

# Inquiry into the performance of Australia's dairy industry and the profitability of Australian dairy farmers since 2000

## 13 December 2019

#### **Contact**

Craig Hough — Director Policy and Strategy, Australian Dairy Farmers Ltd

03 8621 4206 I chough@australiandairyfarmers.com.au

Level 2, Swan House, 22 William Street, Melbourne, Victoria 3000

# Table of Contents

| Ex | recutive Summary  | 6  |
|----|---|----|
| ln | dustry overview   | 12 |
| ln | dustry deregulation   | 16 |
| ln | dustry performance  | 19 |
|    | Dairy Australia statistics  | 19 |
|    | Farm businesses   | 20 |
|    | Production  | 22 |
|    | Market share  | 28 |
|    | Productivity  | 31 |
|    | Price   | 34 |
|    | Costs   | 37 |
|    | Profitability   | 40 |
|    | Return on Equity  | 46 |
| Αc | ctions to improve dairy farm performance and profitability                      | 49 |
|    | Implementation of a regulated minimum farmgate price or other price controls    | 51 |
|    | Introduction of a mandatory code of practice                                    | 54 |
|    | Ending fixed based nationalised retail pricing of dairy products                | 57 |
|    | Implementation of the \$22m Dairy Support Package                               | 60 |
|    | \$10m Energy Efficient Communities Grants Program                               | 60 |
|    | \$8.1m for ACCC's Agricultural Unit including a new 'Dairy Specialist' position | 60 |
|    | \$500k for DA to provide financial and legal advice                             | 61 |
|    | \$150k to ADF to develop a simple standard form contract                        | 61 |
|    | \$300k to ADF for blockchain technology   | 62 |
|    | \$3m Starting Farms Cooperative Program   | 62 |
|    | \$560k to ADF for a new milk marketing and trading platform                     | 63 |
|    | Implementation of the 2019 ADIC Federal Election Policy Statement               | 64 |
|    | Increasing trade and market access  | 64 |
|    | Reducing the impact of climate change   | 64 |
|    | Responding to drought   | 65 |
|    | Implementing the Murray Darling Basin Plan                                      | 65 |
|    | Developing a national water supply blueprint                                    | 65 |
|    | Reducing energy cost  | 66 |
|    | Restoring truth in product labelling  | 67 |
|    | Supporting productivity enhancing RD&E and improving industry statistics        | 68 |
|    |   |    |

# ADF submission – Inquiry into the performance of Australia's dairy industry and the profitability of Australian dairy farmers since 2000

|    | Supporting implementation of the Dairy Plan                                | 70 |
|----|--|----|
|    | Reforming industry structures  | 70 |
|    | Attracting and supporting new entrants to the industry                     | 70 |
|    | Increasing marketing and promotion of dairy                                | 71 |
|    | Increasing farm business management skills                                 | 71 |
|    | Restoring trust and transparency between farmers, processors and retailers | 72 |
| Re | eferences  | 73 |

# List of Figures

| Figure 1: Summary of long-term trends in the Australian dairy industry                        | 8  |
|---|----|
| Figure 2: Dairy farming regions in Australia  | 13 |
| Figure 3: Use of Australian milk by state 2017-18   | 14 |
| Figure 4: Australian dairy industry organisational structure                                  | 15 |
| Figure 5: Number of dairy farms in Australia by year  | 20 |
| Figure 6: Number of farms and value of agriculture sales in the US                            | 21 |
| Figure 7: Gross value of dairy versus other agriculture production (\$m)                      |    |
| Figure 8: Australian volume of manufactured dairy products (Mt)                               | 23 |
| Figure 9: Milk production by state (million litres)   | 24 |
| Figure 10: Global versus Australia milk production (Mt)                                       | 25 |
| Figure 11: Milk production by major producers (Mt)  | 26 |
| Figure 12: EU Common Agriculture Policy expenditure 1980-2020                                 | 27 |
| Figure 13: Australian dairy production and exports (milk equivalents)                         |    |
| Figure 14: Australian cheese imports by country (tonnes)                                      | 29 |
| Figure 15: Average applied MFN tariff for dairy products by country (darker = higher tariffs) | 30 |
| Figure 16: Total factor productivity in the Australian dairy industry                         | 32 |
| Figure 17: Average annual milk production per cow (litres)                                    | 33 |
| Figure 18: International farmgate milk prices (USD/100kg)                                     | 34 |
| Figure 19: Factory paid milk prices (cents/litre)   | 35 |
| Figure 20: % change in average dairy farm production costs above \$5k p/a (2018-19 \$)        | 37 |
| Figure 21: Average dairy farm operating costs above \$5k p/a (2018-19 \$)                     |    |
| Figure 22: Dairy farm cash costs over cash receipts (1990=100)                                | 40 |
| Figure 23: Australian dairy industry profit results (\$)                                      | 41 |
| Figure 24: Operating margin versus % of grazed pasture in Victorian dairy farms               | 42 |
| Figure 25: Financial performance of Victorian dairy farms by size 2006-07 to 2010-11          | 43 |
| Figure 26: Operating profit margin by size of dairy farm in the United States                 | 44 |
| Figure 27: Farm size and rate of return in Australia  | 45 |
| Figure 28: Return on equity – Victorian dairy farms   | 46 |
| Figure 29: Return on equity – NSW dairy farms   | 47 |
| Figure 30: Return on equity – SA dairy farms  |    |
| Figure 31: Return on equity – TAS dairy farms   | 47 |
| Figure 32: Return on equity – WA dairy farms  | 48 |

# ADF submission – Inquiry into the performance of Australia's dairy industry and the profitability of Australian dairy farmers since 2000

# List of Tables

| Table 1: Number of dairy farms in Australia by state and year        | 20 |
|--|----|
| Table 2: Number of farms in Australia – all of agriculture – by year | 21 |

### **Executive Summary**

The Australian Dairy Farmers (ADF) welcomes the Senate's Rural and Regional Affairs and Transport Committee's *Inquiry into the Performance of Australia's dairy industry and the profitability of Australian dairy farmers since deregulation in 2000*. This submission prioritises four of the committee's terms of reference – industry performance, proposed minimum farmgate price, pending mandatory code of practice and other actions to strengthen the future viability of industry. An evaluation of Dairy Australia (DA) has not been undertaken as this is will be addressed via the Australian Government's *Modernising the RDC system review*. Some high-level statements are made of DA's statistics and consultation processes. It is recognised that these are important to industry but can be improved by way of increasing the sample size. This should be a common objective shared by for all agencies collecting industry statistics. The statistics used in this submission have been supplemented with analysis of the ten parliamentary and industry reviews that have occurred over the past decade into the industry. Together these highlight structural issues which are reducing dairy farm profitability and sustainability. Actions to address this include delivering on the inquiry recommendations and providing farmers with a more appropriate domestic pricing arrangement by the retailers.

Australian dairy has been a major export industry for much of its 200 plus year history. This has been largely due to being amongst the world's best low-cost grass based seasonal producers. Competitiveness parity with New Zealand (NZ) dairy farmers has always been the standard. Over time industry has not only lost its competitiveness with NZ but other key competitor producers, in particular the European Union (EU) and United States of America (US). As a consequence, Australian dairy has declined from around 16% of measured world exports of dairy products in the 1990s to 6% today. This has occurred in the context of solid increases in global export trade volumes. For example, between 2012 to 2018 global dairy export trade volumes increased by more than 2.5m tonnes (21%). Australian dairy exports only increased by 22,364 tonnes or 3% over the same period.

Since 2000 Australian milk production has been moving more towards all year-round production to supply more of the domestic than international markets. This has seen regions like Northern Victoria invest more in Total Mixed Ration (TMR) and Partial Mixed Ration (PMR) production systems. These are more complex and higher cost of production systems. These are significant changes to the region's historical production system (from grass based seasonal to all year-round high input production of milk). Over this period average farmgate prices have increased but are generally less than Australia's international competitors, particularly northern hemisphere farmers who are subsidised, and have not kept pace with the average these farm cost increases.

Dairy farmers have been improving productivity since 2000. While farm businesses have declined, the size of those businesses are getting larger and producing more output per hectare and cow. Traditionally these advances have been critical to offsetting Australia's declining terms of trade. However more recently, these gains have not been enough to offset the cost of production increases.

Since 2000 average dairy farm profit has been \$22,818 per annum (Department of Agriculture and Water Resources 2018). This compares to the national minimum wage of \$38,512 per annum (Fair Work Ombudsman 2019).

The outcome of these trends is a higher than average declining number of farms exiting the industry and a shrinking of the national milk pool. New South Wales and Queensland now do not produce enough milk to satisfy their domestic fluid milk demand. Northern Victoria has become the source of all year-round supply to respond to the lower production in Australia's northern states. Northern Victoria has lost its place as the largest milk production region in Australia and looks highly likely to have a future of all year-round production to supply fluid milk for short shelf life products in eastern Australia.

Figure 1: Summary of long-term trends in the Australian dairy industry

| 1980   | 1990                                     | CAGR %<br>1980s  | 2000  | CAGR %<br>1990s   | 2010  | CAGR %<br>2000s   | 2019 (p)   | CAGR %   |
|--------|--|--|---|---|---|---|--|--|
| 5,432  | 6,262                                    | 1.4  | 10,847  | 5.6   | 9,023   | -1.8  | 8,795  | -0.4   |
| 1,880  | 1,654                                    | -1.3   | 2,171   | 2.8   | 1,596   | -3.0  | 1,440  | -1.5   |
| 21,994 | 15,396                                   | -3.5   | 12,896  | -1.8  | 7,511   | -5.3  | 5,213  | -5.1   |
| 3,625  | 3,388                                    | -0.7   | 4,297   | 2.4   | \$3,366   | -24   | \$4,374  | 3.8  |
| 239    | 245                                      | 0.2  | 274   | 1,1   | 301   | 0.9   | 321  | 0.9  |
| 1,094  | 613                                      | -5.6   | 3,918   | 20.4  | \$2,391   | -4.8  | \$3,228  | 4.4  |
| 22     | 31                                       |  | 54  |   | 45  |   | 35   |  |
|        | 5,432<br>1,880<br>21,994<br>3,625<br>239 | 5,432 6,262<br>1,880 1,654<br>21,994 15,396<br>3,625 3,388<br>239 245<br>1,094 613 | 1980s 5,432 6,262 1.4 1,880 1,654 -1.3 21,994 15,396 -3.5 3,625 3,388 -0.7 239 245 0.2 1,094 613 -5.6 | 1980s           5,432         6,262         1.4         10,847           1,880         1,654         -1.3         2,171           21,994         15,396         -3.5         12,896           3,625         3,388         -0.7         4,297           239         245         0.2         274           1,094         613         -5.6         3,918 | 1980s         1990s           5,432         6,262         1.4         10,847         5.6           1,880         1,654         -1.3         2,171         2.8           21,994         15,396         -3.5         12,896         -1.8           3,625         3,388         -0.7         4,297         2.4           239         245         0.2         274         1,1           1,094         613         -5.6         3,918         20.4 | 1980s         1990s           5,432         6,262         1.4         10,847         5.6         9,023           1,880         1,654         -1.3         2,171         2.8         1,596           21,994         15,396         -3.5         12,896         -1.8         7,511           3,625         3,388         -0.7         4,297         2.4         \$3,366           239         245         0.2         274         1.1         301           1,094         613         -5.6         3,918         20.4         \$2,391 | 1980s         1990s         2000s           5,432         6,262         1.4         10,847         5.6         9,023         -1.8           1,880         1,654         -1.3         2,171         2.8         1,596         -3.0           21,994         15,396         -3.5         12,896         -1.8         7,511         -5.3           3,625         3,388         -0.7         4,297         2.4         \$3,366         -2.4           239         245         0.2         274         1,1         301         0.9           1,094         613         -5.6         3,918         20.4         \$2,391         -4.8 | 1980s         1990s         2000s           5,432         6,262         1.4         10,847         5.6         9,023         -1.8         8,795           1,880         1,654         -1.3         2,171         2.8         1,596         -3.0         1,440           21,994         15,396         -3.5         12,896         -1.8         7,511         -5.3         5,213           3,625         3,388         -0.7         4,297         2.4         \$3,366         -2.4         \$4,374           239         245         0.2         274         1.1         301         0.9         321           1,094         613         -5.6         3,918         20.4         \$2,391         -4.8         \$3,228 |

\*Expressed in 2018-19 dollars. CAGR = Compound Annual Growth Rate

Source: Dairy Australia (2019) In Focus, Southbank

There are several key events that have significantly impacted dairy farm profitability since 2000:

- the move by processors to change payment systems to encourage all year-round production (rather than traditional grass based seasonal milk production system commonly practiced in southern Australia), which incurs higher production costs
- drought and other climate linked issues including higher summer temperatures impacting grass growth and cow management, which also incurs higher production costs
- increasing costs, for example electricity and inefficiency in the processing sector contributing to Australian dairy products, in particular bulk commodities, being uncompetitive in overseas markets
- introduction of aggressive promotion of 'private label' or 'home brand' products by supermarkets i.e. \$1 per litre milk since 2011, which has stripped value out of the dairy supply chain.
- significant world market price volatility caused by a range of factors including the removal of
   EU production quotas and EU loss of Russian market access
- the international dairy price downturn and further price reductions late in the 2015–16 season by Australia's two largest dairy processors Murray Goulburn and Fonterra Australia
- farmgate price growth not keeping up with the cost of production growth.

Over the past ten years there have been ten parliamentary and industry reviews into the dairy industry:

- May 2010 Milking it for all it's worth—competition and pricing in the Australian dairy industry by the Senate's Standing Committee on Economics
- 2. November 2011 The impacts of supermarket price decisions on the dairy industry by the Senate's Standing Committee on Economics
- 3. January 2013 Horizon 2020 by the peak bodies representing the dairy industry
- 4. July 2014 Australian dairy: prosperous, trusted, world renowned nutrition vision statement by the Australian Dairy Industry Council
- 5. October 2014 Relative costs of doing business in Australia: Dairy Product Manufacturing by the Productivity Commission
- 6. June 2015 Dairy Moving Forward by the peak bodies representing the dairy industry
- 7. August 2017 Australia's dairy industry: rebuilding trust and a fair market for farmers by the Senate's Economics Reference Committee
- 8. April 2018 Dairy Inquiry by the Australian Competition and Consumer Commission
- 9. April 2019 Federal election policy statement by the Australian Dairy Industry Council
- 10. November 2019 Australian Dairy Plan by the peak bodies representing the dairy industry.

These reviews have examined most of the key issues in this inquiry - pricing, costs, performance, contracts and supply chain. They highlighted structural issues in the industry and made the following recommendations (aggregated):

- 1. improving National Competition Policy and the Competition and Consumer Act 2010
- 2. improving price transparency and professionalising contract management including introduction of a mandatory code of practice between farmers and processors
- 3. greater oversight, transparency and enforcement by the ACCC of inappropriate price setting and value distribution across the supply chain, particularly in regard to the large supermarket retailers who hold significant bargaining power
- 4. enhancing the value proposition of Dairy Australia
- 5. strengthening collective bargaining arrangements and opportunities for farmers
- continuing to pursue increased market access including removal of trade distorting domestic support subsidies
- 7. ensuring that labelling on dairy products adequately and accurately informs consumers about the provenance, manufacturer and contents of the product

- 8. increasing the marketing of dairy products, in particular branded products, to consumers with a particular emphasis on nutritional benefits
- 9. continuing to drive productivity improvement across all aspects of the farm business and supply chain
- 10. securing affordable resources for dairy farming and product manufacturing, particularly in the areas of water, energy and labour
- 11. reforming industry structures to increase the value of farmer levies.

Three attempts have been made outside these reviews to introduce a minimum farmgate price:

- The Hon. Bob Katter Jnr MP on 11 February 2013 introduced the *Dairy Industry (Drinking Milk) Bill 2013* into the House of Representatives. This proposed Fair Work Australia to set a minimum farmgate milk price in the form of a modern award for dairy farmers. The Bill lapsed on 5 August 2013 and did not proceed.
- 2. The Hon. Pauline Hanson MP on 16 October 2019 introduced the *Protecting Australia Dairy Bill 2019*. This proposed to amend the *Competition and Consumer Act 2010* to require the ACCC to determine a base minimum price for milk for each dairy season, require the minister to refer to the Productivity Commission for inquiry the effectiveness of determining a base price for milk and the potential effectiveness of a divestiture regime for the dairy industry and establish a mandatory industry code for the food and grocery industry, including the dairy industry. The Bill was defeated 31-30 in the negative on 11 November 2019 and did not proceed.
- 3. The Hon. Pauline Hanson MP on 2 December 2019 introduced the *Saving Australian Dairy Bill 2019*. This is a retitling of the *Protecting Australia Dairy Bill 2019* and has been referred to this inquiry for analysis and recommendation.

There is no silver bullet to resolving the Australian dairy industry's issues. What is required is:

- 1. implementation of the previous ten industry review/inquiry recommendations. This includes not pursuing a minimum farmgate milk price due to its market distorting impacts.
- 2. in response to the recent and past ACCC decisions on Coles and to address the cost/price squeeze:
  - a) require the retailers to temporarily increase the price of home brand retail fresh milk to \$1.50 per litre and pass the increase (50 cents per litre based on \$1 litre milk) back to dairy farmers via their processors. This should be in place until the action below (b) is implemented.

- b) informed by an industry led (in consultation with key stakeholders) strategic review of pricing and national competition policy, establish a set of principles in the *Food and Grocery Code* to:
  - I. introduce market led regional pricing for all dairy products on retail shelves
  - II. establish appropriate value distribution (% margin/sales revenue) up the supply chain to dairy farmers
  - III. enshrine the ACCC's 'Dairy Specialist' role as a position of oversight and to advocate on the dairy farmers behalf.

### Industry overview

The Australian dairy industry comprises of 46,200 people working in over 5,213 farms producing around 9b litres of raw milk valued at \$4.4b per annum and processing companies transforming the milk into high value dairy products. Around 65% of Australian dairy is sold on the domestic market. It is purchased from supermarkets and other retail or wholesale outlets for direct consumption or as ingredients in food and beverage. The total value of Australia's dairy exports is around \$2.8b per annum. This positions Australia as the fourth largest dairy exporter with 6% of global trade. Approximately 125 Australian companies export dairy products to over 100 countries. The largest markets are China, Japan, Singapore, Malaysia and Indonesia (Dairy Australia 2019).

All Australian states produce milk and dairy products. Most of it occurs in Victoria, which accounts for 64% of Australia's national milk production (5.5b litres in 2018-19) and 79% of national dairy exports (Victorian Department of Economic Development, Jobs, Transport and Resources 2018). The remaining milk production comprises 12% in New South Wales, 10% in Tasmania, 6% in South Australia, 4% in Western Australia and 4% in Queensland. Southern New South Wales, Victoria, Tasmania and South Australia are mostly orientated around exports and manufacture of high value products whereas Queensland, northern New South Wales and Western Australia are more focused on fresh milk for domestic consumption.

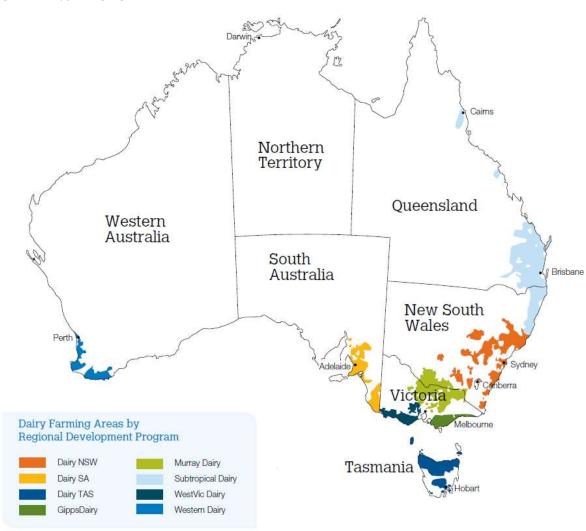


Figure 2: Dairy farming regions in Australia

Dairy Australia (2018) Australian Dairy In Focus

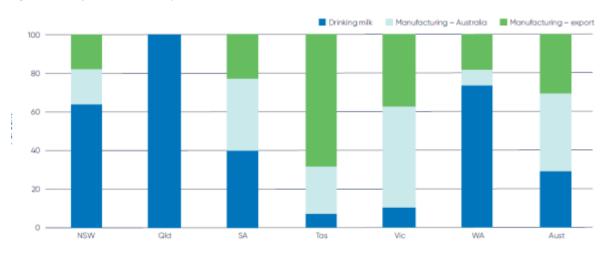


Figure 3: Use of Australian milk by state 2017-18

Source: Dairy Australia (2019) Australian Dairy In Focus

The dairy industry is serviced at the national level by ADF, Australian Dairy Products Federation (ADPF) and Dairy Australia (DA):

- ADF is the national policy and advocacy body representing dairy farmers across Australia's six dairying states. State bodies, known as State Dairy Farmer Organisations (SDFO), pay a membership fee to participate in ADF's national policy development and delivery. ADF, like other commodity groups, is a member of the National Farmers Federation (NFF). This is the peak body representing cross commodity agricultural issues across the country. ADF has six staff and an operating budget of \$2.2m (2018-19).
- ADPF is the national policy and advocacy body representing dairy product manufacturers.
   It has one staff member working three days per week.
  - DA is the industry owned Research Development Corporation (RDC). In 2018-19 it had an operating budget of \$56.5m (Dairy Australia 2018). This comprises \$40.8m (72%) in industry projects/services and \$15.7m (28%) in corporate administration. The breakdown of industry projects/services is \$23m for farm R&D, \$8.2m for farm extension, \$6.2m for industry and community marketing (includes \$1.5m for policy support) and \$3.4m for trade and international market development. Areas covered in the RD&E are pastures and forages, feedbase and animal nutrition, genetics and herd improvement, resource management, animal health and fertility, farm business and workforce management and advanced management technologies. The breakdown of corporate administration is \$4.7m for marketing and communications, \$331k for sustainability, \$1.1m for human resources and \$9.6m for organisational performance.

On occasions ADF and ADPF come together under the auspices of the Australian Dairy Industry Council (ADIC) to represent the whole of the dairy supply chain. DA supports the ADIC in addition to ADF, ADPF and SDFOs with policy research and technical advice. ADF and ADPF (i.e. ADIC) are Group B members of DA. This provides for consultation on key DA initiatives e.g. strategic and operational plans, collaboration/partnership on industry initiatives e.g. Dairy Plan and representation on the DA's Board Selection Committee (with no voting rights).

Figure 4: Australian dairy industry organisational structure



Source: Dairy Australia (2018) Australian Dairy In Focus

## Industry deregulation

Much of the current dairy industry circumstances have developed from a number of very significant policy and trade decisions taken by state and federal governments over the past 50 years. These include relinquishing access to EU butter in the 1970s, Australia/New Zealand Closer Economic Agreement (CER) with NZ in 1980s and National Competition Policy of the 1990s. Deregulation of the dairy industry in 2000 is simply an extension of these events.

In the late 1960s and early 1970s the Australian and NZ governments negotiated with the United Kingdom (UK) and European Economic Community (EEC) for dairy product access into Europe. This was a significant milestone as Australia's milk production for the last century was based on seasonal milk production to produce cream to make butter for export to the UK. The negotiations between the four governments resulted in Australia losing virtually all of its butter access while NZ kept most of their access after the UK entered the EEC in 1973. This decision agreed by the Australian Government prior to 1973 meant Australia had no immediate home to send its butter, resulting in what can only be described as a crash in domestic milk production.

During this period state governments regulated volume and price for liquid milk production, processing and consumption to ensure there was a supply of milk for consumers all year round. The industry crash of the 1970s meant there was significant pressure for all dairy farmers in a state to share in access to the fluid milk markets within each state. There were milk wars in each state with farmers outside fluid milk zones denied access to the major capital city higher value/priced milk markets.

Each state government in the mid-1970s took action to address the fluid milk access arrangements. New South Wales, Queensland and Western Australia redistributed quota/entitlement for fluid milk production to farmers throughout their state. This meant all dairy farmers in these states had to produce milk all year round. The quotas had a value attached to them to allow trade between farmers. In Victoria access to the fluid milk market was designed in a different way. Here dairy farmers were paid the regulated higher liquid milk price for a percentage of their milk each month. If x% of the states total milk production in a month was required to satisfy liquid milk needs for the states' consumers, then each farmer who supplied milk that month received the regulated liquid milk price for the x% of their milk produced that month. This fluid milk payment system meant dairy farmers did not have to produce milk all year round to have access to the higher value fluid milk market.

Throughout the 1980s and 1990s New South Wales and Queensland processors remained relatively competitive against Victorian manufacturing milk products such as cheeses, etc. This is due to farmers being paid a lower price for their milk (lower than world market prices). Northern farmers were able to make solid margins because of higher fluid milk volume per farm and the price paid for milk being above marginal cost of production. The seasonal milk production system, which continued in Victoria, meant there was a lower cost of production to allow lower costs to processors for manufacturing milk products like cheese, butter, and skim and whole milk powders. In addition, processors had more certainty of manufacturing milk volumes in Victoria versus the marginal nature of such milk production in New South Wales and Queensland.

This also explains why milk production for manufactured milk products moved to southern Australia throughout the 1980s and 1990s – to access lower cost of production seasonal milk supply. It was seasonal milk production which gave all states a competitive advantage in exporting butter to the UK up to the 1970s. This continued seasonal production was the trigger for southern Australia to maintain competitiveness for exports over the past 40 years.

The CER came into operation in 1984. Australian dairy was able to negotiate a 10-year phasing in of NZ dairy exports to Australia. This provided the industry time to improve productivity. Up until this point Australia had a wide range of tariff barriers and export support arrangements for manufactured dairy products. This decision by the Australian Government to open up the economy to greater competition was the beginning of deregulation and industry adjustment.

There were several key policies implemented shortly after the CER to further open up the Australian economy. The Kerin Plan of 1986 and subsequent Crean Plan of 1992 were designed to see all domestic and export support arrangements for manufacturing milk products removed by no later than 30 June 2000. In the 1990s the bipartisan (state and federal governments) National Competition Policy (NCP) Agreement, which arose from the Hilmer Review of NCP was implemented. This required all jurisdictions to review their regulations, including pricing and supply regulations, based on a public benefit test. If the review concluded that for a particular regulation, there was a negative public benefit, the relevant jurisdiction was required to remove the regulation. This included review of fluid milk arrangements in each jurisdiction. Each state, with the exception of Victoria, found a positive public benefit to retain pricing and supply regulations. Consequently Victoria, under the terms of the NCP Agreement, was obliged to remove their fluid milk pricing and supply arrangements. With the Australian constitution allowing free trade between states, the Victorian decision meant all state fluid milk pricing and supply arrangements are no longer valid.

These events provided the catalyst for the industry – farmers and processors – and governments to work together to formulate a united national dairy plan. The primary purpose of this work was to have state fluid milk supply and pricing arrangements removed by 1 July 2000 and for the Australian Government to implement an appropriate transition package. Led by the ADIC this resulted in the *Dairy Industry Adjustment Act 2000 (Cwlth)* in April 2000, where the Dairy Adjustment Authority (DAA) administered applications for assistance from dairy farmers under the Dairy Structural Adjustment Program (DSAP) Scheme. In July 2001, the *Dairy Produce Legislation Amendment (Supplementary Assistance) Act 2001 (Cwlth)*, provided the legislative framework for the DAA to administer additional assistance measures to dairy producers under the Supplementary Dairy Assistance Scheme. During the period of implementation (2000 to 2008) the DAA committed \$1.6b under the DSAP and \$111m under the Supplementary Dairy Assistance Scheme.

## Industry performance

Businesses and industries that have been in operation for a long time focus on performance. While there are many levels to performance, ultimately it is about wealth creation. In economic terms this is defined as equity - the net result of an organisation's or industry's assets minus liabilities demonstrated via a *Balance Sheet*. Profit maximisation (increasing total revenue [output x price] and reducing total cost [input x price]), as demonstrated on an organisation's or industry's *Profit and Loss Statement*, is a key component to increasing equity. However, it is not the only driver. Appreciation in land values, investments, and performance in other areas of the *Balance Sheet* are also important.

#### Dairy Australia statistics

DA has a long history of delivering analysis and insights services to the Australian dairy industry, and these statistics provide an invaluable service to industry and government alike. Through this history, DA has secured and maintained the trust of industry to manage data in a confidential manner on their behalf. This includes managing a broad range of market and farm performance datasets. Other sources of on-farm performance data and information have long existed, but DA has proven uniquely capable of aggregating these at the industry level.

In relation to farm performance data provided by DA through the Dairy Farm Monitor Project (DFMP), it is important to ensure that these are not misrepresented as being a statistically representative sample of Australian dairy farmers. The DFMP remains an invaluable service for industry as a management tool to inform the key drivers/levers of farm profitability and performance over an extended time period. These insights are not only extensively used by farmers but also then help to shape the programs and services that are delivered by DA, government, consultants and other services providers. The DFMP is not, nor had it been promoted as being, a representative sample of Australian dairy farmers.

#### Farm businesses

The number of businesses in an industry is not a measure of industry performance. Agriculture industries, including dairy, have for decades continued to reduce the number of farms while at the same time maintaining or increasing output. This trend can be considered positive on the grounds that it is improving industry productivity. These are global trends as countries transition from production to service/knowledge orientated economies, for example the US.

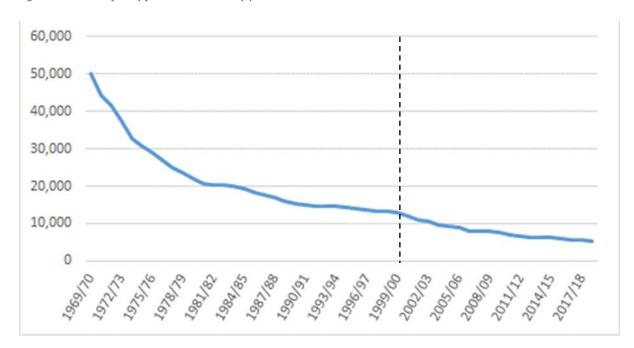


Figure 5: Number of dairy farms in Australia by year

Source: Esposito, S. (2019) ABARES Australian Dairy Farm Statistics

Table 1: Number of dairy farms in Australia by state and year

|      | NSW   | VIC    | QLD   | SA    | WA  | TAS   | AUS    |
|------|-------|--------|-------|-------|-----|-------|--------|
| 1980 | 3,601 | 11,467 | 3,052 | 1,730 | 622 | 1,522 | 21,994 |
| 1990 | 2,220 | 8,840  | 1,970 | 969   | 496 | 901   | 15,396 |
| 2000 | 1,725 | 7,806  | 1,545 | 667   | 419 | 734   | 12,896 |
| 2010 | 820   | 5,159  | 621   | 306   | 165 | 440   | 7,511  |
| 2019 | 575   | 3,516  | 356   | 212   | 150 | 404   | 5,213  |

Source: Dairy Australia <a href="https://www.dairyaustralia.com.au/industry/farm-facts/cows-and-farms">https://www.dairyaustralia.com.au/industry/farm-facts/cows-and-farms</a> and Dairy Australia (2019) In Focus, Southbank

Table 2: Number of farms in Australia – all of agriculture – by year

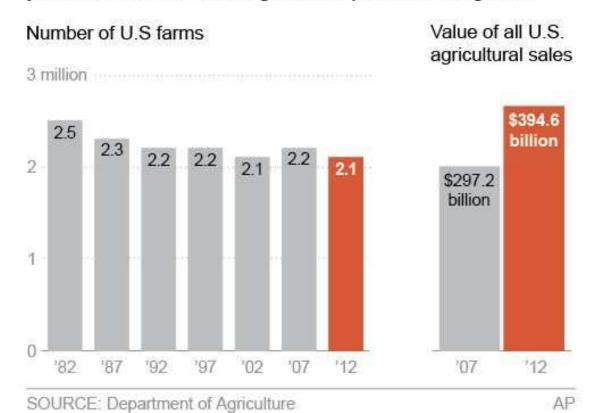
| Year | Number  |
|------|---------|
| 1942 | 254,000 |
| 2000 | 146,400 |
| 2018 | 85,000  |

Source: ABS Agricultural commodities

Figure 6: Number of farms and value of agriculture sales in the US

# Fewer farms, higher sales

The number of U.S. farms declined slightly in the past five years, while the value of agricultural products has grown.



Source: Jalonick, M. (2014) 'Number of US farms declines, farmers getting older', Associated Press, 21 February.

#### Production

Dairy is Australia's third largest agriculture sector with a gross value (output multiplied by price) of \$4.4b. Prior to 2000 the sector recorded consistent increases as output increased at a greater rate than prices. Only marginal growth has occurred after 2000 due to prices increasing at a greater rate than output. The concern for the dairy industry is its share of Australian agriculture is declining. Other agriculture sectors are growing at a faster rate since the early 1990s.

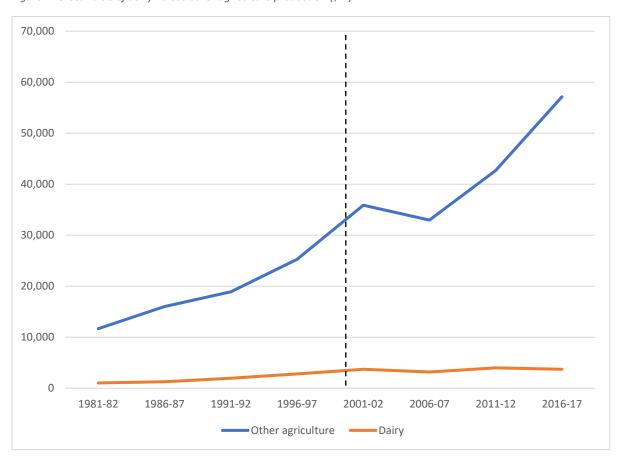


Figure 7: Gross value of dairy versus other agriculture production (\$m)

Source: ABS (2018) Value of agriculture commodities produced

Since 2000 Australia has been moving from an exporter of bulk commodity dairy products e.g. milk powders to high value/quality (differentiated) dairy products e.g. cheese. While the later typically generates a higher price or revenue, it is lower on output.

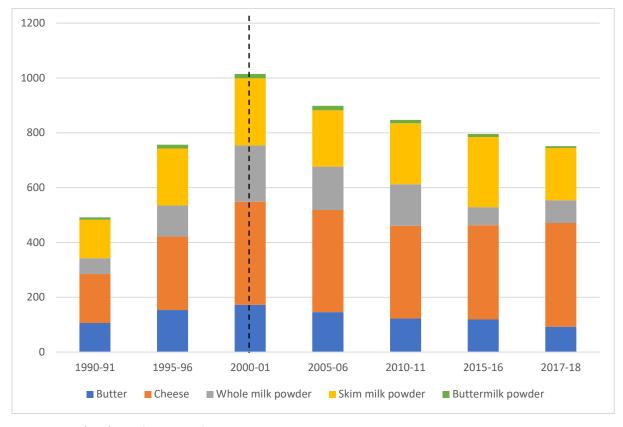


Figure 8: Australian volume of manufactured dairy products (Mt)

Source: ABARES (2018) Agriculture Commodity Statistics

The move towards a flatter production curve and all year-round production has reduced Australian dairy's domestic and international competitiveness. For example, the Victorian peak to trough production ratio has moved from 9:1 in the early 1990s to 1.8:1 in 2016-17 (Mulvaney 2017). This change towards a flat supply milk production pattern in Victoria have had consequential impacts on farmers in New South Wales and Queensland as the northern Victoria region now provides a significant volume of milk all year round. Tasmania has been the outlier in this trend with production continuing to be seasonal and grass based. As a consequence, Tasmania has seen its production rise at the same rate as NZ over the past decade.

Figure 9: Milk production by state (million litres)

|             |       | 4.34  | -1.1              | -   | 12222 | 22.0 | 1.2    |
|-------------|-------|-------|-------------------|-----|-------|------|--------|
|             | NSW   | Vic   | Qld               | SA  | WA    | Tas  | Aust   |
| 2005-06     | 1,197 | 6,651 | 597               | 646 | 377   | 622  | 10,089 |
| 2006-07     | 1,104 | 6,297 | 537               | 655 | 349   | 641  | 9,583  |
| 2007-08     | 1,048 | 6,102 | 486               | 606 | 319   | 661  | 9,223  |
| 2008-09     | 1,064 | 6,135 | 513               | 628 | 340   | 709  | 9,388  |
| 2009-10     | 1,099 | 5,813 | 530               | 605 | 359   | 677  | 9,084  |
| 2010-11     | 1,087 | 5,936 | 487               | 572 | 372   | 726  | 9,180  |
| 2011-12     | 1,136 | 6,246 | <mark>49</mark> 1 | 575 | 349   | 792  | 9,589  |
| 2012-13     | 1,137 | 6,076 | 465               | 542 | 349   | 765  | 9,334  |
| 2013-14     | 1,124 | 6,174 | 446               | 525 | 342   | 810  | 9,421  |
| 2014-15     | 1,184 | 6,411 | 422               | 530 | 367   | 891  | 9,805  |
| 2015-16     | 1,198 | 6,249 | 421               | 538 | 392   | 883  | 9,681  |
| 2016-17     | 1,141 | 5,732 | 425               | 497 | 385   | 836  | 9,016  |
| 2017-18 (r) | 1,144 | 5,979 | 399               | 505 | 385   | 913  | 9,325  |
| 2018-19 (p) | 1,082 | 5,574 | 359               | 496 | 374   | 910  | 8,795  |

Source: Dairy Australia (2019) Australian Dairy In Focus

Cost-competitiveness and efficiency has also been an issue in the Australia's dairy processing sector. Labour and energy costs are higher and productivity performance lower than Australia's major competitors (Productivity Commission 2014 & ACCC 2018). This makes it difficult to compete in bulk commodity products in international markets. Consequently, the sector continues to move towards production of more higher value products which require less volume but attract a price premium offsetting the high production costs and inefficiencies. This is demonstrated when comparing Australian milk production to other countries.

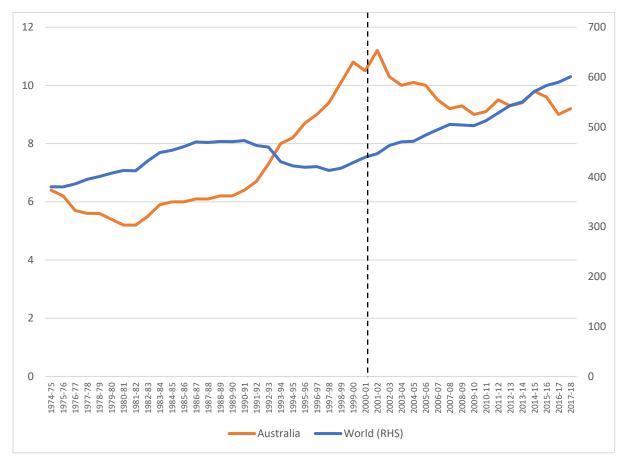


Figure 10: Global versus Australia milk production (Mt)

 $Source: US\ Department\ of\ Agriculture,\ Production,\ Supply\ and\ Distribution\ Database,\ Washington\ DC$ 

A key concern for ADF is milk production growth has primarily come from countries who are highly protected and subsidised by government. For example, India transformed itself from a country of acute milk shortage to the world's leading produce via significant government intervention:

- policy favouring expansion of cooperatives managed by public servants, which ultimately crowded out the private sector.
- government subsidies for animal health and breeding services, bulk chilling, processing infrastructure, etc.
- government (cooperatives) price setting, which limits prices being determined by market forces.
- government providing international competitors with limited market access. For example, in the current Regional Cooperative Economic Partnership (RCEP) negotiation the Indian Government is not providing access for dairy.
- government setting ambitious national targets (currently 300m tons by 2024).

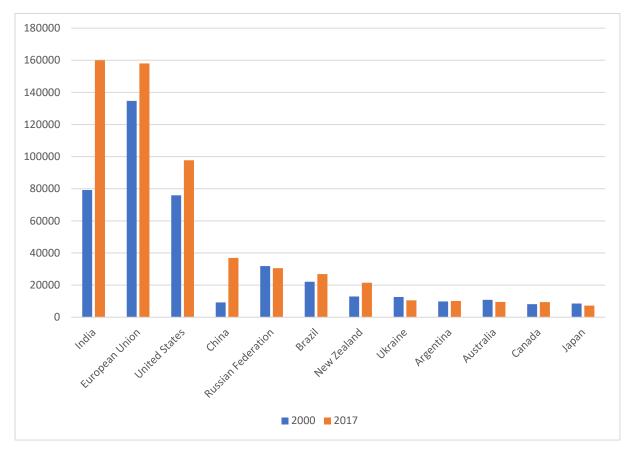


Figure 11: Milk production by major producers (Mt)

Source: ABARES (2018) Agriculture commodity statistics

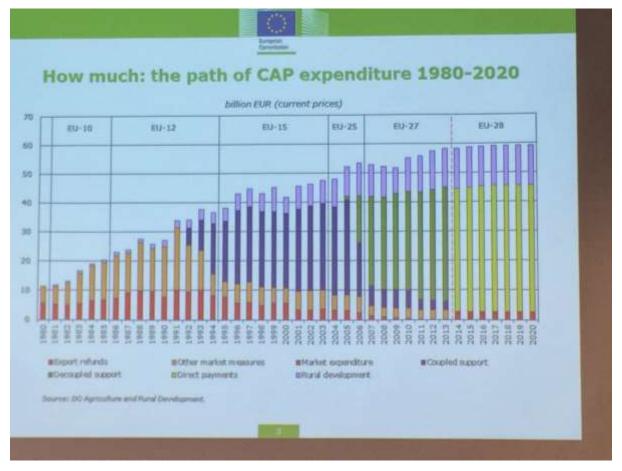


Figure 12: EU Common Agriculture Policy expenditure 1980-2020

Source: Director General Agriculture and Rural Development, European Commission

#### Market share

Traditionally Australia has been a powerhouse in dairy exports. In the late 1990s Australian dairy supplied around 16% of the world's dairy products. This has fallen to around 6% today. Australia currently exports around 35% of its milk production from all states except Queensland. This ranks Australia as the fourth largest dairy exporter in the world at a value of \$3.4b. Australia's exports travel to over 100 countries around the world with approximately 85% ending up in Asia. This is largely due to geographical proximity, exclusion from competitor markets like the EU and Asian consumers transitioning to western diets with high levels of trust in Australian product.

Trade data shows that global dairy export trade volumes increased by more than 2.5m tonnes or 21% between 2012 and 2018. This compares to Australian dairy exports increasing by just over 22k tonnes or 3% over the same period. NZ, EU and US have overtaken Australia to dominate export market share - NZ is 40%, EU 28% and US 14%. For context, in 2009 NZ was only 10.4% of global dairy exports and the EU and US were half what they are now.



Figure 13: Australian dairy production and exports (milk equivalents)

Source: Dairy Australia (2019) Australian Dairy In Focus

These trends have also played out on the domestic market. Key competitor countries who have been increasing production have also been increasing their imports into Australia. This has led to Australia's major supermarkets eroding niche brands by consistently forcing the price down via procurement of cheap imported products.

Figure 14: Australian cheese imports by country (tonnes)

|                      | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017–18 (r) | 2018-19 (p) |
|----------------------|---------|---------|---------|---------|-------------|-------------|
| Austria              | 746     | 584     | 678     | 600     | 640         | 893         |
| Bulgaria             | 1,312   | 1,476   | 1,293   | 1,276   | 1,241       | 809         |
| Denmark              | 2,133   | 1,529   | 2,042   | 1,990   | 2,275       | 2,241       |
| France               | 1,690   | 1,775   | 1,911   | 2,047   | 2,482       | 2,427       |
| Germany              | 1,326   | 1,566   | 2,271   | 2,481   | 2,359       | 2,430       |
| Greece               | 1,761   | 2,110   | 2,104   | 2,068   | 2,027       | 2,117       |
| Italy                | 3,981   | 4,222   | 4,150   | 4,834   | 4,829       | 4,920       |
| Netherlands          | 2,307   | 2,024   | 2,601   | 2,979   | 2,880       | 3,410       |
| Poland               | 530     | 595     | 795     | 840     | 1,126       | 1,070       |
| United Kingdom       | 463     | 625     | 1,129   | 1,438   | 1,026       | 1,316       |
| Other                | 1,543   | 1,764   | 2,112   | 3,294   | 3,920       | 3,493       |
| Total EU             | 17,792  | 18,270  | 21,086  | 23,847  | 24,805      | 25,126      |
| New Zealand          | 39,623  | 45,235  | 55,030  | 65,723  | 56,571      | 42,734      |
| United States        | 16,200  | 16,709  | 11,658  | 20,987  | 28,147      | 24,504      |
| Norway               | 1,787   | 1,745   | 1,134   | 1,090   | 916         | 1,264       |
| Switzerland          | 196     | 180     | 208     | 210     | 232         | 244         |
| Other                | 219     | 257     | 210     | 272     | 287         | 313         |
| Total cheese imports | 75,817  | 82,396  | 89,326  | 112,129 | 110,958     | 94,185      |

Source: Australian Bureau of Statistics

Australia's loss of domestic and international market share is due to a number of factors. Competitors are intensifying production at a greater rate, providing economies of scale. In the EU and US this is being fuelled by their high domestic support programs and tariff protections. This coupled with Australia's increasing cost of production model makes the country uncompetitive in bulk commodities on the global stage. The outcome is a shift to higher value, more differentiated products. These attract a price premium but do not require as much raw milk volume (Productivity Commission 2014).

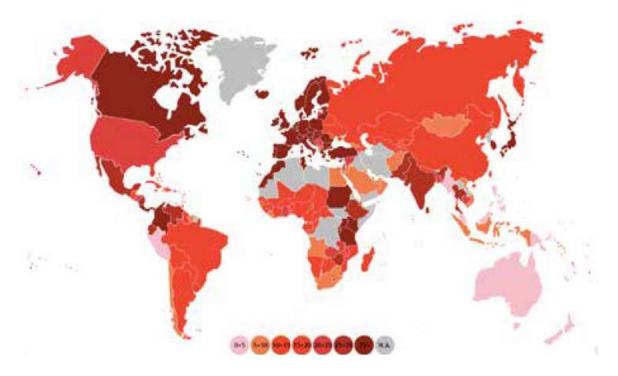


Figure 15: Average applied MFN tariff for dairy products by country (darker = higher tariffs)

Source: Dairy Australia (2019) Situation analysis

Unless the Australian Government makes significant inroads on market access and levelling the playing field, these trends will continue. For example, by 2030 the EU is forecast to supply close to 35% of the global demand. It will do this by focusing more extensively on value-added products such as organic products or those with protected geographical indications (European Commission 2018).

#### Productivity

Agricultural productivity is a key ingredient to industry performance. It enables greater production, and higher value production, using the same or fewer inputs – particularly land and water, but also labour and capital. Increases in productivity offsets against decline in the farmers' terms of trade.

The Australian dairy industry has consistently achieved productivity growth throughout time. Growth in productivity prior to and after 2000 were driven by different factors and increased at different rates (Sheng, Jackson & Gooday 2016). During the 1980s and 1990s many dairy farms transitioned to more intensive production systems. Labour and land requirements were reduced, however material inputs increased (i.e. fertiliser and supplementary feed). Total Factor Productivity (TFP) over this period was driven by output increasing faster than input use due to adoption of new technologies (such as rotary dairies, artificial insemination and improved pastures). In the 2000s smaller farms left the dairy industry shortly after deregulation. A consequence was a decline in production. The TFP growth over this period was driven by input use declining faster than output because land, labour and capital shifted towards the most efficient farms. Furthermore, deregulation appears to have assisted the movement of resources from farms using the year-round to seasonal production systems. This has been important for the industry because deregulation had the effect of boosting industry productivity at a time when on farm technological progress was slowing.

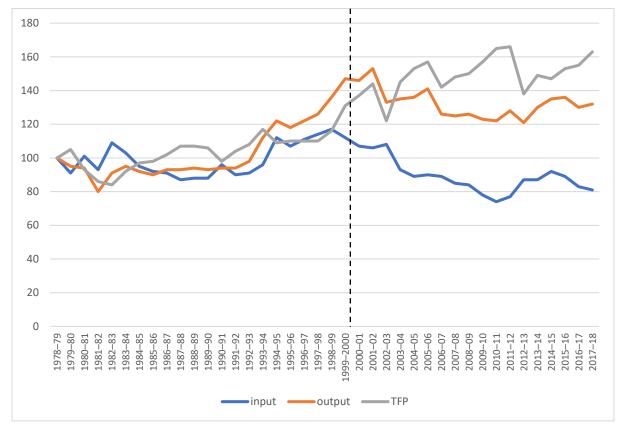


Figure 16: Total factor productivity in the Australian dairy industry

Source: ABARES (2019) Dairy productivity data, March.

Improved herd genetics and advances in pasture management and supplementary feeding regimes has seen average annual yield per cow increase on a consistent basis. Over the past four decades yields have more than doubled from 2,848 litres per cow in 1979-80 to 6,070 in 2017-18. Despite different environmental conditions and production systems each state has consistently recorded increases. This is the result of many years of research, development and extension (RD&E), for example the Australian Dairy Herd Improvement Scheme (ADHIS), which is now called DataGene.

Figure 17: Average annual milk production per cow (litres)

|             | 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 |
| 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     | 5,420 | 5,807 | 5,032 | 6,053 | 6,355 | 5,140 | 5,691 |
| 2009/10     | 5,329 | 5,518 | 5,052 | 5,907 | 6,641 | 4,640 | 5,448 |
| 2010/11     | 5,409 | 5,860 | 4,980 | 6,257 | 6,637 | 5,379 | 5,758 |
| 2011/12     | 5,760 | 6,027 | 5,008 | 6,646 | 5,967 | 5,636 | 5,930 |
| 2012/13     | 5,534 | 5,473 | 4,667 | 7,099 | 5,996 | 5,166 | 5,498 |
| 2013/14 (r) | 5,542 | 5,639 | 4,640 | 6,896 | 5,443 | 5,578 | 5,615 |
| 2014/15 (r) | 6,572 | 5,795 | 4,388 | 7,411 | 5,752 | 6,400 | 5,917 |
| 2015/16 (r) | 6,721 | 5,621 | 4,644 | 7,634 | 6,669 | 5,981 | 5,841 |
| 2016/17 (r) | 6,431 | 5,749 | 4,823 | 6,520 | 6,342 | 5,511 | 5,812 |
| 2017/18 (e) | 6,877 | 6,072 | 4,729 | 7,011 | 5,963 | 5,577 | 6,070 |

Source: Dairy Australia (2018) Australian Dairy In Focus

#### Price

The Australian farmgate milk price is set by the dairy processors based primarily on the global milk price. With the exception of Canada where there is significant government intervention, price trends of Australian farmers have generally mirrored the EU, US and NZ when compared in US\$ terms. The key issue for Australian dairy farmers is that their price is slightly lower than these competitors with the exception of NZ (Productivity Commission 2014). Traditionally this has been largely due to the low cost of raw milk production in Victoria and Tasmania and the absence of price support mechanisms.

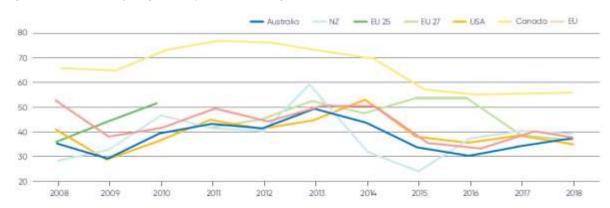


Figure 18: International farmgate milk prices (USD/100kg)

Source: Dairy Australia (2018) Australian Dairy In Focus

The dairy processors do adjust their farmgate milk prices according to local conditions. Key factors include cost of farm and processor production and competition. The processor's profit margin is also considered although often in the broader context of the total raw milk to be procured across the country. Generally, the prices paid are higher in the states with a higher cost of production.

Dairy farmers across all states have been receiving consistent increases in the farmgate price since 2000. They are now at the highest they have ever been. The problem is that these increases have not kept pace with the rising costs of production. Across Australia the average dairy farm has experienced a 71% increase in their farmgate price since 2000. This compares to a 142% increase in their production costs over the same period (refer costs section). The term often used to describe this trend is a cost/price squeeze.

Figure 19: Factory paid milk prices (cents/litre)

|      |         |         |         |         | %        |
|------|---------|---------|---------|---------|----------|
|      |         |         |         |         | increase |
|      |         |         |         |         | 2000/01- |
|      | 2000/01 | 2005/06 | 2010/11 | 2018/19 | 2018/19  |
| NSW  | 29.10   | 34.30   | 48.30   | 54.70   | 88       |
| VIC  | 29.30   | 32.90   | 42.00   | 48.20   | 65       |
| QLD  | 30.60   | 36.60   | 53.10   | 61.00   | 99       |
| SA   | 27.70   | 32.00   | 38.00   | 47.20   | 70       |
| WA   | 26.60   | 29.00   | 43.40   | 50.20   | 89       |
| TAS  | 25.00   | 33.60   | 43.15   | 50.30   | 101      |
| AUST | 29.00   | 33.10   | 43.20   | 49.70   | 71       |

Source: Dairy Australia (2019) Australian Dairy In Focus

The dairy industry has long advocated for the retail fresh milk price to be reflective of these requirements. This has been most prominent since the introduction of \$1 litre home brand milk by the retailers in 2011. A 'race to the bottom' in any sector shifts value from the producer to consumer. In a situation like Australia where the retail price is fixed, any increases in price and investment up the supply chain are limited. Net margins for food retailers (supermarkets and grocery stores) have declined by around 1¾ percentage points since 2011-12 (Carter 2019). This has occurred alongside the expansion of foreign supermarkets into the Australian market as well as a period of aggressive price competition between the major domestic supermarkets. The consequence of this for products with fixed prices like fresh milk is it limits price rise capacity back up the supply chain.

Retailers have helped to lower the farmgate price by awarding tenders to processors from outside a region they operate in or at the very least, having them tender in regions they don't process in. This has meant the existing local processors have had to tender lower to retain a contract, competing against a more manufacturing based lower farmgate price processor. Murray Goulburn did this with the agreement they had with Coles in NSW. While they offered a higher price to get milk originally, LION/DFMC had to lower their Tier 2 milk as they had so much surplus. This dropped their farmgate price by 3-4 cents per litre. It also gave the processors the opportunity to not award farms' contracts who were now isolated, as neighbours had moved across to Murray Goulburn. The cost for LION to service the remaining farms with a different freight company was too expensive or not viable. Similar events happened in parts of Queensland when Woolworths changed from LION to Parmalat. In far north Queensland Parmalat had a home brand contract and used the LION Malanda factory to toll process as they had no suppliers in the region.

#### Costs

The significant gains made by dairy farmers in reducing inputs (the driver of productivity improvement since deregulation) has not translated to decreased production costs. This is due to significant price rises across the majority of the high cost items (above \$5k p/a). With the exception of handling and marketing none of these expenditure items on the Profit and Loss Statement has decreased since 1990 or 2000. In fact, they have increased by 142% for an average dairy farm since 2000 and 265% since 1990.

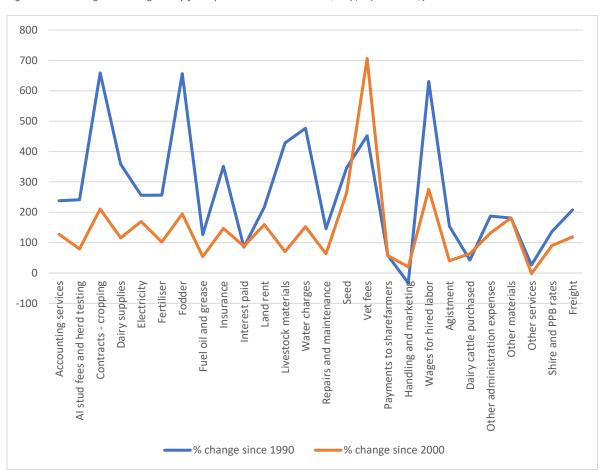


Figure 20: % change in average dairy farm production costs above \$5k p/a (2018-19 \$)

Source: Department of Agriculture and Water Resources (2018) Dairy AgSurf data

The cost rises have been driven by a number of factors, in particular the push to a flatter production curve, drought and climate change. This is seeing more farmers relying on higher cost crop production and bought-in feeds.

Fodder is by far the largest and growing expense. This is due to pasture consumption decreasing across the mainland. For example, Victoria's pasture consumption now represents about 50% of a cows' diet. This compares to 78% and 72% in New Zealand and Tasmania respectively (Beca 2018). There is pressure on purchased fodder costs. Factors like unfair freight subsidies by some states and drought handouts to farmers to purchase fodder are increasing the price to farmers in the states who have fodder and do not get subsidies. This is an unfair drought policy outcome. Other commodities, in particular beef and sheep, have seen a doubling to tripling return on their farmgate value. This demonstrates that these commodities have been more active in purchasing fodder because they can afford it. Dairy has not experienced this outcome, so they are making a loss on purchasing fodder to survive.

Freight costs have also increased considerably. Since 2000 the ability for processors to move milk interstate has increased with the use of B doubles. Milk now moves from SA to WA and vice versa, SE QLD to FNQ, northern Victoria to NSW, etc. as a domestic supply top up. This has enabled processors to pay farmers a manufacturing price (comes from a manufacturing region) and used for liquid milk domestic consumption in another state. This has saved processors having to pay a higher price or support local farmers to stay in business, by filling trucks from large farms interstate, pay less for it and freight it. Farms supplying this milk don't get paid a domestic price and have incurred additional cost to improve farm storage capacity and rapid milk cooling facilities at the request of processors.

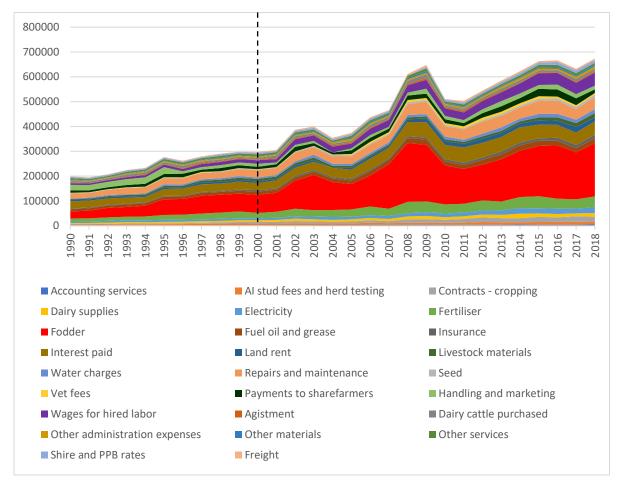


Figure 21: Average dairy farm operating costs above \$5k p/a (2018-19 \$)

Source: Department of Agriculture and Water Resources (2018) Dairy AgSurf data

## **Profitability**

Due to production costs rising at a greater rate than farmgate prices the best 25% of farmers are having their margins squeezed, while the other 75% of farmers are having their margins either flat or negative (ADSA 2018). These impacts are even greater in drought years like the current year when grain and other supplementary feeds such as hay and silage, as well as water, are harder to source and more expensive to purchase. This is a significant cash flow problem across all dairy states.

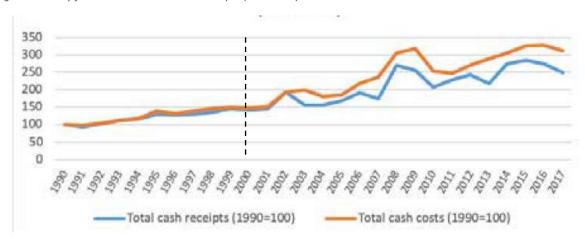


Figure 22: Dairy farm cash costs over cash receipts (1990=100)

Source: ABARES (2018) Dairy farm cash costs versus total cash receipts index  $\frac{1}{2}$ 

Since 2000 the average dairy farm profit has been \$22,818 per annum (Department of Agriculture and Water Resources 2018). This compares to the national minimum wage of \$38,512 per annum for a 38-hour week (Fair Work Ombudsman 2019).

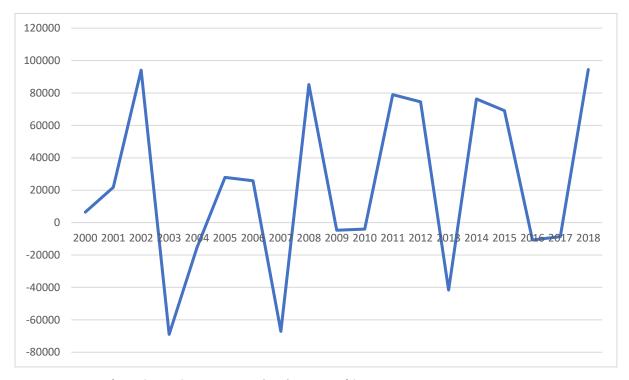
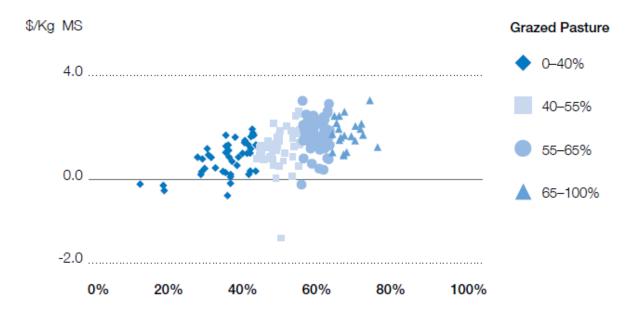


Figure 23: Australian dairy industry profit results (\$)

Source: Department of Agriculture and Water Resources (2018) Dairy AgSurf data

There are some factors that increase the likelihood of dairy farm (and other farm) profitability. Typically, the larger pasture feed percentage and farm size, the higher the profitability. This provides farmers with capacity to make change on their farms rather than solely relying on an increase in price. It is important to note that this a consistent trend in other countries, for example the US.

Figure 24: Operating margin versus % of grazed pasture in Victorian dairy farms



Source: Hauser & Lane (2012) Analysis of Dairy Farm Monitor data

Figure 25: Financial performance of Victorian dairy farms by size 2006-07 to 2010-11

|                                 | Small    | Medium          | Large    |
|---------------------------------|----------|-----------------|----------|
| \$/Kg MS                        | <120,000 | 120,000–240,000 | >240,000 |
| Number of farms                 | 27       | 35              | 12       |
| Average no. cows                | 180      | 310             | 730      |
| Kg Milk solids                  | 84,000   | 162,000         | 380,000  |
| Milk income                     | 5.28     | 5.57            | 5.90     |
| Other income                    | 0.45     | 0.41            | 0.47     |
| Total income                    | 5.74     | 5.98            | 6.37     |
| Variable cost                   | 2.33     | 2.39            | 2.74     |
| Fixed cost                      | 2.91     | 2.30            | 2.22     |
| Operating cost                  | 5.23     | 4.69            | 4.96     |
| Operating margin                | 0.50     | 1.29            | 1.41     |
| Lease cost                      | 0.11     | 0.15            | 0.12     |
| Interest cost                   | 0.56     | 0.57            | 0.66     |
| Net farm income                 | -0.17    | 0.57            | 0.63     |
| Total capital employed          | 29.50    | 23.55           | 22.86    |
| Owner non-financial assets      | 24.31    | 19.52           | 19.26    |
| Owner equity                    | 17.06    | 12.68           | 10.84    |
| Return on capital               | 1.7%     | 5.5%            | 6.2%     |
| Return on assets                | 1.6%     | 5.9%            | 6.7%     |
| Return on equity                | -1.0%    | 4.5%            | 5.8%     |
| Leased assets (% Total capital) | 18%      | 17%             | 16%      |
| Owner equity (% Owner capital)  | 70%      | 65%             | 56%      |

Source: Hauser & Lane (2012) Analysis of Dairy Farm Monitor data

Large farms are more profitable than small and midsize farms Operating profit margin = net farm operating income/revenue 40 30 0 1996 2001 2006 2011 -10 -20 -30 -40 Note: farm size categories are inflation-adjusted midsize ——large ——small avg ——midsize avg ——large avg Source: Economic Research Service, using USDA data from ERS and NASS, Agricultural Resource Management Survey, 1996-2017

Figure 26: Operating profit margin by size of dairy farm in the United States

Source: USDA Outlook Conference 2019, Washington

Beef specialists Grain specialists 10 3 8 2 1 6 0 4 -1 -2 2 -3 -4 0 1983-84 1993-94 2003-04 1983-84 1993-94 2003-04 Sheep specialists Dairy farming 3 2 6 5 4 1 3 0 -1 2 -2 -3 0 -4 -5 --1 -1983-84 1993-94 2003-04 1983-84 1993-94 2003-04 ☑ Largest 30 per cent of farms Industry average Other 70 per cent of farms

Figure 27: Farm size and rate of return in Australia

Source: Productivity Commission (2005) Trends in Australian agriculture, Research Paper, Canberra

## Return on Equity

One of the most important financial ratios and profitability metrics is return on equity. It measures how profitable a business is for the owner and how profitably a business employs its equity. Return on equity is calculated by taking a year's worth of earnings and dividing them by the average shareholder equity for that year and is expressed as a percentage. Basically, the higher the return on equity, the better the result. According to Komashie (2014) historically the average return on equity across the US and UK economies has been around 10-12%. Unfortunately, dairy farms in Australia rarely achieve this range. Generally, they average between 2-3% on most parts of the mainland and around 6-8% in Tasmania and Western Australia (note these figures are slightly inflated due to a disproportionate amount of high performing farmers entering data).

Figure 28: Return on equity – Victorian dairy farms

| Overhead costs |                         |                      |                         |                      |                         |                      |                                  | Profit                |                               |                       |                         |                       |                              |                     |  |  |  |  |
|----------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|----------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------|-----------------------|------------------------------|---------------------|--|--|--|--|
|                | Cash overhead costs     |                      | Non-cash overhead costs |                      | Total overhead costs    |                      | Earnings before interest and tax |                       | Interest and lease<br>charges |                       | Net farm income         |                       | Return<br>on total<br>assets | Return<br>on equity |  |  |  |  |
|                | NOMINAL<br>(S/KG<br>MS) | REAL<br>(S/KG<br>MS) | NOMINAL<br>(S/KG<br>MS) | REAL<br>(S/KG<br>MS) | NOMINAL<br>(S/KG<br>MS) | REAL<br>(S/KG<br>MS) | NOMINAL<br>(S/KG<br>MS)          | REAL<br>(\$/KG<br>MS) | NOMINAL<br>(S/KG<br>MS)       | REAL<br>(\$/KG<br>MS) | NOMINAL<br>(S/KG<br>MS) | REAL<br>(\$/KG<br>MS) | *                            | *                   |  |  |  |  |
| 2006-07        | \$0.77                  | \$1.01               | \$1,17                  | \$1.53               | \$1.94                  | \$2.54               | \$0.06                           | \$0.07                | \$0.58                        | \$0.76                | -\$0.52                 | -\$0.66               | 0.1%                         | -4.1%               |  |  |  |  |
| 2007-08        | \$0.84                  | \$1.05               | \$0.88                  | \$1.10               | \$1.62                  | \$2.04               | \$2.39                           | \$2.99                | \$0.63                        | \$0.79                | \$1.75                  | \$2.20                | 9.8%                         | 12.4%               |  |  |  |  |
| 2008-09        | \$0.82                  | \$1.01               | \$0.88                  | \$1.09               | \$1.70                  | \$2.10               | \$1.08                           | \$1.34                | \$0.59                        | \$0.72                | \$0.49                  | \$0.61                | 3.8%                         | 2.2%                |  |  |  |  |
| 2009-10        | \$0.84                  | \$1.01               | \$1.05                  | \$1.25               | \$1.89                  | \$2.26               | \$0.65                           | \$0.78                | \$0.68                        | \$0.81                | -\$0.03                 | -\$0.03               | 2.2%                         | -0.3%               |  |  |  |  |
| 2010-11        | \$1.00                  | \$1.15               | \$1.02                  | 51.18                | \$2.02                  | \$2.34               | \$1.73                           | \$2.00                | \$0.76                        | \$0.87                | \$0.98                  | \$1.13                | 6.2%                         | 7.8%                |  |  |  |  |
| 2011-12        | \$0.99                  | \$1.13               | \$1.07                  | \$1.22               | \$2.06                  | \$2.35               | \$1.14                           | \$1,31                | \$0.71                        | \$0.81                | \$0.43                  | \$0.49                | 5.0%                         | 4.4%                |  |  |  |  |
| 2012-13        | \$0.99                  | \$1.11               | \$1.09                  | 51.21                | \$2.08                  | \$2.32               | \$0.09                           | \$0.10                | \$0.70                        | \$0.78                | -\$0.60                 | -\$0.67               | 0.7%                         | -7.3%               |  |  |  |  |
| 2013-14        | \$1.05                  | \$1.14               | \$0.97                  | \$1.06               | \$2.03                  | \$2.20               | \$2.02                           | \$2.19                | \$0.65                        | \$0.70                | \$1.38                  | \$1.49                | 8.5%                         | 11.6%               |  |  |  |  |
| 2014-15        | \$1.08                  | \$1.15               | \$0.90                  | \$0.96               | \$1.97                  | \$2.11               | \$1.25                           | \$1.33                | \$0.60                        | \$0.64                | \$0.64                  | \$0.69                | 5.3%                         | 5.2%                |  |  |  |  |
| 2015-16        | \$1.07                  | \$1.13               | \$1.03                  | \$1.09               | \$2.10                  | \$2.22               | \$0.18                           | \$0.19                | \$0.59                        | \$0.63                | -\$0.41                 | -\$0.43               | 0.6%                         | -3.2%               |  |  |  |  |
| 2015-17        | \$1.09                  | \$1.13               | \$1.06                  | \$1.10               | \$2.16                  | \$2.24               | \$0.75                           | \$0.78                | \$0.63                        | \$0.66                | \$0.12                  | \$0.13                | 2.5%                         | 1.0%                |  |  |  |  |
| 2017-18        | \$1.18                  | \$1.20               | \$1.11                  | \$1,13               | \$2.29                  | \$2.32               | \$0.66                           | \$0.67                | \$0.61                        | \$0.62                | \$0.05                  | \$0.05                | 2.5%                         | 0.4%                |  |  |  |  |
| 2018-19        | \$1.22                  | \$1.22               | \$1.12                  | \$1.12               | \$2.34                  | \$2.34               | \$0.25                           | \$0.25                | \$0.64                        | \$0.64                | -\$0.39                 | -\$0.39               | 0.7%                         | -3.5%               |  |  |  |  |
| Average        | 0.000                   | \$1.11               | I MAIN CO               | \$1.16               | - 2000                  | \$2.26               | - College                        | \$1.08                | 1                             | 90.73                 | -                       | \$0.35                | 3.7%                         | 2.0%                |  |  |  |  |

Figure 29: Return on equity – NSW dairy farms

|         |   | Ove                    | thead cos                |                       |                          |                       | Profit                                 |                       |                          |                       |                          |                       |                              |                        |  |  |  |
|---------|---|------------------------|--------------------------|-----------------------|--------------------------|-----------------------|--|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|------------------------------|------------------------|--|--|--|
| Year    | Cash Non-cash<br>overhead overhead costs<br>costs |                        |                          |                       |                          |                       | Earnings<br>before interest<br>and tax |                       | lease charges            |                       |                          |                       |                              |                        |  |  |  |
|         | Nominal<br>(\$/kg<br>MS)                          | Real<br>(\$/kg<br>M\$) | Nominal<br>(\$/kg<br>MS) | Real<br>(\$/kg<br>MS) | Nominal<br>(\$/kg<br>MS) | Real<br>(\$/kg<br>MS) | Nominal<br>(\$/kg<br>MS)               | Real<br>(\$/kg<br>MS) | Nominal<br>(\$/kg<br>MS) | Real<br>(\$/kg<br>MS) | Nominal<br>(\$/kg<br>MS) | Real<br>(\$/kg<br>MS) | Return<br>on total<br>assets | Return<br>on<br>equity |  |  |  |
| 2011-12 | 1.35  | 1.52                   | 1.05                     | 1.18                  | 2.40                     | 2.70                  | 1.65                                   | 1.85                  | 0.73                     | 0.82                  | 0.92                     | 1.04                  | 5.5                          | 4.9                    |  |  |  |
| 2012-13 | 1,44  | 1,58                   | 1.12                     | 1.23                  | 2.56                     | 2.81                  | 0.81                                   | 0.89                  | 0.66                     | 0.72                  | 0.15                     | 0.17                  | 2.7                          | 0.5                    |  |  |  |
| 2013-14 | 1.54  | 1.64                   | 1.16                     | 1.23                  | 2.69                     | 2.87                  | 1.56                                   | 1.66                  | 0.61                     | 0.65                  | 0.95                     | 1.01                  | 4.8                          | 1.2                    |  |  |  |
| 2014-15 | 1.52  | 1.60                   | 1.02                     | 1.08                  | 2.55                     | 2.68                  | 1.91                                   | 2.01                  | 0.56                     | 0.58                  | 1.35                     | 1.42                  | 5.3                          | 5.7                    |  |  |  |
| 2015-16 | 1.49  | 1.55                   | 1.17                     | 1.21                  | 2.66                     | 2.77                  | 1.72                                   | 1.79                  | 0.55                     | 0.57                  | 1.17                     | 1.21                  | 4.7                          | 4.7                    |  |  |  |
| 2016-17 | 1.67  | 1,71                   | 1.16                     | 1.18                  | 2.83                     | 2.89                  | 1.10                                   | 1,12                  | 0.51                     | 0.52                  | 0.59                     | 0.60                  | 2.7                          | 2.1                    |  |  |  |
| 2017-18 | 1.49  | 1.49                   | 1.22                     | 1.22                  | 2.71                     | 2.71                  | 0.58                                   | 0.58                  | 0.58                     | 0.58                  | 0.00                     | 0.00                  | 2.1                          | 0.6                    |  |  |  |
| Average | (6)   | 1,59                   |                          | 1.19                  |                          | 2.78                  |  | 1.42                  |                          | 0.64                  |                          | 0.78                  | 4.0                          | 2.8                    |  |  |  |

Figure 30: Return on equity – SA dairy farms

|         |                          | Ovi                    | rhead cost               | 15                     |                          |                       |  |                       |                               | Pr                    | ofit   |                       |                              |                        |
|---------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|-----------------------|--|-----------------------|-------------------------------|-----------------------|--|-----------------------|------------------------------|------------------------|
|         | ove                      | Cash<br>rhead<br>costs | Nor<br>overhead          | -cash<br>costs         |                          |                       | Earnings<br>before interest<br>and tax |                       | Interest and<br>lease charges |                       | And the second s |                       |                              |                        |
| Year    | Nominal<br>(\$/kg<br>MS) | Real<br>(S/kg<br>MS)   | Nominal<br>(\$/kg<br>MS) | Real<br>(\$/kg<br>M\$) | Nominal<br>(\$/kg<br>MS) | Real<br>(\$/kg<br>MS) | Nominal<br>(\$/kg<br>MS)               | Real<br>(\$/kg<br>MS) | Nominal<br>(S/kg<br>MS)       | Real<br>(\$/kg<br>MS) | Nominal<br>(\$/kg<br>MS)   | Real<br>(\$/kg<br>MS) | Return<br>on total<br>assets | Return<br>on<br>equity |
| 2012-13 | 1,55                     | 1.71                   | 1.60                     | 1,75                   | 3.15                     | 3,46                  | -0.31                                  | -0.34                 | 0,53                          | 0.58                  | -0.84  | -0.92                 | -0.6                         | -4.9                   |
| 2013-14 | 1.54                     | 1.65                   | 1.31                     | 1.40                   | 2.85                     | 3.05                  | 1.27                                   | 1.36                  | 0.52                          | 0.55                  | 0.75   | 0.80                  | 6.2                          | 8.5                    |
| 2014-15 | 1.50                     | 1,57                   | 1.03                     | 1.08                   | 2.52                     | 2.65                  | 0.72                                   | 0.76                  | 0.55                          | 0.58                  | 0.16   | 0.17                  | 3.9                          | 3.6                    |
| 2015-16 | 1.60                     | 1.67                   | 1.00                     | 1.04                   | 2.60                     | 2.71                  | 0.79                                   | 0.82                  | 0.57                          | 0.60                  | 0.22   | 0.23                  | 3.1                          | -1.5                   |
| 2016-17 | 1.68                     | 1.71                   | 1.04                     | 1.06                   | 2.71                     | 2.77                  | 0.88                                   | 0.89                  | 0.47                          | 0.48                  | 0.40   | 0.41                  | 3.1                          | 2.1                    |
| 2017-18 | 1,61                     | 1.61                   | 0.89                     | 0.89                   | 2.50                     | 2.50                  | 1.18                                   | 1.18                  | 0.54                          | 0.54                  | 0.65   | 0.65                  | 4.3                          | 4.1                    |
| Average | 5                        | 1.65                   |                          | 1.20                   |                          | 2.86                  |  | 0.78                  | à                             | 0.56                  |  | 0.22                  | 3.3                          | 2.0                    |

Figure 31: Return on equity – TAS dairy farms

|         |                       |                   |                       | PROFIT            |                      |           |                  |                  |
|---------|-----------------------|-------------------|-----------------------|-------------------|----------------------|-----------|------------------|------------------|
|         | Earnings before       | interest and tax  | Interest and I        | esse charges      | Net fam              | income    |                  |                  |
| Year    | Nominal<br>(\$/kg MS) | Real<br>(S/kg MS) | Nominal<br>(\$/kg MS) | Real<br>(S/kg MS) | Nominal<br>(S/kg MS) | (S/kg MS) | Return on assets | Return on equity |
| 2013-14 | \$2.44                | \$2.60            | \$0.47                | \$0.50            | \$1.97               | \$2.10    | 9.6%             | 12.9%            |
| 2014-15 | \$1.84                | \$1.93            | \$0.42                | \$0.45            | \$1.41               | \$1.48    | 7.8%             | 9.9%             |
| 2015-16 | \$0.92                | \$0.96            | \$0.56                | \$0.58            | \$0.36               | \$0.37    | 3,9%             | 0.8%             |
| 2016-17 | \$0.99                | \$1,01            | \$0.63                | \$0.65            | \$0.36               | \$0.37    | 3,7%             | 1.9%             |
| 2017-18 | \$1.80                | \$1.80            | \$0.66                | \$0.66            | \$1.14               | \$1,14    | 6.3%             | 6.7%             |
|         |                       | \$1.66            |                       | \$0.57            |                      | \$1.09    | 6.3%             | 6.4%             |

# ADF submission – Inquiry into the performance of Australia's dairy industry and the profitability of Australian dairy farmers since 2000

Figure 32: Return on equity – WA dairy farms

|         |                          | Ove                   | erhead cost              |   |                          |                       | Profit                   |                             |                               |                       |                          |                       |                              |                        |  |  |  |
|---------|--------------------------|-----------------------|--------------------------|---|--------------------------|-----------------------|--------------------------|-----------------------------|-------------------------------|-----------------------|--------------------------|-----------------------|------------------------------|------------------------|--|--|--|
|         |                          |                       |                          | Non-cash Total<br>erhead costs overhead costs |                          |                       | before in                | rnings<br>iterest<br>nd tax | Interest and<br>lease charges |                       | 2.00                     |                       |                              |                        |  |  |  |
| Year    | Nominal<br>(\$/kg<br>MS) | Real<br>(\$/kg<br>MS) | Nominal<br>(\$/kg<br>MS) | Real<br>(S/kg<br>MS)                          | Nominal<br>(\$/kg<br>MS) | Real<br>(\$/kg<br>MS) | Nominal<br>(\$/kg<br>MS) | Real<br>(\$/kg<br>MS)       | Nominal<br>(\$/kg<br>MS)      | Real<br>(\$/kg<br>MS) | Nominal<br>(\$/kg<br>MS) | Real<br>(\$/kg<br>MS) | Return<br>on total<br>assets | Return<br>on<br>equity |  |  |  |
| 2013-14 | 1.50                     | 1.60                  | 0.86                     | 0.92  | 2.36                     | 2.52                  | 1.59                     | 1.70                        | 0.65                          | 0.69                  | 0.95                     | 1.01                  | 4.6                          | 5.2                    |  |  |  |
| 2014-15 | 1.47                     | 1.54                  | 0.80                     | 0.84  | 2.26                     | 2.38                  | 2.17                     | 2.28                        | 0.59                          | 0.62                  | 1.58                     | 1.66                  | 6.7                          | 9.0                    |  |  |  |
| 2015-16 | 1.51                     | 1.57                  | 0.82                     | 0.85  | 2.33                     | 2.42                  | 2.02                     | 2.10                        | 0.53                          | 0.55                  | 1,48                     | 1.54                  | 6.6                          | 9,4                    |  |  |  |
| 2016-17 | 1.56                     | 1.59                  | 0.83                     | 0.85  | 2.39                     | 2.44                  | 1.98                     | 2.02                        | 0.53                          | 0.54                  | 1,45                     | 1.48                  | 6.7                          | 11.2                   |  |  |  |
| 2017-18 | 1.53                     | 1.53                  | 0.52                     | 0.52  | 2,57                     | 2.57                  | 1.54                     | 1,54                        | 0.53                          | 0.53                  | 1.01                     | 1.01                  | 4.3                          | 7,7                    |  |  |  |
| Average |                          | 1.57                  |                          | 0.79  |                          | 2.47                  | -                        | 1.93                        |                               | 0.59                  |                          | 1,34                  | 5.8                          | 8.5                    |  |  |  |

Source: Dairy Farm Monitor Project

# Actions to improve dairy farm performance and profitability

Over the past ten years there have been ten parliamentary and industry reviews into the dairy industry:

- 1. May 2010 Milking it for all it's worth—competition and pricing in the Australian dairy industry by the Senate's Economics Reference Committee
- 2. November 2011 The impacts of supermarket price decisions on the dairy industry by the Senate's Economics Reference Committee
- 3. January 2013 Horizon 2020 by the peak bodies representing the dairy industry
- 4. July 2014 Australian dairy: prosperous, trusted, world renowned nutrition vision statement by the Australian Dairy Industry Council
- 5. October 2014 Relative costs of doing business in Australia: Dairy Product Manufacturing by the Productivity Commission
- 6. June 2015 Dairy Moving Forward by the peak bodies representing the dairy industry
- 7. August 2017 Australia's dairy industry: rebuilding trust and a fair market for farmers by the Senate's Economics Reference Committee
- 8. April 2018 Dairy Inquiry by the Australian Competition and Consumer Commission
- 9. April 2019 Federal election policy statement by the Australian Dairy Industry Council
- 10. November 2019 Australian Dairy Plan by the peak bodies representing the dairy industry

As a combination these reviews have examined the key issues in this inquiry - pricing, costs, performance, contracts and supply chain. These inquiries did not find deregulation to be problematic and they did not recommend introduction of a minimum floor price or any other form of price control.

Three attempts have been made outside these reviews to introduce a minimum farmgate price:

- The Hon. Bob Katter Jnr MP on 11 February 2013 introduced the Dairy Industry (Drinking Milk) Bill 2013 into the House of Representatives. This proposed Fair Work Australia to set a minimum farmgate milk price in the form of a modern award for dairy farmers. The Bill lapsed on 5 August 2013 and did not proceed.
- 2. The Hon. Pauline Hanson MP on 16 October 2019 introduced the Protecting Australia Dairy Bill 2019. This proposed to amend the Competition and Consumer Act 2010 to require the ACCC to determine a base minimum price for milk for each dairy season, require the minister to refer to the Productivity Commission for inquiry the effectiveness of determining a base price for milk and the potential effectiveness of a divestiture regime for the dairy industry and establish a mandatory industry code for the food and grocery industry, including the dairy industry. The Bill was defeated 31-30 in the negative on 11 November 2019 and did not proceed.
- 3. The Hon. Pauline Hanson MP on 2 December 2019 introduced the Saving Australian Dairy Bill 2019. This is a retitling of the Protecting Australia Dairy Bill 2019 and has been referred to this inquiry for analysis and recommendation.

ADF supports implementation of the review recommendations, including rejection of the minimum farmgate milk price. It also supports an increase and structural change to the way dairy products are priced on retail shelves. Context and analysis surrounding this are provided in the action plan framework below.

## Implementation of a regulated minimum farmgate price or other price controls

The Australian dairy market has the least amount of government intervention than the major dairy-producing Western jurisdictions (UK, NZ, US, Canada and the EU). Canada is a regulated market whereas the others have a deregulated market with some level of intervention. With the exception of NZ these countries have swapped regulation for new and larger subsidies. Now, bureaucracies manage a myriad of subsidy programs under which consumers pay for their products once at the retail level and again through their tax dollars. This is economic inefficiency with a significant loss to taxpayers not consuming dairy products.

Evaluation of a market outcome is measured by its economic efficiency. This is the extent to which consumer and producer net benefit is maximised. Any form of price control reduces net benefit on either or both sides (often referred to in economics as deadweight loss).

If a minimum price was set above the market clearing rate:

- 1. it would incentivise producers to increase production to obtain more revenue
- 2. customers would lose by paying a higher price or dropping out of the market
- 3. producers would also lose because gains obtained from customers paying a higher price are offset by loss of sales (customers who dropped out will now be purchasing alternatives like cheaper imports) and increased capital costs (debt incurred from production expansion which can no longer be serviced from the loss of customers).

These dynamics diminish incentive to innovate and improve productivity across the supply chain. More importantly they undermine profitability and international competitiveness as consumers and processors source alternate suppliers e.g. NZ dairy and substitute products e.g. plant-based alternatives.

Such distortionary and disproportionate stakeholder outcomes also occur with other price controls. Price supports are where government buys up whatever output is needed to maintain the price above the market clearing rate. In this situation product is purchased without need and therefore has to be 'dumped'. This costs taxpayers. Production quotas are where government determines output to force price up to an arbitrary level. This intervention has the same outcome as the introduction of minimum prices. Import quotas (a limit on the quantity of a good that can be imported) and tariffs (tax on an imported good) incur a high cost to taxpayers with the loss to consumers for paying higher prices (at often lower quality) exceeding the profit gain to domestic producers. A tax (fee charged per unit sold) or subsidy (payment to reduce the buyer's price below the seller's price) influences the quantity produced and consumed and disproportionately favours a producer or consumer. These results suggest that in order to achieve economic efficiency a competitive market is best left alone. This is sometimes, but not always the case.

In some situations, markets fail. This is where prices do not provide the appropriate signals to consumers and producers creating economic inefficiency. Generally, there are two causes of market failure – an externality or lack of information. An externality is where the actions of either consumers or producers result in either costs or benefits no reflecting in the market price. For example, environmental pollution occurring from production. This has a social cost that is unaccounted for in the price. Government intervention is required to incentivise producers to reduce pollution e.g. emission trading scheme. A lack of information is where consumers are ill-informed about the quality or nature of a product and/or price and therefore are unable to make utility maximising decisions. Government intervention is required to correct the power imbalance.

There are a number of market failures that exist in the dairy industry:

- 1. The ACCC found farmers have a lack of information with regard to contracts and pricing. To address this deficit, it made eight recommendations to improve contract management behaviour and price transparency. The ADF has not only supported all of the ACCC's recommendations it has been leading their implementation. This has been demonstrated in the development of an industry led ACCC Dairy Inquiry implementation plan, mandatory code of practice and other initiatives, in particular the \$22m Dairy Support Package.
- Domestic support and other trade barriers are a negative externality. Australian dairy
  farmers are losing markets due to unfair foreign policy and competition. ADF, through the
  ADIC, released a Federal Election Policy Statement placing a significant focus on resolving
  these inequitable distortions.

3. Inappropriate setting of prices by Australia's major supermarkets are also a negative externality. This has led to farmers supplying the domestic market all year round having their margins squeezed to the point they are forced out of the industry. The Food and Grocery Code provides an opportunity for government to reposition the retailers towards market led regional pricing and appropriate value distribution across the supply chain.

Delivering these actions alongside other recommendations in the dairy inquiries conducted by parliament and industry over the past ten years is what is required to restore dairy farm profitability and sustainability. Introducing any form of price control is inconsistent with these initiatives. Imposing floor prices by region undermines Australia's international trade obligations e.g. Cairns Group and is inconsistent with some sections of the *Australian Constitution*, in particular that trade within the Commonwealth is to be free (Section 92) and 'the Commonwealth shall not, by any law or regulation of trade, commerce, or revenue, give preference to one State or any part thereof over another State or any part thereof' (Section 99).

## Introduction of a mandatory code of practice

In April 2018 the ACCC's *Dairy Inquiry report* was released with a recommendation for the Australian Government to apply a mandatory code of practice to the dairy industry. The ACCC said that despite industry making significant inroads at self-regulation via its voluntary code, a mandatory code is required to ensure all farmers are protected from unfair contract terms. This was based on a finding that farmers have inadequate information in relation to pricing and payments, limited bargaining power in contract development and find it difficult to switch processors to improve their terms and conditions. It is argued that a mandatory code would help address these issues and fill a gap in Australian competition law.

ADF made a decision to support the mandatory code based on a Discussion Paper it produced on codes of practice in August 2018 and the ACCC's key arguments. Ultimately, ADF could not guarantee the participation of all processors in a strengthened voluntary code. Without full processor coverage there is a greater risk of farmers being disadvantaged from unfair processor terms. This is something the agency is simply not willing to bear.

In recognition of the Australian Government's Industry Codes of Conduct Policy Framework (November 2017) the ADF, through the ADIC, were leading the development of the mandatory code of practice in partnership with the Department of Agriculture. The framework says 'the path to prescribing an industry code is usually a progressive one' and 'industry codes will generally not be prescribed unless there is evidence that existing measures, including any self-regulation that has been attempted within an industry, have failed to address the identified problem.' The framework applies mandatory codes as a last resort. It states that 'the government is keenly aware that any intervention can have unintended or unforeseen consequences which distort the market and create further problems for market participants. It can impose an unnecessary administrative burden on businesses that are required to comply with regulation. Regulation can also create significant barriers to entry for new firms and can stifle innovation and choice. Once regulation becomes established, it may be difficult to alter and can become out of date when market conditions change. The government will only prescribe mandatory or voluntary codes in very limited circumstances when it is necessary for supporting the efficient operation of markets or the welfare of consumers. This high threshold is reflected in the limited number of codes that have been prescribed over the years.'

The ADIC introduced a voluntary dairy code on 1 July 2017 in response to reductions in the farm gate price paid by Murray Goulburn Cooperative and Fonterra Australia to its dairy farmers for the 2015-16 season. Like the proposed mandatory code, the objective was to improve contractual relationships between farmers and processors and reduce the risk of such events recurring in the future. One of code's clauses was for a review to occur twelve months after operation.

A review of the voluntary code was completed over a three-month period against a well-considered project plan. This involved analysis of:

- 1. key findings of the inquiries into the dairy industry conducted by the ACCC and ERC
- 2. how the dairy code measures up against the ACCC's *Guidelines for developing effective* voluntary industry codes of conduct
- 3. efficiency and effectiveness of the ACCC's enforcement function
- 4. whether the dairy industry passes the threshold test for a mandatory code based on the Australian Government's *Industry Codes of Conduct Policy Framework*.

This work strengthened the evidence base for ADF members to assess effectiveness and identify areas for improvement in the current code and finalise an industry response to the ACCC's recommendation. A key outcome of the review was development of a strengthened revised industry code.

A new code was developed by ADIC and handed over to the department as a basis for its national consultation. This code:

- 1. retained clauses in the voluntary code where there is no stakeholder objection or issue
- added clauses where there is universal agreement between states and processors. This
  included good faith provisions, standard contract timelines, protection for collective
  bargaining groups, independent complaints management and dispute resolution processes,
  penalties regime and improved administrative arrangements.
- 3. aligned with the ACCC's guideline for industry codes.

The release of the *Competition and Consumer (Industry Codes—Dairy) Regulations 2019* on 13

December 2019 by the Minister for Agriculture in Canberra adopts most of the ADIC's revised code.

It also:

- implements most of the ACCC's *Dairy Inquiry report* recommendations:
  - that 'processors and farmers should acknowledge in writing the terms and conditions for milk supply'
  - 'processors should provide all contractual documents simultaneously before the commencement of the dairy season or contract term'
  - 'milk supply contracts should not include terms which unreasonably restrict farmers from switching between processors'
  - 'establish a process whereby an independent body can mediate and arbitrate in relation to contractual disputes between farmers and processors'
  - 'processors should publish information identifying how their pricing offers apply to individual farm production characteristics to enable better farm income forecasts'
  - 'a mandatory code of conduct within the act should be established for the dairy industry'.
- implements many of the Senate's Economics Reference Committee's recommendations:
  - 'that contracts with farmers should offer a clear, consistent formula for milk pricing with unambiguous conditions'<sup>1</sup>
  - 'processors to make their pricing structures for sourcing drinking milk reflect the volume they estimate they require to meet their total commitments and offer more stability in prices rather than changing frequently'<sup>2</sup>
  - 'dairy processors set opening prices conservatively so that any downward pressure from market forces will not result in retrospective price step-downs that have devastating impacts on dairy farmers'<sup>3</sup>
  - 'any review of the code of conduct for contractual relationships should be undertaken by an independent party that can objectively assess whether the code is working as intended and consider if a mandatory code would be more appropriate.'4

<sup>&</sup>lt;sup>1</sup> Milking it for all it's worth—competition and pricing in the Australian dairy industry

<sup>&</sup>lt;sup>2</sup> The impacts of supermarket price decisions on the dairy industry

<sup>&</sup>lt;sup>3</sup> Australia's dairy industry: rebuilding trust and a fair market for farmers

<sup>&</sup>lt;sup>4</sup> Australia's dairy industry: rebuilding trust and a fair market for farmers

## Ending fixed based nationalised retail pricing of dairy products

Since the introduction of \$1 litre milk in 2011 ADF and SDFOs have consistently argued that using fresh milk as a discount marketing agent by the major supermarkets to increase sales of their own private label brands is unsustainable for the dairy industry. Retailers and ACCC have consistently emphasised the domestic retail price do not determine the farm gate price. This is disputed by industry on the grounds that having fresh milk set at an extremely low (near cost) price and fixed for almost a decade significantly limits capacity for price increases back up the dairy supply chain. While retailers and a lesser extent, processors, bear the greatest profitability impact, they are able to offset these losses via margin gain on other products. Dairy farmers have no options. They are price-takers and only have a single perishable product to sell.

Over time processors have pushed farmers towards all year-round production to supply more of their domestic than international markets. This has increased farmers' production costs at a time when they are already confronted with increasing costs arising from climate change, drought and other drivers. The 10-cent per litre price increase by retailers to some of their home brand fresh milk varieties in February 2019 (a move from \$1 to \$1.10 per litre) was intended to provide temporary relief until broader structural reform occurs in the industry. This has had limited effect because:

- 1. around 10 per cent of dairy farmers supply this product
- 2. it does not apply to other discounted dairy products on the retail shelf
- 3. it continues with fixed pricing, which doesn't reflect supply/demand or inflation changes
- 4. places trust in the retailers to pass the levy through to farmers a task they, in particular Coles, has demonstrated not to be capable.

On 5 December 2019 Coles was ordered to pay Norco dairy farmers around \$5.25m following an ACCC investigation into the passing on of the 10 cents per litre increase. The ACCC found that when an unrelated 6.5 cents per litre increase commenced on 1 April 2019, Coles reduced its payments to Norco under the 10 cents per litre retail price increase from 10 to 3.5 cents per litre. Mr Rod Simms, ACCC Chairman said 'we were fully prepared to take Coles to court over what we believe was an egregious breach of the Australian Consumer Law. We believe we had a strong case to allege misleading conduct by Coles.'

This finding continues a similar pattern of behaviour that has occurred since the introduction of \$1 lite milk:

- 1. On 10 April 2015 Coles was fined \$2.5m by the Federal Court for making false or misleading representations and engaging in misleading conduct in relation to the promotion of its par baked bread products. The judge said 'the contravening conduct in this case is substantial and serious. Notwithstanding the absence of any specific evidence as to loss or damage by a consumer or a competitor, it is clear that the significant potential to mislead or deceive and thus to damage competitors, the duration of the conduct, and the fact that the goods in relation to which the impugned phrases were used were "consumer staples" indicate that the objective seriousness of the offending conduct was considerable.'
- 2. On 22 December 2014 Coles was fined \$10m by the Federal Court for engaging in unconscionable conduct. The judge said that 'Coles treated its suppliers in a manner not consistent with acceptable business and social standards which apply to commercial dealings. Coles demanded payments from suppliers to which it was not entitled by threatening harm to the suppliers that did not comply with the demand. Coles withheld money from suppliers it had no right to withhold. Coles' practices, demands and threats were deliberate, orchestrated and relentless.'
- 3. In early April 2014 the ACCC found that the 'Our Coles Brand Milk Story' video and cartoon are likely to have contravened Section 18 of the Australian Competition Law which contradicts Coles' key claim of 'fully absorbing the price cut.' Section 18 prohibits misleading or deceptive conduct. The 'Our Coles Brand Milk Story' video and cartoon was an exercise by Coles to convince consumers that farm gate prices had increased for dairy farmers when they had actually decreased.

It is time for the Australian Government to intervene in establishing an agreed set of retail pricing standards for dairy products on the retail shelves. The independent review of the *Food and Grocery Code* found that 'the price rise process was contributing to a distinct lack of trust between the parties. However, there is an opportunity for the *Food and Grocery Code* to set the outer boundaries on retailer conduct during the price rise process to restore trust and confidence between the parties – it is essentially a matter of fair dealing.'

This establishes the basis for the Food and Grocery Code to:

1. Abolish fixed pricing of dairy products; replacing it with prices determined according to demand and supply fluctuations.

- 2. Establish a universally agreed percentage pass through margin for farmers to remain viable and sustainable.
- 3. Enshrine the ACCC's 'Dairy Specialist' role as a position of oversight and advocate on the dairy farmers behalf.

This work should be informed by an industry led review of regional/domestic market pricing methodology and appropriateness. It will include analysis of national competition reform and other initiatives that have influenced pricing and market outcomes. A taskforce comprising relevant government agencies e.g. ACCC, supply chain participants and DA will need to be convened to deliver this work.

As these actions will take time to implement, they will do nothing to resolve the current situation. To stop the farm exists and hardship the retailers need to temporarily increase the price of their home brand retail fresh milk to \$1.50 per litre with the increase (50 cents per litre based on the original \$1 litre milk) going back to dairy farmers via their processors. This can be implemented immediately and should stay in place until the changes to the *Food and Grocery Code* are made.

## Implementation of the \$22m Dairy Support Package

On 8 May 2019 the Australian Government announced a \$22m support package for the dairy industry. This includes several initiatives designed to reduce dairy farm production cost and environmental footprint and improve price transparency and bargaining power for farmers. The government co-designed these initiatives with ADF primarily to respond to all of the ACCC's *Dairy Inquiry report* recommendations. Both parties recognise that delivering a mandatory code of practice in isolation is not enough to resolve the market failure in the dairy industry.

## \$10m Energy Efficient Communities Grants Program

This will support dairy farmers reduce energy costs by procurement of more energy efficient equipment. Initiatives deployed by farmers will contribute to mitigating climate change, including contribution to the government's international climate reduction targets.

This action implements *Dairy Moving Forward's* objective 'to reduce GHG intensity/unit of milk solids for all Australian dairy farming systems.'

#### \$8.1m for ACCC's Agricultural Unit including a new 'Dairy Specialist' position

The ACCC Agriculture Unit was established by the government in 2015 under the *Agriculture White Paper*. This had funding until 30 June 2019. The *2020 Federal Budget* extended funding in a general sense. This commitment is over and above the budget allocation to provide the dairy sector with a dedicated resource for investigation and enforcement of compliance with the Mandatory Code of Conduct, price setting and value distribution along the supply chain.

This implements the Senate Economics Reference Committee's recommendations for the ACCC 'to use its information-gathering powers, and draw on its work for its recent report on grocery pricing, to provide more accurate estimates of the proportions of the retail price of milk that reflect (i) the costs and (ii) the profits, of farmers, processors and retailers and publish the results'<sup>5</sup>, 'undertake monitoring of the pricing practices within the dairy chain with a view to establishing whether predatory pricing or misuse of market power is occurring'<sup>6</sup> and 'publicly releasing information about its investigations, with a view to providing greater general information about its current enforcement activities and relevant issues of particular public concern.'<sup>7</sup>

## \$500k for DA to provide financial and legal advice

These funds will be used to establish capacity in DA's extension program to build farmer legal and financial literacy for contract negotiations with processors. The ACCC found that farmers often did not seek or have access to such advice prior to entering into contracts. Addressing this deficit ensures farmers are fully informed about what they may or may not be getting themselves into.

This action implements the ACCC's *Dairy Inquiry report* recommendation that 'farmers should ensure they have properly considered the legal and financial implications of their contracts with processors.'

### \$150k to ADF to develop a simple standard form contract

This initiative will develop a template contract incorporating the requirements of the Dairy Mandatory Code of Conduct. It will reduce cost for processors in developing or modifying their contracts. According to the code's regulatory impact statement this was one of the most significant regulatory burdens.

This action implements the ACCC's *Dairy Inquiry report* recommendation that 'processors should simplify their contracts where possible, including by minimising the number of documents and clearly indicating which documents contain terms and conditions of milk supply.'

<sup>&</sup>lt;sup>5</sup> Milking it for all it's worth—competition and pricing in the Australian dairy industry

<sup>&</sup>lt;sup>6</sup> Milking it for all it's worth—competition and pricing in the Australian dairy industry

<sup>&</sup>lt;sup>7</sup> The impacts of supermarket price decisions on the dairy industry

### \$300k to ADF for blockchain technology

This will establish a plan to implement a real time payment system capturing financial transactions for farmers and processors. Contracts will be linked to transactions providing enhanced integration, transparency, efficiency and accountability in the contract payment system. The investment adds and aligns with the Australian Government's March 2019 announcement of \$100k for the development of a national blockchain roadmap. It makes sense to align the roadmap, which will focus on regulation, skills and capacity building, innovation, investment, and international competitiveness and collaboration, with the following issues raised in the ACCC Dairy Inquiry report:

- 'Farmers and farmer representative groups submitted there is weak correlation between
  processor payments for milkfat solids and global prices for butter. Farmers claim that, in this
  respect, fluctuations in the relative global prices for protein and milkfat are not reflected in
  farmgate prices for protein and milkfat.'
- 'Farmers raised concerns that milk supply agreements are difficult to understand due to their complexity and the number of variables that affect payments.'
- 'Farmers are highly reliant on the field officers employed by the processors to translate payment terms into an income estimate based on the farm's historical production profile.'
- 'Some farmers believe complex contracts and payment structures are significant barriers to switching processors, and this reduces the effectiveness of competition for their raw milk.'

#### \$3m Starting Farms Cooperative Program

This will provide grants to assist farmers groups establish farm cooperatives and other collaborative business models. It builds on the success of the Farm Co-operatives and Collaboration Pilot Program, which operated from 2016-2018 and supported 132 cooperatives most of whom were grassroot start-ups. The initiative addresses a capability gap, increases farmer bargaining power and reinvests money back into local regional communities.

This work implements the Senate Economics Reference Committee's recommendations to 'strengthen collective bargaining arrangements' and 'create a more equitable balance of power between the negotiating parties.'

<sup>&</sup>lt;sup>8</sup> Australia's dairy industry: rebuilding trust and a fair market for farmers

<sup>&</sup>lt;sup>9</sup> Milking it for all it's worth—competition and pricing in the Australian dairy industry

# \$560k to ADF for a new milk marketing and trading platform

This initiative will establish a transparent commodity trading market for milk. It will operate in a similar way to other types of financial markets. Like all futures trading, one has to speculate on what the price will be at the time the contract is delivered. It will be done via an exchange like the Sydney Futures Market for example. Commodity trading already occurs in oil and gas, metals such as gold and silver and soft commodities like cocoa, coffee, wheat and sugar.

This initiative replaces the old Dairy Commodity Price Index, which the Senate References Committee said was 'of limited value' and 'not to be continued.' It also strengthens the response to the ACCC's *Dairy Inquiry report* finding that farmgate milk pricing lacks transparency and farmers have limited bargaining power.

 $<sup>^{10}</sup>$  Milking it for all it's worth—competition and pricing in the Australian dairy industry

## Implementation of the 2019 ADIC Federal Election Policy Statement

On 29 April 2019 the *ADIC 2019 Election Policy Statement* was publicly released. This document asks the Australian Government to increase trade and market access by finalising and improving free trade agreements and removing technical barriers to trade and increasing sustainability and resource management by reducing energy cost, securing water and adapting to climate change, in particular drought. All relevant government ministers, shadow ministers and elected members of parliament in dairy regions have been given a copy of this document to ensure they understand what the dairy industry's priorities are for the 46<sup>th</sup> Parliament. Most commitments in the statement are currently in progress.

#### Increasing trade and market access

ADF has long advocated for open markets and free trade. Submissions were made to the Joint Standing Committee of Treaties (JSCOT) requesting ratification of the Indonesian, Peru and Hong Kong FTAs. The Parliament has agreed with this request. ADF is still seeking comprehensive outcomes for dairy in the India, Gulf Cooperation Council, Taiwan, Pacific Alliance and the Regional Comprehensive Economic Partnership (RCEP) FTAs. On 13 November 2019 the ADF, under the banner of the ADIC and in partnership with DA made a submission to the government's public objections process for the geographical indications in the EU-AU FTA. This opposes the 'blanket adoption' of the EU's current GI request for the 56 cheese products it is looking to protect in the Australian market. Most of these cheese names are common food terms, so therefore should not be accepted in the EU FTA. DFAT is leading implementation of a whole of government approach to the resolution of non-tariff barriers. While many of these issues will be difficult to resolve they should be pursued rigorously through this process and the World Trading Organisation.

## Reducing the impact of climate change

Under the \$2b Climate Solutions Fund dairy farmers can revegetate degraded land, improve water quality, reduce erosion and salinity, and drought proof their farm. ADF would like to have someone appointed as a project coordinator to ensure dairy farmers are represented. The appointment would be responsible for developing and registering a project, under an approved Emissions Reduction Fund method, with the Clean Energy Regulator.

This action implements *Dairy Moving Forward's* objective to have an 'Australian dairy industry with the capacity and confidence to manage climate risk.'

#### Responding to drought

The various initiatives that have been rolled out as the drought progresses – Future Drought Fund, Drought Communities Programme, Farm Household Allowance, new dams, desalination plant procurements, etc. have been welcomed by ADF. It is important this continues as circumstances unfold. When the drought breaks the ADF would like to see government develop a national drought policy that better organises these and other initiatives in preparation for the next drought.

#### Implementing the Murray Darling Basin Plan

ADF has commended the federal and state bipartisanship on implementing the plan. Implementation of the Productivity Commission's inquiry is regarded as the key to resolving issues with the plan. Key concerns relate to timelines (including the actual response to the inquiry), project management and governance.

### Developing a national water supply blueprint

The Australian Government has agreed to develop a national water grid to help protect farmers from drought in the future. An Authority has been established bringing together the world's best scientists, water experts and local stakeholder engagement to determine how large-scale water diversion projects could be established to deliver reliable and cost-effective water to farmers and regional communities. Prioritising water supply to Murray Darling Basin communities should be a priority.

### Reducing energy cost

ADF has welcomed the various government initiatives to reduce the cost of energy for Australians. Exorbitant price rises over the past decade has redistributed wealth from hard working Australians like those in the dairy industry to multinational energy companies. The most important changes include establishing a default market offer and reference bill to help consumers get better energy deals, establishing the Underwriting New Generation Investment Program to drive investment in new power generation, and providing support to small businesses which includes \$10mn being set aside from the \$50m Energy Efficiency Program for the dairy industry. Going forward the ADF would like to see the ACCC continue to monitor and prosecute energy companies for price gauging and profiteering at the expense of Australian industries and families.

Delivering this addresses the Productivity Commission's findings that 'Australian energy prices have risen sharply since 2006. For manufacturers of energy-intensive dairy products such as milk powder, this would have had a relatively substantial bearing on cost-competitiveness' and 'poor regulatory frameworks governing electricity markets, policies designed to reduce carbon emissions and promote renewable energy, and the integration of Australian gas markets with global markets have added to spiralling energy costs in Australia, increasing the burden on the dairy industry, in some cases unnecessarily. Pricing reforms designed to improve the functioning of electricity markets would be desirable, and further examination of supply impediments in gas markets (a matter outside the scope of this study) is worthy of consideration.'11

<sup>&</sup>lt;sup>11</sup> Relative costs of doing business in Australia: Dairy Product Manufacturing

## Restoring truth in product labelling

In June 2019 ADF wrote to Ministers McKenzie and Colbeck as the federal representatives on the Forum of Food Regulators requesting a review of the *Food Standards Code*. The purpose of this request was to resolve the significant issues Australia has with its product labelling. Terms like 'milk' are used in product titles despite not being included in the product's ingredients and nutritional value of products are not appropriately displayed. As a consequence, consumers are confused and misled. This is a clear market failure, in the form of an information asymmetry, which requires government intervention.

As a minimum the government needs to remove Clause 1.1.1-13(4) from the *Food Standards Guide*. This states that 'if a food name is used in connection with the sale of a food (for example in the labelling), the sale is taken to be a sale of the food as the named food unless the context makes it clear that this is not the intention.' The clause uses 'milk' as an example by saying 'the context within which foods such as soymilk or soy ice cream are sold is indicated by use of the name soy; indicating that the product is not a dairy product to which a dairy standard applies.' A 2017 Dairy Australia survey showed 54% of respondents buying these products did so because they perceived them to be healthier than dairy milk. This is due to this clause allowing these products to falsely imply unique health properties or nutritional equivalence with dairy. An appropriate resolution is for Australia to have closer alignment with the principles outlined in the *Codex General Standard on Use of Dairy Terms* (GSUDT 1999). This change, coupled with regulations to prevent plant-based alternatives from 'evoking' the qualities and values of dairy, would bring Australia in line with many of its international counterparts. For example, the European Court of Justice decision in 2017 mandated that dairy terms could not be used on plant-based products, even with clarifying terms.

This initiative seeks to implement the Senate Economics Reference Committee's recommendation 'that the Australia and New Zealand Food Regulation Ministerial Council acts to ensure that labelling on dairy products adequately and accurately informs consumers about the provenance, manufacturer and contents of the product.'12

<sup>&</sup>lt;sup>12</sup> Milking it for all it's worth—competition and pricing in the Australian dairy industry

### Supporting productivity enhancing RD&E and improving industry statistics

Since the late 1970s the dairy industry achieved improvements in farm productivity through the adoption of new technologies and best management practices, along with structural change (exits) in the industry. Productivity growth has enabled dairy farmers to remain profitable as farmers have little control over input prices and output prices.

Many studies have been undertaken within Australia and overseas as to the benefits of central RD&E with the general conclusion that such investment is important to maintaining productivity improvements that contribute towards international competitiveness. For example, a Victorian Government initiative in 2011, the Dairy Mega Evaluation, found that:

- 1. major increases in on-farm production were estimated to have increased Victorian dairy farm profitability by around \$10b over the three decades from 1980 to 2010.
- 2. Milk production in Victoria had more than double despite cow numbers remaining the same and a 35% reduction in effective grazing area
- 3. Milk yield per cow had doubled and stocking rate increased by 50%
- 4. Production per hectare increased by 192% from 2,878 L/Ha in 1980 to 8,419 L/Ha in 2010
- 5. RD&E accounted for almost half (46%) of total production gains which is estimated to have increased farmers' profitability by around \$7.7b in net present value terms over the past 30 years. This same RD&E is estimated to have cost an estimated \$2.3b in net present value terms over the same 30 years. This suggests an estimated \$3.30 economic benefit for each dollar invested in R&D. However, for every dollar dairy farmer have invested, their return may be well over (at least double) \$3.30 because more than half of the investment has been paid by external sources. Moreover, many of the benefits from RD&E will continue to flow for some time into the future, representing further returns to investment in RD&E.

#### TFP growth is generally driven by:

- 1. Improving economies of scale the result of farm consolidation, i.e. fewer larger farms
- 2. Improved on-farm practices the result of RD&E of better practices/innovation in the areas of animal performance, land and feed usage, labour automation, farm management.

In Australia, DA is a major contributor to point 2 above. They estimate that if, say, 25% of the observed productivity benefits could be attributed to activity sponsored by DA, then the benefit to the farmer of a levy contribution is more than 4:1.

For these benefits to be validated on an ongoing basis in initiatives like the DFMP, DA and other agencies collecting industry statistics need to increase their sample size. The goal should be to achieve statistical relevance so data and analysis can be published in academic journals and other reputable publications. Achieving this will involve obtaining greater farmer participation and consultation, increased collaboration with ABARES and other agencies collecting and reporting industry performance and additional funding and/or reprioritisation of resources.

Continuing to invest in productivity enhancing RD&E (including efforts to improve the relevance of industry statistics) continues to implement *Dairy Moving Forward's* objectives to improve animal performance and feedbase/nutrition and the Productivity Commission's finding that 'continuous onfarm productivity growth over the past two decades has been critical for containing dairy farm costs and maintaining the competitiveness of the dairy sector.'<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> Relative costs of doing business in Australia: Dairy Product Manufacturing

## Supporting implementation of the Dairy Plan

On 6 December 2019 the Australian dairy industry launched the draft *Australian Dairy Plan* – an industry vision for the next five years to become more profitable, confident and united. It is a unique process in that the industry's peak bodies – DA, ADF, ADPF and Gardiner Dairy Foundation have come together to develop and implement the plan. Input has also come from former Victorian Premier Hon. John Brumby, who has been serving as Independent Chair, and over 1,500 farmers, service providers, processors, retailers, investors and other key stakeholders, who participated in nationwide consultation from May through to July 2019. The *Australian Dairy Plan* replaces *Horizon 2020* and *Australian dairy: prosperous, trusted, world renowned nutrition vision statement*. It articulates five key priorities for the Australian Government to support.

#### Reforming industry structures

There is broad based support for reforms to dairy industry structures and the way in agencies work together. These reforms would better enable unified responses to new challenges, make it easier for the industry to work with key bodies, and more effectively advocate on the industry's interests. There is a commitment to making dairy organisations more effective and easier to do business with. An examination of new industry structures is now in progress with the establishment of a dedicated Joint Transition Team (JTT). The JTT will advise on the options and recommend structural arrangements to take the industry forward. Implementing these changes will require some government support, for example amendment to the *Dairy Produce Act 1986*.

#### Attracting and supporting new entrants to the industry

Dairy offers rewarding careers and there are several established pathways into the industry. However, there are barriers to attracting new entrants. Some of these include accessing finance, relocating to a new community and industry negativity. Strong and positive industry leadership, capability and culture is required to overcome many of these barriers. The Developing Dairy Leaders program is an example of an industry led program specifically designed to meet these requirements. More investment is required in education and culture development to fulfil the deficits.

This action continues to implement the Productivity Commission's finding that 'while the dairy industry faces some challenges in obtaining skilled and experienced labour, it is making efforts to address labour shortages' and the *Dairy Moving Forward's* outcome to 'attract and retain people'.

#### Increasing marketing and promotion of dairy

Many consumers recognise the benefits that dairy provides, from improvements to health and wellbeing, through to the contribution it makes to our economy. However, the way dairy products are perceived by consumers is influencing their purchasing behaviour. There is more that can be done to respond to this challenge, but it requires a greater effort in marketing and promotion. The industry needs to increase the scale and effectiveness of marketing and promotion to build trust in dairy products and win support for the dairy industry. This includes creating greater awareness of the health and nutritional benefits of dairy and an emphasis on the value of buying Australian dairy products. But this increase is beyond the responsibility of any single dairy organisation — it will require co-investment from right across the supply chain, health industry e.g. nutritionists and government given the public good aspects of promoting good bone and other nutritional health consistent with the *Australian Dietary Guidelines*.

This action implements the Senate's Economics References Committee recommendation to 'develop an education campaign to promote awareness about the dairy industry so consumers can make informed choices when purchasing dairy products.' <sup>15</sup>

#### Increasing farm business management skills

Australian dairy farmers manage some of the most complex, decision-intensive animal production systems in the world. They operate in an environment characterised by very high, and increasing, levels of volatility. Now more than ever farm business skills and tools are required to manage economic and production risk. A greater focus on lifting farm business management skills is required across the industry. This will involve some reprioritisation by the farm extension team at DA and their regional development programs and commitments by the education sector and government to include business management skills and risk management into the secondary and tertiary education system.

<sup>&</sup>lt;sup>14</sup> Relative costs of doing business in Australia: Dairy Product Manufacturing

<sup>&</sup>lt;sup>15</sup> Australia's dairy industry: rebuilding trust and a fair market for farmers

This action continues to implement *Dairy Moving Forward's* outcome to improve farm business management capability.

#### Restoring trust and transparency between farmers, processors and retailers

Simplified payment systems, longer-term contracts, mandatory code of conduct, blockchain and milk trading platform are an initial start to be providing more uniformity and transparency in the supply chain. Many of these initiatives are still to be delivered and evaluated (as a pilot initially for some). Modification and further investment will be required to deploy these across the industry. For example, the blockchain funding by the government will only provide some level of education, guideline and pilot. Further investment will be required to implement this at scale. The industry is committed to learning from these initiatives and what is occurring in other dairy markets to ensure greater transparent pricing, value distribution and risk management across the chain.

This action extends the implementation of the ACCC's *Dairy Inquiry report* and various supply chain recommendation made by the Economics References Committee.

# References

ABARES (2018) Agriculture commodity statistics

ABS (2018) Value of agriculture commodities produced

ACCC (2018) Dairy Inquiry, Australian Government, April.

ASADA (2018) Report for average and top 25% margin for all states and regions

Beca, D. (2018) Data sourced from Red Sky Agricultural, Dairy Australia, Dairy Farm Monitor Project, Dairy NZ and Dairy Base.

Carter, M. (2019) 'Competition and Profit Margins in the Retail Trade Sector', *Bulletin*, Reserve Bank of Australia.

CIE (2017) Australian trade liberalisation - analysis of the economic impacts, Canberra.

Dairy Australia (2019) Australian Dairy In Focus

Dairy Australia (2018) Australian Dairy In Focus

Dairy Australia (2018) Dairy Farm Monitor Project

Dairy Australia (2019) Situation analysis

Department of Agriculture and Water Resources (2018) Dairy AgSurf data

Deloittes Access Economics (2015) 'Agri stocks make a comeback in 2015', Agribusiness Bulletin

Department of Human Services (2019) 'Newstart Allowance'

https://www.humanservices.gov.au/individuals/services/centrelink/newstart-allowance/how-much-you-can-get

European Commission (2018) 'EU agricultural outlook 2018-2030: Growing export demand for dairy products as world population expands', *Agriculture and Rural Development*, Brussels.

Export Action Global (2018) Dairy Systems Around the World

Fair Work Ombudsman (2019) 'Minimum wages' <a href="https://www.fairwork.gov.au/how-we-will-help/templates-and-guides/fact-sheets/minimum-workplace-entitlements/minimum-wages">https://www.fairwork.gov.au/how-we-will-help/templates-and-guides/fact-sheets/minimum-workplace-entitlements/minimum-wages</a>

Hauser & Lane (2012) Analysis of Dairy Farm Monitor data

Jalonick, M. (2014) 'Number of US farms declines, farmers getting older', *Associated Press*, 21 February.

Komashie, D. (2014) 'Return on Equity', *Ready Ratios*, University of Professional Studies, Accra, Ghana.

Mulvaney, J. (2017) Project Manika Report, June.

OECD (2017) Agricultural policy monitoring and evaluation, Paris.

Productivity Commission (2005) Trends in Australian agriculture, Research Paper, Canberra

Productivity Commission (2014) *Relative cost of doing business in Australia: Dairy Product Manufacturing*, Canberra.

Sheng, Y., Jackson, T. & Gooday, P. (2016) 'Resource reallocation and its contribution to productivity growth in Australian broadacre agriculture', *Australian Journal of Agricultural and Resource Economics*, vol. 61, iss. 1, pp. 56–75.

US Department of Agriculture, Production, Supply and Distribution Database, Washington DC

USDA Outlook Conference 2019, Washington

Victorian Department of Economic Development, Jobs, Transport and Resources (2018) *Dairy Farm Monitor Project – Victoria*,

http://agriculture.vic.gov.au/ data/assets/pdf file/0008/431747/DFMP Vic Annual-Report-17-18.pdf