained a new loan or extended debt, while a further 26% were refinancing or deferring debt. Other responses reported include;
  - o adjustments to herd size, with 22% increasing cow numbers and the same proportion decreasing herd size;
  - o changing supplementary feeding, with 26% decreasing and 17% increasing the volume fed.
- ABARES Farm Survey estimates for 2012/13 indicate average farm cash incomes are expected to fall to \$95,300—down 33% from the 2011/12 average of \$143,000, but closer to 2% below the preceding 10-year average.
- Lower farmgate milk prices, little change in milk production and increased costs have produced lower financial performance in all regions.
- Twenty-one percent of farms are predicted to have negative farm cash income (up substantially from 13% last year). The proportion of farms with negative cash incomes varied from a low of 10% in Tasmania, to a high of 36% in SA.



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### Farm situation analysis

To develop an improved understanding of key dairy farm business performance drivers in a range of dairying regions, Dairy Australia has initiated a Farm Situation Analysis project.

The initial phase of the project uses a range of industry data sources including the Victorian Dairy Industry Farm Monitor Project (DIFMP), Tasmanian Dairy Business of the Year (DBOY) report and the Queensland Dairy Accounting Scheme (QDAS) to summarize annual physical and financial information for dairy farm businesses in each region. There are plans to expand data collection into remaining states.

The key message from the project to date has emphasized the importance of equity in farm businesses and the ability to adjust production costs in response to variable seasonal conditions and input prices.

- Net farm incomes across all regions have reduced significantly due to the combination of reduced farmgate milk price, an increase in concentrate prices of 10 to 20% and challenging weather conditions.
- The regions most severely impacted in terms of a negative net farm income include southwest Victoria, SA and those farmers in NSW and QLD impacted by the reduced Tier 2 milk price and recent flooding events.
- Business equity was a key driver of current farm performance in the 2012/13 season. Businesses with strong equity (> 70-80%) across all regions will be able to make moderate investments in farm capital in 2012/13.
- Businesses in QLD/Northern NSW at less than 80% equity with reduced production and reduced Tier 1 access face significant challenge to maintain positive Net Farm Income in 2012/13.
- Farm businesses with equity levels <50% will need to reduce farm operating costs to maintain positive Net Farm Income levels in 2012/13 or risk incurring increases to short-term liabilities.
- Farm businesses with medium equity (50-65%) face moderate risk to Net Farm Income from increases to key farm input costs and/or seasonal challenges
- Farm labour costs are also a driver of current farm performance. Those businesses with fully paid labour costs will face increased cash flow pressure in 2012/13, versus those who are owner operators.

### Regional profiles

For the 2012/13 forecast elements, feed concentrate prices are expected to average 15%-20% higher than during 2011/12

#### Gippsland

	2010/11	2011/12	2012/13
	Actual	Actual	(forecast)
Milk price (\$/kgMS)	5.59	5.37	4.83
Equity (%)	74	72	72
Earnings before interest & tax (\$)	292,113	210,547	92,282
Net farm income (\$)	195,668	113,385	(4,880)
Return on assets managed (%)	6.1	4.4	2.6

- A very wet winter and spring across south and west Gippsland, resulted in increased use of fodder reserves and a significantly reduced level of fodder harvest.
- Production forecasts are based on status quo production for 2012/13; season to date milk production levels are down 6.5% at the end of March 2013.
- A moderate increase in farm business liabilities of \$330K over the last 6 years has increased the cost structure and cash flow pressure of many businesses.
- Forecast data for 2012/13 shows businesses at less than 50% equity will potentially need to reduce operating costs to maintain positive Net Farm Income in 2012/13; these businesses are susceptible to the impacts of seasonal challenges and increases to key farm input prices.
- Strong equity businesses (>72%) will have the ability to continue investing in farm capital in 2012/13.

#### Northern Victoria

	2010/11	2011/12	2012/13
	Actual	Actual	(forecast)
Milk price (\$/kgMS)	5.69	5.64	5.08
Equity (%)	66	62	62
Earnings before interest & tax (\$)	202,184	232,119	107,638
Net farm income (\$)	120,184	143,509	19,028
Return on assets managed (%)	6.7	7.6	4.1

- Forecasts have been based on status quo production 2012/13; season to date milk production data shows an increase of 5.1% as at the end of March 2013.

## The production sector

- Northern Victoria shows a relatively small increase in farm business liabilities of \$179K over the last 6 years.
- Forecast data for 2012/13 shows business performance reduced from 2011/12, but overall businesses are well positioned to maintain at least status quo performance in 2012/13 given continued strong water availability and production increases.
- Businesses profitability will be mildly impacted by seasonal challenges and increases to key farm input prices in Northern Victoria.
- Businesses with equity greater than 50% will have the ability to continue investing in farm capital in 2012/13.
- Strong potential for continued milk production growth.

### South West Victoria

	2010/11	2011/12	2012/13
	Actual	Actual	(forecast)
Milk price (\$/kgMS)	5.62	5.56	5.00
Equity (%)	65	61	61
Earnings before interest & tax (\$)	372,944	242,401	68,516
Net farm income (\$)	195,065	51,107	(122,777)
Return on assets managed (%)	5.4	3.3	1.4

- Forecasts have been based on status quo production for 2012/13; season to date milk production data shows a 1.6 % decrease at the end of March, compared with 2011/12.
- A significant increase in farm business liabilities of \$515K over the last 5 years has meant an increase in the cost structure and cash flow pressure of many businesses.
- Forecast data for 2012/13 shows businesses at less than 50% equity will need to reduce operating costs to maintain a positive Net Farm Income in 2012/13.
- Businesses at less than 65% equity are susceptible to the impacts of seasonal challenges and increases to key farm input prices.
- Strong equity businesses (>65%) will have limited ability to continue investing in farm capital in 2012/13.

### Tasmania

	2010/11	2011/12	2012/13
	Actual	Actual	(forecast)
Milk price (\$/kgMS)	5.53	5.40	4.90
Equity (%)	72	68	68
Earnings before interest & tax (\$)	353,727	462,923	310,119
Net farm income (\$)	243,664	334,890	182,087
Return on assets managed (%)	7.3	8.4	5.1

- Forecasts have been based on status quo production for 2012/13; milk production data to the end of March shows a decrease of 3.1% compared with 2011/12.
- A significant increase in farm business liabilities of \$417K over the last 5 years has increased the cost structure and cash flow pressure of many businesses.
- Forecast data for 2012/13 shows businesses at less than 50% equity are susceptible to the impacts of seasonal challenges and increases to key farm input prices and will need to reduce operating costs to maintain positive Net Farm Income in 2012/13.
- Strong equity businesses (>68%) will have the ability to continue investing in farm capital in 2012/13.

### Queensland

	2010/11	2011/12	2012/13
	Actual	Actual	(forecast)
Milk price (\$/kgMS)	7.24	7.32	6.98
Equity (%)	80	80	80
Earnings before interest & tax (\$)	97,155	96,983	32,105
Net farm income (\$)	40,695	36,433	(28,445)
Return on assets managed (%)	3.3	2.4	0.8

- Forecasts have been based on status quo production for 2011/12 and 2012/13; data to the end of March shows a decrease of 5.7%.
- This financial forecast does not reflect the range in farm performance seen across different milk factory suppliers in QLD and Northern NSW
- An increase in farm business liabilities of \$187K over the last 5 years has meant the cost structure and cash flow pressure of many businesses has increased modestly.

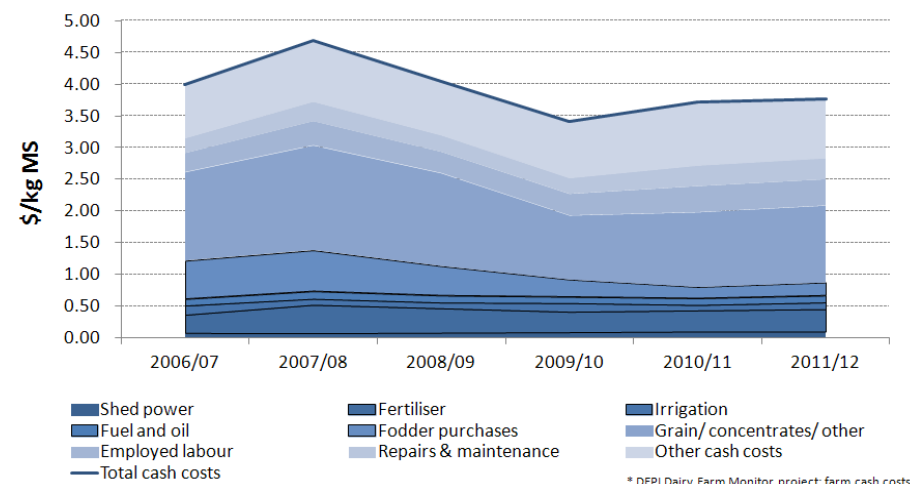
## The production sector

- Forecast data for 2012/13 shows businesses at less than 80% equity and with stable milk supply, will need to reduce operating costs to maintain positive Net Farm Income in 12/13.
- Businesses at less than 80% equity with reduced production and Tier 1 expectations face significant challenge to maintain positive Net Farm Income.
- All businesses are susceptible to the impacts of seasonal challenges and increases to key farm input prices.
- Strong equity businesses (>80%) will have the ability to continue modest investment in farm capital in 12/13

## DPIV farm monitor project

- The project aims to provide the Victorian dairy industry with valuable farm level data relating to productivity gains and profitability, as well as identifying the key drivers of productivity and profitability growth.
- Time series analysis of Farm Monitor Project results reveals that variation in purchased feed (grain and fodder) costs remains the dominant driver of changes in cash costs from year to year.
- In 2011/12, grain/concentrate costs accounted for 32% of cash costs, whilst fodder purchases were an additional 5%. Both costs remain below 2007/08 highs, however, helping keep total costs below that year's peak.
- Other items are less significant in terms of year to year changes, but their gradual inflation adds to structural costs in the industry. Examples include shed power (representing only 3% of costs but up 31% since 2006/07), and employed labour (representing 11% of cash costs but up 38% since 2006/07).
- Total cash operating costs in 2011/12 were 6% below the 2006/07 level, and 20% below the 2007/08 peak in nominal terms.
- The Dairy Industry Farm Monitor Project 2012/13 Annual Report will be released on 15 August.

Fig 4.2: Farm operating cost breakdown – Victorian average



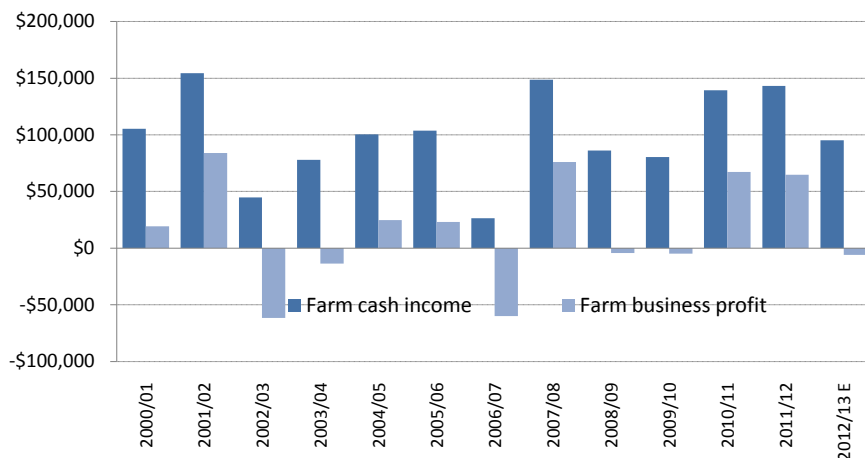
\* DEPI Dairy Farm Monitor project, farm cash costs

## The production sector

### Financial position

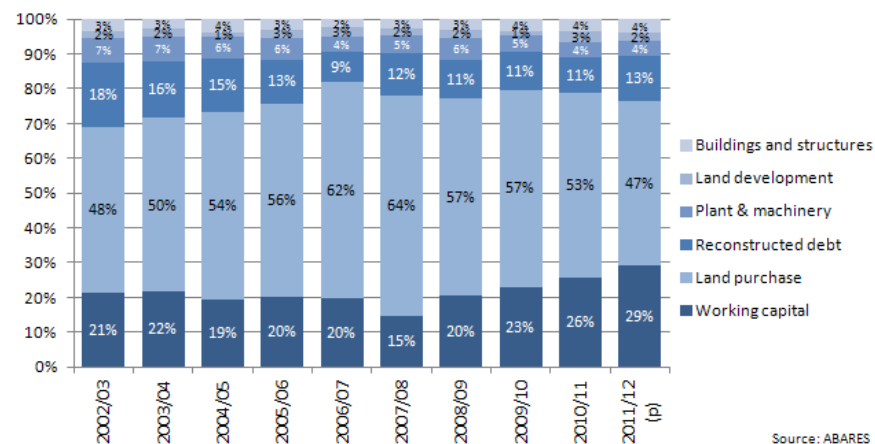
- Despite an evident decline in farm cash incomes, ABARES farm survey data indicates a small (4%) reduction in average debt from \$701,470 in 2011/12 to an estimated \$671,800 in 2012/13.
- Department of Agriculture, Forestry and Fisheries (DAFF) data on Farm Management Deposits (FMDs) shows that although there was a seasonal drawdown in deposits since June 2012, the level of dairy FMDs as at 31 March remains the highest ever for this time of year. At just over \$223.5 million, the total value of deposits held is 6% higher than at the same point in 2012, and only 1% below the \$226.4 million held in June 2008, during the commodity price boom.
- The composition of farm debt continues to change with a marked trend towards using debt for working capital to manage climate and market volatility. The proportion of working capital of overall debt has continued to increase, reaching 29% in 2011/12. This makes it second only to land purchase debt in importance.

Fig 4.3 - ABARES farm performance (\$ average per farm)



- Decreasing land values has emerged as an issue of concern in some regions, most notably western Victoria where rural land valuations have decreased markedly from their 2007/08 peaks. Downward revision of asset valuations increases gearing ratios and potentially limits access to debt for working capital—a key requirement in a cashflow constrained season.
- Analysis of land valuation data compiled by the Victorian DPI as part of the Farm Monitor project suggests that values have eased by around 15% in south-western Victoria, whilst Gippsland and northern Victorian values increased by 4% and 7% respectively.
- The decrease in values in the south west contrasts sharply with a rapid surge in the years leading up to 2007/08—fuelled by easy access to finance, strong farmgate returns, and competition for land from management investment scheme (MIS) schemes and corporate and overseas buyers. Many of these factors have reversed or diminished in recent years and values are returning to trend.

Fig 4.4 – ABARES Composition of average farm debt



Source: ABARES

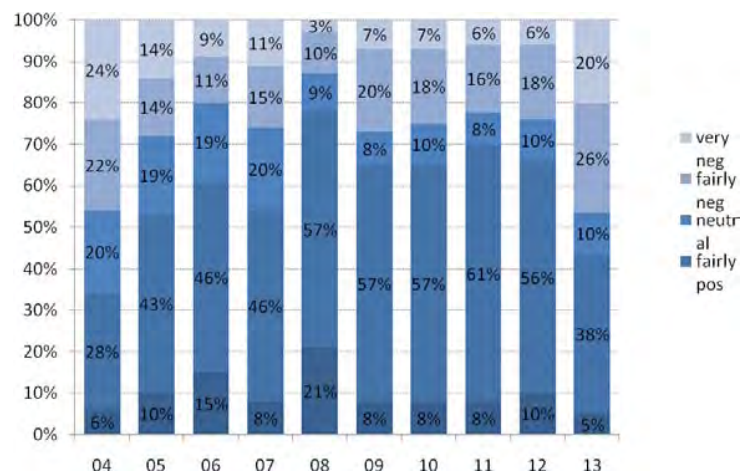


## The production sector

### Industry confidence

- Confidence, as measured by the NDFS was significantly lower in 2013, with just 43% of farmers positive about the future of the industry. This compares with 66% of positive farmers in 2012, and is the lowest level of confidence recorded since the inception of the NDFS in 2004—a year that followed a significant market downturn and a severe widespread drought.

Fig 4.5 - Attitudes towards dairy industry future



- Perhaps unsurprisingly given the challenging season faced, all regions saw confidence decline, with this decline spread across all herd sizes, age groups and business phases.
- While Tasmania remained the industry's most positive region, confidence has fallen dramatically with 50% of farmers in the state positive compared to the very strong 91% positive result in 2012, following announcements of significant processing investment.
- Confidence was lowest in SA, with just 12% of surveyed farmers feeling positive. This region has seen significant variation in confidence levels over the past three surveys
- Confidence was lower across all Victorian regions: 48% of Murray Dairy farmers were positive compared to 77% in 2012; 46% of western Victorian

farmers were confident compared to 63%, while just 44% of respondents in Gippsland were positive compared to 71% in 2012.

- As challenges facing the northern dairy industry have abated little over the past 12 months, confidence remains low in south-eastern QLD and northern NSW, the percentage of farmers describing themselves as being positive about the future having fallen from 45% to 31%.
- This year's survey confirmed milk price as the most important confidence driver cited by 46% of farmers.
- Input costs were the next most influential (21%) of farmers followed by the Australian dollar (17%) and Government policies and interventions (17%).
- It is interesting to note that three of the top four ranked influences on confidence are well outside the control of individual farm businesses and are highly variable.
- Surprisingly, the level of debt was mentioned as a confidence influencer by just 2% of respondents.
- For those remaining positive about the industry's future, confidence in future demand for dairy products remains the most cited reason (12% of respondents). Reasons given by those with a negative attitude about the industry's future included low prices (27%) and increasing production costs (15%).
- Farmers who are more confident in the industry's future are more likely to be:
  - Anticipating higher profits in 2012/13 compared to their average profit for the past 5 years
  - In an expansion phase or at least happy where they are at
  - Milking herds in excess of 500 cows

## The production sector

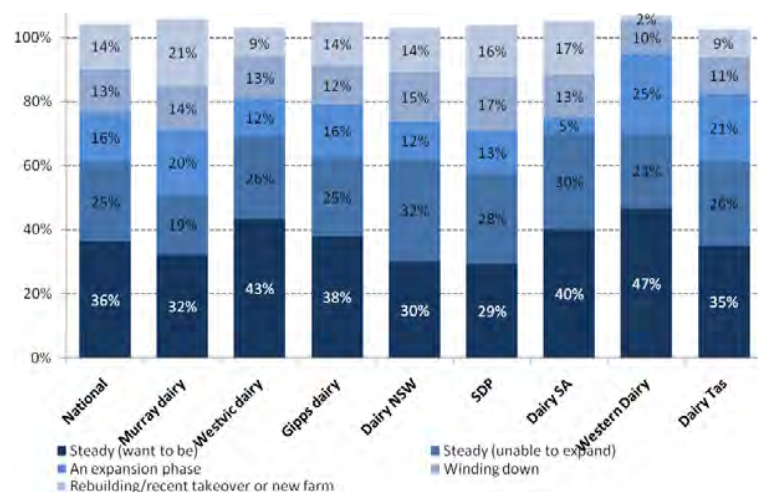
### Challenges and opportunities

- Farmgate milk price remains the greatest future challenge for individual farm businesses mentioned by 51% of surveyed farmers, significantly up on 43% in 2012. Concerns over input costs continue to increase, mentioned by 23% of farmers surveyed this year (compared to 15% in 2012 and 12% in 2011).
- When asked about the greatest challenges facing the Australian dairy industry as a whole in the next 2-5 years, milk prices were again top of mind (mentioned by 41% of respondents) followed by succession of young people and farmer exits (both 10%). Supermarkets driving down prices was seen as a higher order industry challenge in regions with greater exposure to the domestic market such as QLD (mentioned by 32% of respondents) NSW (16%) and WA (18%).

### Enterprise phase

- Only 16% of surveyed farmers describe themselves as being in an expansion phase, down from 22% in 2012. A further 6% described themselves as in recovery from flood or other climatic events. The overwhelming majority (61%) are in a “steady as she goes” phase, either because they are satisfied with the business as it stands (36% of respondents compared to 48% in 2012) or unable to expand at present (25% compared to 17%).

Fig 4.6 - Current enterprise phase by region



- There was a significant increase in the number of farmers describing themselves as “winding down”, 13% in 2013 compared to 7% in 2012. Those winding down are more likely to be on farms with smaller herds, with farmers aged 60 years and over, and with a negative attitude about the dairy industry’s future.
- Those who were unable to expand cited milk price (46% of respondents), lack of profit (31%) and the price or availability of land (22%) as the main factors limiting their ability to grow their business.
- In a similar pattern to the 2012 survey, larger farms—those milking more than 500 cows—are significantly more likely to describe themselves as being in an expansion phase. Meanwhile, smaller farms are significantly more likely to be winding down. This suggests that a proportionately greater percentage of milk is on farms that are in an expansion phase.

### Investment on-farm

- In line with lower expected profits and declining confidence, the proportion of surveyed farmers intending to invest on farm over the coming year has declined from 38% in 2012 to 28% in 2013.
- There are significantly fewer farmers intending to invest in dairy plant (6% in 2013 compared to 12% in 2012), feed systems (2% compared with 6%) and machinery (4% compared with 8%).
- Comparing regions, Western Australian farmers are the most likely to be planning investments this year (37% of respondents), mostly in dairy plant (15%) as well as shedding (10%).
- Investment intentions were lowest in SA (15% of farmers planning capital expenditure), where confidence has fallen significantly and the means to invest may not be readily available in the current season.
- Farms that are planning investment in the coming 12 months are likely to
  - be in an expansion phase, and positive about the future;
  - expect profits to be higher this year than the average of the past five years;
  - Describe themselves as a corporate enterprise rather than a family farm; and
  - be milking 500 cows or more.

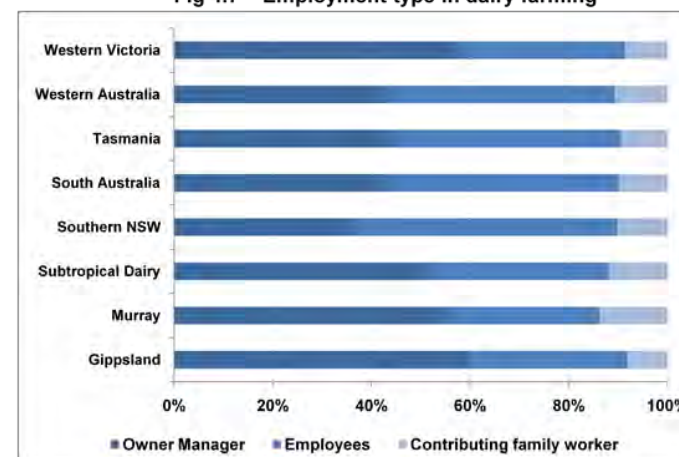
## The production sector

### People in dairying

- *Australian Food Statistics 2011/12* from the Department of Agriculture, Fisheries and Forestry (DAFF) puts the total dairy workforce at 43,000, with 24,750 people engaged in employment in dairy farming and 18,250 employed in dairy product manufacturing.
- Recent analysis of ABS 2011 census data completed by the Workplace Research Centre (WRC) provides a detailed statistical snapshot of Australia's dairy farming and manufacturing workforce demographics.
- The WRC data indicates that close to 65% of the dairy farming workforce was in Victoria and Tasmania, largely mirroring the pattern of milk production. Victoria alone accounts for 57% of the total national dairy farming workforce; by region, the northern Murray region hosted the largest dairy farm workforce (20%), followed by Gippsland (19%) and western Victoria (18%). A similar pattern is found in the dairy manufacturing workforce.
- Nationally around 40% of the dairy farming workforce is in the 50-plus age group. A slim majority of just over 51% of farmer owner-managers are in the 50-plus age group while 43.6% are in the 30-49 age bracket. Just over 20% of dairy farming employees are in the 50-plus age group, 39% in the 30-49 age group and over 31% in the 19-29 age group. Consequently, the data affirms that there are younger people coming up through the industry to succeed the older cohort of farmer owner-managers.
- Nationally just over 65% and 35% of the dairy farming workforce are male and female respectively. Regionally there are higher female proportions of the dairy farming workforce in QLD (over 36%) and Victoria (over 35%); in the dairy manufacturing workforce, there is a slightly higher proportion of males, with the gender split nationally breaking down to over 68% male and over 31% female.
- By state, there is a much more varied pattern in dairy manufacturing with significantly greater proportions of female workers in the dairy manufacturing workforces in WA (over 51%), Tasmania (just under 40%) and NSW (just under 34%). In those states, relatively lower proportions of males, particularly in Western Australian dairy manufacturing, likely reflects greater labour market competition given the mining and resources boom.

- Nationally 73% of the dairy farming workforce is full-time and 27% part-time. There is some variation in the use of part-time labour with lower proportions of the dairy farming workforce in Victoria (20%) and QLD (22%) working part-time; in the dairy manufacturing workforce, there is a greater proportion working full-time (79%) than part-time (21%).
- Over 34% of farmer owner-managers reported average weekly incomes during 2011 in the \$1,000-plus range, 47% between \$400-\$1,000, and 19% less than \$400. Around 20% of the national total employees in dairy farming reported incomes during 2011 in the \$1,000-plus range, just under 60% earned incomes between \$400-\$1,000, and 20% less than \$400.
- In the 2012 NDFS, 68% of dairy farms had people employed in a paid role, which represented a significant increase from the 55% that had employees in 2004 (NDFS 2004).
- Around half of the people commencing roles on dairy farms are new to the industry which emphasizes the importance for farmers to understand good employment practices required to ensure the industry can develop and retain good people. Work is being undertaken to support ongoing development of this success factor in the future.

Fig 4.7 – Employment type in dairy farming

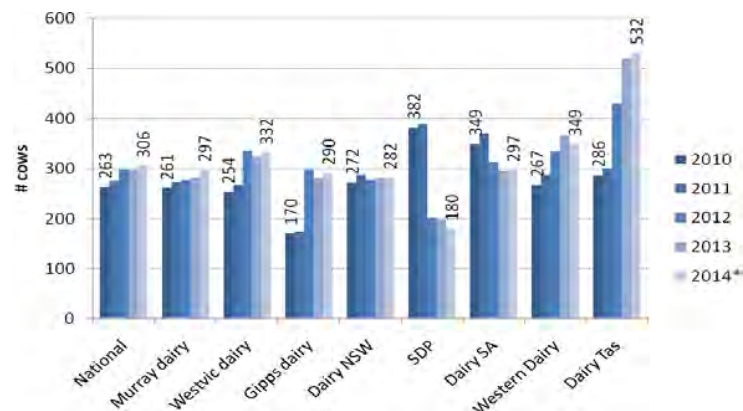


## The production sector

### Herd size trends and predictions

- According to the NDFS, average herd size has risen 37% over the past 10 years. Since 2010, herd size fluctuations have varied considerably region by region. The most significant increases in herd size have occurred in Gippsland, Western Victoria, WA and Tasmania while the most significant declines come from QLD and SA.

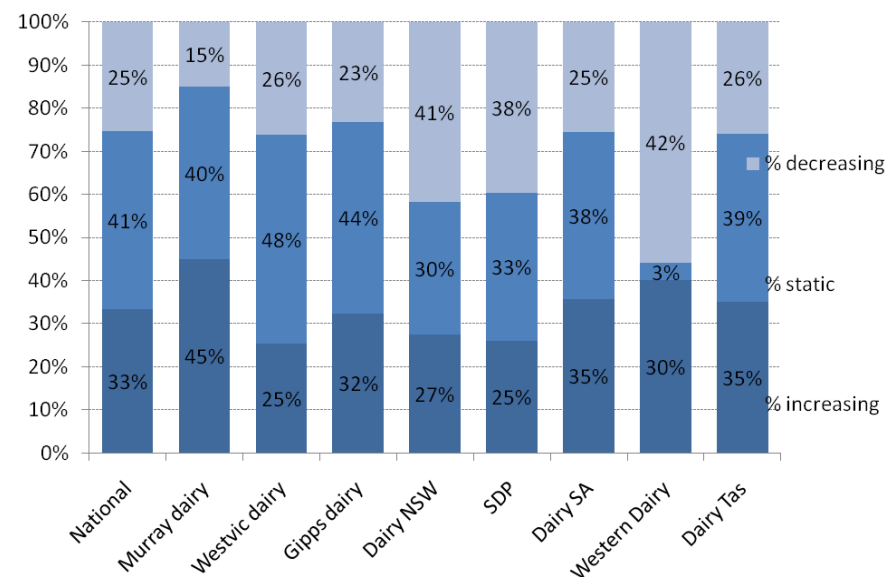
Fig 4.8 - Herd size trend 2010-2014 (\*predicted)



- Since 2004, there has been a significant increase in the proportion of farms with herds in excess of 300 cows; 30% of all dairy farms are now 'large herds' compared to 17% in 2004. At the other end of the scale, small farms (<150 cows) now account for 26% of all farms compared to 35% in 2004.
- The national herd has remained stable at 1.6 million for around five years. The increasing proportion of heifer exports and uncertainty about climatic and market conditions continues to prevent any significant rebuilding of milking cow numbers.
- The NDFS indicates culling rates are in line with those reported in 2012, however the number of milkers sold has increased to 5% of the national herd.
- Culling rates in the 2013 survey were slightly down on 2012 at 15% (compared to 17%), while the proportion of heifers sold increased slightly to 11% (10% in 2012). There were significant differences in heifer sales by region, with Western Australian farms maintaining the highest rate of heifer sales at 23%, while the lowest rate was 5% in QLD and northern NSW.

- Herd expansion accounted for just over half of the increase in production in 2012/13, with increased per-cow yields making up the balance.
- Overall, the average number of cows milked by surveyed farmers is in line with the 2012 survey at 299 (vs. 298 in 2012).
- Surveyed farmers in the Murray Dairy region were most likely (45% of respondents) to be planning increases in herd size over the next 12 months; while northern dairy regions and WA had the highest proportion of farmers planning to decrease herd size at 42%, followed by the Dairy NSW region at 41%, and the Subtropical Dairy region at 38%. Nationally, the average herd size is expected to be around 306 cows in 2013/14.
- Over the next 12 months, given favourable seasonal conditions, 33% of respondents to the NDFS expect to calve more cows than during 2011/12, compared with 25% predicting a reduced number.

Fig 4.9 - Herd size predictions 2013/14 by region





## The production sector

### 2013/14 production outlook

- Season 2013/14 is set to be a period of recovery for many farmers. Farmgate prices are expected to open higher than the current season, and global indicators suggest grain prices should moderate through late 2013.
- The key wildcard for the season ahead is the weather, as low inventories of both grain and fodder mean that, more than ever, the season will hang on a favourable spring for production of pasture and purchased feed inputs.
- Irrigation regions are likely to benefit from the continuing availability of irrigation water, but rain-fed regions and dryland cropping areas do not have this security.
- According to the 2013 NDFS, 33% of farmers intend to increase production in the coming 12 months, while 33% expect production to remain stable; 24% were planning lower production next season. A significant proportion of farmers in the Murray, Gippsland, South Australian and Tasmanian regions are expecting decreased production in 2012/13.
- The outlook for 2013/14 is for modest production growth to between 9.4 and 9.6bn litres, based on the views of major dairy companies and corroborated by analysis of the outcomes of the NDFS. Southern exporting regions will lead growth given positive global prices. Domestic supply regions will likely be flat, in response to market signals and uncertainty around supply contracts.

### Medium-term outlook

- Over the next 3 years, 61% of farmers (representing 63% of total volume produced) are intending to increase milk production. Murray Dairy, Gippsland, Dairy NSW and Tasmania are the most optimistic in increasing milk production. The medium-term outlook reflects a significant increase in production expectations of survey respondents as a response to lower levels of profitability.
- Conversely, 31% of farmers (30% by volume) either expect production to remain stable in 2015/16 or weren't able to provide estimates, a further 3% (2% by volume) were planning for lower production and 6% (4% of volume) expected to have exited the industry by that time.
- Medium-term milk production volumes are estimates on the basis of farmer intentions in the 2013 NDFS. The aim of this exercise is to show the potential difference in production outlook based on industry confidence and farmer intentions at a point in time.

- There are many factors that can influence milk production in any given year. However such intentions are still important considerations in deriving a medium-term outlook for Australian milk production.
- Based on the intentions of farmers surveyed as part of the 2013 NDFS, scenarios have been derived that indicate three year growth in output to between 9.8 and 10.2bn litres by 2015/16.
- This assumes a return to average seasonal conditions, and reflects a significant proportion of survey respondents intending to increase output in three years' time.
- Those intending to grow production are planning to grow aggressively relative to previous years, whilst a smaller proportion than in 2012 foresee their production remaining at about the current level.

**Fig 4.10 – Scenarios for medium-term Australian milk production**

Segments of the production sector	Production intentions in 3 years time	Range of outcomes 2015/16 (billion litres)
<b>Growing</b>	<b>63%</b> of milk production growing by <b>19-26%</b>	6.8 to 7.2
<b>Static</b>	<b>30%</b> of production is on farms that expect similar production	2.8
<b>Declining</b>	<b>2%</b> of production is on farms that expect lower production	0.2
<b>Leaving</b>	<b>4%</b> exiting	-
	Total 2015/16	9.8 to 10.2

## Key regions at a glance

This page includes data from Dairy Australia's regional forecast milk production and outcomes from the 2012 and 2013 NDFS.

### Western Australia

Key facts	2013	2012
Milk production (billion litres)*	0.336	0.338
Avg. farm output (million litres)	2,345	2,200
Avg. herd size per farm	366	334
% plan increase herd (12M)	30	51
% plan more output in 3 yrs	62	46
% positive**	47	54
% plan investment next year	37	41

### Murray Dairy

Key facts	2013	2012
Milk production (billion litres)*	2.273	2.177
Avg. farm output (million litres)	2,082	2,053
Avg. herd size per farm	282	253
% plan increase herd (12M)	45	51
% plan more output in 3 yrs	68	48
% positive**	48	77
% plan investment next year	37	43

### South Queensland/Nth NSW

Key facts	2013	2012
Milk production (billion litres)*	0.580	0.600
Avg. farm output (million litres)	1,164	1,108
Avg. herd size per farm	197	185
% plan increase herd (12M)	25	45
% plan more output in 3 yrs	52	38
% positive**	31	45
% plan investment next year	24	30

### Central Southern NSW

Key facts	2013	2012
Milk production (billion litres)*	0.767	0.764
Avg. farm output (million litres)	1,949	1,829
Avg. herd size per farm	280	253
% plan increase herd (12M)	27	26
% plan more output in 3 yrs	59	42
% positive**	40	53
% plan investment next year	20	36

### South Australia

Key facts	2013	2012
Milk production (billion litres)*	0.549	0.570
Avg. farm output (million litres)	2,172	2,208
Avg. herd size per farm	296	315
% plan increase herd (12M)	35	40
% plan more output in 3 yrs	53	44
% positive**	12	62
% plan investment next year	15	33

### Western Victoria

Key facts	2013	2012
Milk production (billion litres)*	2,187	2,208
Avg. farm output (million litres)	2,008	1,998
Avg. herd size per farm	324	312
% plan increase herd (12M)	25	26
% plan more output in 3 yrs	54	44
% positive**	46	63
% plan investment next year	19	33

### Tasmania

Key facts	2013	2012
Milk production (billion litres)*	0.764	0.788
Avg. farm output (million litres)	2,767	2,750
Avg. herd size per farm	520	394
% plan increase herd (12M)	35	27
% plan more output in 3 yrs	68	53
% positive**	50	91
% plan investment next year	28	51

### Gippsland

Key facts	2013	2012
Milk production (billion litres)*	1,930	2,053
Avg. farm output (million litres)	1,732	1,778
Avg. herd size per farm	280	284
% plan increase herd (12M)	32	34
% plan more output in 3 yrs	66	49
% positive**	44	71
% plan investment next year	32	40

\*\*% of respondents positive about the future of the national industry

\*milk production estimates refer to seasons 2011/12 and 2012/13

# Chapter 5

## Production inputs and resources

### Highlights

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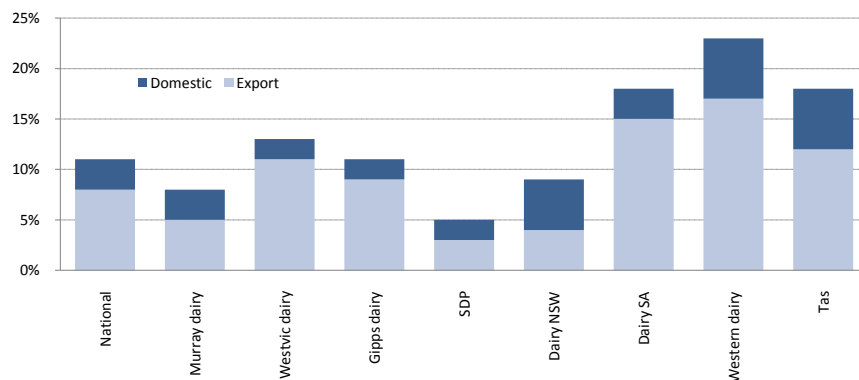


## Production inputs and resources

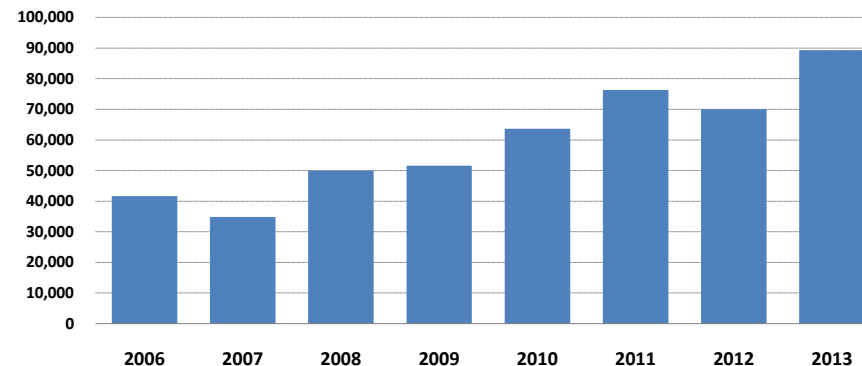
### Cow and heifer trade

- Dairy heifer exports for the 12 months to February 2013 rose 28% to 89,324 compared to the same period last year—for a value of \$A158 million. With the national herd at approximately 1.63 million cows, live export heifers now account for a record 5.5% of milking cows—up markedly on the 4.3% of last year and also exceeding the record high of 4.8% for the same period to February 2011.
- The largest markets over the past 12 months have been China with 69% (down from 76%); Russia with 7% (down from 12%); and 5% each for South-East Asia and the Middle East.
- The recent lift in export heifer volumes comes despite some disruptions to trade. Numbers are up 86% in the three months to February, possibly supported by the effect of difficult seasonal conditions and low cull prices increasing the attractiveness of heifer sales, rather than cull cow sales.
- According to the 2013 NDFS, 30% of dairy farms sold heifers—with 11% of the total heifer herd being sold. The split between export and domestic sales was 73% to export and 27% domestic sales: a shift in the balance towards domestic sales, relative to last year.
- While Victoria is the largest source of export dairy heifers in absolute numbers, due to the size of the industry, the proportion remains highest in WA with 17% of heifers on hand sold for export.

**Fig 5.1: Heifers sold in 2013 (% of milking herd)**



**Fig 5.2: Live dairy cattle exports (12 months to Feb)**



- Over the last decade some 600,000 head have been exported to around 30 countries. Many farmers now regard export heifer sales as an integral part of their dairy business.
- Over the nine months to March 2013, cull cow sales volumes fell 6% below the same period last season and down 20% on the 10-year average. Average prices for the season to date are 15% lower than 2011/12.
- The most recent quarter has matched the trend of the season to date, with cull cow sales for the three months to March down 6% on last year and down 17% on the 10-year average. Lower cull cow prices are likely to have seen additional heifers sold for export in preference to culling of older cows.

### Beef market

- ABARES projections suggest that the Indonesian Government's reduction in the live cattle import quota to 267,000 head for 2013 (compared to 283,000 head in 2012 and 500,000 head in 2011) will see prices for light steers and heifers in northern Australia reduce further in 2013/14.



## Production inputs and resources

- The reduced quota is also likely to see cattle suitable for export to Indonesia finding their way into other markets, including domestic slaughter in southern Australia.
- Reduced demand for higher value chilled cuts and increased demand for cheaper frozen varieties will also put pressure on prices, while the high Australian dollar continues to reduce the competitiveness of Australian beef.
- The outlook for Australian beef exports to the three largest markets is mixed, with slow per-capita consumption growth and increased competition from US product likely to undermine demand for Australian beef in Japan. Whilst reduced production in the US itself and Korea is expected to see rising demand for imported beef, including Australian product.
- Cattle and calf slaughter is forecast to increase by 3% in each of 2012/13 and 2013/14, underpinned largely by higher slaughter rates of breeding females as the current herd building phase comes to an end. The Australian beef herd is currently at its highest level in around 30 years, and is expected to decline gradually over the medium term. ABARES projects that this will lead to lower saleyard prices in real terms over the 5 year projection period.
- The peak and subsequent decline in the size of the national beef herd and subdued prices is likely to see demand for feed grains from the feed-lot sector remain lower—at least for the next couple of seasons. A key factor will be the extent to which pasture conditions in northern Australia remain favourable, allowing stock to remain on pasture for longer.

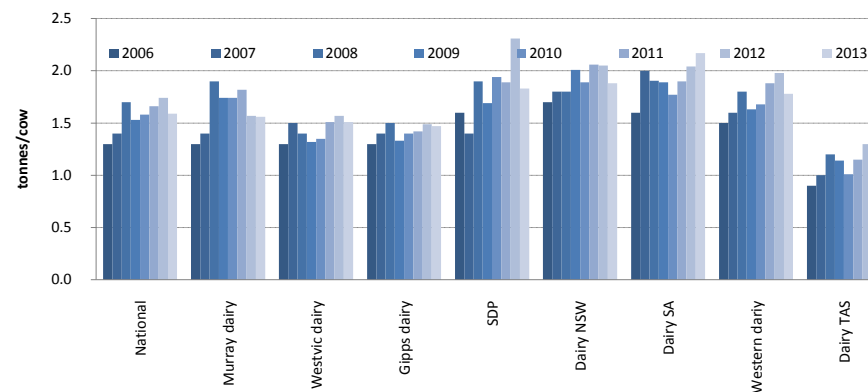
### Feed usage

- According to the 2013 NDFS, an estimated 96% of Australia's dairy herd of 1.63m milking cows consumed an average 1.59 tonnes of grain, mixes and concentrates in 2012/13 for a total feed grain requirement of around 2.5mt.
- National average usage per cow is down slightly on last year's 1.74 tonnes but the percentage of the herd fed is slightly higher at 96%. Average usage ranges from a low of 1.24 tonnes in Tasmania, to a high of 2.17 tonnes in SA.
- Analysis of the survey findings shows that yield per cow rises substantially with the amount of grain fed, with purely pasture-fed herds producing an average of 4,605 litres per cow last year compared to 8,388 litres per cow for herds fed over 2.5 tonnes per cow per year. An estimated 38% of farms now feed their cows more than 1.5 tonnes grain per cow per year (down from 42% in 2012), and are estimated to produce 53% of the national milk volume. Slightly lower

average grain feeding likely reflects the sharply lower milk-to-feed price ratio this year, which has seen some farmers cut back on grain feeding rates to better match marginal (milk) revenue with marginal (grain) cost.

- Challenging seasonal conditions in a number of key dairying regions have seen a sharp lift in the proportion of farmers purchasing hay and silage this season – up to 55% nationally, compared to 47% in 2012 and 53% in 2011.
- Purchased feed is the largest single cost item for dairy farmers, representing almost 26% of average of dairy farm cash costs in 2012/13 according to ABARES: slightly up on 25% last season, but below the 27%, and 30% of the two seasons prior. It also remains well below the record 36% of 2007/08. In dollar terms, average expenditure increased from \$108,000 to \$128,000.
- This figure has risen slightly due to markedly higher grain prices (in part offset by reduced usage), and increased requirements for purchased fodder in some regions due to less favourable seasonal conditions.
- Analysis of the current season indicates a milk price-to-feed price ratio of 1.21 for wheat, and 1.45 for barley. Relative to 2011/12, the decreases of 26% and 25% respectively bear witness to the margin squeeze that has characterised the current season.
- Whilst these ratios are lower than recent years, the 1.20 for wheat in 2008/09 and 1.37 for wheat in 2007/08 saw similar relative pricing.

**Fig 5.3: Average grain usage per cow pa (tonnes)**



## Production inputs and resources

### Global feed grains market

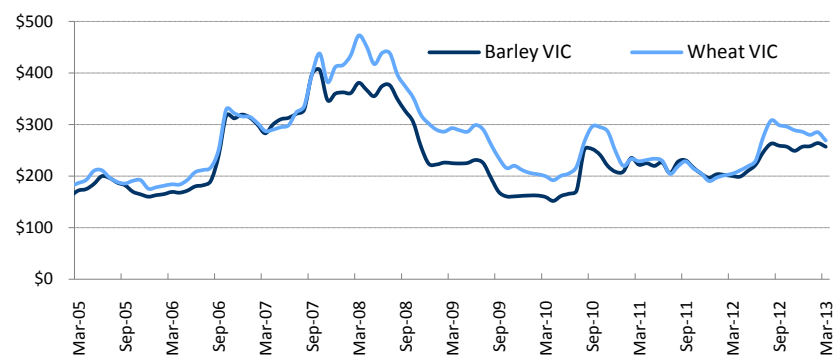
- World prices for grains and oilseeds moved sharply higher in 2012/13 as growing conditions rapidly deteriorated in key production regions, particularly in the US and Eastern Europe. Supplies have remained under pressure since late 2012 and are expected to remain relatively firm through late 2013.
- The International Grains Council (IGC) is forecasting a recovery in wheat yields through 2013/14 which, together with the harvested area reaching a 'four year high' is expected to increase global production by 4% to around 682 million tonnes. Although the rise in output should relieve the current supply situation to some extent, rebounding consumption is anticipated to soak up most of this growth, leading to an increase in stocks of just 5 million tonnes.
- The IGC expects maize and soybeans supplies to be bolstered by potentially record-breaking crops in South America (although logistical difficulties continue to impede the movement of product to international markets) and a bumper harvest in China. Assuming normal weather, production is expected to sharply rebound as US output recovers by as much as 30%.
- ABARES has forecast an increase of 5% in world wheat production to almost 690 million tonnes in 2013/14. The bulk of the increase is expected to come from a combination of higher yields in the European Union and Black Sea region (compared to weather-depressed 2012/13 yields) and increased plantings stimulated by favourable prices. World wheat prices are expected to fall to an average of US\$320/t—US\$42/t less than the forecast 2012/13 closing price.
- The stocks-to-use ratio is expected to remain similar to 2012/13 levels at 25.6%, compared to an average of 27.5% over the five years to 2011/12.
- Current USDA forecasts suggest US wheat plantings will increase 0.5% in 2013 - to 56 million acres, while corn plantings are expected to ease 0.73% from last year's 75 year high. Wheat production is expected to be 7% lower due to reduced yields brought about by the continuation of dry conditions through winter across parts of the Great Plains.
- Corn production is forecast to be up 35% from the drought affected 2012 crop. According to the USDA, a return to normal summer weather would support a sharp recovery in corn yields, as autumn and winter dryness have little correlation with conditions during the following growing season.

- Whilst the volume of corn used in ethanol is expected to increase in 2013, the USDA estimates that this should account for a 36% of expected corn usage – down from 40% during the prior two years.
- Elsewhere, a late winter cold snap in northern Europe has failed to severely dent expectations of a large 2013 crop. There is some concern however that crop development is well behind normal for this time of year.
- Late snowfalls have delayed spring plantings in Eastern Europe leading to crop forecast reductions; however, Ukrainian exports are still expected to be up 25% on last year's drought-affected total.

### Australian market

- ABARES' February 2013 Crop Report notes that dry seasonal conditions adversely affected winter crop yields across Australia, but most notably in WA.

Fig 5.4: Victorian grain price trends - \$/tonne



- Total winter crop production for 2012/13 was estimated at 35.8 million tonnes—a fall of 22% when compared to the record crop of 2011/12, but only 7% below the five year average. Wheat production fell 26% to 22 million tonnes, while barley production declined by 15% to 7.1 million tonnes.

## Production inputs and resources

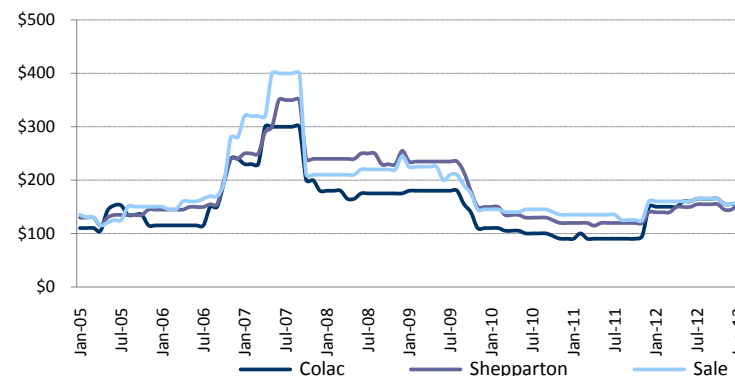
- With little rain to interrupt progress during the harvest in the eastern states, quality downgrades were less prevalent than during the past two seasons. Some quality downgrades emerged in WA due to rainfall during harvest, but on the east coast the biggest issue for growers was low protein levels (thanks to high nitrogen prices and mild temperatures through the filling period).
- The summer crop season has also experienced climatic challenges, with hot and dry conditions to mid-January giving way to heavy rainfall later in the month, which caused flooding and crop damage in some regions. Whilst some producers consequently missed part of their planting window, the heavy rainfall will produce yield benefits for late-sown summer crops and contribute positively to soil moisture levels.
- While upper soil layer moisture levels vary with seasonal conditions, lower layer soil moisture will provide a deeper store of water for east coast winter crops in the year ahead. According to ABARES, relative soil moisture in the lower layers of the soil profile was largely average to well above average in QLD and northern NSW cropping areas at the end of January. Lower level soil moisture in southern regions through southern NSW, Victoria and SA was more variable meanwhile but tended to be below average.
- In WA, deficiencies were evident, however recent above average rainfall has improved the situation since January, and the sandier soils mean crops are generally more reliant on in-crop rainfall anyway.
- Rainfall patterns were varied through April, with scattered showers over southern NSW and Victoria in late April following more substantial events in SA. The rest of the east coast remained dry however, with much more rainfall needed to ensure favourable sowing conditions across the eastern states.
- Australian grains, especially wheat, remain in demand on global markets, with export demand likely to support prices in the short term. Dry conditions locally are also adding to demand for feed grains. Reports suggest up to 90% of the 2012 wheat crop has been sold already, as growers capitalise on high prices amid expectations of a softening market later in the year.
- Firm pricing and a tight supply situation at the domestic level are likely to see the area planted to wheat in Australia increase 4% to 13.8 million hectares for the 2013/14 winter cropping season. ABARES forecasts Australian wheat production will increase by 13% to around 25 million tonnes, reflecting both the increased area planted and improved yields, especially in WA, following the generally dry conditions of the 2012/13 growing season. Barley production is forecast to rise 11% to 7.8 million tonnes, off a 3% rise in planted area.

- Following a spike in grain prices several months ago, ABARE is forecasting wheat prices to ease from \$A345/t in the current season to \$A295/t in 2013/14 as plantings increase and yields recover. Barley prices are also expected to fall from around \$248/t to \$239/t over the same period.
- The ASX grain futures price (delivered Sydney) for January 2014 wheat stands at \$249/t, while January 2014 barley was \$214/t.

## Fodder

- The domestic hay market continues to face supply pressure, which has intensified since 2012, with lower yields in recent months and minimal stock holdings driving upward price pressure. The situation is exacerbated by strong demand from regions where pasture production has suffered due to adverse weather conditions, especially in south-west Victoria.
- Supply of high-protein hays is especially tight, due to production setbacks and poor conditions in many regions through late 2012. Meanwhile, export demand is keeping cereal hay supplies under pressure. The dry weather has also seen large volumes of high quality straw being baled, albeit in an environment of strong local and export demand. ABS data shows hay exports totalled 738,000 tonnes in 2012, down 4% from 2011.

Fig 5.5: Victorian pasture hay price trends - \$/tonne



## Production inputs and resources

### Medium-term outlook

- Whilst the coming year should see a strong supply recovery on grain markets, world grain stocks are expected to remain relatively tight in the medium term as growth in production is broadly matched by increased consumption, ensuring that volatility remains a feature of the grains market landscape.
- Growth in incomes of consumers around the world is expected to remain a major demand factor affecting feed grain and oilseeds markets. As diets in developing regions continue to diversify in favour of livestock products, use of grains for stockfeed is expected to rise at a more rapid pace than in recent years. Meanwhile, the rate of increase in direct consumption of grains as human food is likely to slow.
- Increases in industrial uses of grains and oilseeds such as biofuels are expected to moderate from the rapid growth rates of the past decade. In particular, the USDA considers that reduced gasoline consumption and slow growth in consumer acceptance and availability of higher ethanol blends are likely to constrain ethanol production in the medium term. Strong competition from Brazilian sugar cane-derived ethanol is likely to remain a key limitation to the growth of US ethanol exports.
- Major areas of production growth are expected to be Latin America and the Black Sea region, where extra land is available to bring into production, and yield improvements are readily within reach. Logistics infrastructure in these regions—particularly in parts of Latin America—remains an important challenge to be overcome.

### Fertiliser

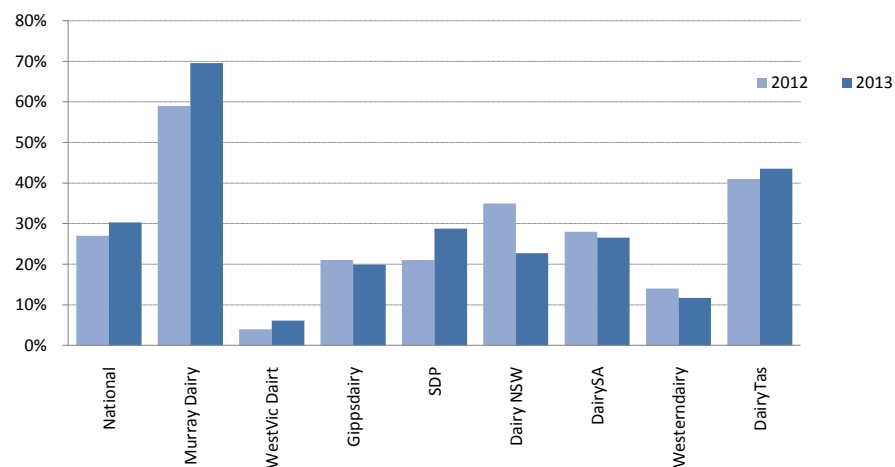
- Fertiliser remains a significant cost item for dairy farmers but has reduced slightly since last year, representing an estimated 7% of average dairy farm cash costs in 2012/13 according to ABARES analysis, closer to the five year average than the 8% of last year.
- Globally, the tight supply situation for grains has seen prices remain at elevated levels since the second quarter of 2012/13. This reflects expectations of a large planting program and consequent increases in demand for fertiliser to maximise yields in the current favourable pricing environment.
- To date, elevated inventories for phosphate and potash products and new production capacity for urea have kept prices steady.

- Rabobank expects urea prices to remain elevated with upside bias due to strong demand from northern hemisphere users—particularly the US if drought conditions moderate. Phosphate and potash prices meanwhile are expected to remain around current levels or slightly lower as inventories clear.
- Locally, the trend towards manufacturers and traders keeping inventories low continues, with more volatile fertiliser pricing having changed the demand pattern as retailers and farmers adopt ‘as needed’ buying and in doing so bear an additional delivery timing risk. Reports suggest pre-ordering of fertiliser by farmers is being increasingly encouraged at the distributor level in order to reduce inventory pricing risks, whilst ensuring timely delivery.

### Irrigation water usage

- The 2013 NDFS reported that 30% of all dairy land used for the milking herd was irrigated, the same level as 2012.
- This level varies significantly by region. In the Murray Dairy region for example, 70% of land used to support the milking herd was irrigated during 2012/13 – up from 69% of land irrigated in 2011/12. At the other end of the spectrum, in western Victoria, just 6% of the land used to support the milking herd was irrigated in 2012/13, compared to 4% the previous year.

Fig 5.6: % of milking land irrigated





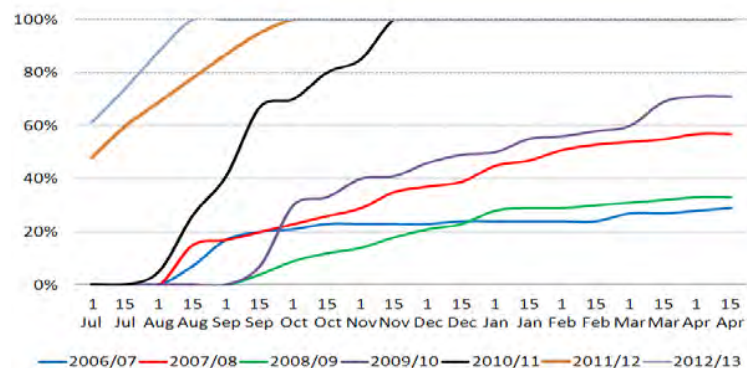
## Production inputs and resources

### Water availability in the southern dairying regions

- Water availability in the Murray-Darling Basin remains favourable thanks to the two consecutive strong La Niña events of 2010/11 and 2011/12.
- Ample supplies saw Goulburn-Murray Water (GMW) and Murray Irrigation Ltd announce 100% high reliability water share (HRWS) allocations across all the Goulburn and Murray systems early in the 2012/13 season, with several systems also receiving allocations against low reliability water shares (LRWS).
- Water trading volumes in northern Victoria were up 130% on last year for the March quarter as farmers utilised carry-over volumes and full allocations to maintain and boost pasture production amid dry conditions. As the dry conditions continued, prices firmed to \$53/ML: a level not seen in the two wet years prior, but still a fraction of the drought induced peaks in 2007. The pattern was similar across the border in NSW, with temporary trades up 91% in the Murray system, and average prices around \$60/ML.
- Water levels in the Goulburn-Murray (GM) system in northern Victoria have been run down this season as weather patterns have tended towards average, with Eildon at 74%, Dartmouth at 94% and Hume at 49% at the end of March. The total GM system was at 73%.

Fig 5.7 Goulburn Murray Water allocations

#### % of High Reliability Water Shares



- GMW released its first Seasonal Outlook for 2013/14 seasonal determinations on February 15th, noting that all northern Victorian systems are expected to

achieve seasonal determinations of 100% against HRWS holdings by mid February 2014, assuming average inflow conditions. The Goulburn, Murray and Loddon systems are all expected to receive opening seasonal allocations on July 1, 2013, and the Campaspe is expected to start the season with a seasonal allocation of 100%. GMW is waiting to ascertain the volume of water carried over and catchment conditions before releasing guidance on Broken system allocations.

- Assuming average rainfall and inflows, the initial outlook is to deliver a 63% allocation on the Goulburn and a 22% allocation on the Murray on 1 July 2013: only the third early-July allocation in over a decade. The outlook for mid-October 2013 is for 100% allocation on the Goulburn and 50% on the Murray systems.

### Rainfall outlook

- The Bureau of Meteorology (BOM)'s national rainfall outlook for the April-June period suggests south-eastern QLD, and northern and eastern NSW are likely to experience continued wet weather. A drier than normal season is forecast to continue for southern Victoria, Tasmania and south-east SA, whilst the outlook is more neutral for northern Victoria and WA
- The three month national outlook for maximum and minimum temperatures indicates that warmer days are more likely over all southern dairy regions and south-west WA, while northern NSW and south-eastern QLD are more likely to experience cooler days.
- According to the Bureau of Meteorology (BOM), El Niño-Southern Oscillation (ENSO) indicators in the tropical Pacific remain at neutral levels, and are likely to remain so through the southern hemisphere autumn.
- Ocean temperatures around much of the continent remain warmer than average, which the BOM suggests may promote increased rainfall in favourable weather patterns at the regional level.
- The Southern Oscillation Index (SOI) remained within neutral values for most of the summer, and has only since moved out of the neutral range on occasion due to the influence of local weather events in the tropical Pacific. Its most recent value, as at early April, is +8.4. A positive SOI is historically correlated with wetter conditions in the eastern states.

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