

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 **MB11** now produced and shown to Maldwyn Beniston at the time of signing his statement on 28 November 2013.

Annexure MB11

Dairy Australia – Australian Dairy Industry in Focus 2010

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Filed on behalf of Murray Goulburn Co-Operative Co Limited

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**Australian Dairy Industry  
In Focus 2010**



## Australian dairy at a glance (2009/10)

**Table 1.**

National dairy herd	1.6 million cows	
Average herd size	220 cows	
Milk production	9,023 million litres	
Average annual milk production per cow	5,445 litres	
Dairy—Australia's 3rd largest rural industry	\$3.4 billion value at farmgate	
Milk utilisation	Cheese	34%
	Drinking milk	25%
	SMP/butter	24%
	WMP	11%
	Casein/butter	3%
	Other	3%
Production of main commodities (tonnes)	Milk powders	316,300
	Cheese	349,400
	Butter (CBE)	128,400
Dairy—major export industry	\$2.4 billion 10% of world dairy trade	
Percentage of Aust milk production—exported	45%	
Major markets for Australian dairy products (tonnes)	Australia	2,773,000 (including 2,337,000 of drinking milk)
	Japan	116,000
	Singapore	87,000
	China	65,300
	Indonesia	44,700
	Philippines	43,200
Per capita consumption	Drinking milk	102 litres
	Cheese	13 kgs
Dairy industry workforce	Direct employment of approximately 40,000 ABARE estimates a regional economic multiplier of 2.5 from the dairy industry	

## Abbreviations

ABARE	Australian Bureau of Agricultural and Resource Economics	NCE	Natural cheddar equivalent—unit of conversion of processed cheddar, pastes and spreads to natural cheddar (1kg processed product weight = 0.806kg natural cheddar)
ABS	Australian Bureau of Statistics	NDFS	National Dairy Farmers' Survey 2010
ADC	Australian Dairy Corporation	MD	Murray Dairy
AMF	Anhydrous milk fat	(p)	Provisional data
AUST	Australia	(r)	Revised data
BMP	Buttermilk powder	SEQ	South-east Queensland/north-east New South Wales
CAGR	Compound annual growth rate	SMP	Skim milk powder
CBE	Commercial butter equivalent, a unit of conversion of AMF to butter (1kg butter = 0.805kg AMF)	SNF	Solids non fat
cpl	Cents per litre	UHT	Milk subjected to ultra high temperature treatment to extend shelf life
(e)	Estimated data	WMP	Wholemilk powder
DA	Dairy Australia	WPC	Whey protein concentrate
EU	European Union	WV	Western Victoria
FNQ	Far north Queensland		
Gps	Gippsland		
n.a.	Data not available		

Published by Dairy Australia.

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Dairy Australia has collected the statistics in this publication from Australian dairy companies and other Australian dairy organisations (except where other sources are indicated).

## Foreword



Australia's dairy industry is one of the three most important rural industries, with a farmgate value of \$3.4 billion in 2009/10. Dairy ranks fourth in agricultural exports—valued at \$2.4 billion after export volumes slipped 2%, reflecting reduced availability of product for sale. In the local market, supermarket sales of dairy products increased in both volume and value—with the retail value of the major dairy categories increasing by 2% to more than \$5.0 billion in 2009/10.

After a very difficult start—with the lowest farmgate milk prices in a number of years—the 2009/10 season finished strongly; with Australian milk production just 4% below last year at 9 billion litres. Milk volumes in the three months from April to June were up by 4% on last year and the monthly year-on-year growth is expected to continue for some months into the new season. Nevertheless, the next few months will provide a guide as to the impact of last season's culling decisions on the size of the local dairy herd and just how much capacity there is for growth in milk production in the short-term in Australia.

Strong 2010/11 opening prices for farmgate milk from exporting companies—up 25 to 30% on last year; significant rainfall across most of southern and eastern Australia with more 'traditional' winter weather patterns; the best early-season irrigation allocations in years; and good pasture growth all suggest that the bulk of the industry will start the new season on a positive and potentially profitable note.

Confidence in the medium to long-term prospects for the industry has remained relatively strong in the *National Dairy Farmer Survey of 2010*; and this was confirmed in a follow-up survey recently conducted. The feature article will follow the trend set last year and provide a *September Update* to the annual *Dairy 2010: Situation & Outlook* report. This year marks the seventh edition of this annual industry report which provides a comprehensive overview of the Australian and global dairy scene.

Dairy Australia is the industry's farmer-owned service organisation. Funded by farmer levies, with matching research and development funds from the Australian Government. Dairy Australia's role is to boost the long-term sustainability and viability of local farm businesses and the regional communities that depend on the dairy industry. The organisation works across the dairy supply chain in areas that benefit the entire industry—from farming through manufacturing, to domestic and export markets. More detail on the company's objectives and the way Dairy Australia interacts with the other industry organisations is available in the 'Industry organisations and structure' section on page 33.

I would like to extend Dairy Australia's thanks to the dairy farmer co-operatives and dairy companies that contribute to our regular data collections. Without their participation, *Australian Dairy Industry In Focus* could not maintain its reputation as the most comprehensive and credible collection of Australian dairy industry statistics available. Regular monthly updates of much of the industry production data included in this publication are available from [www.dairyaustralia.com.au](http://www.dairyaustralia.com.au). The website also features *Dairy 2010: Situation & Outlook*, together with the *September 2010 Update*.

I trust you will find that this latest issue of Australian Dairy Industry In Focus remains a valuable source of knowledge and information on this important industry.

A handwritten signature in black ink, appearing to read 'Ian Halliday'. The signature is fluid and cursive, written over a white background.

Ian Halliday, Managing Director



## Dairy 2010: Situation & Outlook

### Background

The *Situation & Outlook* report is prepared each year to provide a clear and timely picture of what is happening in the Australian dairy industry, key drivers of the industry and expectations for the future. It draws on the National Dairy Farmer Survey results, plus the views and opinions of global dairy market analysts, retail analysts, dairy company management, farm consultants and farm leaders.

As well as informing farmers, the report aims to provide factual insights into dairy for banks, governments, regional communities and suppliers of products and services to the dairy industry.

The full *Situation & Outlook* report was published in May, with an *Update* released in September.

### The industry in September 2010

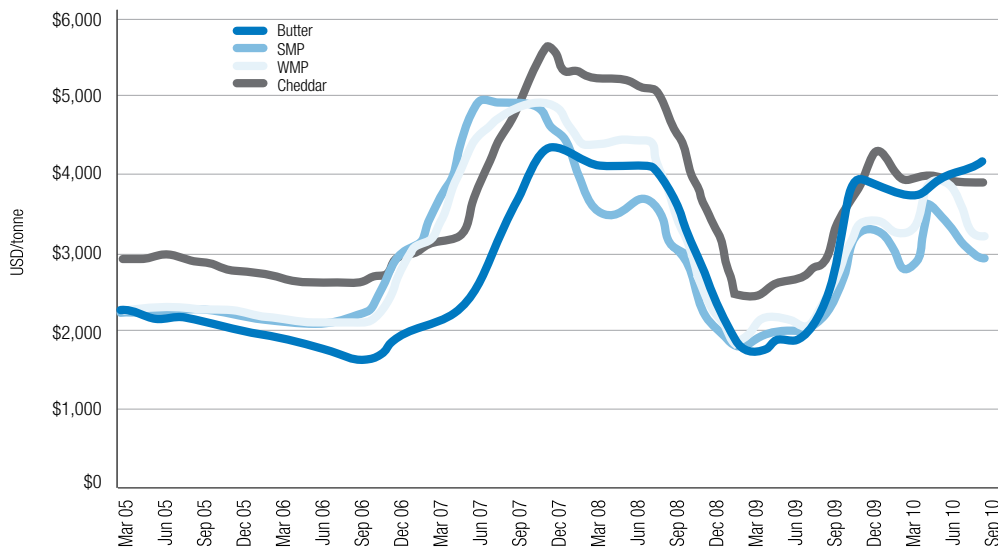
In 2009 the Australian dairy industry was facing a crisis, with the global economic downturn cutting milk prices and continued dry conditions putting many farm businesses at risk.

However, in 2010 the industry's position has changed significantly for the better. Economic recovery in the first half of the year led to renewed demand growth in key markets, and reduced supply saw dairy commodity prices rise sharply in USD terms. Although commodity prices have eased in recent months, dairy market fundamentals currently support a positive price outlook. Nevertheless the continuing uncertainty around the wider global economic situation remains the greatest threat to a sustained market recovery.

While the benefits of the international market recovery for Australian exporters and farmers have been constrained by a strong Australian dollar, farmgate prices for southern producers certainly improved in the second half of the 2009/10 season from the low opening prices of last season.

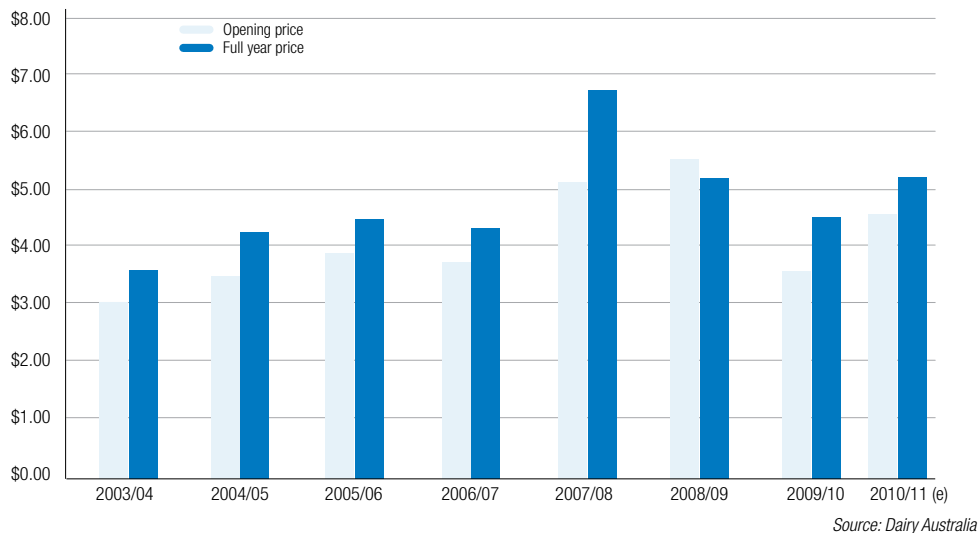
Strong 2010/11 opening prices for farmgate milk from exporting companies—up 25 to 30% on last year; significant rainfall across most of southern and eastern Australia with more 'traditional' winter weather patterns; the best early-season irrigation allocations in years; and good pasture growth all suggest that most farmers will start the new season on a positive and potentially profitable note.

Figure 1. Surveyed spot prices of Australian exporters



Source: Dairy Australia

**Figure 2. Estimated milk prices paid to VIC/SA/TAS dairy farmers—AUD/kg MS**



The major uncertainties are currently around the timing of any milk price step-ups—which come from positive international dairy commodity price signals; a looming spring locust plague; volatile feed grain prices and rising interest rates on high farm debt levels. Average farm debt is estimated to have increased by 20% over the two last years, so that higher interest rates on increased debt loads will maintain pressure on farm finances despite better milk prices.

Product mix decisions and hedging strategies will be critical to the final milk prices paid by Australian exporters in 2010/11. Dairy Australia modelling of prevailing commodity prices and potential exchange rate scenarios suggests that the May forecast range of \$5.00 to \$5.40 per kg MS for southern full year farmgate prices remains achievable.

While the turnaround in external operating conditions for most farmers is very positive, confidence levels overall are generally little changed. The market and margin volatility of the industry is undermining confidence in the outlook for many farmers who are seeking reliable returns on which to build a longer term future.

The low growth situation and outlook resulting from this uncertainty at the farm level is intensifying the contest for sustainable regional supplies. Competition for milk between dairy manufacturers remains strong, due to increasing export demand, the need to fill factories and to support future expansion plans.

Farmers in the northern and western domestically-focussed regions are facing a less positive price and production outlook, as processors seek to balance year-round supply and demand requirements. The implementation of two-tier pricing is proving particularly challenging for farmers whose access to the tier one price has been cut by changes in retailer supply contracts.

## What did farmers say in August 2010?

### Confidence in the future of the industry

The late-August 2010 survey found farmers at a relatively high point—with the combination of good winter rains and better milk prices are delivering the best operating conditions much of the industry has seen for a number of years.

Nevertheless, responses from farmers surveyed indicated only a slight overall improvement in confidence, with 73% positive about the future of the industry compared to 67% in February.

Confidence is up strongly in the Victorian regions and South Australia, while remaining at high levels in Tasmania.

However, significant regional differences have developed in Queensland, New South Wales and Western Australia. The proportion of positive respondents has fallen since February, as many farmers come off supply contracts struck at

the time of record high milk prices in 2007/08. Processors in these regions are seeking to balance year-round supply and demand requirements in a slowing domestic market.

Nationally there was a significant rise in the proportion of respondents positive about the future of the industry in their local region (69% compared with 61%)—but tempered by the regional differences referred to above.

The proportion of survey respondents positive about the future of their own business has remained unchanged at 72% at the national level.

### Expectations of growth in production

Despite the increased level of confidence in the industry, respondents have lowered their production expectations for the immediate season. This indicates it could take some time for higher levels of confidence to translate into larger herds and thereby increased production.

Figure 3. Farmers' attitude to industry future—% of farms

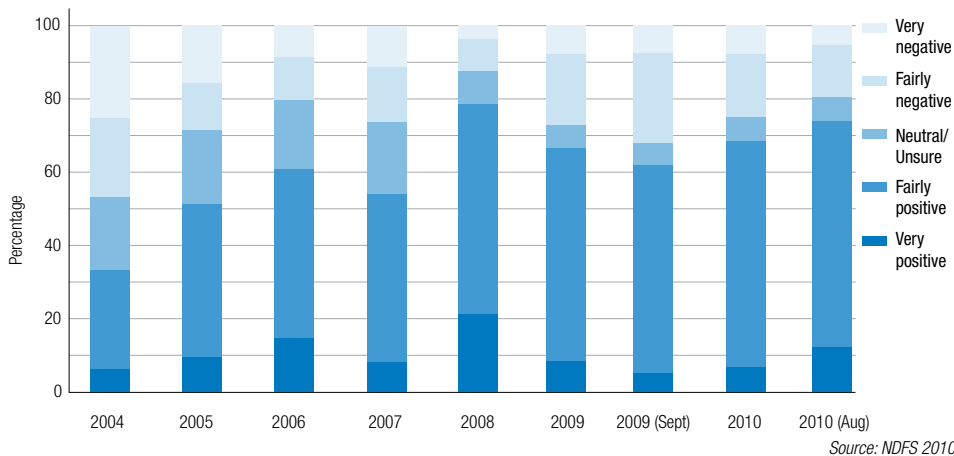
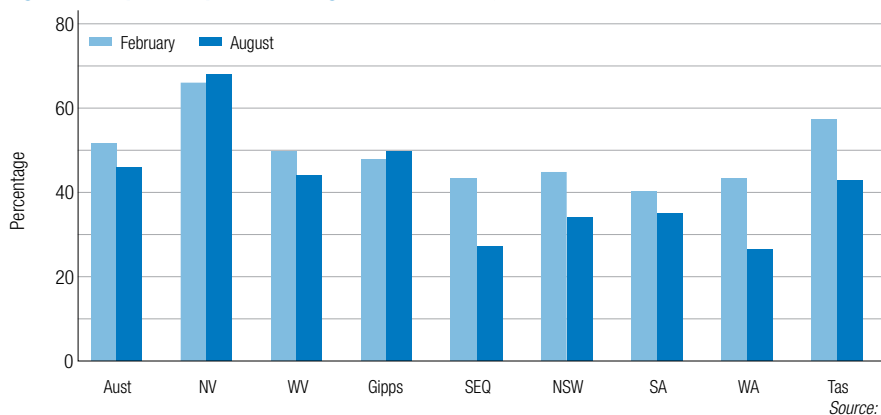


Figure 4. Expected production growth in three years time—% of farms





While around half of respondents expect their herd numbers in 2010/11 to be the same as predicted in the February survey, 37% now anticipate a smaller herd size—due to lower in-calf rates and the impact of higher culling rates a year ago in the face of the very low milk prices at that time.

Some 46% of respondents in the August survey expect their production to be greater in three years' time—slightly lower than in the 52% in the February survey—and reflecting the regional variations in confidence.

### Challenges facing the local industry

Milk price was nominated by 25% of respondents as the greatest challenge faced in the next six months. Cost of feed-grain (16%) and effects of climate/drought/flood (14%) were also mentioned.

Although 95% of survey respondents have purchased grains, mixes and concentrates over the past year, the majority (82%) purchase on an 'as required' basis—leaving just 15% using forward contracts to buy (covering about half their anticipated requirements).

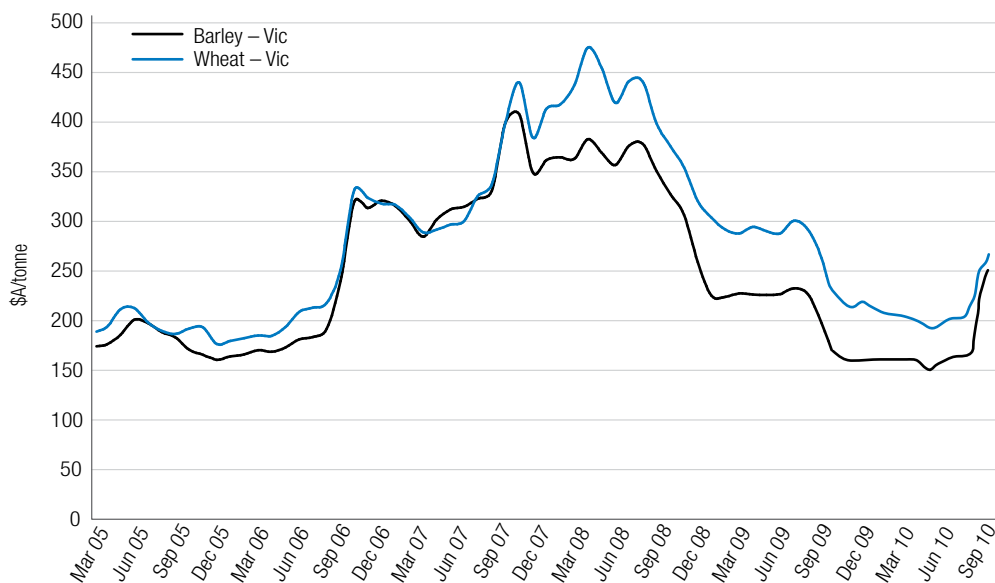
Grain prices increased sharply over July and August in response to a series of northern hemisphere supply setbacks. While surveyed farmers expected to reduce their reliance on bought-in feed over the coming twelve months due to good pasture growth from high soil moisture levels and the best early-season irrigation allocations in years, many dairy farmers will be exposed to any further grain price increases.

### International market outlook remains uncertain

High levels of sovereign debt and financial market volatility are contributing to elevated uncertainty over global economic recovery; with sustained growth being undermined by Euro-zone sovereign debt issues, the fading impact of fiscal stimulus packages and high unemployment rates in the US and the EU.

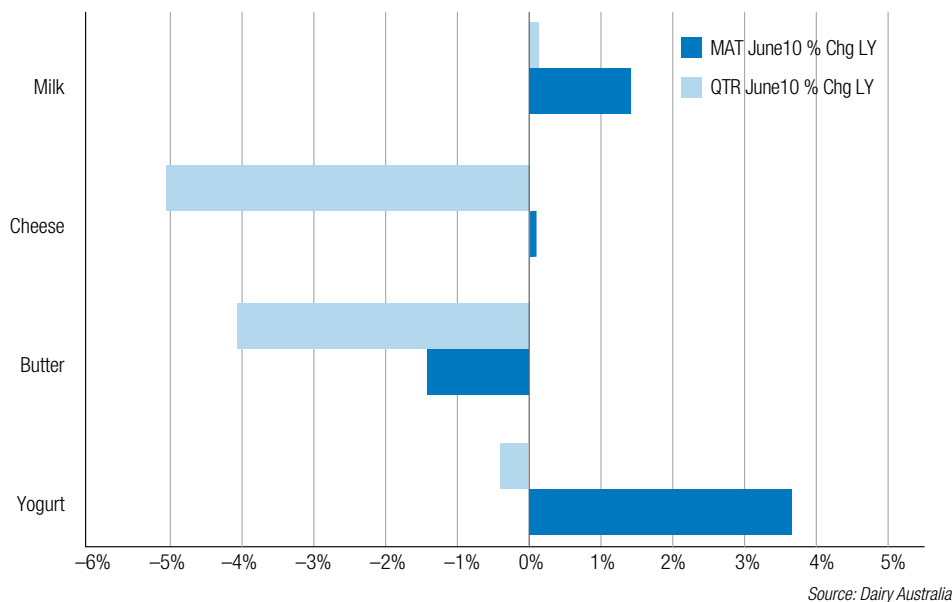
These wider economic concerns continue to overshadow international commodity trade and influence currency markets—resulting in sometimes exaggerated market responses to negative news. As a result, price volatility continues to be a feature of the international dairy market, despite supply and demand fundamentals remaining largely sound.

Figure 5. Grain prices (AUD/tonne)



Source: Australian Crop Forecasters

**Figure 6. Domestic sales growth by dairy category—% volume change on last year**



The economies of Australia's key dairy export destinations in Asia are recovering well, driven by solid internal demand growth. This is good news for dairy consumption and also helps protect developing Asia from economic shocks from the US or the EU.

China's imports of whole milk powder are growing strongly as consumers continue to prefer imported product. Sustained Chinese demand will be critical to maintaining market balance.

The recent drought conditions in Russia may trigger a surge in dairy import volumes; while the widespread flooding in Pakistan could mean a need for imported dairy ingredients to compensate for lost local supply—either commercially or through aid programs.

### Australian market situation & outlook

There are also mixed signals for manufacturers and retailers in the Australian market.

Consumer sentiment surged as interest rates have held steady for five months, pointing to improved consumer spending in the second half of 2010. This contrasts with a decline in business confidence, which has fallen for the fifth consecutive month to June 2009 levels.

Despite employment remaining strong, households are approaching their finances with caution and continuing to reduce household debt. Consumers' discretionary expenditure patterns have tightened as they seek value in both the type of product they buy and the channels in which they spend their money.

The past twelve months has seen falling retail dairy prices, as measured by the CPI. This reflects the aggressive marketing campaigns of the major supermarket chains with strong promotional activity emphasising price and value to consumers.

Domestic sales volumes reported by the major dairy companies have slowed for key dairy categories during the April–June quarter—when compared to annual trends—as have wholesale unit prices, so that sales values are lower than last year.

### World supply

US milk production has continued to trend upwards since February 2010. However, grain price volatility and continuing credit issues may keep the expansion below historical growth rates. Nevertheless, the US has the ability to ramp up production quickly given a plentiful supply of replacement heifers.

EU milk production during the first half of 2010 was in line with 2009. Some parts of the EU have seen milk volumes negatively impacted by extreme summer heat; with milk production down for both Germany (-0.7%) and France (-0.6%)—the largest milk producers in Europe; and down also in Russia and its neighbouring republics of Belarus and the Ukraine.

The EU Commission is still carrying a stockpile of skim milk powder acquired under the market support program during the 2009 downturn. Nevertheless, the Commission is eager not to disrupt the market and may hold the product into 2011. In contrast, tight butter supplies in Europe are reflected in much lower stocks this year.

Argentina's milk production is expected to

register some growth by the close of the year despite being down 6% for the first half. Recent conditions in Brazil's southern states have favoured the development of winter pastures and milk production is reportedly up over 4% in the first half.

Growth in supply is expected to be matched by higher domestic demand as economic growth in both Argentina and Brazil boosts demand for cheese and milk. Meanwhile, milk production in Chile and Uruguay is expected to register double-digit growth this year; but both countries are still relatively small in overall volume of supply to world markets.

Assuming favourable seasonal conditions continue, New Zealand milk production is expected to increase 4 to 8% in 2010/11. Much of the growth is attributed to conversions in the South Island, with the milk is destined for WMP exports.

Dairy Australia's current forecast milk production is for growth of around 1 to 2% to 9.1–9.2 billion litres for 2010/11—with potential for upside if seasonal conditions remain positive and grain prices ease following the Australian harvest.

## The Australian dairy industry

### An important rural industry

The dairy industry continues to be one of Australia's major rural industries. Based on a farmgate value of production of \$3.4 billion in 2009/10, it ranks third behind the beef and wheat industries. It is estimated that approximately 40,000 people are directly employed on dairy farms and manufacturing plants. Related transport and distribution activities, and research and development projects, represent further employment associated with the industry.

Dairy is also one of Australia's leading rural industries in terms of adding value through further downstream processing. Much of this processing occurs close to farming areas, thereby generating significant economic activity and employment in country regions. ABARE estimates this regional economic multiplier effect to be in the order of 2.5 from the dairy industry.

Dairying is a well-established industry across temperate and some subtropical areas of Australia. While the bulk of milk production occurs in south-east seaboard states, all states have dairy industries that supply fresh drinking milk to nearby cities and towns. A range of high-quality consumer products, including

fresh milks, custards, yogurts and a wide variety of cheeses, are produced in most Australian states. Nevertheless, the manufacturing of longer shelf life products, such as cheese and specialised milk powders, is steadily becoming more concentrated in the south-east region of Australia.

Strong growth characterised the dairy industry through the 1990s, but that growth has stalled in the last decade. The industry has experienced a slow recovery from the severe widespread drought of 2002/03, only to experience on-going dry conditions; with the resulting low water storage levels significantly limiting water allocations in irrigated dairying regions. The increasing levels of market and margin volatility of the industry in recent years has also served to undermine confidence in the outlook for many farmers who are seeking reliable returns on which to build a longer term future.

Table 2 details the long-term trends for a number of key industry measures.

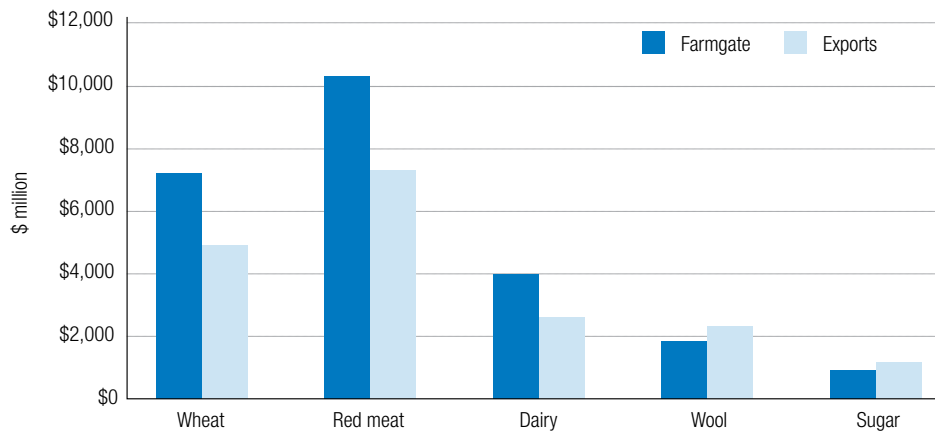
Figure 7 provides a comparison across the five major agricultural industries in Australia—comparing farmgate and export sales values—and shows the relative importance of the dairy industry within the agricultural sector.

**Table 2. Australian dairy industry—long term trends**

At June 30	1980	1990	CAGR 1980s	2000	CAGR 1990s	2010(p)	CAGR 2000s	CAGR 30 yrs
Milk production (m. lts)	5,432	6,262	1.4%	10,847	5.6%	9,023	-1.8%	1.7%
Dairy cows ('000)	1,880	1,654	-1.3%	2,171	2.8%	1,600	-3.0%	-0.5%
Farm numbers	21,994	15,396	-3.5%	12,896	-1.8%	7,511	-5.3%	-3.5%
Value of Farm Production*(\$m.)	\$3,209	\$2,991	-0.7%	\$3,788	2.4%	\$3,366	-1.2%	0.2%
Per capita consumption (milk equiv)	239	244	0.2%	274	1.2%	301	0.9%	0.8%
Export Value*(\$m.)	\$969	\$541	-5.7%	\$3,454	20.4%	\$2,391	-3.6%	3.1%
Export Share of Production	22%	31%		54%		45%		

Sources: ABS, ADC, DA, State Authorities  
CAGR = Compound Annual Growth Rate  
\*Expressed in 2009/10 dollars.

**Figure 7. Farmgate value vs Export sales value—2008/09**



Source: ABS

### A world-competitive industry

Australian dairy farmers operate in a deregulated and open market; the only government involvement being in the administration of food standards and food safety assurance systems. Consequently, international markets and prices are the major factor determining the price received by farmers for their milk.

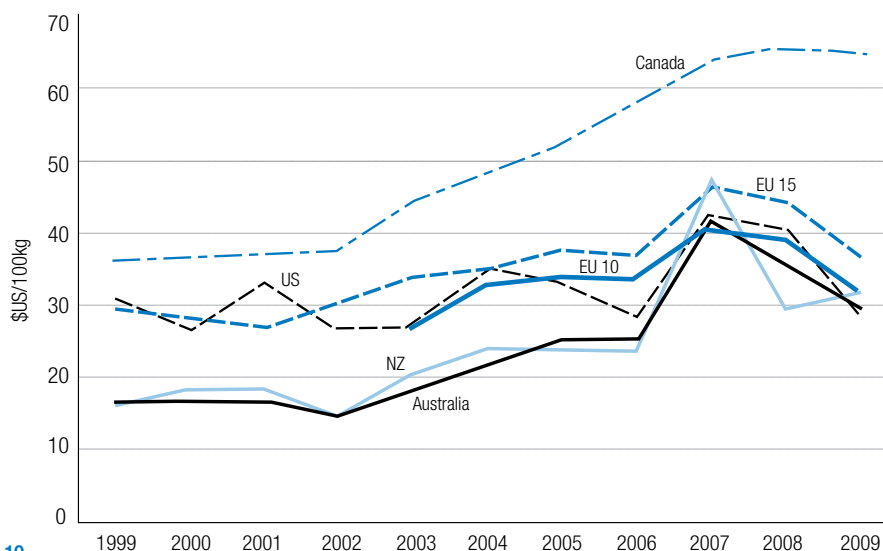
At an average of approximately US\$29 per 100kg of milk last year, Australian dairy farmers generally receive among the lowest prices compared to many major producing countries and so must operate highly cost-efficient production systems. This is regularly borne out by international comparisons; where Australian farms consistently have costs of production in the lower cost category of all farms in such surveys. The fact

that around half of Australia's milk production has been exported over the last decade reflects this high level of competitiveness.

However this has become increasingly difficult in recent years. Farm cost structures have increased in response to the need to adapt to drier conditions where rain fed pastures are regularly contributing a lower proportion of the total feed base available to the herd. Consequently, Australia's share of international trade has trended lower as local milk production has contracted over the past decade.

As shown in figure 8, the convergence of prices received by farmers around the world during the commodity price boom in 2007 has begun to dissipate, but most prices have moved down in the last two years.

**Figure 8. International Farmgate milk prices (US\$/100kg)**



Source: Dairy Australia



## Farm facts

South-east Australia's climate and natural resources are generally favourable to dairying and allow the industry to be predominantly pasture-based, with approximately 70–75% of the cattle feed requirements coming from grazing in a year of 'normal' seasonal conditions. This results in efficient, high-quality milk production.

Most dairy production is located in coastal areas where pasture growth generally depends on natural rainfall. Nevertheless, there are several inland irrigation schemes—most notably in northern Victoria and southern New South Wales.

Feedlot-based dairying remains the exception in Australia, although the use of supplementary feed—grains, hay and silage—is widespread and has increased significantly in recent seasons as farmers have had to adapt to drier conditions in many dairying regions. According to the

2010 National Dairy Farmer Survey, some 94% of dairy farms fed an average of 1.58 tonnes of grain, grain mixes or feed concentrates per cow during the 2009/10 season—marginally up from an average of 1.53 tonnes in 2008/09. Feeding rates have increased steadily in most dairying regions around Australia.

Owner-operated farms dominate the Australian dairy industry. Share farming was employed on 15% of farms in 2009/10 as it operates successfully within the family ownership model; while corporate farms make up just 2% of the total.

The number of farms has fallen by two-thirds over the last three decades from 22,000 in 1980 to 7,511 in mid-2010. Strong farmgate milk prices during 2007/08 and 2008/09 greatly reduced the rate of attrition overall and even led to an increase in the number of registered dairy farms in Victoria for two consecutive years. However,

**Table 3. Number of registered dairy farms**

	NSW	VIC	QLD	SA	WA	TAS	AUST
1979/80	3,601	11,467	3,052	1,730	622	1,522	21,994
1989/90	2,220	8,840	1,970	969	496	901	15,396
1999/00	1,725	7,806	1,545	667	419	734	12,896
2000/01	1,391	7,559	1,305	587	359	638	11,839
2001/02	1,323	7,079	1,152	538	344	612	11,048
2002/03	1,290	6,801	1,125	516	325	597	10,654
2003/04	1,096	6,242	967	458	305*	543	9,611
2004/05	1,063	6,108	885	402	278	507	9,243
2005/06	1,024	5,892	802	383	245	498	8,844
2006/07	924	5,346	734	354	222	475	8,055
2007/08	886	5,422	664	332	186	463	7,953
2008/09	860	5,462	648	320	183	451	7,924
2009/10 (p)	820	5,159	621	306	165*	440	7,511

Source: State Milk Authorities

\* Estimate

the 2009/10 season opened with the lowest milk prices in a number of years and the rate of attrition increased accordingly.

Nevertheless falling farm numbers do reflect a long-term trend observed in agriculture around the world, as reduced price support and changing business practices have encouraged a shift to larger, more efficient operating systems.

Average herd size has increased from 85 cows in 1980 to an estimated 220 currently. There is also a trend emerging to very large farm operations of over 1,000 head of dairy cattle.

Analysis of the 2010 National Dairy Farmer Survey indicated that 11% of dairy farms had herd sizes of more than 500 cows and produced 28% of the total milk produced in Australia. At the other end of the spectrum, 45% of farms had fewer than 200 cows and produced just 20% of the milk.

The dominant breed in Australia is the Friesian Holstein, accounting for some 70% of all dairy cattle. Other important breeds include the Jersey, and Australia's own breed, the Illawarra.

Most breeding is by artificial insemination and so Australian farmers have access to some of the best genetic material in the world. Herd recording is quite widely practiced, with around half of all dairy farms regularly recording herd performance.

The genetic evaluation of dairy cattle is conducted by the Australian Dairy Herd Improvement Service (ADHIS), using one of the most sophisticated evaluation systems available.

Improved herd genetics, as well as advances in pasture management and supplementary feeding regimes, have seen average annual yield per cow double from 2,850 litres to around 5,500 litres over the past three decades.

**Table 4. Number of dairy cows (000 head)**

	NSW	VIC	QLD *	SA	WA	TAS	AUST
<b>At March 31</b>							
1979/80	311	1,047	247	103	71	103	1,880
1989/90	238	968	201	89	64	92	1,654
1999/00	289	1,377	195	105	65	139	2,171
<b>At June 30</b>							
2000/01**	268	1,377	186	124	72	148	2,176
2001/02	264	1,363	174	110	75	134	2,123
2002/03	250	1,303	159	117	77	142	2,050
2003/04	248	1,297	171	116	74	133	2,038
2004/05 (e)	245	1,295	150	115	70	135	2,010
<b>New Series***</b>							
2005/06	222	1,217	127	104	67	143	1,880
2006/07	210	1,150	121	114	60	140	1,796
2007/08	195	1,055	100	103	54	134	1,641
2008/09 (r)	201	1,061	107	106	52	149	1,676
2009/10 (e)	205	995	110	95	55	140	1,600

\* For 1999 and 2000, Qld state figure includes Northern Territory cow numbers.

\*\* From 2001 census date is June 30, NT and ACT numbers are included in national total

\*\*\* Change in ABS data collection

Source: ABS and Dairy Australia

Combining this increase in yields per cow with average herd sizes that are nearly two and a half times larger, the average milk production per farm has increased from 250,000 litres to 1,200,000 litres per year over the same period.

Unlike many countries around the world, there is no legislative control over the price milk processing companies pay farmers for their milk. Farmgate prices vary between manufacturers, with individual company returns being affected by factors such as product and market mix, marketing strategies and processing efficiencies. Australian milk prices are based on the milkfat and protein solids content of the milk. Payments from processors to individual farmers can also vary marginally, as firms operate a range of incentive/penalty payments related to milk quality, productivity and out-of-season supplies. There are also volume incentives in place to encourage milk supply to particular processing plants to improve operating efficiencies.

The price farmers receive also varies across states, reflecting how milk is used in the marketplace. For example, many farmers in the southern regions receive a 'blended' price, incorporating returns from both drinking and manufacturing milk. However, higher prices are generally received for year-round supply of milk under commercial contract arrangements in the northern dairy regions, where fresh drinking milk makes up a much larger proportion of the production mix.

Farmgate milk prices reached record highs in 2007/08; and despite falling 15% during 2008/09, remained well above those of previous seasons. However the collapse in world dairy commodity prices during late-2008 saw a step-down in milk prices during the second half of the 2008/09 season for the 75% of Australian dairy farmers who supply exporting companies. Consequently, the 2009/10 season opened with the lowest milk prices in a number of years. Nevertheless, prices improved strongly during the year to finish within 12% of the previous season.

**Table 5. Average annual milk production per cow**

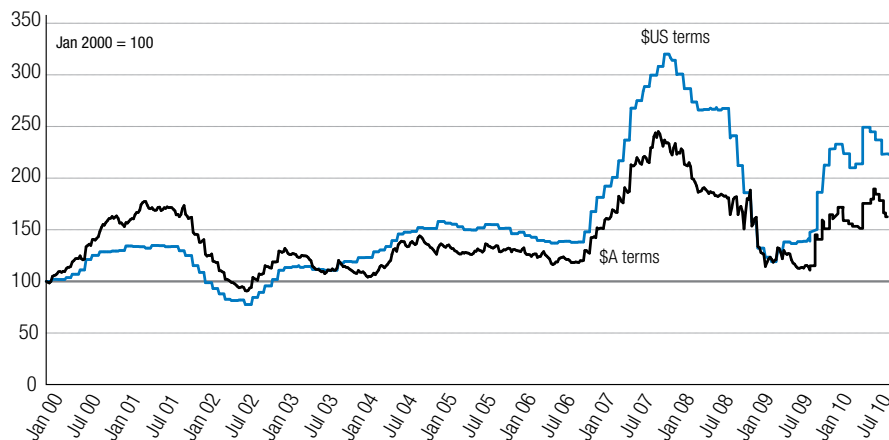
	NSW	VIC	QLD	SA	WA	TAS	AUST
1979/80	2,870	3,012	1,984	3,163	3,105	2,958	2,848
1989/90	3,602	3,920	3,122	3,934	4,205	3,791	3,781
1999/00	4,827	4,989	4,349	6,790	6,338	4,381	4,996
2000/01	4,687	4,977	3,943	6,369	5,903	4,177	4,859
2001/02	5,030	5,391	4,067	5,933	5,402	4,646	5,215
2002/03	4,996	4,885	4,230	6,556	5,348	4,304	4,913
2003/04	5,093	4,944	4,162	6,021	5,285	4,219	4,925
2004/05	4,925	5,101	3,735	5,862	5,418	4,497	4,983
2005/06	5,039	5,221	4,076	5,791	5,369	4,581	5,108
2006/07	5,151	5,261	4,033	6,417	5,235	4,696	5,182
2007/08	5,031	5,393	4,163	5,799	5,907	4,961	5,275
2008/09 (r)	5,420	5,807	5,032	6,053	6,355	5,140	5,691
2009/10 (e)	5,316	5,599	4,923	5,862	6,641	4,633	5,445

Source: Dairy manufacturers, ABS and Dairy Australia

Apart from the many factors affecting the milk prices received by individual farmers, as outlined above, the value of the Australian dollar in foreign exchange markets against the US dollar and the Euro is also critical in determining company returns. In the past decade, the Australian dollar has ranged in value against the US dollar from US\$ 0.52 to nearly US\$0.95.

The impact of currency changes on local returns is clearly shown in Figure 9. The Australian Export Index represents the weighted average value of a 'basket' of Australia's major dairy exports compared to a baseline set at January 2000.

**Figure 9. Australian Export Index**



Source: Dairy Australia and ABS

**Table 6. Typical factory paid prices by state**

		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
NSW	cents/litre	32.9	34.3	35.7	48.6	52.4	48.7
	\$/kg milk solids	4.62	4.80	5.02	6.73	7.29	6.72
VIC	cents/litre	31.5	32.9	32.0	50.0	39.1	33.9
	\$/kg milk solids	4.23	4.44	4.32	6.68	5.14	4.49
QLD	cents/litre	35.0	36.6	38.8	51.8	57.2	55.8
	\$/kg milk solids	4.84	4.99	5.38	7.14	7.89	7.57
SA	cents/litre	30.1	32.0	32.6	48.6	44.6	34.6
	\$/kg milk solids	4.19	4.49	4.57	6.75	6.19	4.73
WA	cents/litre	27.3	29.1	32.4	41.4	49.0	42.4
	\$/kg milk solids	3.91	4.12	4.55	5.80	6.77	5.96
TAS	cents/litre	30.9	33.6	36.5	50.2	41.3	34.6
	\$/kg milk solids	4.05	4.39	4.79	6.63	5.40	4.46
AUST	cents/litre	31.5	33.1	33.2	49.6	42.4	37.3
	\$/kg milk solids	4.28	4.50	4.51	6.68	5.66	4.98

Source: Dairy manufacturers

The products included in the Index are butter, cheese, skim milk powder and wholemilk powder, and they are weighted by their contribution to Australia's dairy export volumes. The Index takes into consideration individual dairy product export price fluctuations and movements in the Australian/US dollar exchange rate.

The Index shows that early in the decade Australian industry returns benefited from a low Australian dollar compared to the US dollar. However export returns were relatively weaker in Australian dollar terms during 2007/08, where the Australian dollar was 'stronger' and averaged US\$0.90 over the season. More recently, a stronger Australian dollar has once again lowered local currency returns from export markets.

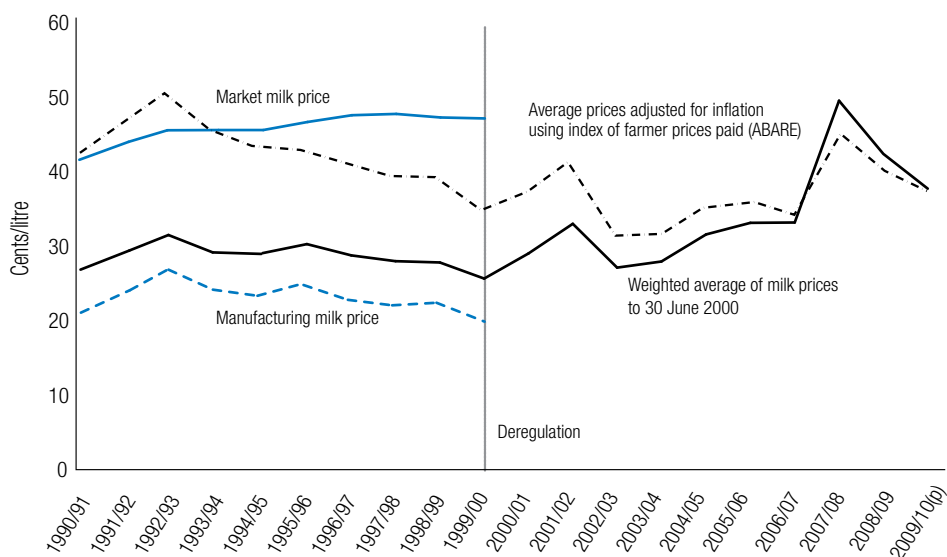
The long-term downward trend in inflation-adjusted farmgate prices (Figure 10) is in line with returns from other agricultural industries over the past two decades. Despite the occasional peaks—in 1992/93, 2001/02 and 2007/08—the line has traditionally returned to trend and clearly illustrates the imperative to continually improve productivity throughout the industry.

Australian milk production costs eased in the last couple of seasons; after increasing significantly over previous years when input costs such as feed grains, fodder, fertilisers, fuel and finance

interest costs were all trending strongly upwards during the commodity boom of the 2007/08 season. The average milk price in the important southern Australian dairying regions increased during the second half of the 2009/10 season as world dairy prices improved during late-2009 and into the first half of 2010. This was particularly important since many farms were cash flow negative during most of 2009. Stronger world dairy prices suggest that local farmgate milk prices will be much improved for the 2010/11 season; which may allow farmers to recover losses from last season and pay down some of the additional debt taken on to cover cash flow shortfalls.

The annual ABARE Farm Survey estimates the financial performance of Australian dairy farms. The two main measures are farm cash income (defined as total cash receipts less total cash costs) and farm business profit (which takes into account any build-up in trading stocks, less depreciation and the value of farm labour). Trends in farm cash income and farm business profit have shown significant variability over the past decade. Figure 11 illustrates how they were strong in the year of record high milk production volumes in 2001/02—encouraged by a combination of favourable climatic and market conditions; fell due to the dramatic impact

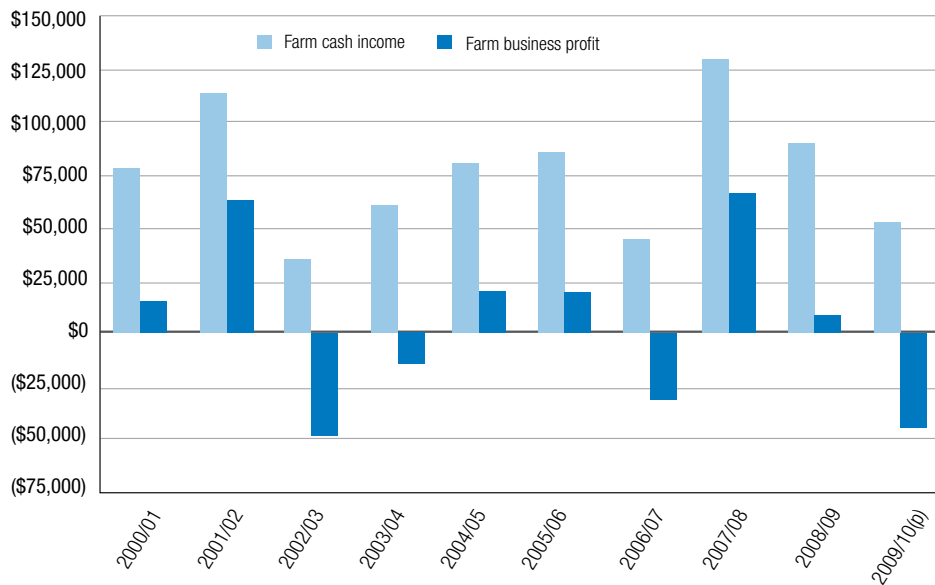
**Figure 10. Factory Paid Prices (cents/litre)**



Source: Dairy manufacturers and ABARE



**Figure 11. Australian dairy farm financial performance**



Source: ABARE

of the drought in the 2002/03 season; slowly recovered and consolidated over the following three years, before another financially crippling drought in 2006/07. Significant financial recovery occurred in 2007/08 driven by high farmgate milk prices; only to be reversed again in 2009/10 by sharply falling milk prices.

ABARE estimates that the average farm cash income was down 43% on last year to \$50,000 in 2009/10; with 44% of dairy farms experiencing a negative cash income. The range of financial performance is very wide across Australia's dairying regions—from a cash loss of \$27,300 in the northern Victoria / Riverina region up to cash income of \$240,500 in Western Australia—and there would be very wide variations within regions.

The national average farm business loss was estimated at \$44,000 in 2009/10; compared to a marginal farm business profit of \$6,700 last year. Once again, the figures ranged from a loss of \$109,800 to a profit of \$192,600 in the same two regions.

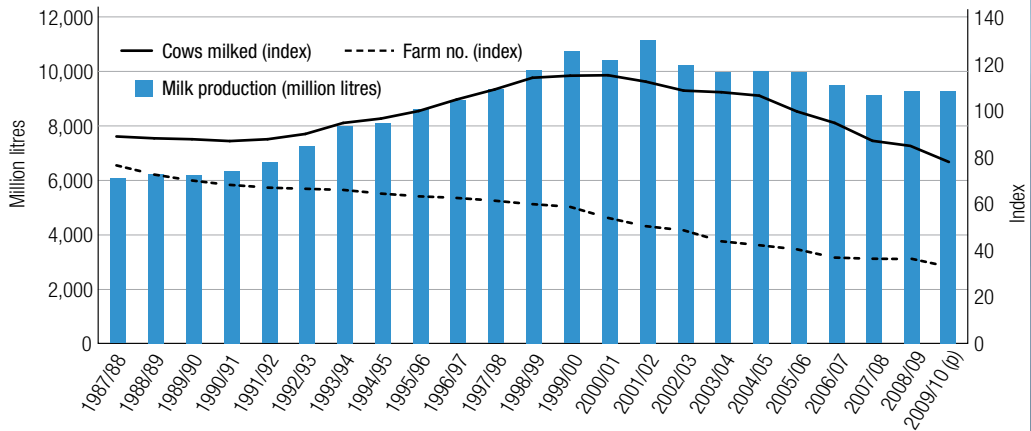
Despite the significant financial pressures on dairy farming operations in recent years and strongly increasing debt levels, it is interesting to note that the level of farm business equity, as estimated by ABARE, continues to be slightly above the long-term average of 80% as the capital value of farming land assets has continued to increase strongly over recent years.

## Milk production

While farm numbers have steadily decreased over the past three decades, milk output generally increased, due to increasing cow numbers and improved cow yields. However following the major drought of 2002/03, the industry has plateaued with falling cow numbers and seasonal conditions constraining production. Recent seasons have seen continuing drought conditions across many dairying and grain growing regions, further reducing cow numbers and limiting any growth in milk production.

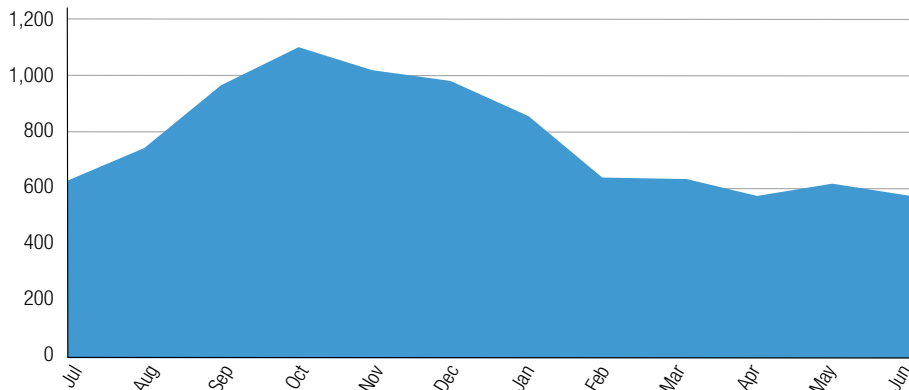
Nevertheless, there have been significant on-farm adaptation strategies employed to manage the highly variable conditions of recent years, particularly in the inland irrigation regions of northern Victoria, and central and southern inland New South Wales where water allocations have been very low for a number of years.

**Figure 12. Australian milk production vs indices of farms and cows milked**



Source: Dairy manufacturers, ABS, State Authorities and Dairy Australia

**Figure 13. Seasonality of milk production in Australia, 2009/10 (million litres)**



Source: Dairy manufacturers

The underlying trend has continued to fewer farms, larger herds and increasing levels of milk production per farm. Farmers have made many changes to their general farm management practices and adopted a range of improved technologies, including soil testing, fodder conservation, supplementary feeding, improved animal genetics, artificial insemination programs, the use of new milking equipment and techniques, and the widespread use of computers to record and monitor herd and individual cow performance.

Milk production is concentrated in the temperate zone of Australia; as can be seen in Table 7 and the map of dairying regions in Appendix 1.

Australian milk production remains strongly seasonal in the key south-eastern dairying regions, reflecting the pasture-based nature of the industry. Milk production peaks in October and tapers off in the cooler months from April. The production of long shelf-life manufactured products in these parts of the country has enabled maximum milk utilisation within the

seasonal cycle. However, the seasonality of milk output in Queensland, New South Wales and Western Australia is much less pronounced, due to a greater focus on drinking milk and fresh products in these states. Farmers in these states manage calving and feed systems to ensure more even year-round production.

*See Appendix 2 for more details on the seasonality of milk production by state.*

Australian milk production decreased by 365 million litres, or 3.9%, to 9,023 million litres in 2009/10. This reflected generally benign conditions and strong milk prices in the domestically-focussed northern states; but also reflected the low milk prices and the financial challenges faced by dairy farmers in the export-focussed south-east dairying regions of the country. The irrigated regions of southern New South Wales and northern Victoria also faced another year of difficult conditions; with low water allocations and milk production suffered accordingly.

**Table 7. Milk Production by state (million litres)**

	NSW	VIC	QLD	SA	WA	TAS	AUST
1979/80	907	3,151	508	329	222	315	5,432
1989/90	879	3,787	629	356	267	344	6,262
1999/00	1,395	6,870	848	713	412	609	10,847
2000/01	1,326	6,784	760	699	388	590	10,546
2001/02	1,343	7,405	744	715	393	671	11,271
2002/03	1,302	6,584	720	733	404	585	10,328
2003/04	1,271	6,434	674	703	404	590	10,076
2004/05	1,218	6,613	619	679	398	600	10,127
<b>New series*</b>							
2005/06	1,197	6,651	597	646	377	622	10,089
2006/07	1,105	6,297	534	655	350	642	9,583
2007/08	1,049	6,102	485	606	319	662	9,223
2008/09	1,065	6,135	512	628	340	708	9,388
2009/10 (p)	1,074	5,790	531	605	350	673	9,023

\* From July 2005, data collection based on farm location  
Source: Dairy manufacturers

Cows' milk consists of solids (milkfat, protein, lactose and minerals) in water, with water making up about 87% of the volume. Companies base farmgate payments on fat and protein components. Milk composition varies between regions due to a number of factors, such as cow breed and age, nutrition and feed quality, as shown in Table 8.

The previous trend of expanding total milk output, an increasing proportion of milk used for manufacturing dairy products and hence a declining drinking milk share of production have been reversed over the past eight years, as shown in Figure 14.

The volumes of milk going into the drinking milk sector have shown steady growth recently and last year accounted for 25% of total milk production—up from a figure of 17% in 2001/02.

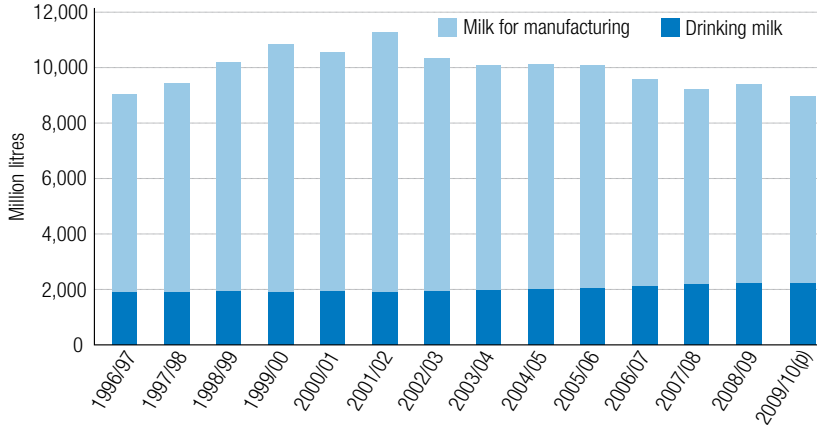
The differential in the proportion of drinking milk to manufacturing milk by state is shown in Figure 15. It graphically illustrates the greater focus on drinking milk in the product mix in the dairying industries within Queensland, New South Wales and Western Australia.

**Table 8. Average protein/fat composition by state (%)**

	NSW	VIC	QLD	SA	WA	TAS	AUST
<b>Milkfat</b>							
2003/04	3.94	4.16	3.95	3.96	3.98	4.32	4.10
2004/05	3.89	4.12	3.99	3.94	3.87	4.28	4.07
2005/06	3.91	4.08	4.00	3.88	3.91	4.29	4.05
2006/07	3.88	4.09	3.98	3.90	3.92	4.25	4.05
2007/08	3.97	4.14	4.01	3.95	3.95	4.20	4.10
2008/09	3.93	4.22	3.97	3.93	3.99	4.25	4.15
2009/10 (p)	3.97	4.20	4.05	4.05	3.91	4.34	4.15
<b>Protein</b>							
2003/04	3.26	3.34	3.21	3.27	3.15	3.36	3.31
2004/05	3.23	3.32	3.23	3.24	3.11	3.35	3.29
2005/06	3.25	3.33	3.33	3.25	3.15	3.37	3.31
2006/07	3.24	3.33	3.22	3.25	3.19	3.37	3.30
2007/08	3.25	3.34	3.25	3.25	3.19	3.39	3.32
2008/09	3.26	3.38	3.28	3.28	3.24	3.39	3.35
2009/10 (p)	3.27	3.35	3.33	3.27	3.20	3.41	3.34

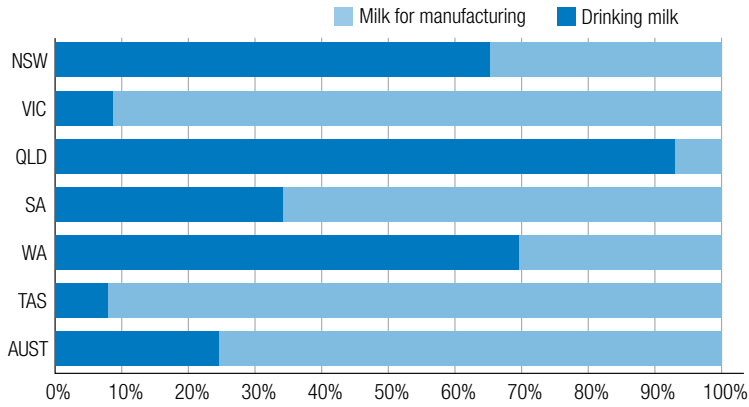
Source: Dairy manufacturers

**Figure 14. Drinking and manufacturing milk production (million litres)**



Source: Dairy manufacturers

**Figure 15. Milk Production—shares by state, 2009/10**



Source: Dairy manufacturers



## Dairy manufacturing

As in the farm sector, the milk processing sector is undergoing continuing rationalisation. This has resulted in improved factory capacity, as larger operations have improved their efficiency and economies of scale. The lack of growth in milk production over the past eight years has relieved the pressure on Australian dairy companies to continue to invest in increasing processing capacity—at least in the short to medium term. Instead, the challenge has been to remove surplus plant and to utilise the existing capacity as profitably as possible.

The Australian dairy manufacturing sector is quite diverse and includes farmer-owned co-operatives, public, private and multi-national companies.

Co-operatives no longer dominate the industry and now account for less than 40% of Australia's milk production—of which the largest is Murray Goulburn accounting for some 33% of national milk output. Smaller regional co-operatives include Challenge Dairies, Norco and Hastings Valley.

Other Australian dairy companies cover a diverse range of markets and products, from the publicly listed Warrnambool Cheese and Butter Factory; to the privately owned Bega Cheese Limited, Tatura Milk Industries, Regal Cream and Burra Foods to name a few; together with many highly specialised cheese manufacturers.

Large multi-national dairy companies have operated in the Australian dairy industry for many years and currently include Fonterra (New Zealand), Kirin (Japan) and Parmalat (Italy).

The major rationalisation event during 2008/09 was National Foods' purchase of the Dairy Farmers Group in November which had significant implications for the domestic market. The ACCC—Australia's national competition regulator—required divestiture of certain assets to ensure the state drinking milk markets remained competitive before giving approval for the takeover to proceed. The integration of the two companies and the rationalisation of their various manufacturing plants across the country have continued through 2010 and will do so well into 2011.

No major takeovers occurred during 2009/10.

The major manufactured product streams are:

- drinking milk—fresh and UHT long-life;
- skim milk powder (SMP)/buttermilk powder (BMP)/butter;
- butter/casein;
- cheese;
- wholemilk powder (WMP);
- other consumer products, such as yogurts, custards and dairy desserts; and
- specialised ingredients, such as whey proteins, nutraceuticals, etc.

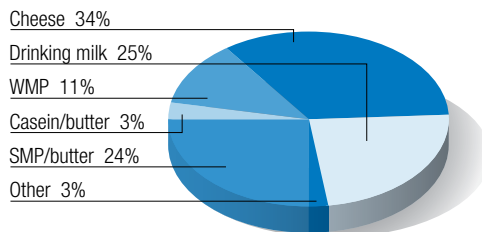
Cheese is consistently the major product stream; utilising around one third of Australia's milk production in 2009/10, and has remained at this level over as number of years.

Drinking milk and skim milk powder/butter production were the two next largest users of milk; taking about a quarter of all milk each.

Around 60% of manufactured product (in milk equivalent terms) is exported and the remaining 40% is sold on the Australian market. This contrasts with drinking milk, where some 97% is consumed in the domestic market.

*See Appendix 3 for more details on the manufacturing processes.*

**Figure 16. The utilisation of Australian milk in 2009/10**



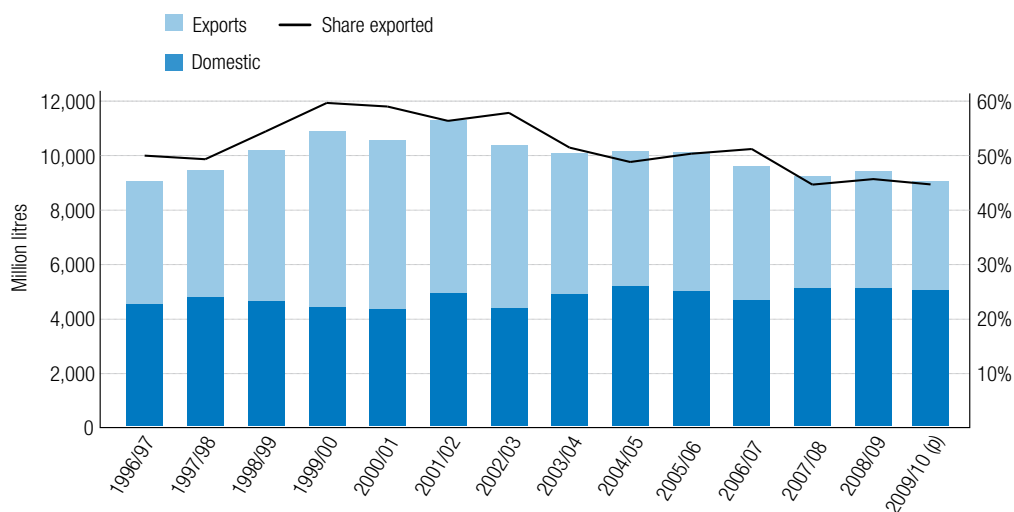
*Source: Dairy Australia*

## Dairy markets

Over the past two decades Australian milk production has been well above that volume required for domestic consumption, so that a significant proportion is destined for export markets. The share of total production exported has ranged from 40-60% over the period shown in Figure 17. In the last three years Australia has exported around 45% of its milk production—the lowest proportion since the mid-1990s, due to the reduced availability of product for export.

While Australia accounts for an estimated 2% of the world's milk production, it is a significant exporter of dairy products. Australia ranks third in terms of world dairy trade—with a 10% share—behind New Zealand and the European Union as a bloc.

**Figure 17. Australian composition and exports (milk equivalents)**



Source: Dairy manufacturers and ABS

**Table 9. Australian dairy markets by product, 2009/10 (A\$ million)**

	Sth East Asia	Other Asia	Europe	Middle East	Americas	Other	Total
Butter/AMF	68	42	16	28	20	4	210
Cheese	91	453	21	73	27	21	713
Milk	29	26	0	1	0	14	70
SMP	203	83	2	45	4	11	352
WMP*	136	170	2	51	30	11	422
Other **	181	250	15	47	48	78	625
<b>Total</b>	<b>708</b>	<b>1,024</b>	<b>56</b>	<b>245</b>	<b>129</b>	<b>139</b>	<b>2,391</b>

Source: Dairy Australia estimates and ABS

\*Also includes infant powder

\*\* Includes consumer products such as ice cream, custards, etc and mixtures but excludes industrial / ingredient usage.

Japan is the single most important export market for Australia, accounting for 19% of exports by value. Australian exports are concentrated in Asia, which represented 72% of the total dairy export value of A\$2.4 billion in 2009/10.

This concentration of exports in Asia/East Asia reflects both Australia's geographic proximity to these markets and the extent to which Australia is excluded from other major markets by direct restrictions (as in the case of the European Union) or the impact of the export subsidy programs of major competitor countries.

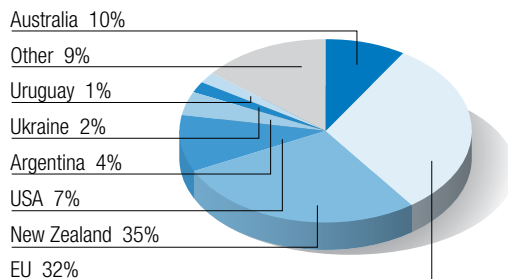
Asian markets have considerable potential for consumption growth as incomes rise and diets become more 'westernised'. Australian dairy

companies have proven track records in supplying these markets over a number of decades. At the same time the Middle East and the Americas are also becoming increasingly important markets for many Australian exporters.

Australia's top five export markets by volume in 2009/10 were Japan, Singapore, China, Indonesia, and the Philippines; while the top five export markets by value were slightly different in Japan, China, Singapore, Indonesia and Malaysia. The fastest growing export market for Australia in recent years has been China.

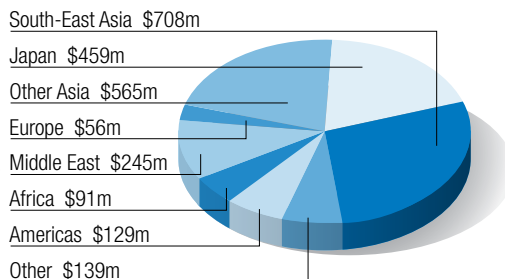
See Appendix 5 for detailed tables of Australia's export markets.

**Figure 18. Exporters' share of world trade in 2009 (milk equivalents)**



Source: Dairy Australia and ABS

**Figure 19. Australian exports by region, 2009/10 (A\$ million)**



Source: ABS

**Table 10. Top 10 Australian export destinations, 2009/10**

Country	Volume—Tonnes	% of Total	Country	Value—A\$ million	% of Total
Japan	115,953	16%	Japan	459	19%
Singapore	87,091	12%	China	229	10%
China	65,326	9%	Singapore	204	9%
Indonesia	44,675	6%	Indonesia	148	6%
Philippines	43,179	6%	Malaysia	124	5%
Malaysia	38,545	5%	New Zealand	108	5%
New Zealand	31,844	4%	Philippines	103	4%
Thailand	31,519	4%	Thailand	96	4%
Hong Kong	29,215	4%	Korea, South	92	4%
Saudi Arabia	27,785	4%	Saudi Arabia	86	4%

Source: ABS

## Australian consumption of dairy products

The major Australian consumer dairy products are drinking milk, cheese, butter and butter blends, and yogurt.

Per capita consumption trends over the past two decades have varied quite significantly by individual product. These trends reflect changes in consumer tastes and preferences in response to a multitude of variables, such as multicultural influences on food trends, health perceptions about dairy products and manufacturers' responses (with low-fat variants), new product development, flavour and packaging innovations, competitive category offerings, and the distribution and hence availability of products.

Per capita consumption of drinking milk is currently estimated at just over 102 litres, unchanged from last year, and remaining at very high levels compared to many countries—thanks in no small part to the expansion of the 'coffee-culture' in Australia.

Cheese consumption has stabilised at nearly 13kg per person in the last two years—with an on-going shift from cheddar to non-cheddar varieties as consumer tastes have developed and diversified.

Annual per capita consumption of butter in Australia is around 4 kgs. The introduction of butter and vegetable oil based dairy blends in the early-1990's—which are easier to spread and lower in saturated fats—helped stabilise a long-term decline. Consumers are also interested in the 'naturalness' of butter, together with its superior taste and cooking functionality.

Yogurt is the ultimate 'healthy snack' for time-pressed consumers, combining both convenience and health attributes; with per capita consumption at just over 7kg per year.

Figure 20. Per capita consumption (litres/kg)

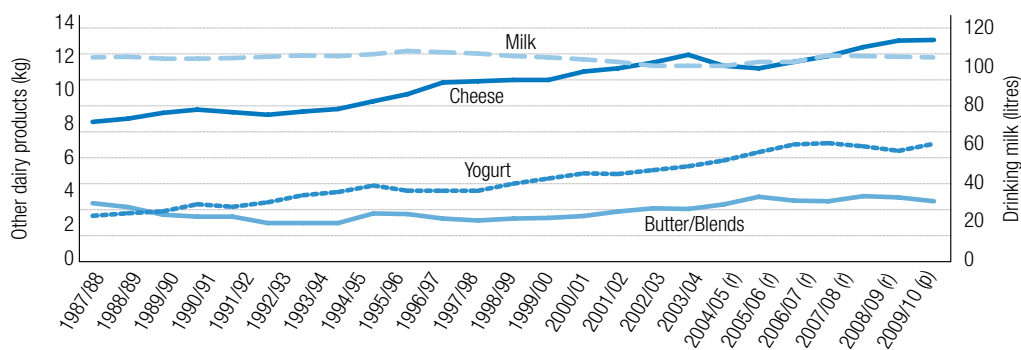


Table 11. Per capita consumption of major dairy products (litres/kg)

	Milk (lts)	Cheese (kgs)	Butter / Blends (kgs)	Yogurt (kgs)
2001/02	98.5	11.6	3.4	5.6
2002/03	98.3	12.1	3.4	5.8
2003/04	99.0	11.5	3.6	6.1
2004/05	100.2	11.3	4.1	6.6
2005/06 (f)	100.2	11.7	3.9	7.0
2006/07 (f)	103.4	12.0	3.8	7.1
2007/08 (f)	103.0	12.5	4.1	6.9
2008/09 (f)	102.6	12.9	4.0	6.7
2009/10 (p)	102.4	12.9	3.8	7.1

Source: Dairy manufacturers and Dairy Australia

## Drinking milk

Regular or wholemilk is standardised to a milkfat content of around 3.4 to 3.6%. Modified, reduced and low-fat milks are standardised to other specifications, with varying milkfat and solids non-fat levels. The cream removed during standardisation can be bottled as table cream or manufactured into butter or other dairy products.

Australian milk consumption has been steadily shifting from regular milk to modified milk types, such as reduced and low-fat milks, over many years. This trend reversed for a period during 2008, as consumers responded to rapidly increasing retail prices by switching to the relatively lower-priced regular full cream milks. Nevertheless, the long-term trend in this

**Table 12. Drinking milk sales by state (million litres)**

	NSW	VIC	QLD	SA	WA	TAS	AUST
1989/90	582	449	316	150	164	47	1,730
1999/00	597	440	383	185	190	48	1,933
2000/01	633	456	393	201	201	50	1,934
2001/02	626	460	403	185	200	50	1,924
2002/03	620	475	404	183	208	52	1,942
2003/04	627	476	418	196	212	52	1,981
2004/05	641	486	429	200	215	53	2,024
2005/06	660	499	444	192	216	50	2,061
2006/07	692	510	474	201	226	53	2,156
2007/08 (r)	682	524	485	205	237	55	2,188
2008/09 (r)	695	533	495	208	241	56	2,229
2009/10 (p)	709	545	499	213	247	57	2,269

State figures exclude interstate traded milk prior to 2001, NSW includes ACT after June 2000.

Source: Milk processors and State Milk Authorities

**Table 13. Drinking milk sales by type (million litres)**

	Regular	Reduced	No Fat	Flavoured	UHT	Total
1989/90	1,257	322		111	40	1,730
1999/00	1,099	498		173	164	1,933
2000/01	1,094	415	95	165	165	1,934
2001/02	1,074	435	105	170	140	1,924
2002/03	1,055	440	120	174	153	1,942
2003/04	1,057	462	118	190	154	1,981
2004/05	1,063	492	116	199	154	2,024
2005/06	1,093	488	124	201	155	2,061
2006/07	1,107	530	125	213	181	2,156
2007/08 (r)	1,119	551	123	213	183	2,188
2008/09 (r)	1,136	569	118	210	196	2,229
2009/10 (p)	1,133	590	119	215	211	2,269

Source: Milk processors and State Milk Authorities



category resumed during 2009/10. Full cream white milk volumes marginally declined on the previous year and lost 1% share in a growing market, settling marginally below a 50% share of total drinking milk. The pattern across the other segments was all positive; with modified milks and fresh flavoured milks both up around 3% over the year and UHT up by a strong 8% driven by significant supermarket promotional activity.

There are now just two major players in the Australian drinking milk market: the enlarged National Foods—after their takeover of the Dairy Farmers Group in late-2008—(with the Pura and Dairy Farmers brands) and Parmalat (with the Pauls brand). There are also a number of smaller players in the marketplace with strong regional brands.

The supermarket channel's share of Australian drinking milk sales has continued to trend steadily up over recent years—to 51% in 2009/10. Supermarkets benefited generally from increased 'at-home' eating as consumers sought to economise over the past couple of years.

Supermarket sales volumes grew by 3.8% in 2009/10; with the comparative sales performance between branded (+6.3%) and private label milks (+1.3%) reversing the trend of the previous year.

Private label brands account for 50% of total supermarket milk volumes, up from around 25% in 1999/2000. Their average price is significantly less than company branded products. This lower average price is due to a combination of product and pack size mix—with a greater proportion of private label purchases being bulk regular full cream milk.

On the packaging front, plastic bottles now account for around 80% of all milk sales in supermarkets, with the balance split evenly between gable-top cartons and UHT packs.

There have also been significant movements within the pack sizes bought by consumers in supermarkets. While the 2-litre plastic bottle remains the most popular size, with nearly 40% share, this is down from close to 50% eight years ago. Similarly, the combined share of 1-litre cartons and plastic bottles has slipped from 33% to 20%. The major change has been in the explosive growth of the 3-litre plastic bottle, increasing its share of all supermarket milk sales from 13% to 35% since it first appeared in June 1998.

In 2009/10, the average price of branded milk decreased around 4% to \$2.12 per litre. When combined with a 4.1% decrease in the average private label price to \$1.19 per litre, delivered fall in the average supermarket price of 6 cents per litre to \$1.65 per litre.

This was because retail milk prices fell 11 cents per litre from late-February 2009 as the Dairy Adjustment Levy, used to fund the industry's deregulation adjustment package, was removed from wholesale prices.

*See the section on Industry Levies on page 36 for more details.*

Australia exports relatively small volumes of milk—predominantly as UHT product—with 80% of the total going into the Asian region and nearly 15% into the island countries of the Pacific region.

*See Appendix 6 for more details of drinking milk exports.*

## Cheese

Australia produced 349,400 tonnes of cheese in 2009/10—a 2% increase on the previous year. Nevertheless, production volumes are significantly less than earlier in the decade as the availability of milk has trended downwards. The product mix changed last season; with strong growth in the production of semi hard and fresh cheeses offsetting falls in cheddar and hard grating cheese volumes.

A longer-term trend away from cheddar cheeses towards non-cheddar cheese types has been apparent in both the production and consumption data for Australia for some years. This trend resumed in 2009/10 with the cheddar share of total production dropping 47%.

It is estimated that around 55% of the domestic sales of Australian cheese are through supermarkets. A significant proportion—mostly specialty cheeses—is sold through the smaller independent retail trade, with the remainder used in the foodservice sector and in food processing applications.

Cheese is a major product for the Australian dairy industry; with sales of around 215,000 tonnes within Australia, valued at an estimated A\$1.6 billion, and export sales of 168,100 tonnes, worth A\$715 million in 2009/10.

Sales volumes through the supermarket channel increased by nearly 2% in 2009/10. However, average retail prices fell by 1% due to

significant periods of strong promotional activity by the major retail chains. Cheddar cheese sales were unchanged, while the non-cheddar cheese types grew by 6%; continuing the slow but steady trend away from cheddar. Non-cheddar cheeses now make up a third of all supermarket sales—up from a quarter at the start of the decade.

Cheese imports accounted for 25% of estimated domestic sales last year. In 2009/10, 78% of the 71,500 tonnes of cheese imported into Australia was sourced from New Zealand. The bulk of the remaining cheese imports came from the US and Europe.

Japan remained Australia's most important overseas cheese market in 2009/10 and accounted for over 50% of product exports, followed by China, South Korea, Saudi Arabia, and Taiwan. Australian cheeses were exported to more than 60 countries around the world last year.

The trend away from cheddar cheeses to non-cheddar cheese types evident in the domestic market is also being reflected in Australia's cheese exports; the non-cheddar share of total export sales has steadily increased from 45% to 58% since the start of the decade.

**Table 14. Australian cheese production by type of cheese**

	2004/05	2005/06	2006/07	2007/08 (r)	2008/09 (r)	2009/10 (p)
Cheddar	195,887	191,693	179,159	171,260	178,360	164,220
Semi Hard	90,714	76,813	75,529	73,854	61,659	82,481
Hard Grating	13,267	23,022	18,477	16,908	17,924	12,236
Fresh	83,649	75,441	84,443	90,934	75,435	81,764
Mould	4,833	5,847	6,030	7,966	8,915	8,660
Total Cheese	388,350	372,816	363,638	360,922	342,293	349,361

Source: Dairy manufacturers

## Butter

In 2009/10, Australia produced 128,400 tonnes of butter and anhydrous milkfat (AMF) or butteroil in commercial butter equivalent terms (CBE)—while a 13% decrease on the previous year—back to the levels of the previous two years.

AMF is butter with the water removed. It is primarily produced for export and domestic food processing applications, such as bakery and confectionery. While these sectors also use butter, the majority of domestic butter sales are through retail and foodservice outlets.

The introduction of spreadable butters and vegetable oil-based dairy blends, which are easier to spread and lower in saturated fat, has helped to stabilise domestic market sales in the last two decades, after a sustained decline through the 1970s and 1980s.

Nevertheless, Australia's total retail market for tablespreads has generally shrunk over the last decade. Consumer concerns about margarine consumption have meant a continuing decline in share; with dairy spreads taking further retail market share from margarine. This has been a continuing trend over the decade,

as dairyspreads' share of the category has steadily increased from 30% in 2000/01 to approaching 45% by the end of the decade.

It is estimated that around 55% of the domestic sales of Australian dairyspreads are through supermarkets. Supermarket sales volumes remained steady in 2009/10, together with little change in average retail prices during the year.

*See Appendix 5 for more details of supermarket butter and dairy blend sales.*

Australian exports of butter and AMF can vary significantly from year to year, depending on milk availability during the season and local company responses when strong world commodity prices are on offer in the market for competing products. Export volumes lifted 5% last year to 73,750 tonnes—worth A\$211 million.

Australia's most important overseas markets for butter/AMF were Singapore, Egypt, Malaysia, South Korea and Morocco—out of a total of over 50 countries.

*See Appendix 6 for more details of butter and AMF exports.*

**Table 15. Butter and AMF production**

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
Butter/Butter Blends (CBE)	105,131	92,850	101,666	99,202	109,753	100,134
AMF (CBE)	41,528	52,904	31,434	28,416	38,742	28,245

*Source: Dairy manufacturers*

**Table 16. Australian exports of butter and AMF (tonnes)**

	2004/05	2005/06	2006/07	2007/08	2008/09 (r)	2009/10 (p)
Butter	37,900	35,525	44,279	34,636	43,968	41,748
AMF (CBE)	31,611	46,816	36,689	22,516	26,532	32,002

*Source: Dairy Australia & ABS*

## Other fresh and frozen dairy products

Australian manufacturers produce a range of fresh dairy products, including yogurts, dairy desserts, chilled custards and creams, dairy dips and frozen products such as ice-cream. To cater for the health concerns of modern consumers—a major driver in food choices—the majority of dairy products are available in low fat formulations.

Yogurts have been a category of considerable growth for the dairy industry over the past two decades, due to their ability to meet consumer requirements for convenient, healthy snacks in an environment of time-poor lifestyles. The segment is dominated by strong international brands, such as Ski, Yoplait and Nestlé. The Danone brand is to re-enter the local market in 2010/11.

Growth in yogurt sales has been underpinned by regular product innovation in the areas of packaging, flavour combinations and the use of probiotic cultures, as well as new products, such as drinking yogurts.

Marketing support in terms of advertising new product ranges and flavour innovations are important in encouraging consumer trial and subsequent category growth.

Dairy desserts are a low volume / high value dairy category with slowly declining volumes in recent years. Marketed as an indulgence or treat item, these products are generally targeted to adult consumers and include mousses, crème caramels and fromage frais. Children's products include fromage frais and flavoured custards that often feature popular cartoon characters on-pack.

Chilled custards, a traditional favourite, have shown marginal growth in recent years as manufacturers have expanded their product offerings into small, snack-sized single-serve plastic cups sold in multi-packs.

The overall market for cream has declined in recent years—although recent economic uncertainty saw more people preparing meals at home and hence supporting sales. Regular and sour creams are both used extensively as accompaniments or ingredients, but are facing significant competition on the health front, often from other dairy products, such as natural yogurt.

Dairy dips are another low volume / high value dairy category showing steady volume growth in recent years. Flavour innovations have been particularly successful in maintaining the consumer appeal of another traditional favourite in the dairy case.

Australia's consumption of ice-cream is relatively high by world standards—generally reported at 18 litres per head and third only to New Zealand and the United States. The market is stable in volume terms, if highly seasonal in certain segments, stick lines particularly.

The major market development in recent years has been in premium indulgent treats, in both stick lines and smaller-sized take-home tubs. Refreshing fruit-based products are also popular with consumers seeking a healthy option within the category.

Nevertheless, sales of larger tubs (2-litre or greater) and multi-packs of stick lines continue to make up the majority of sales in supermarkets, while mid-range stick lines and ice-cream cones are the major volume products in the route trade.

Once again, strong international brands, such as Streets (from Unilever), Peters (from Nestlé) and Cadbury (from Kraft) dominate the category.

## Milk powders

Australian manufacturers produce a range of milk powders. New technology used in the production and use of powders has seen the range of specifications available from Australian manufacturers expand in line with customers' needs.

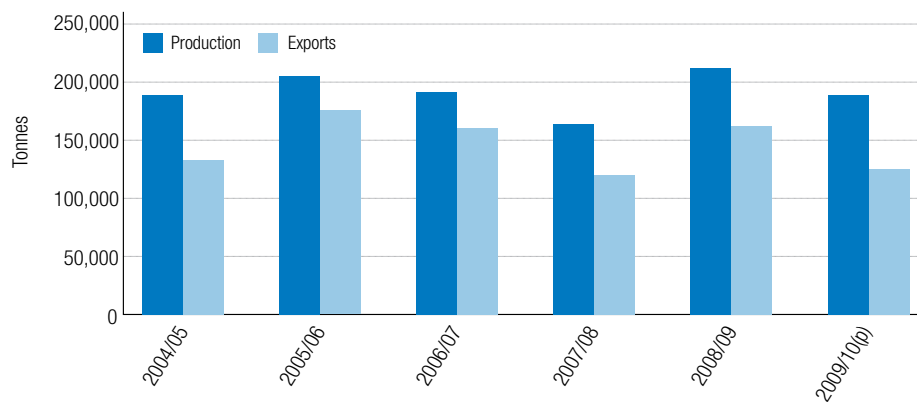
In the years up until the peak production season of 2001/02, the most obvious trend in powder production was an increase in wholemilk powder (WMP) output, with skim milk powder (SMP) production remaining relatively stable. Since 2002/03, production of milk powders have been most affected by the reduced availability of milk and the trend has changed. The production of both forms of powder fell sharply, followed by similar patterns of recovery, with WMP volumes making up nearly half the total milk powder production up until 2004/05.

Strong commodity prices in recent years saw a significant re-balancing of company product mixes from 2005/06 towards SMP (and butter/butteroil) to take advantage of the higher relative export returns available from these products. 2007/08 saw a trend back towards WMP; but this was subsequently reversed the following year with SMP now at around a 60% share of total milk powder production.

Less than 20% of Australia's powder production is sold domestically. Retail outlets account for only a small percentage of domestic sales, with local usage being mainly as a food ingredient.

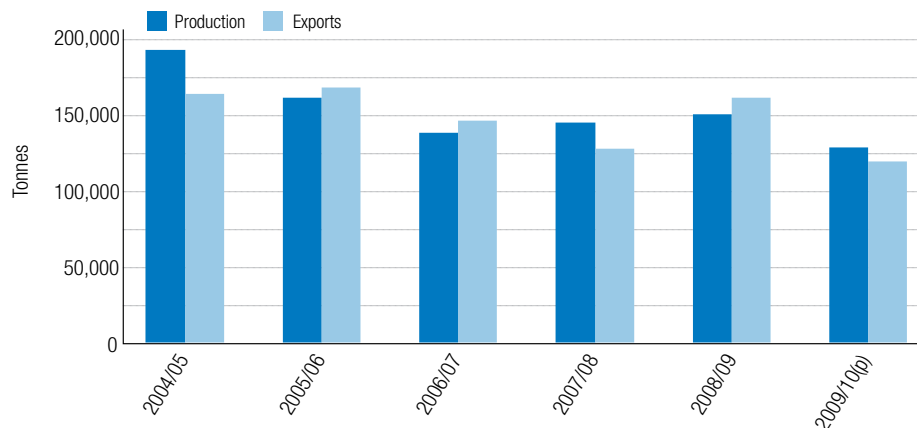
Exported milk powder is often recombined into liquid milk products, particularly in tropical climates where fresh milk supplies are not available. It is also used in bakery products

**Figure 21. Australian production and exports of skim milk powder (tonnes)**



Source: Dairy manufacturers and ABS

**Figure 22. Australian production and exports of wholemilk powder (tonnes)**



Source: Dairy manufacturers and ABS



(improving the volume and binding capacity of bread, and ensuring crisper pastry and biscuits), confectionery and milk chocolates, processed meats, ready-to-cook meals, baby foods, ice-cream, yogurt, health foods and reduced-fat milks. Industrial-grade powder is used for animal fodder.

The major export markets for Australian milk powders are concentrated in Asia; with 80% of SMP export volumes and nearly 70% of WMP destined for the region in 2009/10.

See Appendix 6 for more details on milk powder exports.

The Philippines was the largest single export market for Australian SMP, followed by Singapore, Indonesia, Thailand and Malaysia.

Singapore was the largest single export market for Australian WMP, followed by China, Sri Lanka, Indonesia and Saudi Arabia.

**Table 17. Australian production of milk powders (tonnes)**

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
Skim milk powder	189,113	205,495	191,475	164,315	212,030	190,233
Wholemilk powder*	189,220	158,250	135,364	141,974	147,544	126,024

\* includes infant powders  
Source: Dairy manufacturers

**Table 18. Australian exports of skim milk powder by region (tonnes)**

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
Asia	112,848	147,507	126,793	92,590	127,699	100,969
Middle East	9,136	19,042	19,878	22,010	20,906	17,829
Africa	6,352	3,704	6,023	2,353	6,180	1,462
Pacific	725	1,032	1,258	509	514	3,953
Americas	4,069	4,067	5,266	1,983	6,257	1,462
Europe	98	235	1,111	313	525	244
Others	0	17	0	0	0	0
<b>Total</b>	<b>133,228</b>	<b>175,604</b>	<b>160,329</b>	<b>119,758</b>	<b>162,081</b>	<b>125,919</b>

Source: Dairy Australia & ABS

**Table 19. Australian exports of wholemilk powder by region (tonnes)**

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
Asia	114,566	123,039	99,837	90,208	102,024	80,396
Middle East	24,232	10,420	18,499	12,151	30,889	17,180
Africa	7,732	12,404	10,069	9,504	13,221	6,867
Pacific	6,803	5,879	3,474	2,759	2,330	2,226
Americas	6,713	13,068	11,111	10,327	9,548	10,001
Europe	411	26	450	198	20	204
Others	0	0	0	0	0	0
<b>Total</b>	<b>160,457</b>	<b>164,836</b>	<b>143,440</b>	<b>125,147</b>	<b>158,032</b>	<b>116,874</b>

\*Includes infant powders  
Source: Dairy Australia & ABS

## Whey products and casein

Whey is a by-product of the cheese making process. Traditionally this product was disposed of in liquid form. However, recognition of the value of whey's components has seen the production and utilisation of whey powders and protein concentrates increase significantly in recent years.

Food-grade whey powder is used in the manufacture of ice-cream, bakery products (cakes, biscuits), chocolate flavouring, infant formula, yogurt, beverages and processed meat. Industrial uses include animal feed (for pigs, horses and poultry), calf milk replacer and even as a carrier for herbicides.

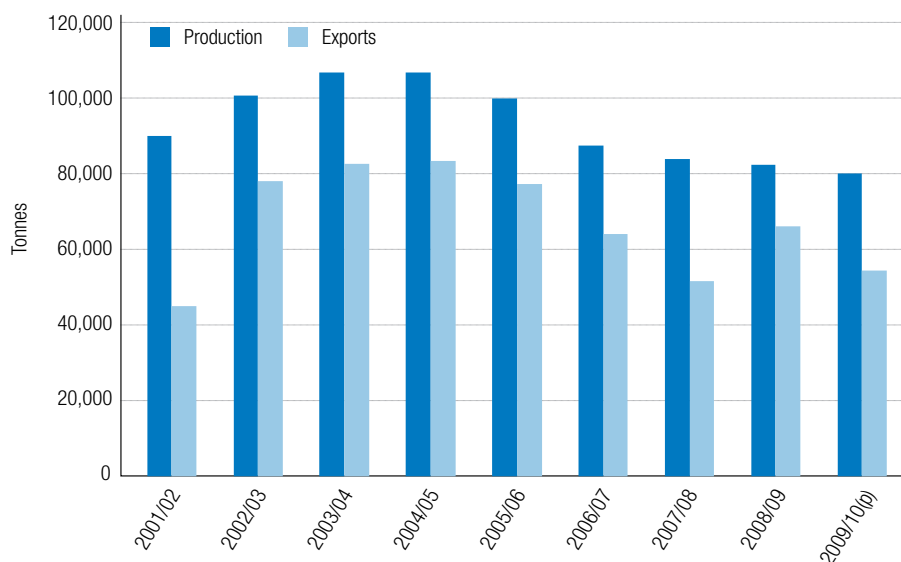
Whey protein concentrates are used in snack foods, juices, confectionery, ice-cream, biscuits, processed meats, (milk) protein drinks, desserts, infant foods and dietetic products. Products such as cosmetics, skin creams, bath salts and detergents also contain protein concentrates.

Approximately 30% of Australia's whey production was used domestically in the manufacture of infant formula, biscuits and ice-cream. The remainder is exported; with China, Singapore, the Philippines, Indonesia and Japan being the largest export markets for Australian whey powders in 2009/10.

Casein and caseinates are ingredients in noodles, chocolate, sweets, mayonnaise, ice-cream and cheese manufacture. They are used as binding ingredients, emulsifiers and milk substitutes in processed foods. Industrial uses of casein and caseinates include: plastics (buttons, knitting needles); the manufacture of synthetic fibres and chemicals (plants, glues, glazed paper, putty and cosmetics); as a reinforcing agent and stabiliser for rubber in automobile tyres; a nutritional supplement and binder in calf milk replacers; and a range of other technical applications.

The majority of Australia's production of casein and caseinates is for export markets. The United States and Japan have been the largest export markets in recent years.

**Figure 23. Production and exports of whey products (tonnes)**



Source: Dairy manufacturers and ABS



## Industry organisations and structure

The Australian dairy industry is diverse, incorporating primary production, manufacturing and marketing. Accordingly, a number of bodies represent the various sectors and provide a framework for the industry to work together.

### Dairy Australia

Dairy Australia is the industry-owned national service organisation. Formed on 1 July 2003, Dairy Australia replaced the Australian Dairy Corporation and the Dairy Research and Development Corporation.

Dairy Australia is a company limited by guarantee, operating under the Corporations Act 2001. It is fully accountable to its members—those levy payers who elect to become members—and the peak industry bodies.

The structure provides farmers, as members, with a direct say in the activities of the organisation. To help the Australian dairy industry achieve its vision of growing an internationally competitive, innovative and sustainable industry, the organisation coordinates and delivers practical help to provide value for farmers' levy investment. Together with the farmer-paid levy, the company receives matching Federal Government research and development funds.

Dairy Australia invests the Dairy Service Levy, matching government funds and other money in activities across the dairy supply chain—from paddock to plate—to get the best outcomes for farmers, the dairy industry and the broader community. The company targets areas where there is a market failure or significant under-investment, such as human resource skills for retaining and developing staff, research, development and extension, trade policy, information, issues management and marketing of the health benefits of dairy products and the industry itself.

Consequently, Dairy Australia's main role is to facilitate profitable partnerships, industry collaboration and collective action that pools and aligns industry funds, resources, expertise and in-kind support to meet critical industry needs.

Due to the integrated nature of the dairy industry, success of the farm and non-farm sectors is highly interdependent. While the bottom line for farmers is a profitable farming business, they also need an industry that can support them by buying their milk, processing it efficiently, and selling it to consumers in Australia and overseas. The dairy industry also needs strong domestic and international markets, continual innovation, and community support of its production processes and products.

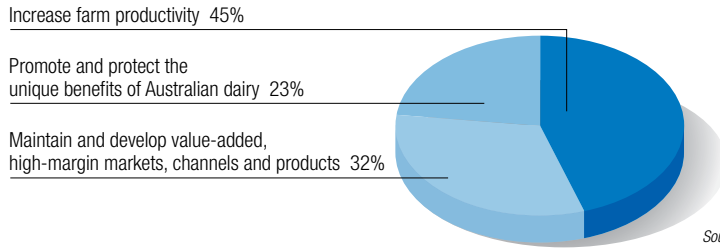
Dairy Australia has recognised the interdependence between the farm and non-farm sectors by developing three core business objectives that operate across the dairy supply chain to deliver ongoing value and improved margins for levy payers.

For the current 2011–15 planning cycle, Dairy Australia's core objectives are to:

- increase farm productivity
- maintain and develop value-added, high-margin markets, channels and products
- promote and protect the unique benefits of Australian dairy.

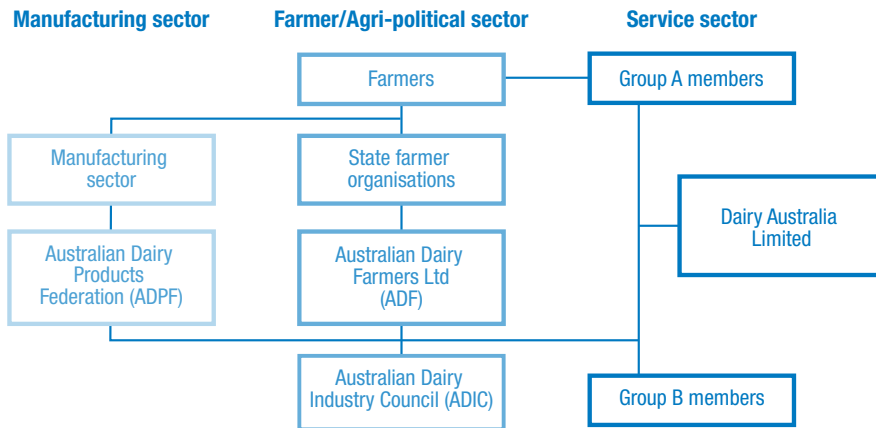
The organisation prepares an annual rolling five-year Strategic Plan. The current plan can be downloaded from [www.dairyaustralia.com.au](http://www.dairyaustralia.com.au).

**Figure 24. Dairy Australia’s planned expenditure by business objectives for 2011 to 2015**



Source: Dairy Australia Strategic Plan 2011–15

**Figure 25. Australian dairy industry organisations**



### Australian Dairy Industry Council

The Australian Dairy Industry Council (ADIC) is the dairy industry's peak policy body. It co-ordinates industry policy and represents all sectors of the industry on national and international issues.

The ADIC represents farmers, dairy product manufacturers and milk processors through its constituent organisations:

- Australian Dairy Farmers Limited; and
- Australian Dairy Products Federation.

The ADIC has the task of bringing these bodies together to form a united view on issues affecting the dairy industry.

### Australian Dairy Farmers Limited

Australian Dairy Farmers Limited (ADF) provides national representation for dairy farmers and forms the dairy commodity council of the National Farmers' Federation.

Its members include the six dairy farmer organisations, representing each state:

- New South Wales Farmers' Association's Dairy Committee (NSWFA);
- Queensland Dairyfarmers' Organisation (QDO);
- South Australian Dairyfarmers' Association (SADA);
- Tasmanian Farmers and Graziers Association's Dairy Council (TFGA);
- United Dairyfarmers of Victoria (UDV); and
- Western Australian Farmers' Federation's Dairy Council (WAFF).

### Australian Dairy Products Federation

The Australian Dairy Products Federation (ADPF) is the national organisation representing the interests of dairy product manufacturers and traders. The ADPF's primary purpose is to promote the interests of its members, and the dairy industry in general, to the Australian and State Governments and other sectors of the community.

### State dairy and food regulatory authorities

State dairy or food regulatory authorities are statutory authorities established under State legislation. They are responsible for all regulatory matters relating to the safety of milk and dairy foods produced and manufactured in their state.

The Australia New Zealand Dairy Authorities Committee (ANZDAC), with representatives from each state food safety organisation, AQIS, FSANZ and the New Zealand Food Safety Authority, aims to achieve greater uniformity and consistency in the application of dairy legislation, standards and management practices across Australia and with New Zealand.

The relevant State dairy and food regulatory authorities are:

- New South Wales Food Authority;
- Safe Food Production Queensland;
- Dairy Authority of South Australia;
- Tasmanian Dairy Industry Authority;
- Dairy Food Safety Victoria;
- Health Department of Western Australia; and
- Territory Health Services

## Industry levies

### Dairy Services

Dairy Australia is funded by farmer-paid levies that are imposed on the fat and protein content of all milk produced in Australia.

The Australian Government matches expenditure on the industry's research and development activities that meet established criteria.

All Australian dairy farmers had the opportunity to participate, by mail, in the Dairy Poll 2007 conducted during February and March 2007. Compared to levy polls in other agricultural industries, a high participation rate of 53% was achieved. Some 68% of votes were cast in favour of maintaining the Dairy Service Levy at its current rate.

### Animal Health Australia

Australian dairy farmers also contribute to the funding of Animal Health Australia (AHA), as do farmers in all other livestock industries. AHA is a non-profit public company limited by guarantee. Members include the Australian, state and territory governments, and key commodity and interest groups. AHA's task is to facilitate partnerships between governments and livestock industries, and provide a national approach to animal health systems. The Animal Health Levy is the dairy industry's contribution to AHA programs.

**Table 20. Average rate of milk levies for 2010/11**

	Milkfat (cents/kg)	Protein (cents/kg)	Milk* (cents/litre)	Milksolids (cents/kg)
Animal Health	0.0373	0.0880	0.004	0.06
Dairy Services	2.6075	6.3558	0.320	4.28

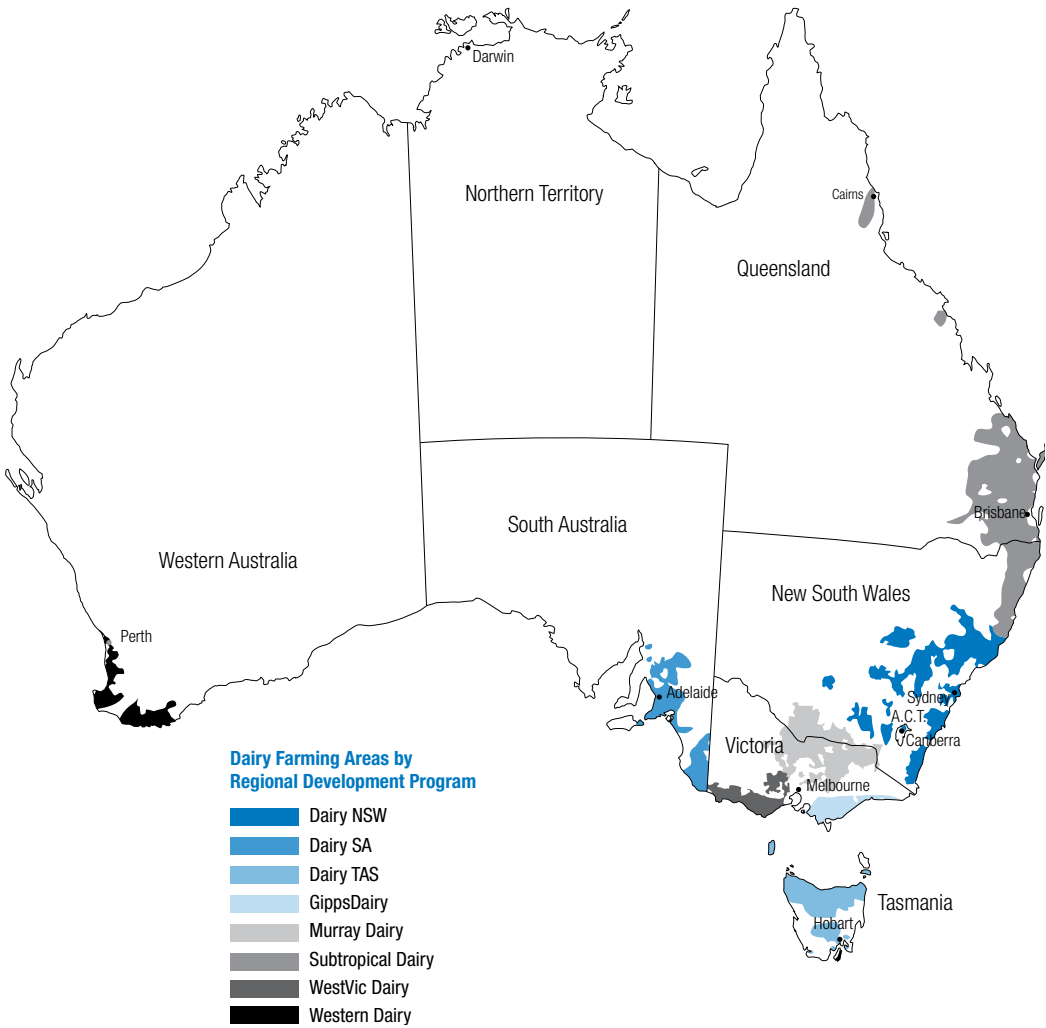
\* Based on average 2009/10 Australian milk composition of 4.15% milkfat and 3.34% protein

## Appendices

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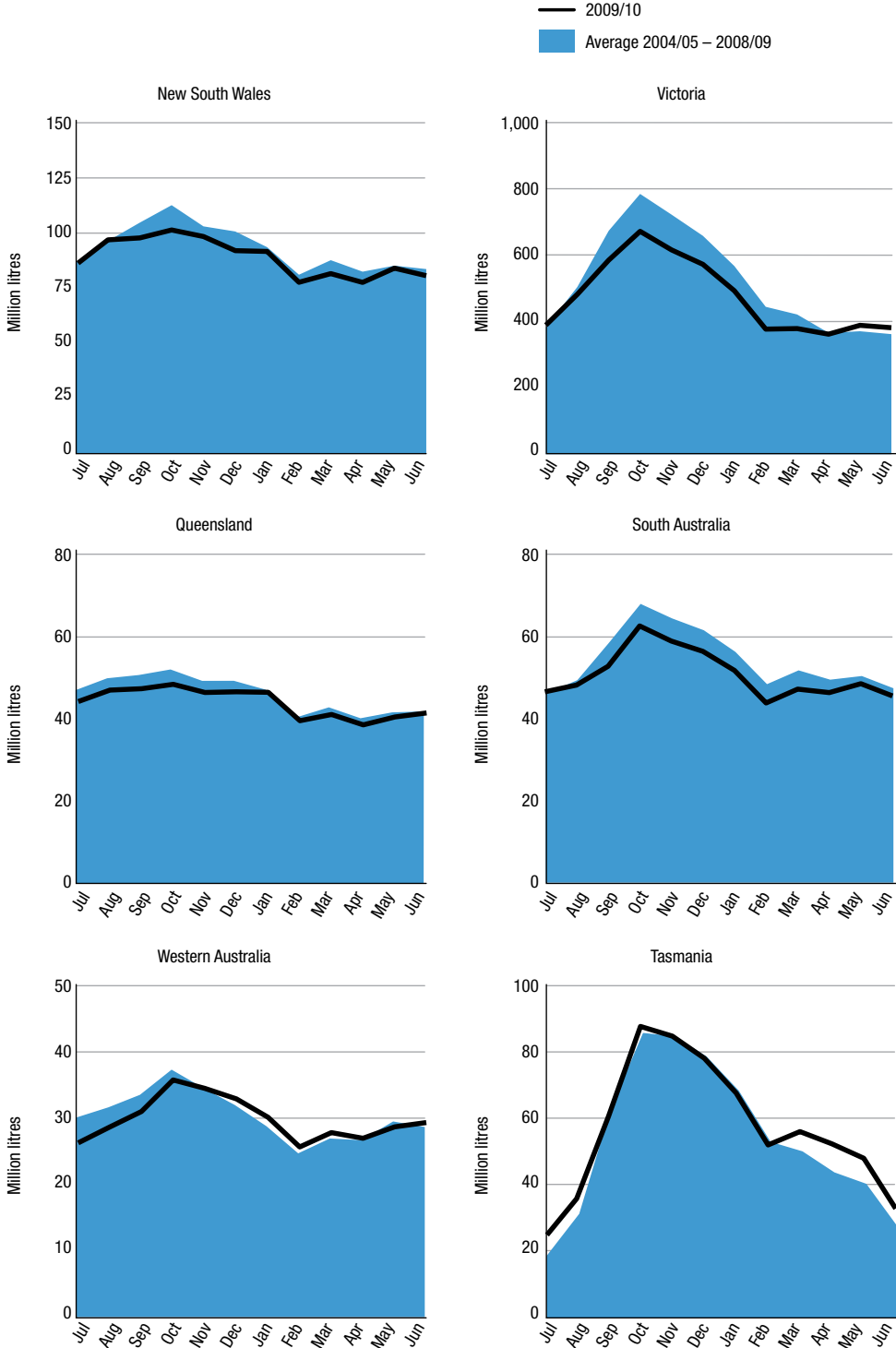


# Appendix 1. Dairying regions



# Appendix 2. Milk production

Figure A1. Seasonality of milk production (million litres)



Source: Dairy manufacturers



## Appendix 3. Manufacturing processes

The milkfat and solids contained in manufacturing milk can be used to produce a wide variety of dairy products. There are four major production processes. The first two are for butter / skim milk powder production and butter / casein production which are joint product processes. The other two are whole milk powder production and cheese production. Furthermore, for each of these separate product lines, other dairy products can be made from the residual milk components.

The first step in making butter is to separate whole milk into cream and skim milk. The liquid skim milk is evaporated and spray dried to produce skim milk powder (SMP). The cream is churned until the fat globules form into solid butter, and leaving a liquid by-product, buttermilk. This liquid can be dried to make buttermilk powder (BMP).

There are various ways of making casein. A common method is to set the skim milk by mixing with acid to produce curd. The curd is shaken to remove large clumps. The remaining liquid whey by-product is removed and the curd is repeatedly rinsed in water and then drained. Excess moisture is extracted by pressing the curd. It is then milled and dried. The curd is broken down to particle size by grinding it and passing it through a sieve.

Whole milk powder (WMP) is made by evaporating milk that has had some of the cream removed. The evaporated milk is concentrated and dried either by roller or spray process to form a powder. Spray drying is more commonly used and involves spraying a fine mist of concentrated milk into a current of hot air to form granules of powder. The granules can be treated with steam to 'instantise' the powder and make it easier to reconstitute into milk.

Cheese production techniques vary substantially. To make cheddar cheese, some of the cream is removed from the pasteurised milk. Starter culture is added to the milk to produce both acid and flavour. Then rennet is added to form curd and whey. The curd is cut, heated and stirred to allow the whey to drain. A process called cheddaring then takes place, and involves the curd being allowed to mat together, before it is milled, salted, pressed and packed. The cheese is stored to develop the desired maturity and flavour. The longer it is stored, the stronger the flavour. Mild cheddar is matured for about three months, semi-matured cheddar for three to six months and mature or tasty cheddar for up to a year.

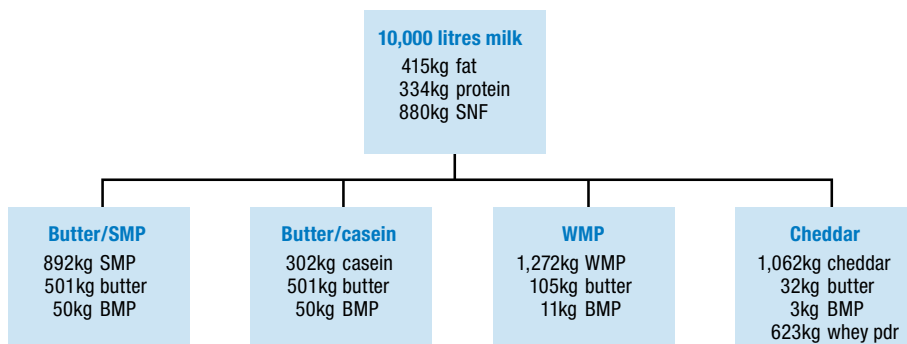
The liquid whey extracted during cheese manufacture contains protein, lactose and a little fat. It can be dried to make products for pharmaceutical purposes, as a useful supplement in stock feed, and in the manufacture of ice-cream.

The cream from standardisation of milk for wholemilk powder, casein and cheddar production can be used to make butter and BMP.

**Table A1. Product composition**

	% fat	%SNF
Skim milk powder	1.0	94.5
Butter	80.5	2.0
Ghee	99.6	0.1
Casein	1.5	88.5
Wholemilk powder	26.0	70.4
Cheddar cheese	33.0	31.0
Gouda	31.5	23.5
Edam	21.2	31.8
Parmesan	21.8	46.2
Cottage cheese	4.0	16.0
Brie	25.0	25.0
Mozzarella	23.1	30.9

**Figure A2. Product yield from 10,000 litres of milk 2009/10**



**Table A2. Australian cheese production by state (tonnes)**

	NSW	VIC	QLD	SA	WA	TAS	AUST
1989/90	14,198	103,216	12,842	22,774	4,129	18,172	175,331
1999/00	26,441	239,029	26,011	40,782	7,680	33,399	373,342
2000/01	23,443	257,006	22,672	33,541	7,305	32,510	376,477
2001/02	24,836	285,239	24,618	36,120	8,473	32,776	412,063
2002/03	22,686	259,399	22,569	28,364	8,411	37,538	378,966
2003/04	19,748	268,433	23,520	26,463	8,481	37,117	383,762
2004/05	22,453	270,651	18,447	33,562	7,357	35,880	388,350
2005/06	21,140	268,925	7,308	31,394	6,411	37,638	372,816
2006/07	22,690	266,102	4,542	29,503	2,618	38,183	363,638
2007/08	24,591	268,206	2,888	18,350	2,547	44,340	360,922
2008/09	26,584	245,034	1,958	16,774	3,985	47,958	342,293
2009/10 (p)	26,138	259,772	1,123	14,736	4,238	43,354	349,361

Source: Dairy manufacturers

**Table A3. Australian production of dairy products (tonnes)**

	Butter*	AMF (CBE)	SMP	WMP**	Whey Products
1989/90	78,053	26,105	130,976	56,476	19,895
1999/00	110,325	71,295	236,322	186,653	66,258
2000/01	103,145	69,175	244,442	205,449	61,452
2001/02	108,308	70,045	239,489	238,684	88,785
2002/03	103,377	60,343	196,608	198,306	99,384
2003/04	104,143	44,754	182,056	186,860	105,390
2004/05	105,131	41,528	189,113	189,220	105,225
2005/06	92,850	52,904	205,495	158,250	98,436
2006/07	101,666	31,434	191,475	135,364	86,198
2007/08	99,202	28,416	164,315	141,974	82,652
2008/09	109,753	38,742	212,030	147,544	81,136
2009/10 (p)	100,134	28,245	190,233	126,024	79,094

Source: Dairy manufacturers

\*includes butter blends as CBE

\*\* includes infant powders

Table A4. Australian cheese production by variety

	2004/05	2005/06	2006/07	2007/08 (r)	2008/09 (r)	2009/10 (p)
<b>Cheddar &amp; Cheddar Types</b>						
Cheddar (1)	172,942	159,921	148,845	135,929	149,267	138,099
Reduced fat cheddar	17,368	26,943	22,287	26,754	23,689	21,414
Cheedam	1,085	833	541	28	260	447
Other cheddar type cheese (2)	4,492	3,996	7,486	8,549	5,144	4,260
<b>Total Cheddar</b>	<b>195,887</b>	<b>191,693</b>	<b>179,159</b>	<b>171,260</b>	<b>178,360</b>	<b>164,220</b>
<b>Semi Hard Cheese</b>						
Mozzarella	57,186	52,603	54,117	55,208	42,167	54,374
Pizza	5,573	5,581	4,573	4,957	5,017	6,905
Other stretch curd and shredding	9,312	4,807	2,835	1,970	1,359	3,237
Edam	267	123	158	709	305	207
Gouda	11,310	6,450	6,818	8,040	8,909	13,111
Other eye type cheese (3)	3,652	3,607	3,552	2,344	2,145	2,051
Other Semi Hard Cheese (4)	3,414	3,642	3,476	626	1,757	2,596
<b>Total Semi Hard Cheese</b>	<b>90,714</b>	<b>76,813</b>	<b>75,529</b>	<b>73,854</b>	<b>61,659</b>	<b>82,481</b>
<b>Hard Grating Types</b>						
Parmesan	5,072	8,462	8,631	9,981	10,633	7,360
Pecorino	840	892	1,536	2,039	946	1,443
Romano	2,256	2,854	2,028	1,637	1,957	2,013
Other (5)	5,099	10,814	6,282	3,251	4,388	1,420
<b>Total</b>	<b>13,267</b>	<b>23,022</b>	<b>18,477</b>	<b>16,908</b>	<b>17,924</b>	<b>12,236</b>
<b>Fresh Types</b>						
Cottage	2,692	2,490	2,488	2,582	2,529	2,507
Cream cheese	57,235	50,022	58,161	62,267	47,399	53,702
Fetta	5,875	5,195	5,668	5,875	6,073	6,400
Neufchatel	7,909	8,681	9,270	9,521	8,730	7,844
Ricotta	4,948	4,402	5,376	6,892	7,276	7,881
Other fresh types (6)	4,990	4,651	3,480	3,797	3,428	3,430
<b>Total</b>	<b>83,649</b>	<b>75,441</b>	<b>84,443</b>	<b>90,934</b>	<b>75,435</b>	<b>81,764</b>
<b>Mould Ripened</b>						
Blue Vein	848	1,062	1,025	1,434	1,707	1,738
Brie and Camembert	1,736	2,247	4,602	5,971	6,489	6,148
Other mould ripened	2,249	2,538	403	561	719	774
<b>Total</b>	<b>4,833</b>	<b>5,847</b>	<b>6,030</b>	<b>7,966</b>	<b>8,915</b>	<b>8,660</b>
<b>Total Cheese</b>	<b>388,350</b>	<b>372,816</b>	<b>363,638</b>	<b>360,922</b>	<b>342,293</b>	<b>349,361</b>

(1) Includes: Vintage (2) Includes: Colby, Cheshire, Gloucester, Lancashire, Leicester, Nimbin and semi processed cheddar

(3) Includes: Swiss, Emmenthal, Fontina, Havarti, Samsøe, Tilsit, Buetten, Vacherin. (4) Includes: Bakers, Casalinga, Goya.

(5) Includes: Fresh Pecorino, Melbourn, Pepato, Parmigiano. (6) Includes: Quark, Stracchino, Mascarpone.

Revisions due to reclassification of cheeses and revisions of specialty cheese production Source: Dairy manufacturers

## Appendix 4. Domestic sales

Table A5. Dairy company domestic sales excluding industrial sales (tonnes)\*

Major dairy products—excl drinking milk	Sales channel	2007/08	2008/09	2009/10
<b>Butter</b>	Grocery	39,406	41,384	40,353
	Non-Grocery	8,779	9,302	9,673
<b>Butter total</b>		<b>48,185</b>	<b>50,686</b>	<b>50,026</b>
<b>Cheese</b>	Grocery	125,070	127,369	126,709
	Non-Grocery	67,156	66,962	67,835
<b>Cheese total</b>		<b>192,226</b>	<b>194,331</b>	<b>194,544</b>
<b>Cream</b>	Grocery	48,253	50,239	51,373
	Non-Grocery	42,343	41,095	41,919
<b>Cream total</b>		<b>90,596</b>	<b>91,334</b>	<b>93,292</b>
<b>Custard</b>	Grocery	24,148	22,257	22,264
	Non-Grocery	2,625	2,556	2,714
<b>Custard total</b>		<b>26,773</b>	<b>24,812</b>	<b>24,977</b>
<b>Dairy desserts</b>	Grocery	20,415	18,397	19,384
	Non-Grocery	418	401	399
<b>Dairy desserts total</b>		<b>20,834</b>	<b>18,798</b>	<b>19,783</b>
<b>Milk powder</b>	Grocery	4,675	4,536	4,650
	Non-Grocery	412	497	486
<b>Milk powder total</b>		<b>5,087</b>	<b>5,033</b>	<b>5,136</b>
<b>Yogurt</b>	Grocery	128,482	128,933	135,201
	Non-Grocery	14,066	14,232	13,848
<b>Yogurt total</b>		<b>142,549</b>	<b>143,165</b>	<b>149,049</b>

\* This data is dairy company wholesale sales to distributors / warehouses / retailers.

\* Grocery refers to major supermarket chains.

\* Non-Grocery refers to other retailers including convenience stores and the foodservice channel.

Source: Dairy manufacturers

## Appendix 5. Supermarket sales

### Milk

**Table A6. Supermarket milk sales by state (million litres)**

	NSW	VIC	QLD	SA	WA	TAS	AUST
2007/08	317	276	255	102	106	26	1,082
2008/09	327	284	269	105	106	28	1,119
2009/10 (p)	340	296	280	107	108	29	1,161

Source: Synovate Aztec

**Table A7. Supermarket milk sales by type (million litres)**

	Regular	Reduced Fat	No Fat	Flavoured	UHT	AUST
2007/08	488	333	66	67	128	1,082
2008/09	509	346	62	70	133	1,119
2009/10 (p)	507	363	63	78	150	1,161

Source: Synovate Aztec

**Table A8. Supermarket milk sales—branded vs private label (million litres)**

	2007/08		2008/09		2009/10 (p)	
	Million litres	Price/Litre	Million litres	Price/Litre	Million litres	Price/Litre
<b>Branded Milk</b>						
Regular Whole	147	\$1.74	152	\$1.86	148	\$1.83
Reduced Fat	184	\$2.01	178	\$2.10	185	\$2.03
No Fat	63	\$2.06	59	\$2.14	59	\$2.07
Flavoured	64	\$3.33	67	\$3.71	74	\$3.72
UHT	82	\$1.91	86	\$1.91	110	\$1.63
<b>Total Branded Milk</b>	<b>540</b>	<b>\$2.08</b>	<b>542</b>	<b>\$2.20</b>	<b>576</b>	<b>\$2.12</b>
<b>Private Label</b>						
Regular Whole	341	\$1.16	357	\$1.18	359	\$1.12
Reduced Fat	149	\$1.34	167	\$1.35	177	\$1.30
Low Fat	3	\$1.63	3	\$1.64	4	\$1.63
Flavoured	3	\$1.95	3	\$2.12	5	\$2.01
UHT	46	\$1.18	46	\$1.19	40	\$1.15
<b>Total Private Label Milk</b>	<b>542</b>	<b>\$1.22</b>	<b>577</b>	<b>\$1.24</b>	<b>585</b>	<b>\$1.19</b>
<b>Total Milk</b>	<b>1,082</b>	<b>\$1.65</b>	<b>1,119</b>	<b>\$1.71</b>	<b>1,161</b>	<b>\$1.65</b>

Source: Synovate Aztec

## Dairy spreads

**Table A9. Supermarket dairy spreads sales by type (tonnes)**

	2007/08 (r)		2008/09 (r)		2009/10 (p)	
	Tonnes	Price per kg	Tonnes	Price per kg	Tonnes	Price per kg
<b>Dairy</b>						
Butter	17,286	\$7.44	18,730	\$8.01	19,543	\$8.18
Blends	20,303	\$7.33	20,302	\$8.18	19,513	\$8.15
Ghee	46	\$11.23	36	\$11.71	27	\$12.50
<b>Total Dairy Spreads</b>	<b>37,634</b>	<b>\$7.39</b>	<b>39,067</b>	<b>\$8.10</b>	<b>39,083</b>	<b>\$8.17</b>

Source: Synovate Aztec

**Table A10. Supermarket dairy spreads sales by pack size (tonnes)**

	2007/08 (r)		2008/09 (r)		2009/10 (p)	
	Tonnes	Price per kg	Tonnes	Price per kg	Tonnes	Price per kg
250 gram	8,318	\$7.46	9,169	\$8.13	9,684	\$8.62
375 gram	6,213	\$9.54	6,524	\$10.49	5,435	\$11.20
500 gram	22,234	\$6.63	22,569	\$7.33	23,259	\$7.22
Other sizes	870	\$10.59	804	\$10.12	705	\$10.05
<b>Total Dairy Spreads</b>	<b>37,634</b>	<b>\$7.39</b>	<b>39,067</b>	<b>\$8.10</b>	<b>39,083</b>	<b>\$8.17</b>

Source: Synovate Aztec

**Table A11. Supermarket dairy spreads sales by form (tonnes)**

	2007/08 (r)		2008/09 (r)		2009/10 (p)	
	Tonnes	Price per kg	Tonnes	Price per kg	Tonnes	Price per kg
Pats	13,840	\$6.47	14,796	\$6.90	15,684	\$7.09
Tubs	23,769	\$7.91	24,247	\$8.82	23,379	\$8.87
Others	25	\$23.71	25	\$25.62	21	\$26.36
<b>Total Dairy Spreads</b>	<b>37,634</b>	<b>\$7.39</b>	<b>39,067</b>	<b>\$8.10</b>	<b>39,083</b>	<b>\$8.17</b>

Source: Synovate Aztec

## Appendix 6. Australian exports

Table A12. Australian exports of cheese (tonnes)

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
<b>Asia</b>						
China, Hong Kong	6,857	8,180	10,123	11,079	7,410	10,851
Indonesia	6,792	6,061	7,678	4,028	2,547	4,198
Japan	106,549	81,047	95,879	96,846	74,140	89,850
Korea, South	10,365	8,936	8,327	6,859	7,045	7,204
Malaysia	3,103	3,476	3,465	3,877	3,858	4,462
Philippines	4,953	3,381	3,316	4,390	3,174	4,067
Singapore	2,445	2,832	3,667	3,814	4,098	4,135
Taiwan	5,844	5,399	5,464	5,842	3,778	5,158
Thailand	999	1,215	1,587	1,958	1,993	1,859
Other Asia	1,372	1,522	1,144	1,040	629	764
<b>Total Asia</b>	<b>149,279</b>	<b>122,049</b>	<b>140,650</b>	<b>139,733</b>	<b>108,672</b>	<b>132,548</b>
<b>Middle East</b>						
Saudi Arabia	17,081	20,708	18,066	16,355	5,359	6,705
U.A.E.	3,513	4,130	4,057	3,619	1,735	1,712
Other Middle East	9,321	11,499	10,468	8,877	4,051	6,460
<b>Total Middle East</b>	<b>29,915</b>	<b>36,337</b>	<b>32,591</b>	<b>28,851</b>	<b>11,145</b>	<b>14,877</b>
<b>Africa</b>						
Algeria	3,179	4,417	2,342	1,460	935	340
Egypt	1,996	1,921	2,784	1,948	2,135	1,770
Other Africa	2,669	2,864	2,794	2,510	1,429	3,555
<b>Total Africa</b>	<b>7,844</b>	<b>9,202</b>	<b>7,920</b>	<b>5,918</b>	<b>4,499</b>	<b>5,665</b>
<b>Pacific</b>						
New Zealand	2,415	2,761	2,665	4,352	2,652	3,344
Others	714	765	604	660	506	459
<b>Total Pacific</b>	<b>3,129</b>	<b>3,526</b>	<b>3,269</b>	<b>5,012</b>	<b>3,158</b>	<b>3,803</b>
<b>Americas</b>						
Caribbean	799	940	540	201	953	1,109
United States	11,931	11,807	14,044	8,719	9,327	4,132
Others	2,782	2,136	1,820	1,065	831	663
<b>Total Americas</b>	<b>15,512</b>	<b>14,883</b>	<b>16,404</b>	<b>9,985</b>	<b>11,111</b>	<b>5,904</b>
<b>Europe</b>						
Eastern Europe	467	139	424	831	386	381
EU	21,273	15,566	11,056	12,073	5,691	5,053
Other Europe	60	0	0	0	0	0
<b>Total Europe</b>	<b>21,800</b>	<b>15,705</b>	<b>11,480</b>	<b>12,904</b>	<b>6,077</b>	<b>5,434</b>
<b>Total</b>	<b>227,479</b>	<b>201,702</b>	<b>212,314</b>	<b>202,403</b>	<b>144,662</b>	<b>168,231</b>

Source: Dairy Australia and ABS



**Table A13. Australian exports of wholemilk powder (tonnes)**

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
<b>Asia</b>						
Bangladesh	6,137	7,344	6,898	2,072	10,740	6,354
China, Hong Kong	3,414	7,146	6,546	13,212	21,635	16,545
Indonesia	13,642	24,676	20,575	15,196	16,979	9,084
Japan	1,307	669	580	204	482	324
Malaysia	28,708	25,843	20,895	17,816	9,050	3,290
Philippines	15,168	6,985	4,160	4,420	3,607	887
Singapore	12,725	17,080	15,259	17,841	18,195	19,600
Sri Lanka	7,200	10,721	6,430	4,341	6,051	9,798
Taiwan	15,341	10,754	5,769	3,962	5,538	4,126
Thailand	6,025	5,784	6,702	5,236	5,012	3,342
Others	4,899	6,036	6,024	5,908	4,736	7,045
<b>Total Asia</b>	<b>114,566</b>	<b>123,038</b>	<b>99,838</b>	<b>90,208</b>	<b>102,025</b>	<b>80,395</b>
<b>Africa</b>	7,732	12,403	10,070	9,504	13,221	6,867
<b>Americas</b>	6,713	13,069	11,111	10,327	9,548	10,001
<b>Europe</b>	411	26	450	198	20	204
<b>Middle East</b>	24,232	10,419	18,500	12,151	30,889	17,180
<b>Pacific</b>	6,803	5,879	3,474	2,759	2,330	2,226
<b>Total</b>	<b>160,457</b>	<b>164,834</b>	<b>143,443</b>	<b>125,147</b>	<b>158,033</b>	<b>116,873</b>

*\*Also includes infant powder  
Source: Dairy Australia and ABS*

**Table A14. Australian exports of SMP (tonnes)**

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
<b>Asia</b>						
China, Hong Kong	9,056	7,284	8,754	9,737	12,470	8,767
Indonesia	13,700	17,232	15,394	15,500	12,924	16,439
Japan	3,414	3,914	1,329	610	6,985	1,071
Malaysia	22,018	25,648	24,265	14,223	14,912	8,311
Philippines	17,686	25,407	15,828	13,345	25,426	19,232
Singapore	20,670	20,128	22,961	15,859	17,134	17,048
Taiwan	8,182	10,284	9,580	5,827	6,264	7,422
Thailand	8,250	26,844	17,897	11,642	9,511	9,888
Others	9,872	10,767	10,785	5,848	22,073	12,791
<b>Total Asia</b>	<b>112,848</b>	<b>147,507</b>	<b>126,793</b>	<b>92,590</b>	<b>127,699</b>	<b>100,969</b>
<b>Africa</b>	6,352	3,704	6,023	2,353	6,180	1,462
<b>Americas</b>	4,069	4,067	5,266	1,983	6,257	1,462
<b>Europe</b>	98	235	1,111	313	525	244
<b>Middle East</b>	9,136	19,042	19,878	22,010	20,906	17,829
<b>Pacific</b>	725	1,032	1,258	509	514	3,953
<b>Others</b>	0	17	0	0	0	0
<b>Total</b>	<b>133,229</b>	<b>175,605</b>	<b>160,329</b>	<b>119,758</b>	<b>162,081</b>	<b>125,919</b>

*Source: Dairy Australia and ABS*

Table A15. Australian exports of butter\* (tonnes)

	2004/05	2005/06	2006/07	2007/08	2008/09 (r)	2009/10 (p)
<b>Asia</b>						
China, Hong Kong	2,769	2,251	3,393	3,692	3,236	4,114
Japan	2,172	1,550	2,279	4,389	2,374	392
Korea, South	7,708	3,018	4,810	3,955	2,623	2,408
Malaysia	1,474	1,490	1,470	1,640	1,828	2,062
Singapore	5,378	3,256	4,142	4,918	3,901	4,651
Taiwan	1,112	1,321	1,178	1,211	1,119	1,199
Others	1,358	1,518	1,905	1,176	1,704	2,690
<b>Total Asia</b>	<b>21,971</b>	<b>14,404</b>	<b>19,177</b>	<b>20,980</b>	<b>16,785</b>	<b>17,516</b>
<b>Middle East</b>						
Saudi Arabia	360	1,256	1,742	1,357	679	1,626
U.A.E.	275	939	2,494	1,355	1,881	1,174
Others	2,209	1,135	1,489	1,043	4,585	5,565
<b>Total Middle East</b>	<b>2,844</b>	<b>3,330</b>	<b>5,725</b>	<b>3,755</b>	<b>7,145</b>	<b>8,365</b>
<b>Africa</b>						
Mauritius	256	189	219	227	149	198
North Africa	2,924	3,926	6,273	1,550	10,674	9,552
Others	58	140	156	60	306	720
<b>Total Africa</b>	<b>3,238</b>	<b>4,255</b>	<b>6,648</b>	<b>1,837</b>	<b>11,129</b>	<b>10,470</b>
<b>Pacific</b>	591	1,085	998	462	855	871
<b>Americas</b>	3,331	4,233	1,952	423	1,207	619
<b>Europe</b>	5,925	8,219	9,779	7,179	6,847	3,907
<b>Total</b>	<b>37,900</b>	<b>35,526</b>	<b>44,279</b>	<b>34,636</b>	<b>43,968</b>	<b>41,747</b>

\* Includes butter blends converted at the rate of 1kg butter blend = 0.7kg butter  
Source: Dairy Australia and ABS

Table A16. Australian exports of butteroil (tonnes)

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
<b>Asia</b>						
Bangladesh	403	151	119	85	252	168
Indonesia	370	1,975	1,025	571	1,444	934
Malaysia	1,557	2,682	2,385	2,621	1,521	2,656
Philippines	755	1,210	885	294	1,446	1,970
Singapore	1,358	3,932	2,181	1,623	969	1,091
Others	6,835	6,168	7,389	4,735	4,172	7,908
<b>Total Asia</b>	<b>11,278</b>	<b>16,118</b>	<b>13,984</b>	<b>9,929</b>	<b>9,804</b>	<b>14,727</b>
<b>Middle East</b>						
Kuwait	486	137	0	14	202	101
United Arab Emirates	2,164	2,060	2,029	1,958	321	69
Others	897	2,394	1,515	678	1,244	1,763
<b>Total Middle East</b>	<b>3,547</b>	<b>4,591</b>	<b>3,544</b>	<b>2,650</b>	<b>1,767</b>	<b>1,933</b>
<b>Africa</b>	2,018	2,100	1,979	69	1,344	601
<b>Americas</b>	6,559	13,240	9,061	4,329	7,823	6,896
<b>Europe</b>	1,851	1,518	838	972	450	1,460
<b>Pacific</b>	194	120	129	176	168	145
<b>Total</b>	<b>25,447</b>	<b>37,687</b>	<b>29,535</b>	<b>18,125</b>	<b>21,356</b>	<b>25,762</b>

Source: Dairy Australia and ABS

Table A17. Australian exports of liquid milk (tonnes)

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
<b>Asia</b>						
Singapore	16,689	18,012	18,281	17,277	19,036	21,239
Philippines	7,250	9,600	9,763	5,809	2,722	3,653
Malaysia	3,628	3,650	4,531	3,246	3,346	3,902
Indonesia	1,726	1,386	1,635	1,544	635	516
Hong Kong	15,839	17,075	17,326	15,600	17,325	15,333
China	777	694	344	384	1,924	1,284
Other Asia	7,657	6,575	6,823	4,842	4,120	6,781
<b>Total Asia</b>	<b>53,565</b>	<b>56,992</b>	<b>58,701</b>	<b>48,702</b>	<b>49,108</b>	<b>52,708</b>
<b>Africa</b>	3,419	1,059	928	792	538	386
<b>Pacific</b>	11,891	12,055	9,323	10,321	9,734	10,730
<b>Others</b>	1,004	0	238	115	570	680
<b>Total</b>	<b>69,879</b>	<b>70,107</b>	<b>69,192</b>	<b>59,931</b>	<b>59,950</b>	<b>64,504</b>

Source: Dairy Australia and ABS

Table A18. Whey product exports\*

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
<b>Asia</b>						
Malaysia	5,202	5,385	4,281	3,594	5,166	4,257
Indonesia	12,548	12,419	12,486	8,024	5,040	4,729
Philippines	11,678	9,099	5,419	4,878	7,796	5,315
Japan	4,801	1,906	2,251	2,257	3,483	4,281
China	12,396	8,759	8,108	6,630	12,240	10,526
Hong Kong	879	975	596	361	363	317
Singapore	9,087	9,846	7,470	5,279	8,052	7,198
Taiwan	2,244	2,322	1,595	1,117	1,366	1,518
Thailand	5,998	8,824	7,369	5,885	6,125	3,937
Other Asia	6,322	5,128	3,065	3,339	4,286	2,198
<b>Total Asia</b>	<b>71,155</b>	<b>64,663</b>	<b>52,641</b>	<b>41,363</b>	<b>53,917</b>	<b>44,276</b>
<b>Europe</b>	764	2,404	1,408	467	436	436
<b>Other</b>	10,309	9,114	9,169	9,100	10,808	9,064
<b>Total</b>	<b>82,229</b>	<b>76,181</b>	<b>63,218</b>	<b>50,930</b>	<b>65,161</b>	<b>53,776</b>

\* Includes whey protein concentrate  
Source: Dairy Australia and ABS

Table A19. Australian exports of other milk products\*

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
<b>Asia</b>						
China	3,858	1,157	1,134	7,608	852	6,045
Japan	3,068	3,249	4,842	4,132	2,659	3,035
Indonesia	3,626	2,661	3,140	2,194	2,403	3,491
Malaysia	813	1,006	1,295	1,214	584	846
Philippines	5,122	7,327	4,206	3,116	4,012	4,584
Singapore	6,365	7,384	3,748	3,566	2,400	4,963
Thailand	1,157	1,371	3,070	1,416	1,099	1,401
Other Asia	3,186	3,253	4,278	5,539	2,527	2,161
<b>Total Asia</b>	<b>27,196</b>	<b>27,409</b>	<b>25,713</b>	<b>28,784</b>	<b>16,536</b>	<b>26,526</b>
<b>Americas</b>	13,661	7,305	7,228	5,285	2,933	7,107
<b>Europe</b>	8,393	4,086	5,345	2,045	700	1,009
<b>Other</b>	1,978	2,151	2,701	2,764	4,494	6,045
<b>Total</b>	<b>51,228</b>	<b>40,951</b>	<b>40,988</b>	<b>38,879</b>	<b>24,663</b>	<b>40,687</b>

\* Includes buttermilk powder, casein, milk protein concentrate, lactose and milk powder combinations  
Source: Dairy Australia and ABS

## Appendix 7. Australian imports

**Table A20. Australian imports of dairy products from New Zealand and other countries (tonnes)**

	New Zealand	Other	Total 2008/09	New Zealand	Other	Total 2009/10
Skim milk powder	3,788	42	3,830	3,781	119	3,900
Buttermilk powder	109	1,842	1,951	98	1,753	1,851
Wholemilk powder*	9,000	5,722	14,722	11,648	5,774	17,422
Whey powder & concentrates	2,322	11,507	13,829	2,584	10,217	12,801
Condensed milk	77	1,918	1,995	168	1,319	1,487
Milk	5,329	0	5,329	7,351	255	7,606
Cream	1,762	3	1,765	1,481	2	1,483
Yogurt	586	132	718	359	66	425
Butter**	11,471	576	12,047	16,836	1,275	18,111
Butter oil	947	403	1,350	1,065	480	1,545
Mixtures	9,685	5,999	15,684	9,806	8,395	18,201
Cheese	42,758	16,083	58,841	55,596	15,929	71,525
Casein	870	128	998	501	129	630
Caseinates	222	21	243	209	11	220
Lactose	3,575	7,796	11,371	3,098	7,687	10,785
Ice cream ('000 lts)	3,693	10,689	14,382	3,305	14,582	17,887

\* Includes infant powder

\*\* Includes butter blends converted at the rate of 1kg butter blend = 0.7kg butter

Source: ABS

**Table A21. Australian cheese imports by country (tonnes)**

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 (p)
Austria	158	202	315	330	359	405
Bulgaria	1,545	1,615	1,655	1,700	1,345	1,340
Denmark	2,188	2,464	2,163	2,068	2,072	2,186
France	692	762	884	933	799	688
Germany	396	356	463	194	251	369
Greece	1,113	1,146	1,296	1,298	1,504	1,201
Italy	2,059	2,401	2,401	2,803	2,756	2,972
Netherlands	1,061	1,139	1,291	1,157	1,227	1,353
Poland	381	374	463	412	452	464
United Kingdom	193	172	222	153	185	234
Other	256	416	272	589	611	627
<b>Total EU</b>	<b>10,042</b>	<b>11,047</b>	<b>11,425</b>	<b>11,637</b>	<b>11,561</b>	<b>11,839</b>
New Zealand	37,994	47,195	50,529	49,230	42,758	55,596
United States	43	20	51	6,718	2,358	2,157
Norway	1,815	1,817	1,831	1,857	1,770	1,472
Switzerland	81	112	104	128	115	150
Other	321	150	330	175	279	311
<b>Total cheese imports</b>	<b>50,296</b>	<b>60,341</b>	<b>64,270</b>	<b>69,745</b>	<b>58,841</b>	<b>71,525</b>

Source: ABS (Exclude goats cheese)

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