The “Milk Wars”

Winners and losers in the NSW fresh milk supply chain

NSW Small Business Commissioner

12/20/2013

This report from the NSW Small Business Commissioner examines the challenges facing the NSW dairy industry and the need for reforms to address imbalances in power and influence across the milk supply chain.

The “Milk Wars”

This report was produced by the Office of the New South Wales Small Business Commissioner (OSBC) with the assistance of Professor Tim Mazzarol of the University of Western Australia, with reference to research undertaken by Arche Consulting.

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FORWARD

One of the important roles of the New South Wales Small Business Commissioner is to examine unfair commercial dealings that can jeopardise the survival of small businesses.

Consumers are unlikely to be aware of the complex issues that have arisen across the supply chain following the introduction of discounted, private-label fresh milk in NSW by the major retail supermarket chains. While dairy farmers claim that the pricing transmission across the supply chain has had some unfair impacts, the major retailers argue that the perceived “unfairness” is in fact the operation of typical market forces; and furthermore, that vigorous competition in a free market is neither unfair nor illegal and operates to the benefit of the consumer.

Interpretations of what constitutes “unfair” treatment in business-to-business transactions vary according to perspectives and experiences, and ultimately depend on who benefits and who suffers detriment. Some small businesses perceive that competition is unfair, while other players perceive that regulatory changes are unfair, but often these are just a part of the risk profile of business and government. Pursuing an unfair practice claim will by its nature require legal action. As soon as this realm is entered, any chance of preserving the amicable commercial relationship is lost. The evidentiary burden, the cost of litigation and the fear of retribution pose as barriers to access to justice and fair competition for many small businesses.

The NSW dairy industry is at a cross-road: intense retail concentration and market share, together with the consolidation of the processing and wholesale components have intensified competition, placing pressure on profit margins at each component of the supply chain. Insufficient returns on production and significant under investment at the level of production have created an unsustainable environment in some dairy regions, forcing many farmers to leave the industry. Issues arise when components of the supply chain become concentrated and market power is exerted over the more vulnerable who have little to no bargaining power to gain any commercial advantage.

The issues canvassed in this paper implore a re-examination of the question of whether the benefit of $1 milk to the consumer is balanced by the impact being felt at the production and supply levels. The short-term benefits of cheap milk to consumers must be balanced with the long-term sustainability of the dairy industry. Arguably it is not the consumer that is deriving the *most* benefit from the discounted milk.

In October 2012 we had a number of parties from across the NSW fresh milk supply chain approach us with allegations of unfair practices tied to the “dollar priced” milk. We examined the issue just as we would any dispute. We commenced the process by engaging several affected farmers and distributors to tell their stories to both of the major supermarket operators, and provide them with the chance to tell their story and outline their objectives. The common ground on which all parties agreed was that the consumer wants fresh, locally produced milk. As a result, a Dairy Industry supplying fresh milk was mutually agreed upon as being an important objective. We proceeded to individually meet with the major milk processors, who had further interpretations of the challenges of the sector, but agreed with the premise that local milk is of key importance.

Given the lack of clarity around the cause and effect of discounted milk, the lack of data on the supply chain in NSW, and the fact that some small businesses have benefited from discounted milk, the Office of the Small Business Commissioner was well positioned to undertake an analysis of the fresh milk supply chain in NSW. This report was produced by the Office of the New South Wales Small Business Commissioner (OSBC) with the assistance of Professor Tim Mazzarol of the University of Western Australia, with reference to research undertaken by Arche Consulting.

Having completed our review of the fresh drinking milk supply chain in NSW, we have developed a number of insights that may provide additional perspectives for stakeholders across the NSW Dairy Industry. We hope that they will find these insights useful so that they can make proactive decisions to secure a better future for everyone who works hard to deliver fresh milk to NSW consumers.

Yasmin King
New South Wales Small Business Commissioner

GLOSSARY

Milk	The term “milk” is used in this report to refer to fresh drinking milk, which is also referred to as “market milk”. Other types of milk such as UHT and milk used for manufacturing will be referred to as such.
Farm gate Milk	The term “farm gate milk” refers to raw unprocessed milk produced by dairy farmers.
Manufacturing Milk	Raw unprocessed milk that is used as an input in the manufacture of non-liquid dairy products (butter, cheese, milk powder, whey products and casein).
UHT Milk	Also known as “long-life” milk, UHT milk is treated with an additional process, Ultra High Temperature Processing, to extend the shelf life of the milk.
Private-label	The term “private-label” is used to refer to supermarket generic brands or non-branded fresh drinking milk.
Branded Milk	The term “brand milk” or “branded milk” refers to all other brands of fresh drinking milk other than supermarket ‘private-label’ milk.
Farm gate Price	The “farm gate price” is the price paid to dairy farmers for raw milk.
Discounted Milk	Refers to private-label milk discounted to $1 per litre, the subject of the “milk wars” or “milk pricing wars”.
Milk Processors	Refers to milk processing factories. Raw milk is collected and transported from dairy farms in refrigerated tankers to milk processors for laboratory testing and approval for use. The raw milk is then pasteurised, homogenised and further processed before being packaged and distributed to retailers and other food-service establishments. Following the increased vertical integration of large processing factories, the distribution of wholesale milk is often incorporated into the operations of larger processors.
Milk Manufacturers	Milk Processing and manufacturing operations are often performed by the same factory. However milk manufacturers traditionally use raw milk as an input to manufacture other non-liquid dairy products (butter, cheese, whey products and casein).
Wholesalers	Wholesalers collect drinking milk and dairy products from processors and manufacturers for distribution to retailers and food-service establishments.

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EXECUTIVE SUMMARY

The Australian dairy industry sits at a crossroad, “it hasn’t grown as an industry over the past decade and has a diminished global standing and reputation” (ADC, 2012). Growth expectations are at a 10-year low and only 29 per cent of dairy farmers plan to have a larger output in three years. The intense pressure on the supply chain and insufficient returns at the farm gate is impacting on dairy farmers’ ability to invest and grow, and in some regions, their sustainability. Declining milk production and farmer attrition rates are jeopardising the ability of the NSW industry to meet the current and future demand for fresh drinking milk in NSW.

The major supermarkets’ discount pricing strategies of private-label fresh drinking milk is the most significant challenge to the dairy industry since deregulation in 2000. This particularly impacts the NSW dairy sector due to its predominant focus on fresh drinking milk with less than 10 per cent of production used for manufacturing. NSW dairy farmers have been forced into “flat line” production in order to meet the demands of processors for a consistent supply of fresh drinking milk.

Unlike the seasonal production of dairy farmers in Victoria, flat line production is more costly and less efficient. Farm gate prices for fresh drinking milk have traditionally attracted a higher price to meet the higher production costs. However, the downward pressure placed on milk processors to reduce margins has led to production input costs which is reflected in the pricing systems used for farm gate milk. NSW processors also use a two tier farm gate pricing system that pays premium prices for raw milk supplies against specific quotas, but much lower “tier 2” prices for additional milk. In some cases, tier 2 prices have been reported to be less than the cost of production and cited by dairy farmers as the reason for leaving the industry.

The NSW dairy industry is predominantly comprised of small family owned and operated farms spread across a large area which is classified into several geographically diverse regions. Each region is characterised by varying climates, water sources and feed base systems which are significant variants affecting production. Dairy produce wholesalers are also relatively small firms with tight geographically focused distribution systems. These small businesses are confronted within the supply chain by a handful of large dairy processors and major supermarket operators who create “choke points”.

This report considers the changing landscape of the NSW dairy industry and the continuing impact of discounted milk pricing ($1 per litre) across the supply chain since its introduction on Australia Day 2011. Previous studies and investigations into the impacts of discounted private-label milk have looked at the Australian dairy industry as a whole which does not take into account the differences within each state in terms of the degree of focus on the fresh drinking milk or manufacturing milk markets, regional differences, and whether production is primarily seasonal or flat line.

The report is organised into six chapters. Chapter 1 provides an overview of the Australian dairy industry supply chain. Chapter 2 examines the nature of the NSW diary industry. Chapter 3 looks at the nature of market power within the dairy supply chain, in particular the impact of supermarket price discounting, private-label products and the two-tier pricing system. Chapter 4 provides a discussion over the future of the NSW dairy sector. Chapter 5 explores ways in

which to strengthen the NSW dairy supply chain and Chapter 6 provides conclusions and recommendations.

A series of four recommendations are made:

1. **Attention must be given to building sustainable supply chains** – this proposes the adoption of the Grocery Code of Conduct and the formation of government and industry forums designed to encourage the development of strategies to achieve sustainable dairy supply chains.

2. **Adjudication of supply chain disputes** – this proposes the adoption of a formal process of adjudication of disputes between suppliers and buyers within the supply chain. It could be modelled on the UK Groceries Code Adjudicator.

3. **Amendments to the CAA** – this proposes making changes to sections 46 and 46(1AA) of the *Competition and Consumer Act 2010* in order to protect against abuse of market power by major retailers and processors.

4. **Provide reliable data on pricing** – this proposes that Australia adopts the same strategy used in the UK that requires the disclosure and publication of up to date data on pricing along the entire supply chain. This will make pricing information more transparent.

CHAPTER 1: THE MILK SUPPLY CHAIN

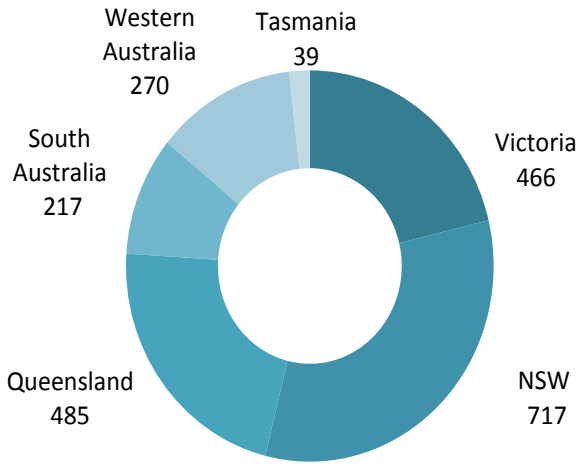
The introduction of discounted private-label fresh drinking milk has been the most significant change in the dairy industry since deregulation in 2000. The impact of the "Milk Pricing Wars" is examined through the changes in the NSW fresh drinking milk supply chain dynamics commencing with a brief overview of the industry.

THE AUSTRALIAN DAIRY INDUSTRY

Australia has had dairy cows since the arrival of the First Fleet in 1788. Today the dairy sector is the nation's third largest rural industry with farm gate production valued at $3.7 billion (Dairy Australia, 2013). The dairy industry is a major employer, particularly within regional areas. It is estimated that 43,000 people are employed within the farms and factories that produce and process milk, as well as a further 100,000 in related services industries. The majority (80%) of dairy production is concentrated in the south-east corner of Australia.

NSW is the largest producer of fresh milk, followed by Queensland, Victoria, Western Australia (WA) and South Australia (SA) (see figure 1.1). The nature of these dairy industries varies by state with Queensland (QLD), northern NSW and WA focused predominately on domestic markets for fresh drinking milk (approx. 25% of the national total), and Victoria, southern NSW and Tasmania focused primarily on the production of milk for processing into butter, cheese, milk and whey products and casein) for export.

FIGURE 1.1: FRESH MILK PRODUCTION BY STATE 2011/12 (MILLION LITRES)



Source: Dairy Australia (2012)

The Australian diary industry can be separated into the fresh drinking milk segment focused upon the domestic market ("market milk"), and the export segment focusing on milk for value added products including export. Of these segments the first accounts for only a quarter of national milk production, but 40 per cent of national dairy food sales. The second segment is impacted by

the international price of milk. In 2012/13 Australia exported about 38 per cent of its milk production with a market value of $2.76 billion (Dairy Australia, 2013).

By global standards Australian dairy farmers receive relatively low prices for their milk and this has led them to either leave the industry or become very efficient in their production (Dairy Australia, 2012).

Dairy Cattle Farming

The Australian dairy industry supply chain commences with the 6,686 registered dairy farms that produce around 9.4 billion litres of raw milk annually from about 1.7 million dairy cows. This sector of the dairy industry generates around $3.8 billion in annual revenue. In recent years it has experienced a compound annual rate of decline in revenue of about 2.9 per cent, although this is forecast to grow at a compound annual rate of 1.7 per cent over the five years to 2018/19 (Witham, 2013a).

Dairy Cattle Farming:

Businesses = 6,686 farms
Annual revenue = $3.8 billion
Annual profit = $139.9 million
Annual growth rate:
Past 5 years = -2.9%
Forecast 2014-2019 = 1.7%

Source: IBISWorld (2013)

Dairy farmers are impacted by the farm gate price of milk which has been influenced in recent years by the price wars and heavy discounting undertaken by supermarket retailers. Other important external factors that impact on the dairy farmer are the price of electricity, animal feeds and related supplements, consumer demand for milk and the weather.

The average dairy is a major user of electricity as milking is undertaken with automated systems and cows need to be milked twice, sometimes three-times each day. Dairy cattle also need special feeds and other nutrition supplements. This includes coarse grains for feed which are needed in times when rainfall is poor and pastures are unable to sustain the herds alone. Low rainfall and drought conditions are also a major external impact on dairy farmers, as is the availability of water.

Most dairy farms are located in the coastal regions and rely upon natural pastures. This enables an efficient milk production system of high quality, but there are inland dairy farms in southern NSW and northern Victoria that rely on irrigation systems. While Australian dairy farmers generally rely on natural pastures for feeding their herds, it is common for coarse grains, hay and silage to be used as feed supplements (Dairy Australia, 2013).

Depending on whether the dairy producer is focused on the domestic whole milk segment or the export processing segment for value added products, the demand for dairy foods will also have an impact. In general terms the dairy cattle industry is a mature one with a trend towards fewer but larger farms. Demand for dairy products is set to increase, particularly in Asia. Domestic demand for drinking milk has experienced low growth during the past decade, but the introduction of specialty milks (e.g. organic and A2) provides an opportunity for growth (Witham, 2013a).

The majority (68.3%) of milk produced by Australian dairy farmers is used for manufacturing of dairy products and this is anticipated to grow over the next five years. Milk for drinking “market milk” currently comprises around 23.3 per cent of the revenue to the dairy farming segment. The volume of milk produced for the “market milk” segment has increased moderately in recent years, but it is forecast to decline over the next five years as the demand for export dairy products rises (Witham, 2013a).

In terms of customers the main buyers for whole milk are the dairy processors and manufacturers who represent 60 per cent of the market. These processors are primarily international firms such as New Zealand's Fonterra Co-operative Group Ltd, which controls around 36 per cent of the milk market. Also important are co-operatives that comprise the remaining 40 per cent of the market. Amongst these are Victoria's Murray Goulburn Co-operative Ltd (23% of the market), and Norco Co-operative Ltd from northern NSW. As member owned businesses co-operatives seek to enhance the economic welfare of the dairy farmers and typically offer guaranteed supply contracts at fair prices. Any profits generated from the co-operatives are paid to the farmers as dividends.

The **key success factors** for dairy farmers are economies of scale, use of specialist equipment or facilities, and the ability to manage cash flow and debt. Also important are climate change, specifically rainfall, and the ability of the farmer to secure long-term supply contracts with dairy processors to ensure demand for their milk at prices that offer them satisfactory profit margins. In the past five years profit margins have been around 3 per cent (Witham, 2013).

Dairy Processing

The next stage of the milk supply chain is the dairy processors who can be divided broadly into at least five overlapping segments: i) milk and cream processors; ii) milk powder manufacturers; iii) butter and dairy product manufacturers; iii) cheese manufacturers; and v) ice cream manufacturers. Each of these processing segments has substantial overlaps, but warrants separate consideration.

Milk and Cream Processors

Milk & Cream Processing:

Businesses = 61 (4 control 72.6% of market)
Annual revenue = $1.9 billion
Annual profit = $43.7 million
Annual growth rate:
Past 5 years = 4.5%
Forecast 2014-2019 = 2.1%

Source: IBISWorld (2013)

The first segment (**milk and cream processors**) consists of those firms that pasteurise and separate raw milk to produce drinking milk and cream products. Key processing includes fresh pasteurised cream and milk, low fat milk, skim and whole milk and ultra-pasteurised milk. The main products are whole milk, UHT milk, low-fat milk and cream.

This segment comprises around 61 businesses, but only four companies control about 72.6 per cent of the market. The main players in this segment are Lion Pty Ltd (32.1% market share), Parmalat Australia Ltd (14.7% market share), Fonterra Co-operative Group Ltd (13.5% market share) and Murray Goulburn Co-operative Ltd (12.3% market share) (Lin, 2013a).

In a similar manner to dairy farmers, this segment is impacted by the domestic price of milk and the level of consumer demand on the downstream side of the supply chain, and on the level of production on the upstream side. Weather conditions, rainfall and a decline in dairy cow herds can impact this segment on the supply side. Consumer preferences for other drinks and retailers ability to negotiate wholesale prices will have impacts on the demand side.

Whole milk for drinking comprises the most important market segment for milk and cream processors with around 44.2 per cent of production devoted to this product. Low-fat milk comprises around 31.3 per cent of production and is expected to increase as consumers demand healthier alternatives to whole milk. UHT milk and cream comprise respectively 8.7 per cent and 4.2 per cent of production with the remainder devoted to flavoured milk drinks and specialist milk products containing vitamins, minerals or those without lactose. This segment is forecast to grow strongly in future years (Lin, 2013a).

Key success factors in this segment are economies of scale and scope, the use of specialist equipment and facilities and value added production techniques. Also important are an ability to adapt products to satisfy changing consumer tastes, and to support this with effective market research. Larger producers tend to enjoy lower costs per unit of production. However, profit margins are generally low and have been squeezed as a result of aggressive discounting and the demand by major retailers to promote private-label brands (Lin, 2013a).

Milk Powder Manufacturers

The second segment (**milk powder manufacturers**) is those businesses that manufacture milk powder and powdered milk-based beverages such as baby milk formulas and supplements. The primary processing activities are the manufacture of milk powder, milk-based baby food powder production, malted milk powder manufacturing and the production of health beverage powders. Key products are buttermilk, skim milk and whole milk powders.

Milk Powder Manufacture:

Businesses = 87 (5 control 53.1% of market)
Annual revenue = $3.3 billion
Annual profit = $95.8 million
Annual growth rate:
Past 5 years = -2.1%
Forecast 2013-2018 = 2.3%

Source: IBISWorld (2013)

In 2013 there were an estimated 87 businesses engaged in this segment, however, just over half (53.1%) of the market is dominated by five companies. The largest player is Fonterra (28% market share), followed by Murray Goulburn (16.1% market share). Other key players are Lion (4% market share), Warrnambool Cheese and Butter Factory Company Holdings Ltd (WCB) (3.5% market share) and Tatura Milk Industries Ltd (1.5% market share) which is owned by Bega Cheese Ltd (Lin, 2013b).

This industry segment is highly capital intensive and export focused. While the overall demand for milk powders has grown strongly, particularly in Asia, this segment has experienced pressures from price volatility, declining or stagnant revenue growth. There has also been a high degree of consolidation within the segment with mergers and acquisitions. The five year outlook for the segment is positive, but export prices may be impacted by the appreciation of the Australian dollar against the US dollar and the Euro, and from the outcome of the Doha Round of the World Trade Organization's negotiations over tariffs and market access (Lin, 2013b).

The most important market segment for milk powder manufacturers is whole milk powder, which comprises around 46.6 per cent of total production value. Skim milk powder is the next most important market segment comprising about 42.2 per cent. The rest is taken up by butter milk powder (5.1%) and specialist products such as genetically modified milk powders, coconut powder and powders with medical supplements (6.1%) (Lin, 2013b).

The **key success factors** in this segment are the firm's ability to access sufficient supply of milk and to secure long-term sales contracts with wholesalers, supermarket retailers and overseas buyers. Economies of scale and the investment in plant and equipment with the latest technology are also critical. Profit margins are generally thin and value adding through innovation in speciality products such as low-fat or fat-free milk powders are important.

Butter and Dairy Product Manufacturers

The third segment (**butter and dairy product manufacturers**) is those firms that produce butter, condensed milk, proteins and yoghurts. Key manufactures include butter, buttermilk, casein, malt extract, canned milk or cream, skim milk stock feed, yoghurt and condensed or evaporated milk.

Butter & Dairy Product Manufacture:

Businesses = 107 (5 control 71.6% of market)
Annual revenue = $3.8 billion
Annual profit = $145.2 million
Annual growth rate:
Past 5 years = 2.2%
Forecast 2014-2019 = 1.4%

Source: IBISWorld (2013)

Although there are an estimated 107 businesses engaged in this segment, it is highly concentrated with 71.6 per cent of market share controlled by five companies and 60 per cent controlled by the two largest. Within this segment the major players are Fonterra (37.3% market share), Murray Goulburn (23% market share), Lion (5.3% market share), WCB (4.5% market share) and Tatura Milk (1.5% market share) (Lin, 2013c).

The key factors influencing this segment are the demand from supermarkets and grocery stores plus the consumer demand for butter and related products. The domestic price of milk also plays a key part in the industry's success as does the supply of whole milk from dairy farmers.

Butter comprises the largest area of production with 30 per cent of the total value of this segment derived from this product area. Other key products are proteins (22%), yoghurt (14%) and condensed milk (11%). Around 23 per cent of production is devoted to other products such as buttermilk, canned cream, and lactose and coffee mixtures. The largest market segment (39.4%) for these products is the supermarkets, followed by exports (19.5%), other food manufacturers (18.6%), other retailers (12.3%) and food service outlets (10.2%). As with other areas of the dairy industry, retailers have placed pressure on the segment's competitiveness through demands for lower prices and the use of private-labels (Lin, 2013c).

For this segment the **key success factors** are the ability of manufacturers to secure long-term sales contracts with both Australian and overseas buyers, plus the ability to secure supplies of fresh milk. Economies of scale and scope are also important, as is investment in specialist equipment and facilities. Finally, firms in this segment must possess a capacity to market their products and offer products that are differentiated either via brand or product type. Profitability is dependent on the price paid for raw milk and also other inputs such as packaging materials, bottles and containers.

Cheese Manufacturers

Cheese Manufacture:

Businesses = 87 (4 control 85.4% of market)
Annual revenue = $4.4 billion
Annual profit = $96.5 million
Exports = $918.5 million
Annual growth rate:
Past 5 years = 2.0%
Forecast 2014-2019 = 2.3%

Source: IBISWorld (2013)

The fourth segment (**cheese manufacturers**) is comprised of firms that manufacture cheese of different kinds. This includes cheddar, hard grating, mould ripened, blue, semi-hard, stretch and processed cheese.

There are around 87 businesses in this segment but only four firms dominate, controlling 85.4 per cent of the market share. These firms are Murray Goulburn (34.7% market share), Lion (26.3% market share), Bega Cheese Ltd (16.9% market share) and Fonterra (7.5% market share) (Lin, 2013d).

The main factors influencing this sector on the upstream side are supply of milk product, which can be affected by seasonality and rainfall. On the downstream side the key influences are consumer demand for products and the dominant role played by major supermarket retailers. As an export focused sector the world price for cheese and the value of the Australian dollar will also play a significant role.

Supermarket retailers comprise the largest customer with around 47.3 per cent of cheese sold there. Export markets constitute around 20.9 per cent of total demand, followed by food-service outlets (13.8%), other retailers (9.1%) and food processors (8.9%). Private-label cheeses owned by the major supermarket chains account for about 20 per cent of domestic cheese sales, although there is high consumer loyalty to well-known brands (Lin, 2013d).

The **key success factors** for the cheese segment are the ownership of strong retail brands and the ability to differentiate product through packaging. Related to this is the ability of manufacturers to consistently produce high quality products and to add value so as to generate high margins. As with any manufacturing operation there is a need to invest in state of art processing equipment and to continuously innovate. Scale economies are also important. Finally, there is a need to secure long-term contracts with Australian and overseas buyers, plus the need to secure reliable supplies of milk at stable prices. Despite their value added product and control of consumer brand, the profit margins in the cheese segment are low. Imports and aggressive discounting by major supermarket chains of private-label brands have squeezed margins (Lin, 2013d).

Ice Cream Manufacturers

The fifth segment (**ice cream manufacturers**) is comprised of firms that manufacture ice cream, gelato, sorbet and frozen confectionery. Major products include take-home tubs (33% of sales), take-home multi-packs (22.5% of sales), take-home premium tubs (19.5% of sales), unpackaged scoop and serve ice cream (17.5% of sales) and individually packaged products (7.5% of sales) (Lin, 2013e).

Ice Cream Manufacture:

Businesses = 110 (3 control 75.4% of market)
Annual revenue = $637.8 million
Annual profit = $40.8 million
Exports = $47.9 million
Annual growth rate:
Past 5 years = 3.0%
Forecast 2014-2019 = 1.1%

Source: IBISWorld (2013)

Although there are an estimated 110 businesses engaged in the manufacture of ice cream in Australia, it remains heavily concentrated with three firms controlling 75.4 per cent of the market. The most dominant player is Pacific Equity Partners Ltd with a market share of 36.9 per cent. This company controls the Peters, Heaven, Maxibon, Drumstick and Connoisseur brands. Next is Unilever Australia Pty Ltd with around 27 per cent market share. This firm owns the Streets, Magnum, Gaytime, Paddle-Pop and Cornetto brands. Finally, there is Regal Cream Products Pty Ltd with a market share of 11.5%. It has the Bulla Dairy Foods brand.

This industry segment is strongly influenced by the demand from consumers and the trends in consumer spending and health or nutrition issues. On the input side the world price of sugar and domestic price of milk play a critical role. Milk is the most important ingredient in ice cream and the segment will be impacted by both rises and falls in the price of milk and the availability of supply. Exports (primarily to Asia) currently comprise around 7.5 per cent of revenue within the ice cream manufacturing segment, while competition from imported product has grown by nearly 4 per cent per annum with a forecast for 5 per cent growth in 2014 (Lin, 2013e).

Supermarkets and grocery stores comprise the most important customers for ice cream with around 62.9 per cent of sales going to that source. The food-services sector (e.g. hotels, cafes and restaurants) comprise about 24.8 per cent of sales and some 4.8 per cent is absorbed by the route trade (e.g. petrol stations, milk bars and vending machines). As noted above, exports account for about 7.5 per cent of sales. The major supermarket chains have been growing their private-label or "house brands" of ice cream and developing strong links in the supply chain. This has the potential to squeeze margins but is counterbalanced by the strong brand loyalty of consumers.

The **key success factors** for the ice cream manufacturing segment are product differentiation and branding, economies of scale and scope, and the ability to adapt and change to meet consumer preferences. Also of importance is the ability to secure long-term contracts for the supply of sugar, milk and other

key ingredients at fixed prices. The ability of the manufacturers to pass any unforeseen cost increases down the supply chain is essential to profitability (Lin, 2013e). Of particular importance is the price of milk, which accounts for 64.5 per cent of industry revenues. It is a requirement by regulation that Australian made ice cream contains at least 10 per cent milk fat. This will ensure that milk supplies remain a critical input to this segment. The price of milk will also determine the profit margins that manufacturers can obtain.

Dairy Produce Wholesaling

After processing and manufacture the next stage of the dairy industry supply chain is that of wholesaling. The dairy produce wholesaling sector acts as an intermediary between the dairy manufacturers and processors and the retailers. There are an estimated 726 businesses engaged in dairy produce wholesaling in Australia and unlike the processors and retailers there are no dominant players.

Dairy Produce Wholesaling:

Businesses = 726
Annual revenue = $988.3 million
Annual profit = $49.4 million
Wages = $43.3 million
Annual growth rate:
Past 5 years = 2.3%
Forecast 2014-2019 = 1.0%

Source: IBISWorld (2013)

Around 34.8 per cent of the dairy produce wholesaling businesses is located in NSW, followed by Victoria (24.2%), Queensland (15.4%), SA (13.8%), WA (8.5%), Tasmania (2.7%) and the Northern Territory (0.5%). A characteristic of these firms is that they are geographically focused and generally operate within a small geographic area. This is due to the nature of the dairy produce distribution system which has a large number of retail outlets, particularly for the smaller supermarket and grocery retailers, route trade and the food-services service sector. Major supermarket chains (e.g. Coles, Woolworths and Metcash) have their own wholesaling and logistics operations and typically deal directly with the processors and manufacturers.

Among the more prominent dairy wholesaling companies are the Melbourne-based Marsh Dairy Products Pty Ltd, with around 2.5 per cent market share, and Sydney Dairy Distributors Pty Ltd, with around 1.0 per cent market share. The sector is labour intensive and requires a significant investment in cool rooms, refrigeration, storage and handling equipment and transport vehicles. There is also a requirement for substantial investment in computerised warehousing systems for inventory management (Lin, 2013d).

The main products distributed by these wholesalers are cheese (34%), drinking milk (23%), skim-milk powder (20%), and whole-milk powder (12%). The remaining products consist of yoghurts, ice cream, butter and various dairy spreads. Supermarkets are the most important customers and comprise around 35.5 per cent of total industry sales. These include both the major retailers and the smaller independent supermarkets. A further 27 per cent of sales come from other retailers such as convenience stores, milk bars and small grocers. The food-service sector comprises some 22.2 per cent of sales and food manufacturers around 15.3 per cent (Lin, 2013d).

The **key success factors** in this industry are the ability to secure reliable and long-term contracts with processors and manufacturers for supply of dairy produce, plus the ability to do the same with retailers. It is also important that wholesalers have an efficient warehouse and distribution system that will allow it to deliver produce in a timely manner with minimum spoilage. This will also require an effective network of distribution that can take advantage of regional economies of scale. This has seen many firms grow in overall size and has led to consolidation in the sector with the demise of many of the smaller players. Profit margins have been depressed in recent years (Lin, 2013d).

Supermarkets and Grocery Retailers

Supermarkets & Grocery Retailers:

Businesses = 2,022 (2 control 73.9% of market)
Annual revenue = $87.2 billion
Annual profit = $3.5 billion
Wages = $8.0 billion
Annual growth rate:
Past 5 years = 2.4%
Forecast 2014-2019 = 2.3%

Source: IBISWorld (2013)

The end of the dairy supply chain is found with the supermarkets and grocery store retailers. These businesses retail a wide range of fresh and packaged produce as well as other consumer goods such as toiletries, cleaning products and also dairy goods. This sector does not include specialist or niche retailers and convenience stores.

There are an estimated 2,022 supermarkets and grocery retailers in Australia. However, the sector is dominated by a few major players. The largest of these are Woolworths Ltd, which controls around 41.4 per cent of the market, and Wesfarmers (Coles) with a market share of 32.5 per cent. Together these two giant retailers control around 73.9 per cent of the entire market. Other significant players are ALDI Stores Pty Ltd (4.7% market share), Independent Grocers of Australia (IGA) (6.0% market share), Australian United Retailers Ltd (2.3% market share), Costco (<1% market share) and SPAR Australia (<1% market share) (Witham, 2013b).

The key drivers of this sector are consumer sentiment and real household disposable income. Over the longer term the population growth rate also has an impact on these firms. The sector is intensely competitive and the two major players – Woolworths and Coles – have engaged in discounting of key products including major price cutting of day to day goods such as dairy products. This aggressive behaviour by the major supermarket retailers has driven down prices and squeezed the profit margins of smaller supermarkets.

At the centre of this industry sector is the battle that has been waging between the two major players. The take-over of Coles by Wesfarmers Ltd in 2007 led to a triggering of intense competition with Woolworths over market share. Price wars on everyday products including milk, plus the rise of private-label goods in the dairy produce lines have also been features of this battle. While private-label products have traditionally been viewed as lower quality, the consistent marketing by the major retailers has seen a change in consumer habits leading to a significant growth in this category. In 2013/14 private-label products accounted for more than 28 per cent of all supermarket sales (Witham, 2013b).

This is a pattern that has been followed by the second tier retailers such as IGA and Metcash. There is a prediction that these "supermarket shelf wars" will only intensify over the next five years from 2013/14 to 2018/19, and will be also accompanied by an increase in the market share held by private-label brands. This will impact on the fresh food supply chains such as dairy produce. The two major supermarket chains currently source around 97 per cent of all their fresh produce from local supply chains (Witham, 2013b). However, over time this may change as cheaper imports become available.

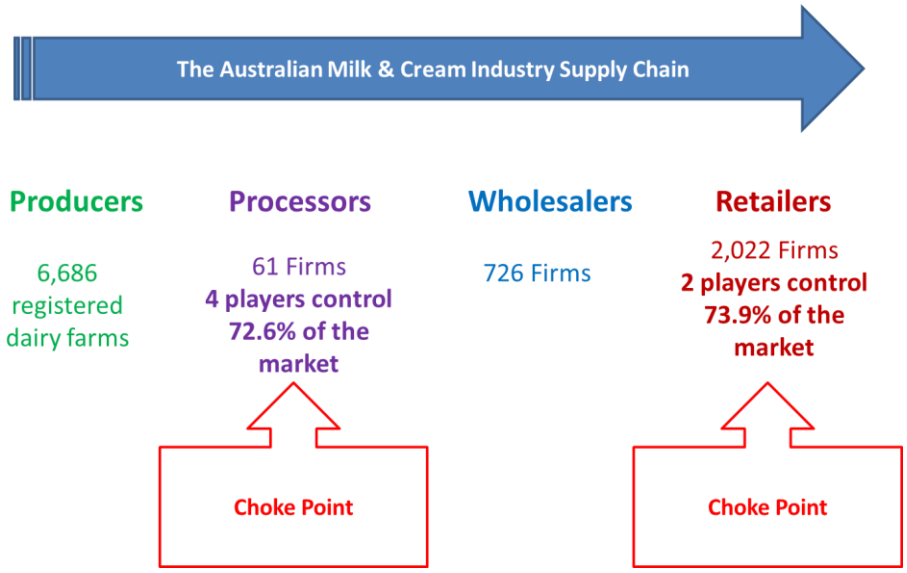
The **key success factors** in this industry are the location of stores, availability of car parking, ability to control stock and the general layout and design of stores. The training and development of staff that must be knowledgeable about products and good with customer service is also an essential factor. Also of key importance is the ability to sustain major advertising campaigns across a wide range of media. This includes mainstream media advertising, direct mail distribution of catalogues and point-of-purchase (POP) display promotions. Economies of scope are also important. For example, major supermarkets carry around 30,000 product lines while smaller ones have about 900 lines. Yet the main focus of competition is price with consumers seeking lower prices for their supermarket and grocery purchase (Witham, 2013b).

The Dairy Supply Chain in Summary

Major "choke points" exist within the dairy supply chain caused by excessive market power at the processor and retailer stages.

The overall pattern that emerges from this overview of the Australian dairy industry supply chain is that there are areas of intense concentration of market power by a relatively small number of firms. These create "choke points" as illustrated in Figure 1.2 where it is shown that the key "choke points" are found at the level of the processors and again at the point of retail.

Figure 1.2: Milk and cream supply chain in Australia



The concentration of market power in the hands of the two major supermarket chains has significant impacts on the overall supply chain for milk and other dairy products. As discussed above, these dominant retailers have been engaged in an aggressive price war over recent years. This has impacted on the dairy industry due to the discounting of milk to $1 per litre. Milk consumption has increased since 2011 due to cheaper prices, but there has also been a major shift from branded to private-label milk products. During 2010/11 sales of branded milk declined by around 5 per cent (Witham, 2013a).

Although the impact of these retailer "milk wars" on dairy farmers has been contested, the effect of processor pricing behaviour has had adverse effects on dairy producers in NSW. Many farmers from the state who sell outside the dairy co-operatives have been faced with a "two-tier" pricing strategy such as that imposed by Lion. This sees farmers offered a premium (tier 1) milk price and then a significantly lower (tier 2) milk price in the spring. This has had negative impacts on dairy producers in NSW (Witham, 2013a).

According to Lim (2013a) in 2010 Parmalat was paying farmers a premium of 58 cents per litre on 85 per cent of its total milk volume. By 2011 this had fallen to 44 cents on 77 per cent of milk supply, which was estimated to have cost the farmers an average of $8,000 in income over that period. The impact of lower retail milk prices and an expansion of lower-priced private-label milk have had the effect of squeezing processors' margins, which flow on down the line to the primary producers.

CHAPTER 2: THE NSW DAIRY INDUSTRY

Therefore if consumers want to drink fresh local milk then supporting the local NSW dairy industry is the only way to ensure the sustainability of fresh local drinking milk in the future.

NSW has the largest drinking milk consumption rate in Australia, accounting for around 31.2 per cent of all fresh drinking milk produced nationally (ABARES, 2012). In terms of annual milk production volumes, NSW is ranked second among the states accounting for approximately 11 per cent of national production.

The dairy industry in NSW is estimated to be worth about $522 million in terms of gross value of farm gate milk production (GVP), and $3,932 million nationally (McKenzie, 2013). NSW is home to approximately 11 per cent of the total dairy farms across Australia, while 67 per cent of dairy farms are located in Victoria (Dairy Australia, 2012). However, 66 per cent of the farm gate milk produced in NSW is directed into the fresh drinking milk market. By comparison, Victoria, the leading dairy producing state, only directs 8 per cent of milk produced into the fresh drinking market, but the total state production accounts for 66 per cent of total national production (Dairy Australia, 2012).

DAIRY FARMING IN NSW

The NSW dairy farm sector is heavily focused on fresh drinking milk production.

The NSW dairy farm sector is characterised by larger farm business units than is the case in Victoria. For example, the average dairy herd in NSW has 354 cows compared to 321 in Victoria. However, unlike Victoria, dairy farms in NSW are scattered over a much larger geographic area with greater regional differences than is common in other Australian states. These regions differ in terms of climate, water sources and the feed-base systems used, which are significant variants that affect productivity.

Northern NSW has the highest proportion of small dairy farms. The Riverina, Bega and Far South Coast regions focus on the production of milk for manufacturing. The Riverina produces milk for the manufacturing processors based in Victoria (i.e. Murray Goulburn, Parmalat and Fonterra). By contrast Bega and the Far South Coast produce milk predominantly for the local dairy product manufacturing of Bega Cheese Ltd. All the other regions produce milk for the fresh drinking milk market supplying processors in NSW, southern QLD (e.g. Lion, Parmalat, Norco and Fonterra) together with some other smaller processors.

Table 2.1 provides an overview of the different dairy regions across NSW and the number of farms, volume of production, share of milk production and the average annual milk production per farm. It can be seen that the most important regions for milk production are the Riverina, Manning, Illawarra, Far South Coast, Hunter and Central Western Slopes.

An important feature of the NSW dairy farm sector is its orientation towards the production of fresh drinking milk as opposed to milk for manufacturing of dairy products. As the most populous state, NSW (including the Australian Capital Territory (ACT) is the nation's largest market for fresh drinking milk.

The total volume of milk sales in 2011/12 was 729 million litres, which constitutes around 30 per cent of national drinking milk sales (Dairy Australia, 2012).

TABLE 2.1.: NSW REGIONAL AREAS RANKED BY VOLUME

	Regions	Farms (number)	Volume (million litres)	Share of annual milk production	Average annual milk production/farm (million litres)
1	Riverina	81	191	18%	2.36
2	Manning	156	157	15%	1.01
3	Illawarra	113	138	13%	1.22
4	Far South Coast	90	137	13%	1.52
5	Hunter	100	130	12%	1.30
6	Central Western Slopes	29	112	10%	3.86
7	Far North Coast	90	66	6%	0.73
8	Mid North Coast	63	48	4%	0.76
9	Metropolitan	14	28	3%	2.00
10	North West Slopes	15	26	2%	1.73
11	South West Slopes	12	25	2%	2.08
12	Upper Murray	10	11	1%	1.10
	Total	**773**	**1,069**		

Source: NSW Department of Primary Industries (2013)

PROFILE OF THE NSW DAIRY FARMER

Small owner operated family farms dominate the dairy industry in NSW.

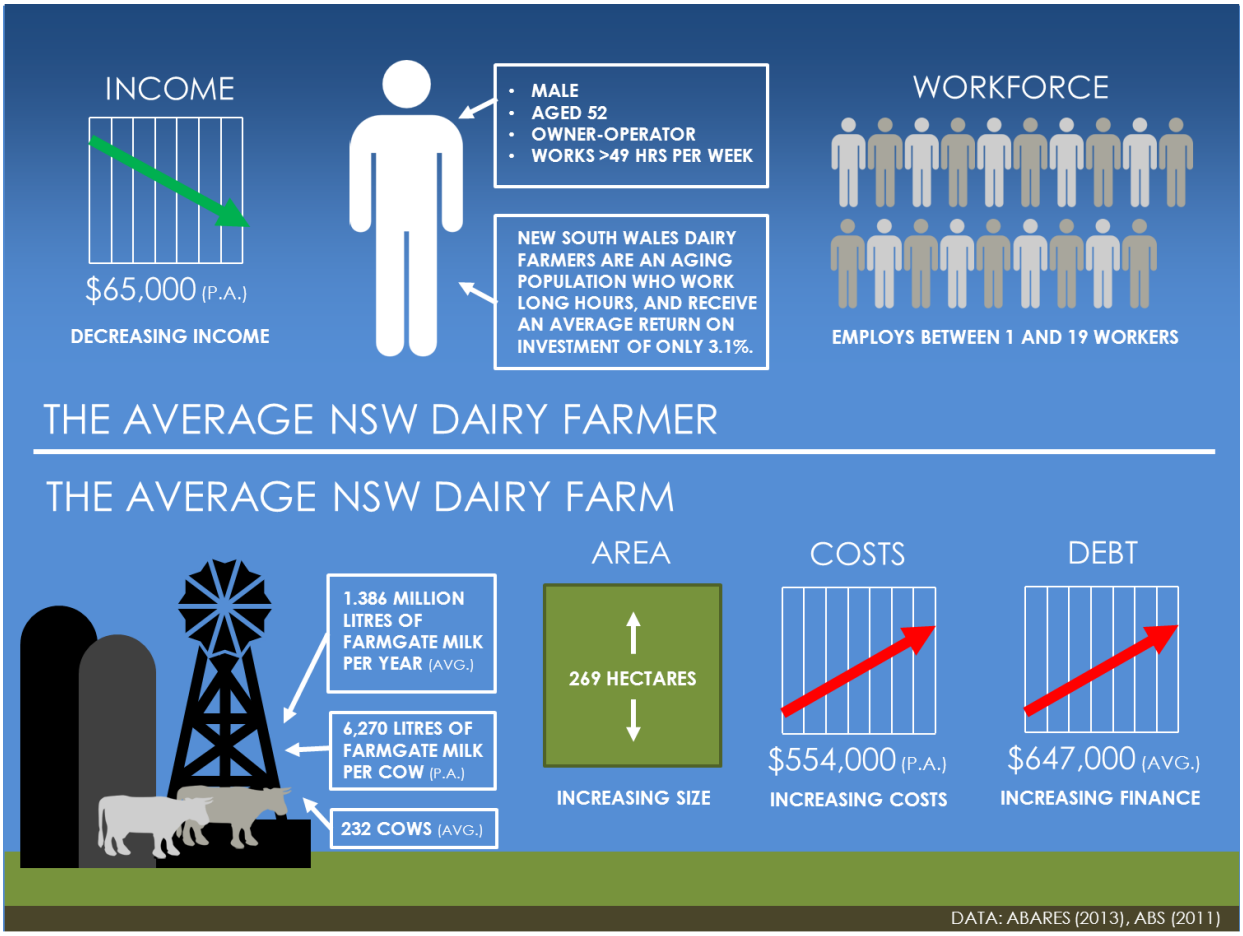
The average NSW dairy farmer is asset rich but with "frozen assets", cash poor, and part of an ageing workforce (median age is 53) (ABS, 2012). Small owner operated family farms dominate the dairy industry in NSW. Dairy farm owner-mangers work very long hours and reported incomes are relatively low. In both 2006 and 2011 the overwhelming majority of dairy farm owner-managers reported working more than 60 hours a week, and had incomes of less than $65,000 a year (ABS, 2011).

Farm cash income is a measure of cash funds generated by the farm business for farm investment and consumption after paying all costs incurred in production, including interest payments but excluding capital payments and payments to family workers. The average farm cash income for dairy farms in Australia is estimated to have declined from $143,200 in 2011/12 to $87,000 per farm in 2012/13. **This decline has been attributed mainly due to lower farm gate milk prices, because milk production has remained relatively unchanged in 2012–13** (ABARES, 2012).

A measure of longer-term profitability is farm business profit, as it takes into account capital depreciation and changes in inventories of livestock, crops and fodder. Farm business profit is estimated to decline from $64,700 in 2011–12 to farm business loss of $10,000 in 2012–13. This reduction is a result of both reduced farm cash income and lower farm inventories. The average rate of return, excluding capital appreciation, is estimated to decline in 2012–13 to average 1.5 per cent nationally (ABARES, 2012).

In 2011/12 new investment on dairy farms remained relatively high. Net capital additions to dairy farms averaged $72,000 per farm. However, with more restricted access to credit lending institutions, farm debt growth has slowed, with debt for land purchases accounting for the largest share of the average farm's business debt. Borrowings to provide working capital were the next largest share of average farm business debt (ABARES, 2012).

FIGURE 2.1: PROFILE OF THE NSW DAIRY FARMER



A CAPITAL INTENSIVE BUSINESS UNDER FINANCIAL CONSTRAINT

Dairy farming is a capital intensive business but price pressures have reduced farm profitability and increased debt. At the national level, around 22 per cent of dairy farms had debt exceeding $1 million at 30 June 2012. The proportion of farms with relatively high debt varies across regions. The general increase in land values to 2008 boosted the equity most farmers had in their businesses. Farm business equity generally remains strong for dairy farms. The average equity ratio for dairy farms, at 30 June 2012, was estimated to be 80 per cent.

However, in some regions, farm equity is estimated to have fallen significantly over the past three years, mainly as a consequence of reductions in reported land values. In other regions, reductions in farm debt, increases in capital investment and increases in livestock numbers have resulted in increased farm

equity. An estimated 28 per cent of dairy farms **in 2011/12 had equity ratios below 70 per cent. Around 38 per cent of dairy farms were estimated to have equity ratios exceeding 90 per cent at 30 June 2012** (ABARES, 2012)**.**

Financial institutions lend to farm businesses after considering the equity (security) farmers have in their businesses and the capacity of the businesses to service increased debt. Institutional lenders permit large operations with high farm cash incomes or access to substantial off-farm assets or income to operate with an equity ratio of less than 70 per cent. Nationally, the proportion of dairy farms estimated to have a farm business equity ratio of greater than 70 per cent declined slightly from 75 per cent in 2010/11 to 73 per cent in 2011/12. The proportion of farms that recorded negative farm cash incomes (indicating they may need to increase their working capital borrowings) increased from 10 per cent in 2010/11 to 14 per cent in 2011/12. The proportion of dairy farms that recorded both an equity ratio of less than 70 per cent and negative farm cash income remained at around 8 per cent in 2010/11 and 2011/12 (ABARES, 2012).

Future Outlook for NSW Dairy Farmers

"There isn't enough money in it at the moment to pay out your parents. Essentially we can't afford to go and buy mum and dad's business."

There has been a decline in the number of dairy farmers for many decades as farmers sell to large scale farming operations and fewer young people take over the family farm. There is also a tendency of farmers to work well beyond the retirement age of workers in other occupations.

Increasing land values and insufficient returns for some farmers will also have an impact on succession planning and the ability of some farmers to be able to afford to retire from the industry. Many younger farmers do not have sufficient capital to be able to purchase the business from their parents who will need to sell the business to be able to afford to retire:

> *"There isn't enough money in it at the moment to pay out your parents. Essentially we can't afford to go and buy mum and dad's business" (King, 2013)*

Young farmers who secure loans to purchase their parents' farms are likely to struggle with servicing the debt from returns on production. The ability of the market to respond to future shortages influenced by climatic and other events (fires, flood, bovine disease) is likely to be an issue in the future due to the inability of farmers to increase production in the short-term.

Rationalisation of the dairy farm production sector is likely to continue with regional differences. Some dairy farmers are likely to be "stranded" by supermarket contract changes such as Lion's contract with Coles which expires mid-2014. The future of dairy farmers in northern NSW is uncertain. Some will continue their supply arrangements for 12 months and others may be able to transfer their milk production to Murray Goulburn and Norco. Rationalisation in NSW is following the nationwide trend, and some dairy farmers have been able to turn land to different uses. It is likely that many more will leave the industry, unable to get a return on investment large enough to reinvest in the farm business.

The current fresh drinking milk market returns cannot sustain growth and development. If farmers cannot get a reasonable return they are unable to invest in production efficiencies in order to be sustainable. The need to put some significant capital into production efficiencies will be a challenge for marginal producers and those with thinner margins. Farmers who are further

away from processors as a result of changes to retailer/processor contracts and shifting supply arrangements will also be impacted by high transport costs.

The attrition rate of dairy farmers in NSW raises the question of who will be ready for the export market (free-trade agreements) if they open up soon. There will be a need for large-scale production capacity for the mass Asian market which will require capital investment and production efficiencies. Despite the large number of younger people ready to step onto the farms, the largest barrier to entry is the lack of access to the capital needed.

Fresh Milk Processing in NSW

Fresh drinking milk is the least value-added dairy product.

As discussed above milk production in NSW is primarily directed to the fresh milk market whereas Victoria has a much larger focus on manufacturing and a smaller percentage of its total milk production is directed to the fresh drinking milk market. Fresh drinking milk is the least value-added dairy product in comparison to manufactured dairy products such as butter and cheese. Dairy product manufacture is one of the leading agricultural industries in terms of adding value through downstream processing (Dairy News, 2011). However, milk processing only requires processing of the raw milk received from farmers (i.e. testing, pasteurisation, homogenisation and packaging). In contrast to Victoria, the NSW dairy industry has a low manufacturing capacity mainly performed by Bega Cheese and a few smaller processors.

In most Australian states, the intake of farm gate (raw) milk by fresh milk processors largely follows the demands of domestic supply obligations and the market share of private-label and branded dairy products. Victoria is an exception, where the Murray Goulburn Co-operative (MGC) intake is nearly the equivalent volume of milk for the export of manufactured dairy products, and milk for the domestic fresh milk market.

However, NSW does not prepare as substantive a quantity of dairy products for export as Victoria. NSW currently processes approximately 66 per cent of its own supply of farm gate milk for the creation of fresh milk for retail sale and internal domestic consumption. Based on the NSW farm gate milk production total of 1,086 million litres for the financial year 2011/12, 723 million litres of NSW farm gate milk was processed into fresh milk in 2011/12 (Dairy Australia, 2013).

A concentrated market

The processing component of the fresh milk supply chain in NSW is highly concentrated. A group of four large-scale dairy processors supply the majority of fresh milk to the NSW market. These firms are Lion Pty Ltd, Parmalat, Norco and Fonterra, which were described earlier in Chapter 1. The number of dairy processors will expand to five by July 2014 with the entry of Murray Goulburn which will take over the contract currently held by Lion to supply to Coles.

As discussed in Chapter 1 the milk and cream processing sector is dominated by Lion, Parmalat, Fonterra and Murray Goulburn who together control around 72.6 per cent of the market (Lin, 2013a). Within NSW Norco has a substantial presence, and delivers both branded milk and private-label milk for the supermarkets. However, its market reach is concentrated primarily in the northern NSW and southern Queensland border region. As co-operatives both Norco and Murray Goulburn are focused on the long term economic welfare of their members. However, the other processors are foreign owned global

companies. Currently Lion and Parmalat dominate the processing sector, together processing around 85 per cent of fresh milk sourced from NSW dairy farms.

FIGURE 2.2: THE LOCATION OF MAJOR MILK PROCESSORS IN NSW

There are a number of other smaller processors in the marketplace pursuing regional branding which have shown significant growth in recent years including. These firms include Richmond Dairies, The A2 Corporation, Hastings Co-operative and the Berry Rural Co-operative Society.

Richmond Dairies is located in Casino and sources milk from Queensland and NSW dairy farmers and through arrangements with other processors. The business is owned by the Longley Farm group based in Yorkshire, UK. It produces fresh milk and powdered milk as well as frozen cream, skim milk and milk concentrates using "Fast Freeze Technology".

The A2 Corporation (A2C) is located in western Sydney with operations in New Zealand, China and the United Kingdom. It owns the intellectual property rights to A2 brand milk, a natural, additive free product that sources from cows that supply A2 beta-casein protein rich milk. This is particularly suitable for people who are lactose intolerant.

Hastings Co-operative Ltd is based in Port Macquarie and is a diversified business engaged in retailing including farm supplies, fuel, liquor, supermarkets and department store operations. In 2011/12 it sold its Hastings Valley Dairy factory to Sungrow of India. Sungrow have stated that they plan

to produce milk powder for export. It is thought that around 12 dairy farms were suppliers to the co-operative.

Berry Rural Co-operative Society Ltd, which trades as South Coast Dairy, has 16 dairy farms supplying fresh milk and around 40 members. It produces a range of full cream, lite and skim milk products. It has announced plans to build a $1.5 million production facility to process fresh and flavoured milk and cheese for the local region (Food&Drink, 2013).

There also are several planned investments in new smaller scale processing facilities.

Processors relationships with Retailers

The concentration and extreme pressure on processors is evident in the competitive tendering process for the large-scale supermarket contracts.

As discussed above, the NSW fresh milk sector is concentrated around a small number of large manufacturers and retailers who dominate the supply chain. The concentration and extreme pressure on processors is evident in the competitive tendering process for the large-scale supermarket contracts. Fresh milk processors compete with each other to secure forward-looking contracts to provide fresh milk for major retailer private-label stock. By providing major retailers with private-label stock and maintaining throughput in the plants, they ensure a place within the major retailers' supermarkets for their own branded, fresh milk products. Processors continually compete to secure the value and identity of their own branded fresh milk in the retail market through advertising, marketing and branding.

Historically, major fresh milk dairy processors in NSW have been closely associated with specific regions of the state. For example, Norco continues to be associated with supplying fresh milk and other dairy products to the northern areas of the state from Coffs Harbour to north of the Queensland border. As the NSW market has become increasingly dominated by global players, and with continued pressures from major supermarket retailers such as Coles, Woolworth, and ALDI, geography has played less of a role in determining from where a processor's fresh milk will be supplied.

Improvements in the NSW road network, improvements to the distribution platforms of the major retailers, and the expansion and construction of new processing facilities have contributed to a greater flexibility of fresh milk distribution options for processors. This increase in distribution capabilities lends itself to future concerns about whether or not fresh milk in NSW will continue to originate from within the state. All four major processors (Lion, Parmalat, Norco and Fonterra) with branded, fresh milk market share in NSW presently have processing facilities in the state, with the newest entrant, Murray Goulburn Co-operative, constructing a facility in Erskine Park which is anticipated to become fully operational by July 2014. **It is noted that NSW has minimal dairy manufacturing capacity due to the focus of NSW milk processors on the fresh drinking milk market.**

"There's no money in private-label milk…we have to do it to get our brands on the shelves…"

Source: OCSB (2013)

Private-label fresh milk for major supermarket retailers is typically processed on the same production lines as branded fresh milk product, with an unknown degree of differentiation from the branded fresh milk product. The known production capacity of major, fresh milk processing factories in NSW ranges from 50 million litres to in excess of 150 million litres per year. The actual production levels for each factory, subdivided by branded or private-label output, are generally regarded to be commercially sensitive information and are not available publicly.

Although the contracts between processors and major supermarket retailers are commercial in-confidence, it has long been surmised by industry observers that the processors are required to provide private-label fresh milk to major supermarket retailers to secure positioning for their products on store shelves.

Anecdotal observations support the conclusion that branded milk follows private-label milk into Coles and Woolworths locations, with the exception of innovative or premium, branded fresh milk product with high consumer demand, such as Fonterra's *A2* line.

Recent media reports provide some insight into the importance of these contracts to processors. For example, Lion was unable to renegotiate its contract with Coles for supply of private-label fresh milk nationwide. Norco and Murray Goulburn won 5 and 10-year supply contracts to supply Coles with private-label fresh milk, and for Murray Goulburn, giving them the potential ability to displace the position of the NSW supply of Dairy Farmers branded milk on store shelves with their own branded fresh milk offering, *Devondale*.

For the processors without a premium branded fresh milk product with unique consumer appeal, the effects of failing to lock in a private-label fresh milk contract with a major retailer can be catastrophic and result in very limited opportunities for retailing the product. This will ultimately impact on business growth and economic viability. The concentrated retail channel and the dominance of private-label leave limited opportunities for the development of new or innovative products.

Future Outlook for NSW Dairy Processing

The NSW dairy supply chain appears to be shrinking…with the ongoing pressure to reduce margins.

The NSW dairy supply chain appears to be shrinking and consolidation in the processing sector is likely to continue with the ongoing pressure to reduce margins. Smaller processors with a low export focus, or those who do not have a supermarket contract to supply large volumes of private-label milk face challenges with the lower market value of branded fresh drinking milk products and the duopoly's control of the retail sales channel. The concentration of the retail market and the major supermarkets' increasing market share of fresh drinking milk and the volume of milk controlled favours the growth of large-scale processors with the capacity to meet demand of retail supply contracts. The consolidation of the processing sector of the supply chain reflects processors' needs to spread and contain costs, and optimise output, particularly when returns on capital are low, and lower than the cost of capital.

Large-scale processors may have lucrative future opportunities on the horizon if current experimentation with the international export of fresh milk to overseas markets such as China is successful. For example, Norco has conducted two trials to export fresh drinking milk to China where there is the potential for supplying large volumes to the growing middle class (Honan, 2013). The trial milk exports have been held up by Chinese quarantine rules which require milk to be held and tested for two weeks upon arrival in the country. When consideration of the potential market it is likely that supply would be sourced from Victoria as the supply is cheaper.

There is anecdotal evidence that at certain times of the year there are plenty of dairy farmers in Victoria wanting to supply. The demand is robust however the difficulties of getting the milk into China are major hurdles for exporters. Any effort to increase exports will assist the NSW dairy production sector in the

medium term by providing an alternative market for supply that is not retailer controlled. New Zealand has an advantage in this potential dairy market (for manufactured dairy products) due to a zero tariff under a free trade agreement.

There are some concerns that the availability of a foreign market with robust demand for product that bears a $6.00 per litre fresh milk base price could result in future supply shortages for the NSW marketplace. This is based on assumptions that the fresh milk supply was sourced from NSW and that the fresh drinking milk export market provided greater returns than local fresh drinking milk market.

The volatility of the global milk market will be a challenging factor together with variables such as input costs and the weather. The current sentiment is that now is a crucial time for investment in anticipation of the global growth in demand for fresh milk and dairy products. Mergers and acquisitions are currently underway, including bid for Warrnambool Cheese and Butter (WCB). With a limited manufacturing base in NSW, Lion faces an uncertain future following the loss of the contract with Coles for private-label drinking milk. Lion and Fonterra have increased their shareholding in WCB, while Bega Cheese and Murray Goulburn have engaged in a tripartite bidding war with Canadian owned Saputo to acquire WCB. Bega Cheese and Murray Goulburn each own significant shares in WCB of 18 per cent and 17.7 per cent respectively. Canada’s Saputo envisages that the acquisition of WCB will enable growth in the scale and capacity required to compete in the global market by creating a platform for growth into the Asia Pacific Region.

Foreign owned milk processors dominate the dairy industry in NSW and Australia. The debate about the future ownership of WCB and foreign ownership has heightened sensitivities, especially among dairy farmers in Victoria who are opposed to the potential of Saputo to purchase farm land. Murray Goulburn has put forward the benefits to the dairy industry of ownership by an Australian farmer-owned co-operative with the capacity to compete in global markets to maximise returns for farmer owners. Murray Goulburn’s ownership has the potential to grow the Australian dairy industry for the benefit of regional communities by supporting on-farm and industry investment (Macdonald, 2013).

CHAPTER 3: MARKET POWER IN THE SUPPLY CHAIN

> *"Effective measures to prevent unfair business-to-business (B2B) commercial practices and the resulting detriments to both small-scale producers and consumers are urgently needed. Remedies should be based on the fundamental principle of fair dealing and should be enforceable and binding. All suppliers in national, regional and global supply chains should have effective recourse to protection."* (Nicholson and Young, 2012)

"Supermarkets acquire an effectively impregnable role as gate-keepers between suppliers and consumers"
Nicholson & Young (2012)

Australia has the second most concentrated national grocery market in the world (New Zealand ranks first, with a ratio of 2:100%). As discussed in Chapter 1 the supermarket and grocery sector is dominated by Woolworths and Coles who together control around 74 per cent of the market (Witham, 2013b).

According to the Productivity Commission (PC) market concentration alone does not provide much guidance to the competitiveness of a market. The most important factors are barriers to entry and market contestability. However, much of the discussion over competitiveness relates to the retail sector as a whole and does relate specifically to market power in supplier relationships.

The buying power of the major retailers is demonstrated by the aggressive tendering by milk processors for private-label milk contracts for supermarkets. **The private-label percentage of the market is now so high that tendering for private-label business is a major component of the dairy industry**. This poses a significant threat to independent producers who must compete with these private-labels.

What drives the development of private-label products is the retailers' desire to lower shelf-prices and ensure a consistent supply. Concentration at the processor level is an advantage to the major retailers who comprise an oligopsony. For the two largest processors the supermarkets represent over half of their production under contract and their branded product.

A report compiled by Consumers International (CI), commissioned by the EU Competition Commission examined the relationship between supermarkets and suppliers (Nicholson and Young, 2012). The report used Australia's highly concentrated retail sector to demonstrate the anti-competitive abuses of concentrated buyer power. It cited evidence from CHOICE Australia to demonstrate how Coles and Woolworths increased their market share to the detriment of branded products, thereby manipulating consumer demand.

The bargaining power of supermarkets is also reinforced by fragmentation on the supply side. Increases in the major supermarkets' buying and selling power are mutually reinforcing. For example, as there is an increase in market share supermarkets are able to buy larger volumes and command better prices. They can then extract better terms and prices from suppliers, and they are also able to pass much of the risks of overproduction, natural losses and variations in cyclical demand back to their suppliers. They are able to obtain more favourable buying terms than would be possible in a fully competitive market.

Through an increased share of the grocery and dairy markets, together with increased vertical integration of other components of the supply chain, the major supermarkets are able to exert greater control over the fresh drinking milk supply chain in NSW. They can also exert greater influence over suppliers, deciding what food is grown, when and where, how it is packaged, stored and transported and whether it is sold through the supermarket channel. Because of their market share in retail sector they control what is available to purchase and therefore act as gatekeepers rather than passive transmitters of consumer wants. This gatekeeping role can work to the detriment of suppliers *and* consumers (Nicholson and Young, 2012).

The integrated purchasing and distribution power of Coles, Woolworths and ALDI is such that they can support the development and production of private-label offerings across numerous categories of products.

FIGURE 3.1: AUSTRALIAN SUPPLIERS, SUPERMARKETS AND CONSUMERS

Source:
Nicholson & Young (2012

As illustrated in Figure 3.1 the concentration of market power in the hands of two or three major retailers creates a "choke point" that squeezes the milk suppliers from the processors back to the farmer. This has significant impacts on the profitability of the other supply chain actors, particularly those who lack bargaining power. It is a common problem in agricultural supply chains. According to a study of global supply chains, buyer-driven chains typically have high levels of retailer concentration (Gereffi and Lee, 2012). Large retailers dictate conditions of supply that typically determine price, quality, quantity and timing of delivery on terms that suit the buyer rather than the supplier.

The most noticeable impacts of this supply chain power on the NSW dairy industry are in farm gate price setting, flat-line production, two-tier pricing and the pressure to supply fresh milk for private-label products.

Farm Gate Milk Pricing

Any analysis of NSW farm gate milk pricing is complicated by the limited transparency surrounding individual, farm gate supply contracts/agreements.

The farm gate price is the price paid to dairy farmers for raw milk that is predominantly processed by processors and manufacturers. Although farm gate milk is thought of as essentially a generic product, farm gate milk produced for the drinking milk market is slightly higher in quality than farm gate milk produced for the rest of the dairy manufacturing sector and the price is often based on the percentage of fat content and milk solids.

The average farm gate price for milk in 2012 was 47.4 cents per litre. In 2000, prior to the deregulation of the dairy industry, the (regulated) farm gate price for milk directed to drinking products was 47 cents per litre across Australia. Adjusting for inflation, this would equate to 66 cents per litre in 2012.[1] In contrast, milk directed to the manufacturing market averaged 21 cents per litre in 2000 and was determined by the international milk market (the equivalent value adjusted for inflation is 30 cents in 2012).

Table 3.1: NSW Average farm gate milk prices

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Cents/litre	35.7	48.6	52.4	48.7	48.3	47.4
$/kg milk solids	5.02	6.73	7.29	6.72	6.74	6.60

Source: Diary Australia (2012)

Farm gate milk prices are represented as a weighted average of the two prices and measured in cents per litre. This obscures the differences in prices paid for milk directed to the fresh milk market and milk directed to manufacturing which are important differences for a region's market focus. The average farm gate milk price also does not illustrate the different prices paid by different processors, or seasonal premiums, haulage fees and deductions for surplus milk.

Average farm gate milk prices do not accurately depict the return per litre any specific NSW dairy farmer might receive for their milk. The farm gate milk price is dependent on a number of other factors, including: farm gate milk characteristics, calving cycles, farm gate milk tier, and supply competition within a region. Farm gate milk supply contracts are complex, and payment terms vary depending on location and compliance. Any analysis of NSW farm gate milk pricing is complicated by the limited transparency surrounding individual, farm gate supply contracts/agreements.

[1] The change in cost is 41.3 per cent over 12 years at an average annual inflation rate of 2.9 per cent. Reserve Bank of Australia 'Inflation Calculator' available at: http://www.rba.gov.au/calculator/annualDecimal.html

An example of useful disclosure is the price announcement by Dairy Farmers Co-operative (2012) in September 2012 which indicated that farmers located more than 200 kilometres from one of the processor's factories must pay a penalty, per litre. However, these types of clauses, which unilaterally vary the conditions of supply agreements and returns at the farm gate, have led to increased fiscal stress on dairy farms located in more remote areas.

Processors use a basic methodology for calculating farm gate milk prices and release anticipated quotas and price amendment announcements. This formula is a sum of the quantity of butterfat (in kg x $ per kg for fat), the quantity of protein (in kg x $ per kg for protein) and volume measured in litres multiplied by the cents per litre volume charges (Gibb, 2012).

The volume requirements are closely related to the fresh drinking milk contracts (usually two year contracts) that processors have with the supermarket retailers at the time and the mix of private-label and branded product contracted for (McKenzie, 2013).

Transparency of Pricing

The lack of transparency in pricing is a key factor in the diminished bargaining power of farmers and processors when competing for supply contracts.

The lack of transparency in pricing is a key factor in the diminished bargaining power of farmers and processors when competing for supply contracts. Data is not available to analyse the relative profit margins and percentage share of the consumer dollar spent on drinking milk in NSW retained by retailers, processors and farmers. The data is not available because it is protected by commercial confidentiality clauses in supply contracts between processors and retailers.

Retailers say they do not determine farm gate prices. If farm gate prices rise due to greater input costs, then processors are paid more for their milk under the "rise and fall clauses" in the retailer/processor contracts. Dairy farmers say that these adjustments are not being passed on and that farm gate prices are too low, and they want transparency and fairness of pricing.

Rises in input costs are borne by farmers and not recouped in the farm gate price. While retailers do not directly determine the prices paid at the farm gate to farmers for farm gate milk, there is a strong indication that they are having an indirect impact on the farm gate prices by reducing processors margins for the production of private-label milk.

Is it speculated that margins for branded milk are also diminishing as sales decline due to the market share increases of supermarket discounted private-label milk. As private-label market share increases, retailers adjust supply volume quotas. Increased supply of volumes of private-label with a corresponding decrease in the supply of brands, mean that processors are losing revenue from both sales of brand milk together with future sales Brands are also losing access to retail shelf space and the potential for sales.

As value is taken out of the supply chain by the retailers, pressure is being passed along the supply chain. Dairy farmers report that the amount paid as top tier farm gate price goes down when the processor has a drop in sales of branded milk. Processors have also reduced the price of branded milk to compete with the lower prices of discounted private-label (Hintz, 2011).

A key reform of the Dairy Industry in the United Kingdom is pricing transparency at all levels of the supply chain, including margin data and clearer contracts. DairyCo (UK) produces an annual publication containing key

statistics and a pricing information guide providing farmers information that is used to improve bargaining power. The key statistics include: the annual average price (per litre) paid by each processor and values of milk used for a range of dairy products; average farm gate prices; also margins and prices paid for liquid milk (gross margins and selling prices) (DairyCo, 2011).

Seasonal versus Flat Line Production

Flat line production is more costly and less economically efficient, and requires that calving is staggered over the year and supplementary feed is used.

Historically, farm gate milk production has been a seasonal endeavour, with calving timed to coincide with the peak fodder production times. Production in Victoria remains largely seasonal, with the excess supply produced during peak production periods utilised for manufacturing. In NSW, most dairy farms, particularly those in northern regions of the state, have moved to flat line milk production, with calving staggered over the year and supplementary feeding in use. Due to the increased cost associated with flat line milk production, a higher farm gate price is required to sustain this practice. The farmers assume all the risk by planning production 12 months ahead. Contracts between retailers and processors may terminate in that period with corresponding changes to supply arrangements.

In states such as Victoria or Tasmania the emphasis for most dairy farmers is the supply of milk for manufacturing purposes. This tends to be seasonal in nature and excess supply during peak production periods can be used for the manufacture of butter, cheese, milk powder and other value added products. However, in NSW where the focus is more on the production of fresh drinking milk to meet domestic consumption farmers have been forced to adopt a flat line milk production process in which milk is produced steadily for market requirements.

A cow usually produces milk for as long as she is milked. It takes 50 to 70 hours for a cow to turn grass into milk and most cows give about 25 litres per day (which varies according to the diet and age of cow). Cows need motivation (usually nutritious food) to want to be milked, and need to be content and relaxed.

Flat line milk production requires that farmers ensure a constant year round supply of feed, purchasing more to account for seasonal variations and climatic events (for example, drought) which impacts on their ability grow their own. Pasture is the largest part of the diet and consists of rye, legumes or clover. Dairy cows are fed a complex diet consisting of pasture, hay, silage, grains and forage crops. The quantity and quality of the diet has a direct effect on how much milk is produced. Pasture is the primary food and cows are rotated around different paddocks after milking (twice a day) to allow crops in other paddocks to grow. Each cow eats an average of 40 kg of grain a day in addition to the other foods (Dairy Australia, 2011).

Flat line production requires fertility and calving to be planned 12 months ahead so that cows are inseminated at various stages throughout the year to ensure lactation and replenishment of the herd, and to ensure that the period before birth when cows stop being milked (2 months prior to calving) is staggered across the herd (Dairy Australia, 2011).

Farmers in Victoria or Tasmania have an advantage over their counterparts in NSW because the seasonal production model provides economic benefits such that farm gate costs per litre of milk produced are considerably lower (e.g. 40-70%) than those in NSW (Morgan et al, 2000). Flat line production is more

costly and less economically efficient, and requires that calving is staggered over the year and supplementary feed is used.

IMPACT OF RETAIL "MILK WARS" ON FARM GATE PRICING

NSW dairy farmers view the retail price wars as impacting negatively on the farm gate price for milk.

There has been a growing perception that the discounting strategies of the two major supermarkets in the sales of fresh drinking milk has been reducing farmers' profit margins on their farm gate milk. Supermarkets claim that they have been absorbing the losses and are not passing them on to processors or farmers (*Weekly Times Now*, 2013; Cooper, 2013). However, NSW dairy farmers claim that the downward pressure being placed on the supply chain by the supermarkets' pricing strategies is negatively impacting on the price paid for farm gate milk.

In NSW the view held by dairy farmers is that the downward pressure placed on the supply chain by retailer milk discounting is being passed along the supply chain to the processors who are unable to give a farm gate price that offers a reasonable and sustainable rate. The lack of bargaining power in negotiating the price paid for farm gate milk, and 'take it or leave it' contracts for supply, means that some farmers have had to sell at 'break even' prices, or below the cost of production. This has had significant implications for the sustainability of some farming businesses and may have broader implications for the sustainability of the industry.

Unfortunately the data is not available to conduct an analysis of costs, prices and profits along the supply chain. However, the available data suggests that there has been negative productivity growth in the dairy industry in NSW and that both processors and dairy farmers' revenues are in decline. For example, there has been a marginal increase in milk consumption per capita, yet milk production in NSW has fallen.

There are growing concerns that NSW will not continue to produce enough fresh drinking milk to meet the level of demand, but will rely on cross border subsidies between processors from states (mainly Victoria). The volumes of milk transported from interstate are not reported and vary from year to year. The importance of meeting demand is reflected in the costs of transport for the interstate transfer of milk to fill deficits in NSW and Queensland and the loss of revenue for the NSW fresh drinking milk production industry.

The discounting of fresh milk does not appear to be a means to driving excessive profits or continued excess consumer visits for major retailers. There are on the record statements about the sustainability of $1/litre fresh milk in the Australian market from Woolworths itself (SERC, 2011). A growing proportion of consumers appear willing to pay for premium, branded fresh milk products, as will be examined in the Consumer section of this report.

The Coles' "Down Down Staying Down" campaign appears to be a long-term strategy. If one of the major retailers sees optimal benefit in claiming higher profits and greater margins it would force the other players in the market to make a decision of whether to continue to retain lower profitability in the fresh milk category, or increase pricing to seek a similar level of profitability.

Competing on private-label fresh milk pricing is not a rational or sustainable practice for major retailers to optimally maximise profit on drinking milk sales, however as a 'loss leader' it has been an effective mechanism to increase foot

traffic into the major supermarkets to increase market share and drive retail grocery profit growth.

Unless an alternative market such as export becomes available for fresh drinking milk, supermarkets will continue to be the winners in the "Milk Pricing Wars".

CONCENTRATION OF MARKET SHARE AND PRICE TRANSMISSION

Reduced margins lead processors to seek to reduce input costs…In some cases farmers have reported selling milk below the cost of production.

Major retailers ultimately control the price of private-label products, such as fresh drinking milk, through the margins they choose to seek. As a result of their buying power, they are able to determine the price of milk without consideration of market forces or the input costs of producers and processors, and exert downward pressure on their margins.

A consequence of this has been intensified competition at the processor level where processors are under greater pressure to reduce margins to compete for the large-scale supermarket supply contracts. Reduced margins lead processors to seek to reduce input costs in their pricing systems for farm gate milk supplied by dairy farmers. In some cases farmers have reported selling milk below the cost of production.

Supermarkets also control the retail channel for the sale of other brands of drinking milk. Supply contracts for private-label milk ensure the product placement of processors' own brands on supermarket shelves.

Processors deliver packaged, fresh milk to major retail distribution centres (their integrated wholesalers) to be redistributed to stores, along with their own branded products. Processors negotiate a private-label, fresh milk output price and carriage of their branded fresh milk product with major retailers.

The major retailers enter into long-term contracts with processors for the provision of private-label fresh milk. Although the terms and conditions of contracts between processors and retailers are not publicly available, there is some anecdotal evidence that the presence of a processor's branded fresh milk product is dependent on entering into a private-label milk supply contract with a major retailer.

Processors have supply agreements with dairy farmer suppliers to ensure that they have access to an adequate supply of farm gate milk to process into fresh milk for the duration of their private-label contract. The costs of transportation are passed along to farm producers, also enforcing a lower farm gate price than if the market naturally achieved equilibrium.

The processors engaged in long-term contracts with major retailers, are locked into providing a fixed volume of private-label fresh drinking milk product for major retailers. Processors rely on sales of their branded products for revenue which declines as sales decline.

Unable to seek greater profits from the retailers, the processors rationally seek to optimise costs through other available avenues by reducing and rationalising their input costs. Both processors and retailers have moved into the previously independent, fresh milk wholesaler market space in an effort to reduce input costs and gain even more profitability whilst maintaining their relationships with each other.

Farm gate milk pricing systems such as the two-tier pricing system which is used by processors to signal milk volumes required and that excess milk is unwanted due to the inability of processors to direct it to alternative uses such as manufacturing. However, this pricing system has impacted on the profitability of many dairy farmers.

TRANSFER OF PROFITS FROM SUPPLIERS TO RETAILERS

Gross profit margins are declining around 600 basis points over the past five years.

A report by Macquarie Equities in November 2012 suggests the biggest contributor to profit growth for Coles and Woolworths over the past five years is the transfer of profits from suppliers to the retailers:

> *"A popular positioning is that Australian suppliers over-earn relative to overseas peers or parent companies. There seems little evidence of this with local suppliers' Trade Spend – gross profit margins are declining around 600 basis points over the last five years."*

Trade spend includes money spent by suppliers on promotions that add value to products such as: special pricing, display fixtures, rebates, demonstrations, gifts and bonuses. "Trade spend" now averages more than suppliers' operating costs and is estimated to be $4 billion a year. The report concludes that it is a key reason why retailer margins have improved despite retail price deflation and aggressive discounting (Ferguson, 2013).

The Office of the NSW Small Business Commissioner has received anecdotal evidence from dairy and grocery suppliers over abuse of market power by the major retailers. Complaints of buyer power abuses have included the following:

- Abuses of suppliers' intellectual property in product development and manufacture;
- Charging suppliers for products stolen from supermarkets;
- Listing fees;
- De-listing and threats of de-listing;
- Demanding extra or unforeseen discounts or payments;
- Demanding retrospective payments, extra discounts, after-sale rebates;
- Return of unsold goods to supplier after not restocking the shelves;
- Retrospective unilateral changes to agreed terms by the supermarkets;
- Below cost selling;
- Influencing product availability to, or raising the costs of, other retailers; and
- Promotion of retailers' own brands.

These claims are difficult to verify and fear of retribution; verbal contracts and a lack of evidence are cited as the most common reasons for not escalating the complaints. Retailers claim that they refund price discounts through lower profit margins. Retailers have continued to show strong sales growth since the discounting began. The data is not available to analyse margins across the supply chain to measure the percentage of the consumer dollar taken by each

component. Coles and Woolworths have secured a significant share of the milk market with their $1 milk pricing strategy at the expense of branded milk suppliers, particularly Lion-owned Dairy Farmers and Pura. Coles and Woolworths have been actively replacing branded products with private-label.

Impact of the "Two-Tier" pricing system

The system lacks transparency and effectively forces farmers to produce a flat milk supply incurring extra costs.

As outlined in Chapter 1, some dairy processors have responded to the tighter margins imposed by retailer discounting, by dividing farm gate milk pricing into two basic tiers. This is now a common pattern within NSW dairy supply contracts.

Tier 1 farm gate milk pricing refers to the contracted or allotted volume of a dairy farm within the greater volumes produced within a region. Tier 1 farm gate milk receives a significantly higher return than tier 2 milk, even though the quality of the product is essentially the same.

Tier 2 pricing refers to farm gate milk supplied in excess of contracted Tier 1 volumes. Tier 2 is only collected if the regional totals have collectively exceeded their allotted Tier 1 volumes.

An issue for many farmers was that they expanded to increase production. Pricing signals were subsequently amended and the volumes of milk being produced were not required. The two-tier pricing system cuts across the seasonality of supply and seasonal surpluses are paid a much lower unsustainable rate.

Farmers in the south are insulated from the problems of oversupply as their milk is readily channelled into the large manufacturing factories of Victoria, the exporting state. Farmers in the north do not have this option because Norco has limited capacity to take excess milk. Data shows that despite a fall in prices milk production grew in southern NSW while in the same period, production in central and northeast NSW has fallen significantly in the past two years (Tanter, 2013).

Anecdotally, farmers in the Hunter region reported that during a period of gross oversupply, the Tier 2 price dropped to 15 cents per litre. However, much lower "Tier 2" prices have been reported within NSW, with the average being close to 25 per cent of the Tier 1 price of 11 cents per litre (Clover Hill Dairy Diaries, 2013).

This system of two-tier pricing for farm gate milk lacks transparency and effectively forces farmers to produce a flat milk supply incurring extra costs. There is no difference in quality of Tier 1 and Tier 2 milk produced for the fresh drinking milk market. Due to the limited manufacturing capacity in NSW, milk processors do not want excess milk.

The benefit to the processors of the two-tier pricing system is the protection the system provides in limiting the risk of exposure to potential changes in the product returns mix. It is also used to indicate the size and value of the available market volumes required. Surplus milk, or milk produced in excess of contracted milk volumes is paid at a lower price and may be used for manufacturing if there is a demand and the availability of a manufacturing plant located nearby.

The regions in southern NSW are more likely to benefit from the manufacturing plants in Victoria. By contrast, the northern regions do not

have this option. Tier 2 farm gate milk prices have been reported by some farmers to be as low as 11 cents per litre. Tier 2 milk is traded between processors, creating a secondary milk market (Clover Hill Dairy Diaries, 2013).

If there is no demand, farmers will be faced with the disposal of surplus milk if they are unable to sell it. However, the disposal of milk is a costly and complicated process requiring the construction of purpose built trenches on farm to the reduce damage caused by its decomposition. The incorrect disposal of milk has the potential to constitute a major environmental hazard. It cannot be disposed of in a manner that would allow it to run or leach into waterways because it will contaminate waterways and kill aquatic life (DAFWA. 2012).

A typical NSW dairy farmer is left in a difficult position if their farm fails to produce high efficiency levels of farm gate milk and achieve optimal Tier 1 pricing from processors. Farm producers bear increased operational risk, increased operational costs and lower profitability in the long term unless they achieve optimal levels of farm gate milk output, provide a differentiated farm gate milk variety (organic, A2, or speciality health focused) or unless they become a successful producer-processor.

IMPACT OF SUPPLY CHAIN POWER ON WHOLESALERS

The most significant trend affecting the industry has been major retailers bypassing wholesalers and purchasing directly from milk processors.

As outlined in Chapter 1 the diary produce wholesaling sector is characterised by a relatively large number of mid-sized firms that operate within local geographic areas. No single firm is large enough to gain market dominance. According to the Amalgamated Milk Vendors Association (AMVA), there are between 320-360 wholesalers of milk within NSW, with 300 of the vendors maintaining membership in the organisation. Anecdotally, at the time of milk market deregulation in 1998, the organisation had a membership of more than 1,500 members (AMVA, 2013).

The majority of milk vendors are properly classified as small businesses, with far less than 20 employees. Many have less than 3 or 4 trucks, and remain as owner-operator businesses, as this is the most efficient business model for the nature of the business (AMVA, 2013). Fresh milk wholesalers in NSW largely follow the natural pattern of density and distribution associated with the state’s population. Natural distribution is also tempered by the need to deliver product within a realistic distribution platform footprint, and constrained by exclusivity arrangements to provide distribution for the branded, fresh milk product of specific processors.

The large supermarket retailers, such as Coles, Woolworths, and ALDI, have integrated the wholesale component of the supply chain into their own distribution platforms. They conduct all trade in fresh milk directly with the processors, and redistribute it from their central distribution centres onwards to stores.

Fresh milk wholesalers will often secure exclusive rights of territory to distribute the specific branded products of a particular fresh milk processor. However, if the brand complement of a processor fails to provide all of the products that a wholesaler needs across different categories, such as cheese, the wholesaler is usually free to establish such exclusivities within separate categories for convenience.

Exclusivity does not usually require licensing or payment to the processor for territorial rights of distribution. Processors tend to seek a wholesaler with the

appropriate capabilities and platform to successfully represent branded fresh milk product to a territory. Occasionally, this takes the form of general food distributors carrying fresh milk and other dairy products as well, such as the Fonterra distribution in the Sydney and Wollongong territories.

Table 3.2 provides an overview of the processor wholesale franchises operating in NSW in 2013. It can be seen that the largest of these networks is that owned by Lion. The other wholesaler networks are much smaller and tend to be focused on specific regions. Only Parmalat operates a state-wide network, although it is considerably smaller than that managed by Lion. Murray Goulburn is not yet active in NSW but this is likely to change in the future now that it has secured milk supply contracts with the large retailers in the state.

TABLE 3.2: PROCESSOR WHOLESALE FRANCHISES IN NSW 2013

Processor	Number of NSW Wholesalers	% of Wholesaler Franchises	Distribution Area
LION	260	72.2%	State-wide
Norco QUALITY SINCE 1895	60	16.5%	Northern NSW
Fonterra Dairy for life	20	5.5%	Riverina, Sydney, Wollongong
parmalat	20	5.5%	State-wide
MURRAY GOULBURN	0	0%	None

Parmalat also maintains its own fleet of 11 trucks for its "own wholesale" distribution
Source: AMVA, 2013

There are some differences between processors in regard to centralised billing versus wholesaler-direct billing to client businesses. While Parmalat centralises billing for its distributor in the Sydney area, Lion (Dairy Farmers) adopts a mixed approach to how its wholesalers secure payment. Norco relies upon its wholesalers to collect their own payments.

CHAPTER 4: THE FUTURE OF THE NSW DAIRY SECTOR

> *To remain viable into the future, NSW dairy farmers will need to manage their businesses to account for a range of external risks, as outlined above. Dairy production systems in NSW will need to be adaptable and resilient in the face of the likely volatilities in milk price, labour supply, and climate and input costs. The NSW industry's recent period of consolidation of processing organisations and capacity, although not a new phenomenon, has resulted in a drop in the number of processors and a change from cooperative to company structures. Milk pricing has changed as a result of competition between the major supermarket chains and a reduction in the ability to deal with milk supply over and above the liquid milk market.* (McKenzie, 2013, p.4)

The demand for milk is not greatly affected by increases in price although there is elasticity within different categories of milk.

Demand for fresh drinking milk in NSW is driven by the importance of 'local' freshly produced. Per capita consumption has been rising as a function of population growth and has been reflected by an increase in total sales volume by 10 per cent since 2005/06. Increased consumption could also be partly attributed to the rise in the coffee drinking culture rather than the introduction of discounted milk.

The demand for milk is not greatly affected by increases in price although there is elasticity within different categories of milk. Consumers have demonstrated a willingness to pay a premium price for innovative drinking milk products. A2 Milk is an example of this: despite its premium price, sales remain strong and have accelerated since the milk price wars began. A2 currently retails at approximately $5 for a 2-litre bottle, which represents a premium of 150 per cent to private-label at $1 per litre.

A POTENTIAL MILK SUPPLY DEFICIT IN NSW

Prior to deregulation, the market for manufacturing milk was already characterised by open access with dairy products freely traded within and between states. However, for fresh drinking "market milk" State Dairy Authorities set all price margins from farm gate through to the retailer. The distribution of market milk was also regulated, with vendors only allowed to sell in specified zones. The relationships between producers, processors and retailers were characterised by controlled supply, regulated pricing and income sharing. The effective rates of assistance were 19 per cent for manufacturing milk and more than 200 per cent for drinking milk.

In NSW, milk was produced on the basis of a quota system and marketed through the NSW Dairy Corporation. As the NSW Department of Agriculture's Dairy Industry Situation Statement pointed out:

> *"Control of all milk produced in New South Wales is vested in the NSW Dairy Corporation (NSWDC) and the corporation sets the farm gate price for liquid milk. Milk not required by the corporation is used by processors for manufacturing."*

The NSW government review group added that, in 1997, "97 per cent of NSW dairy farmers hold quota. . . Only 3 per cent of registered farms hold no quota and supply only manufacturing milk." (Wilkinson, 1999)

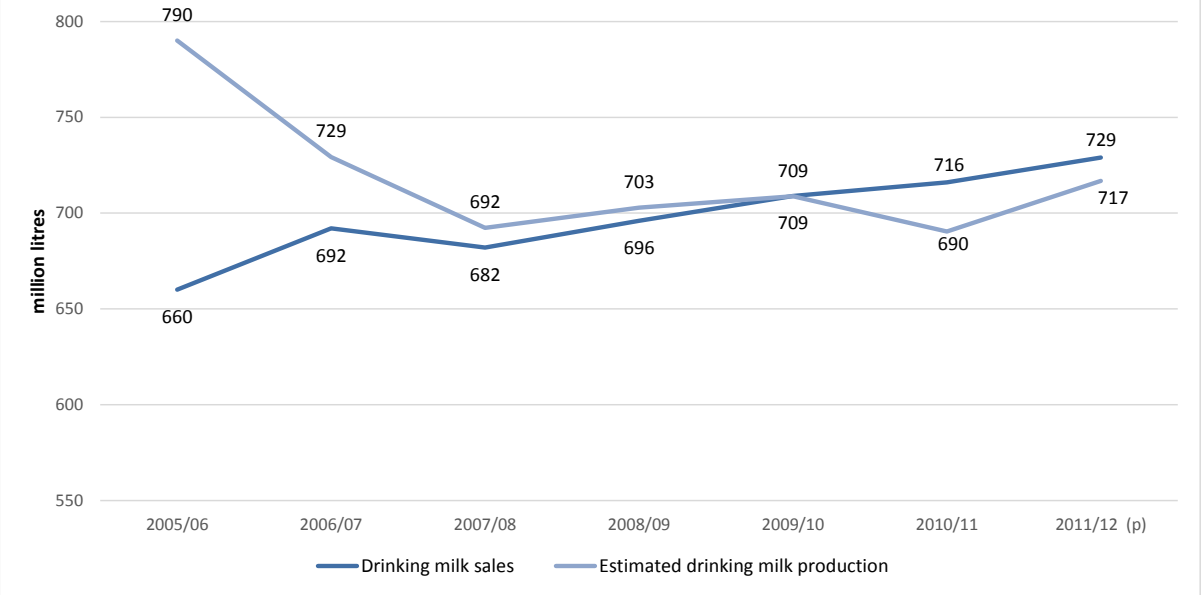
The purpose of deregulation was to remove trade barriers between the states and establish a common open market in milk. There were six separate dairy industries rather than one national industry, and each industry was monopolized by State Governments (Edwards, 2003).

Pre-deregulation cross subsidisation was proving detrimental to Victoria when other states manufactured dairy products with seasonal excess milk. They were effectively subsidising the production of greater volumes of milk with the premium price paid above manufacturing prices for drinking milk, and then dumping products onto domestic or export commercial markets to compete with products produced in Victoria with milk supplied at lower manufacture prices (Wilkinson, 1999). Since deregulation, the major supermarkets have effectively filled the regulatory void and exerted control over the price of drinking milk at the retail component of the supply chain.

In the decade since the deregulation of the dairy industry, national farm gate milk production has decreased by approximately 10 per cent (from 10,546 million litres in 2000/01 to 9,480 million litres in 2011/12). The decrease in farm gate milk production is more pronounced in NSW at approximately 18 per cent (from 1,326 million litres in 2000/01 to 1,086 million litres in 2011/12) (Dairy Australia, 2012).

NSW currently produces enough milk to meet the level of consumption. However, there is growing concern that if the current attrition of dairy farmers continues there will be milk shortages in the future (*see Figure 4.1*). The deficit will be compounded by the fact that milk from northern NSW is used to supply the Queensland market where supply does not meet demand. In 2011/12 the deficit in the Queensland market was estimated to be 9 per cent or around 43 million litres.

FIGURE 4.1: NSW DEMAND AND SUPPLY OF FRESH DRINKING MILK



Source: Arche Consulting

Victoria currently produces 66 per cent of the total Australia farm gate milk and may not be operating at full capacity. To meet the current volumes of farm gate milk produced in NSW and Queensland, Victoria would only need to increase production by 27 per cent. Therefore if moderate latent capacity exists in Victoria, it is feasible that Victoria could supply Victoria, NSW and Queensland with farm gate milk. However seasonal variations and adverse climate events (such as drought and floods) would significantly increase the likelihood of fresh drinking milk having to be supplemented by UHT milk. It is noted that Northern NSW and southeast Queensland supply the Queensland fresh milk drinking market. There is evidence that UHT milk has already been used as a supplementary supply in northwest Queensland.

Therefore if consumers want to drink fresh local milk then supporting the local NSW dairy industry is the only way to ensure the sustainability of fresh local drinking milk in the future.

Dairy Farmers are Price Takers

There is little to no money to be made supplying home brand milk to supermarkets... the fresh milk business is a charity.

Unlike other countries, since the deregulation of the Australian dairy industry in 2000, there is no legislative control over the price that processing companies pay farmers for milk. (Unlike the United States, the European Union and other parts of the world a minimum price paid for milk is regulated to ensure a reliable supply and income for farmers). Different prices are offered to dairy farmers for private-label and branded milk supplies. As processors agree to new private-label contracts with retailers, the market in one area may diminish significantly. For example, National Foods (Lion) new contract with Woolworths in 2010 had major implications for farmers in Qld and ACT as it reduced volume for which Lion could offer the higher farm gate price. Many farmers reported having issues with surplus milk supplied above contract prices which attracted a 'break even' price and was sold to another processor for conversion to milk powder.

Adjustments in volumes of branded (higher price) and private-label (lower price) milk supplied to processors for supermarket contracts with processors correlate with adjustments to money paid for milk at the farm gate. While prices may not be adjusted and overall volumes supplied may be the same, if the percentage of the volume for the higher priced branded milk reduces then less money is paid at the farm gate. While variations to production input costs (hay, grain, carbon tax, water) have had an impact in the cost of milk production the diminished bargaining power of farmers and limited choice of processor have meant that some farmers report having to sell milk at 'break even' prices or less than the cost of production. Farmers advocate a pricing model that focuses on net income less costs.

Individual dairy farmers are price takers with weak bargaining power and are therefore unable to negotiate contract terms and conditions of supply to milk processors. Farmers have used co-operatives to increase bargaining power to obtain a better price and address the power imbalance that exists with the concentration at the processing level of the supply chain. Apart from the Norco Co-operative, the NSW Dairy industry is dominated by independent small owner-operated dairy farms scattered across a large area broadly categorised into characteristically different regions. The concentration of the processing component of the supply chain means that processors compete fiercely for the supermarket private-label contracts which largely determine their ability to secure retail shelf space.

If they don't sell their own brands, they can't afford to pay farmers a fair price.

The degree of a dairy farmer's bargaining power varies depending on the regional area of farmer. In areas where there is more demand for farm gate milk from processors, dairy farmers may be better positioned to have more bargaining power than regions where demand is limited. The bargaining power of dairy farmers is generally at its lowest in springs when there are excess volumes are produced.

However, even in areas where there are a few processors, the ability of a dairy farmer to move to another processor is limited due to the inflexibility of supply contracts. In areas where there is little competition between processors it is much more difficult to set up a supply arrangement with another processor. Unless dairy farmers are able to change supply relationships after the announcement of a more favourable price by another processor, they have little to no influence on the price received.

The ease of access to different markets will vary throughout the state. Generally the limiting factor, beyond exclusive dealing provisions in supply contracts, is the cost of freighting milk into other regional and state markets and the returns dairy farmers can gain for products in these markets.

Generally the small number of major processors and the geographic spread of dairy farms means that more than one processor will service some regional areas giving farmers a number of options for farmers to supply. In other regional areas, especially in southeast Queensland and northern NSW, there are fewer processors located further away.

Farmers' options in terms of processors are further limited by the lack of flexibility of contracts and limitations in demand for farm gate milk due to reduced processing capacity and haulage expenses that are calculated on a scale that increases with distance from the processor. For example, farmers in the Hunter Valley may have two processors collecting from the area. However, if a farmer wishes to change supplier he/she requires the other supplier to take up the demand. This may not be the case given the processing capacity of the other processor.

Beyond the large processors and co-operatives, smaller processing operations offer limited competition as they generally do not require large volumes of farm gate milk. Larger processors will look to secure the larger volumes off farm. Therefore farmers will generally have a preference to secure a contract with a large processor for the majority of their milk, to provide them with security, and then supply a smaller portion to the small, often local processor where demand for raw milk is determined by the smaller processor's retail options.

Dairy Farmers are being "Captured" by Processors

"Soft capture" of dairy farmers by milk processors is a continuing goal.

However, by maintaining relatively rigid supply requirements with dairy farmers for the maintenance of production levels and continuity of supply, processors effectively "capture" the farmer and restrict additional market opportunities.

Key factors that can inhibit a dairy farmer's ability to exercise market power include geographic limitations that prevent switching processors, plus supply contracts that often exceed a seasonal timeframe. Processors also have greater

leverage in deciding to terminate or continue a supply arrangement. Market moves made by processors do not generally translate into realised gains for dairy farmers. For example, the average contract with a retailer is for 2 years.

The perishability of milk means that surplus raw milk must be sold on the spot market by processors to other processors. As a result of its perishability it cannot be stored to take advantage of price signals at a later date.

Processors also transfer dairy farmers' supplies between each other when the market supply shifts. In addition, dairy farmers get very little notice of retailer decisions to contract with different processors and changes to existing supply arrangements. Retailer/processor relationships have been characterised by short-term contracts (average of 2 years duration). Supply contracts may also overlap or producers may be outside a new processors preferred supply region.

As contracts change, dairy farmers may receive little notice of adjustments to anticipated volume quotas. Volume adjustments in production typically require time and planning (cows are not machines). Short-term contracts give no long-term security to farmers to invest capital in improving production efficiency. This is exacerbated by low farm gate returns. Finally, there is no long-term security. Dairy farmers assume the risk by planning 12 months ahead whereas the supply arrangements of processors may change with little notice.

Outlying farms are becoming "Stranded Assets"

Geographically isolated farmers will receive lower prices after incurring deductions for haulage distances, to maintain a cost-efficient supply in volume.

NSW dairy farmers located outside areas with concentrated dairy production are in a difficult position when it comes to effectively negotiating the continuation of their supply contracts or receiving an economic price from milk processors. Demographic analysis has shown that dairy farmers in NSW are an aging and geographically dispersed population.

Fresh milk processors are not able to negotiate with major retailers from a position of substantive leverage in regard to increasing their price but compete to secure supply tenders by offering pricing based on the lowest margins. The rational economic response to such a position is to examine any means to reduce production costs. One way this has been accomplished is through reducing inefficiency in farm gate milk supply intake.

As regional analysis shows, local government areas of NSW that were formerly known for a large number of dairy farms now find themselves with few to no farms. This has reduced regional yields of farm gate milk and leaves the remaining farms scattered throughout the supply regions.

Farmers need to maximise the production output from their herds in order to counterbalance the costs of transportation so as to ensure that they secure forward supply contracts with larger processors. Geographically isolated farmers will receive lower prices after incurring deductions for haulage distances, to maintain a cost-efficient supply in volume.

As farms become "stranded", it can be surmised that their ability to get farm gate milk to market and achieve the revenues they need to survive can become impossible. Evidence supporting this hypothesis can be seen in Regional Milk Price Announcements issued for farmers in NSW who supply the Dairy Farmers Co-operative. In the financial year 2011/12, the Lion subsidiary paid a premium distance (logistic) adjustment of one cent per litre (or 1.0 cents per litre) on Tier 1 (allocated volume) farm gate milk for producers located within 100 kilometres of a processor, 0.5 cents per litre for farmers located 101-200

kilometres of a processing facility, and farmers located in excess of 200 kilometres were paid 0.0 cents per litre.

From the financial year 2012/13, farmers located within 100 kilometres of a processor were paid 0.5 cents per litre, farmers located 101-200 kilometres of a processing facility were paid 0.0 cents per litre, and farmers located in excess of 200 kilometres away were penalised -1.0 cents per litre. Fixed gate charges, although a relatively low cost component, are also based on the distance of transportation (Dairy Farmers Co-operative, 2012).

For dairy farms with a significantly larger volume of milk production, there are more options to distribute the loss of 1 cent per litre across the range of operational costs for a dairy business. Unfortunately, smaller dairy farmers are subject to the economy of the small scale of their operation, and do not have as much latitude to negotiate with farm suppliers to reduce their costs.

Processors are generally interested in recruiting higher volume farmers that produce high quality farm gate milk, particularly if they are located close to their processing facilities (Promar, 2013). If regional dairy farm numbers across NSW continue to decline and more farms become stranded, processors will continue to rationalise and concentrate their efforts into smaller geographic clusters, resulting in the fragmentation of the dairy industry in NSW into a greater number of smaller regional, and local government areas.

The Impact on Communities

The district is now likely to see a "grey tsunami" as young people leave and move to the city.

The contraction of the fresh drinking milk supply chain and the rationalisation of the dairy industry in NSW have the potential to reshape the social landscape in many of the NSW rural communities over the next twenty years. Although dairy farmers and farmers in other agricultural industries are a small and declining segment of the population of NSW, they manage a disproportionate share of the state's land. Approximately 75 per cent of land in NSW is used for agricultural land use (ABS, 2013) with an estimated 1.6 million hectares used by dairy businesses as grazing land (DAFF, 2012).

The social and economic impacts of dairy farmer attrition and farm closures in regional areas of NSW will depend on the importance of the dairy industry and its output to the local economy in individual local government areas. For example, in the Far South Coast Region the greater regional economy is directly linked to the productivity of dairy farms and the processing of nearly all farm gate milk output into cheese.

The effect of "stranded assets" is likely to impact on the sustainability of other dairy farms in an area or region. Water availability (especially in regions such as Illawarra, the Central West, Manning and the Mid North coast) will also impact on farmers' ability to turn the land to different agricultural uses. Downstream impacts are likely to be felt by the businesses that rely wholly or predominantly on the presence of the dairy farms for revenue such as: vets, feed producers, and fertiliser producers. In the longer term the effects may be more significant.

The effects on a town when an industry leaves can be illustrated by the example of Benneydale in New Zealand, a once thriving community that faced significant social and economic hardship in the years following the closure of a coal mine. Initially there was the loss of traffic, falling house prices, business closures, unemployment and a declining population as people moved to the

city in search of employment. The district is now likely to see a "grey tsunami" as young people leave and move to the city. The shortage of ratepayers to pay the costs of local infrastructure has meant that are insufficient services:

> *"A market driven by user pays system could lead to further rural decline because of economies of scale in the provision of many rural services were higher in isolated areas. This encourages net outward migration if the rural residents are expected to fully cover the cost of the provision of many rural services themselves…"*

People would be reluctant to move to remote rural locations unless the infrastructure was good and health and education services were accessible. The older people will eventually leave rural areas if they are unable to access adequate health services or there are no opportunities to occupy themselves during retirement. Benneydale and the two neighbouring towns in the region have also been in the headlines for the disproportionate numbers of beneficiaries, youth suicides and school closures (Ihaka, 2012).

Over the past thirty years there has been significant rationalisation of the milk production sector in NSW. In 1980 there were approximately 3,600 dairy farms compared to 518 in 2013 (ABARES. 2012). Over the same period the number of dairy cows has decreased from 300,000 to 200,000 head. This dramatic decline in the number of dairy farms is shown in Table 4.1.

TABLE 4.1: THE DECLINING DAIRY SECTOR OF NSW

	1980	2012
Dairy farms	3,600	768
Dairy cows	300,000 head	200,000 head
Farm gate milk production (per annum)	900 million litres	1,086 million litres
Average milk production (per annum)	2,870 litres	5,550 litres

Sources: Dairy Australia, 2012; ABARES, 2012

Despite fewer dairy cows and fewer farms, milk production has increased nationally from approximately 900 million litres to 1,086 million litres annually, and the average milk production per head has increased dramatically from 2,870 litres to 5,550 per cow per year. However, farm gate milk production in NSW has declined by approximately 18 per cent (from 1,326 million litres in 200/01 to 1,086 million litres in 2011/12) despite annual increases in consumption and sales of fresh drinking milk (Dairy Australia, 2012).

On a regional level the NSW dairy industry is concentrated in specific areas and as shown in Table 4.2 the loss of farms has been disproportionately felt by some regions. The decline of farms below a certain number makes it likely that the remaining businesses will become "stranded assets" and this can lead to their eventual demise. As highlighted in the case of the town of Bennydale in New Zealand, the loss of these farms can lead to significant negative impacts on the local communities who rely upon them for work and the social capital that their farmer owners bring to the community.

TABLE 4.2: DAIRY FARM RATIONALISATION BY REGION
(APPROXIMATE REDUCTION IN FARM NUMBERS SINCE 2009, AS AT JAN 2013)

Region	Reduction in farms numbers	No. of licensed farms remaining	Characteristics
Metropolitan	41 %	14	The majority of dairy farms are located in Wollondilly, Camden, Campbelltown, Hawkesbury and Liverpool LGAs. Leppington Pastoral Company is located in Bringelly and is one of the largest technologically advanced dairy facilities with 2,000 cows that are milked 3 times a day.
Central West	37 %	24	Very few farms remain in Narromine, Dubbo, Blayney, Cabonne and Wellington LGAs.
Manning/Mid North Coast	36 %	190	Dairy farm rationalisation has been more pronounced in the Kempsey area.
North West Slopes	33 %	15	There is only one dairy farm remaining in the Walcha LGA.
Hunter	30 %	62	
Illawarra/South Coast	29 %	95	There are only 4 licensed dairy farms remaining in Shellharbour LGA.
Far South Coast	25 %	93	
Riverina	25 %	90	Only a few dairy farms remain in Conargo and Corowa Shire areas.
North Coast	18 %	148	Only one licensed dairy farm remains in the Ballina LGA.
Upper Murray/South West Slopes	18 %	31	Production is concentrated around Wagga Wagga and Tumbarumba LGAs. There are a limited number of farms in Harden, Albury, Greater Hume and Tumut LGAs.

Source: Food Authority 2013

THE ROLE OF CO-OPERATIVES

By comparison with the situation in NSW, in Victoria the Murray Goulburn Co-operative is actively engaged in a "Next Generation" program targeting younger farmers. Under this program Murray Goulburn is providing younger generation dairy farmers to remain on the land and to expand their operations. The package includes significant financial support for young farmers, farming families and new entrants through the provision of investment rebates of up to $100,000 over three years. The program also assists farmers to source dairy workers via the use of a 457 visa specialist, and leasing partnerships that allow investors to partner with the farmer to acquire land for farm expansion. Short and medium term financing is also provided to help farmers upgrade plant and equipment and ease cash flow management issues (Murray Goulburn, 2013).

"While our primary focus is a higher farm gate milk price…we recognise that there are times in a farm's life that other forms of business support are needed."

Robert Poole, Murray Goulburn

Murray Goulburn's investment in the Victorian dairy sector is a reflection of their status as a co-operative. Such businesses are owned by their farmer members and if they possess sufficient size they can serve to mitigate the pressures that small business owners such as farmers will experience from supply chains dominated by large retailers or processors.

A study of 7 large agricultural co-operatives in the European Union found that they could complete with the market concentration generated by three major wholesale/retail companies that controlled between 40-80 per cent of EU markets. This was achieved through their large scale and scope, the ownership of retail brands, plus a high investment in R&D and innovation (Menard and Klein, 2004).

Dairy co-operatives were once dominant within the sector but today they control only about 33 per cent of the nation's milk production. Of this Murray Goulburn accounts for some 30 per cent (Dairy Australia, 2012). Within NSW only Norco has sufficient scale to make much of an impact on the market, but as outlined in Chapter 1 it is only able to claim around 4.5 per cent of the national milk and cream processing market and its influence is primarily restricted to the north of NSW and southern Queensland.

FIGURE 4.2: ESTIMATED MARKET SHARE OF NSW MILK VOLUMES 2013

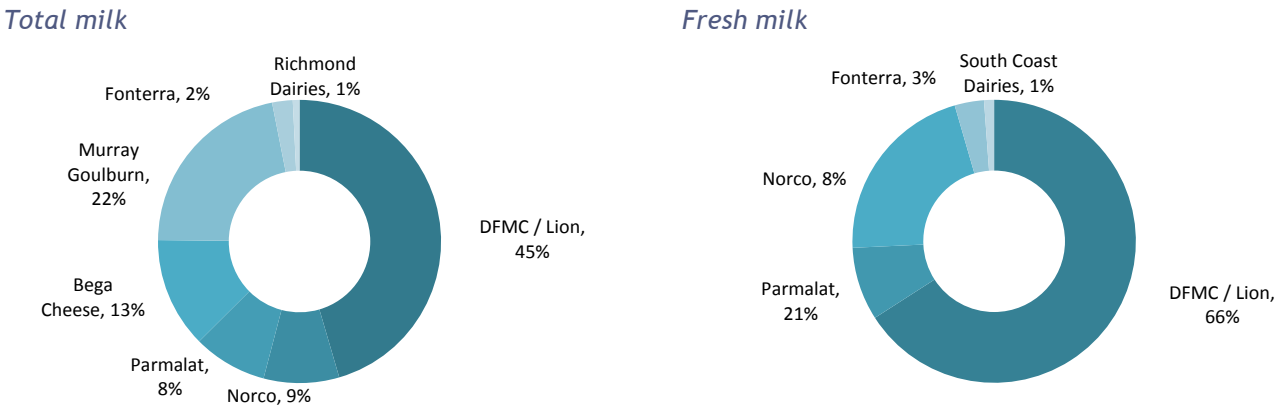


Figure 4.2 is an estimate of the share of NSW milk production purchased by each processing company. This estimate is based on a region by region assessment of milk supply and links to processors. As shown Lion is the dominant player with only Murray Goulburn sufficiently large enough to compete on equal terms. The decision by Coles to shift their fresh milk contract from Lion to Murray Goulburn and Norco in mid-2014 will potentially be of benefit to NSW dairy farmers if these two co-operatives can expand their membership across the state.

CHAPTER 5: STRENGTHENING THE NSW DAIRY SUPPLY CHAIN

> *For obvious reasons, milk price is a constant concern of dairy farmers. In Australia's deregulated industry, there is no legislative control over the price that milk-processing companies pay farmers for their milk. Farm-gate prices vary among manufacturers, with individual company returns being affected by factors such as product and market mix, marketing strategies and processing efficiencies. Payments from processors to individual farmers can also vary significantly, as firms operate a range of incentive or penalty payments related to milk quality, productivity and out-of-season supplies.* (McKenzie, 2013 p.9)

Members from all components of the supply chain agree that it is desirable to sustain the NSW dairy industry because of the importance of fresh local milk to the population.

As each level of the NSW dairy supply chain becomes more concentrated and more closely tied to other levels, competition has ceased to work in the consumers' and farmers' interests. This can be seen by the concentration at the retail and processor levels where the major retailers dominate the supply chain with large-scale supply contracts with processors for private-label milk. These supply contracts are used to exert vertical control over the processors and their brands of fresh drinking milk. Through the retailers' domination of the retail sales channel they effectively reduce the competition to their own products while simultaneously increasing market share.

As dominant buyers and sellers of fresh drinking milk, the two major retailers have effectively achieved control over the fresh drinking milk market in NSW. The price discounting strategies of the retailers have exerted downward pressure on other components of the supply chain to reduce profits margins. Fierce competition at the processor level has compelled processors to lower wholesale milk prices to retain retail supply contracts for large volumes of milk, contracts which secure positioning of their brands in the retail space. Processors use tiered pricing strategies to cuts costs and pass on risks to the dairy farmers. Decreased profit margins and the uncertainty of continually changing supply arrangements have forced many dairy farmers out of the industry. The changing landscape has raised questions about the sustainability of the dairy industry in NSW.

Members from all components of the supply agree that it is desirable to sustain the NSW dairy industry because of the importance of fresh local milk to the population. However, the key issues for each component of the NSW dairy supply chain include several components

THE CHALLENGES FACING DAIRY PRODUCERS

The higher cost of the flat line production to meet the demand of the fresh drinking milk market is a major factor in squeezing the financial viability of the average NSW dairy farm. Contracts that incentivise flat milk supply and proximity to processor risk the long-term viability of many dairy farmers.

Typical NSW dairy farm operating costs encompass a range of inputs the most important of which is fodder. In 2011/12 the average fodder cost to NSW dairy farms was $168,000 (ABARES, 2012). This represented a 1 per cent increase on the previous financial year. ABARES estimates that fodder costs are to further increase in 2012/13 and total cash costs to increase, mainly as a result of

increased expenditure on fodder purchases due to drier seasonal conditions and higher fodder prices.

The lack of bargaining power and price taking situation facing many farmers is compounded by the limited availability of alternative markets for seasonal excesses of milk produced.

Labour is the second most significant cost associated with dairy farming. Hired labour represented $45,000 on average for NSW dairy farms in 2011/12. Dairy farms are obviously in production 7 days a week, 365 days a year and are therefore subject to weekend and public holiday penalty rates. Labour costs may also be more significant in regions like Hunter, where there is competition for labour with mining companies.

The next most significant costs are repairs, maintenance and interest charges. Water is also a major cost to dairy farms and water allocations vary for different regions in NSW. They can be impacted by seasonal variations and climate change (drought/floods). The average water consumption of a dairy cow is 100 litres a day (equivalent to a full bath tub). Water is also used for cleaning cows' teats, milking equipment, milking sheds and milk haulage tankers. Dairy farms must also incur costs associated with animal welfare and health, land management (crop and pasture chemicals, fertiliser), plus a range of rates, rents and milk levies. Electricity is also a major cost along with fuels, oil and grease and refrigerants.

The lack of bargaining power and price taking situation facing many farmers is compounded by the limited availability of alternate markets for seasonal excesses of milk produced. Tiered farm gate milk pricing, with Tier 2 pricing not covering the cost of production only exacerbates the already financially stressed farm business. Most dairy farms are also heavily geared.

ABARES (2013) reports that nearly all NSW dairy farms have capital value greater than $1 million, the majority of farms with capital greater than $3 million. ABARES also report that NSW dairy farms have significant levels of debt. Average rate of return is 3.1 per cent.

Twenty six per cent of NSW dairy farms had debt between $200,000 and $500,000 and 38 per cent had debt greater than $500,000. Average interest paid by NSW dairy farms in 2011/12 was $43,000. Repairs and maintenance are higher in NSW relative to Victoria ($44,000 compared to $41,000) (DAFF, 2012; ABARES, 2013).

This debt structure is high risk and makes it difficult for many dairy farmers to attract outside investment for future growth or investment in production efficiencies. Finally, the constantly shifting supply arrangements as the contracts between the processors and retailers change impacts negatively on cash flow and planning.

These conditions will not change in the current deregulated market without the ability for dairy farmers to enhance their bargaining power via co-operative membership, or through intervention by government to remove the two-tier pricing system and ensure that farm gate prices are more fairly structured.

The Challenges Facing Milk Processors

Within the milk processor segment of the supply chain the key challenges are the lack of transparency in relation to pricing and the dominant power wielded by the major retail supermarket firms. As discussed earlier in this report the pressure on processors to supply private-label milk in order to secure retail space for branded product is a form of market power distortion that is placing significant pressure on processors' profit margins.

The long term impact of this private-label supply requirement is to reduce the incentives for investment in the processors’ own brands and a significant erosion of consumer choice of product over time.

Retailers have generally changed contracts with processors every two years, which has meant corresponding changes in pricing, anticipated volume quotas and freight costs.

Given the collective proportion of the milk market share of Coles and Woolworths’ private-label milk, and the concentration at the processing level of the industry, changes in processing arrangements have significant impacts further down the supply chain to farmers. Retailers have generally changed contracts with processors every two years which has meant corresponding changes in pricing, anticipated volume quotas and freight costs. The processor who wins the supermarket tender must be able to attract significant volumes to process milk and meet the contract. In the case of Murray Goulburn Co-operative’s contract to supply Coles from mid-2014, it may be more efficient to transport milk from Victoria.

As a result of losing the contract, Lion has found it necessary to terminate, or not renew, supply agreements with farmers in regional supply areas. Lion’s loss of contracts to supply Coles’ private-label drinking milk from July 2014 across Victoria, NSW and Queensland will significantly impact its existing supply chain. Together with Parmalat, Lion controls around 85 per cent of the fresh milk sourced from NSW dairy farms. Lion’s loss of this contract has seen it offer new supply contracts to only the most ‘efficient’ section of their existing supplier base in terms of costs of milk collection for 12 months.

NSW farmers currently produce 700 litres (million) for Lion. It is understood that Lion will continue to produce its branded (Dairy Farmers and Pura) items for Coles, but there will be a significant reduction in the volume of milk processed with loss of the private-label deal. The Coles’ deal also bypasses the wholesalers. Parmalat, who will no longer be selling milk for the same profit but will instead receive a fee for processing the small volume of Woolworths’ trial of farmer direct supply with its ‘Farmers’ Own’ milk.

To meet the demand of the contract with Coles, Murray Goulburn has announced that it will build a $60 million milk processing facility at Erskine Park in Sydney’s west. Murray Goulburn needs about 100 million litres of milk from the state in order to supply the new processing plant. Murray Goulburn is offering to pay NSW dairy farmers the equivalent of the Victorian farm gate milk price, in addition to freight costs. This offer has been presented to town hall-style meetings with dairy farmers across NSW in mid-2013. Murray Goulburn may have to offer a premium on the prevailing farm gate price to lure farmers from rival processors Parmalat Australia and Lion. The Murray Goulburn contract may mean that many processors are locked out of a significant portion of the market for a 10 year period.

Murray Goulburn and Norco are currently arranging the transfer of volume from Lion across the state (especially the South Coast, Hunter, Manning and Central West regions) and for Norco in the Far North Coast. Murray Goulburn is concerned that they will be left with a higher cost base for the milk product sold. They intend to reflect higher the cost (in terms of volume and distance) in their contracts. Under the supply agreement, the price to Coles is based on a farm-gate price and the cost of processing plus a profit margin. The contract includes a rise and fall clause that means the price reflects the changing value of the milk on international markets.

Woolworths are progressing with a trial on the mid-North Coast of NSW to contract directly with farmers, effectively bypassing processors in the supply

chain. The trial of a premium drinking milk 'Farmers' Own' line will involve Parmalat Australia processing up to 15 million litres of the group's milk per year. While farmers may appear to have increased bargaining power with direct contracting in the short-term, it remains to be seen whether supply contracts will be unilaterally adjusted by retailers at a later date to the farmers' detriment.

A LACK OF TRANSPARENCY IN RETAIL SUPPLY CONTRACTS

Retailers say they do not ask processors to help fund retail price adjustments.

One of key problems affecting the dairy processors is the lack of transparency in the pricing structures used for negotiating retail supply contracts. The lack of transparency of pricing in the tender process has been described as a "Dutch auction". Processors have little bargaining power and the competition has put intense pressure them to reduce their margins. Retailer confidentiality requirements have prevented price transparency and processors are not able to communicate with each other to maintain a higher price.

The *Competition and Consumer Act* s 44ZZRD) prohibits agreements between competitors for the purpose of price fixing. Instead processors are forced to offer the lowest prices to win contracts. The lack of profitability of private-label milk contracts may in part explain the losses reported by Lion in annual financial reports.

Losses can also be explained by the decline in sales of branded milk as the brand share of the market cedes to private-label, and pricing strategies employed to lower prices to compete with private-label milk. Anecdotal evidence suggests that retailers exert control over processors with other products and may refuse supply contracts of other products and shelving space. Products may be delisted if the retailer's terms are not accepted.

PROCESSORS MAKE A LOSS WHILE RETAILERS MAKE PROFITS

Prior to milk discounting Lion reported increased sales as a result of its purchase of Dairy Farmers (leading brand) milk in 2009 (Lion, 2010). The impact of discounted private-label milk was clearly evident in the challenges reported maintaining acceptable operating margins in "a very competitive retail environment". Revenue for the 9 months to September (2010) declined 5.8 per cent to $2.32 billion (Lion, 2011).

In 2011 Lion recorded a consolidated local impairment charge of $1.2 billion, the majority of which sat in its Dairy and Drinks division as a consequence of the "challenging operating environment" further described as:

> *"...nine months of sustained deep discounting activity in white milk – which has seen a transfer of sales volumes from higher margin branded products into private-label and from the non-grocery channel to grocery."*

A further decline in revenue of 10.0 per cent to $2,535.6 million was reported for the 2012 financial year and was attributed to:

> *"...white milk private-label contract losses and reduced branded milk sales in the grocery channel as a result of the highly competitive market and continued deep discounting. Lion's total white milk volume across branded and private-label was down 14.5 per cent on the prior year".*

In June, Lion led a marketing strategy across its leading branded white milk products, Dairy Farmers and Pura, making them "permeate free". This may in

part explain the modest volume growth in branded white milk. However it is more likely a result of the increasing popularity of A2 milk. The rising anti-Coles sentiment may also be a less significant factor.

By contrast to Lion and other processors, Coles and Woolworths have reported strong sales growth since the introduction of discounted private-label milk. In the third quarter of 2013, Coles reported a 6.6 per cent increase in the sale of food and liquor to a total of $6.49 billion. Wesfarmers managing director, Richard Goyder said that it was due to investments in price cuts and fresh produce:

> *"Coles achieved its sixteenth consecutive quarter of growth in comparable sales and density."* (Stafford, 2013)

Woolworths similarly has reported an annual sales increase of 5.9 per cent for 2012-2013, with the largest growth reported in the food and liquor section.

A food and retail analyst suggested that the Coles deal with Murray Goulburn will earn the supermarket chain $20 million (before interest and tax) more a year. Coles is requiring a price reduction of 10 cents per litre for white milk supplied under private-label, while promising to pay the farmers a higher price (Dring, 2013. Murray Goulburn may also be committed to prices that pose a risk to the company's profitability in the long term, although as a co-operative its financial structure is different to that of an investor owned firm like Lion.

If our brands don't sell we can't give a good price to farmers at the farm gate.

Reduced bargaining power

The benefit of private-label contracts with retailers is product placement on the supermarket shelves. However, this means that processors are contracted to supply private-label brands that are in direct competition to their own brands and as a result, competition issues have arisen where the supermarkets have engaged in practices to strengthen private-label market share.

Anecdotally, processors have described the challenges of maintaining product placement on the supermarket shelves which include: reduced shelf space, or sub optimal positioning; threats of delisting; and failure of the supermarket to restocking empty shelves of branded milk products. One supplier admitted to going into one of the major supermarkets and having to remove brand milk products from refrigerated storage and placing them onto the empty shelves so that the products were not returned "unsold" with the threat of delisting for non-performance. Fear of retribution is one of the factors that have diminished the bargaining power of processors who supply branded products to the major retailers.

Reduced innovation and Product Differentiation

Vertical competition between processors and retailers has largely inhibited innovation. Given the low returns for drinking milk products, processors do not have upstream incentives to innovate and differentiate. However, there appears to be room in the drinking milk market for drinking milk products that are innovative or differentiated. A2 (permeate free) premium milk is an example of brand positioning based and a differentiated drinking milk product. The A2 protein is marketed for consumers to assist with "digestive wellbeing". Consumers are prepared to pay the higher price for this product. Sales for A2 continue to rise and much of the sales growth has occurred in the last 5 years since the milk price war began.

There is also a growing array of specialty milks offering different benefits. These include “PysiCal” from Parmalat, “Smarter White Milk” and “Zymil” from Pauls. Lion also producers diet focused products such as “Shape” and “Light White” alongside its “Light Start” Pura brand. Yet the challenge for premium brands will be sufficient investment in marketing and promotion to drive consumer awareness and demand.

Processors have not had a lot of incentive to market their own brands while under contract with supermarkets because the supply of brand has been secured. When supermarket contracts are not renewed, they are then faced with a need to re-invigorate brands through marketing strategies. Smaller brands also face challenges supplying to the retail sector. The competition for shelf space in a concentrated retail market dominated by private-label limits the potential for growth. Other retail channels are limited and include convenience stores and independent grocers, and farmers markets.

Already heavily concentrated, the milk and cream processing segment is set for more consolidation and the potential for more foreign ownership as global dairy firms such as Saputo seek to secure a foothold in Australia in order to secure global milk supply and access to lucrative Asian markets. Such globally focused businesses will be primarily targeting high value export contracts in value added products such as cheese, butter, milk powders and other manufactures. Fresh drinking milk will be less attractive due to its low margin and small domestic market.

Meeting the Challenge of Retailer Dominance

All we are trying to do is what is right for the consumers.

The concentrated buying power of the major supermarket retailers and their desire to force milk prices down while promoting their private-label product is the primary challenge facing the NSW dairy industry. The destructive nature of the two dominant retailers’ aggressive market behaviour has created a key “choke point” within the supply chain. Unsatisfied with their control at the retail end, these major supermarket operators have begun a program of expanding their control over the supply chain from the dairy producer to the consumer.

Major retailers such as Coles and Woolworths have set the scene for what will be a medium to long-term strategy of forcing retail prices down and increasing the shelf space devoted to their own private-label products. The entry of Germany’s ALDI to the Australian supermarket and grocery sector will do little to alleviate this trend. Most of ALDI’s products are sold as private-label “house brands” and their primary strategy is heavy discounting. IGA and Costco as the other two major players will have little choice but to follow this lead. Given their size the primary retail battles will be with Coles and Woolworths at the top end of the sector, and ALDI, Costco and IGA at the second tier (Witham, 2013b).

This battle for retail markets is a global phenomenon and one that impacts negatively along supply chains, particularly those that are related to fresh produce. There is now a call for reform to the pricing system. The pressure is for both fair pricing for farmers and fairer treatment for cows and the wider environment. According to UK-based lobby group Compassion in World Farming reform is needed to the supply chain system that will improve the life of rural communities through “fair pricing for a fair product” Their agenda suggests that a more sustainable dairy industry should be built on the following initiatives (CIWF, 2012).

The first step is for **government to provide appropriate mediation and/or ombudsman services** to ensure that the interests of farmers and society are given full regard in setting the price structure for a fair price for a fair product. **Government and industry need to work together to provide statutory guarantees for farm gate milk prices that allow farmers a sustainable price**. This should include sufficient price level to provide farmers with a living wage, plus room for investment in their businesses and the delivery of good animal welfare outcomes.

There should also be appropriate **legally enforceable standards for animal welfare**, plus **mandatory labelling of products** to demonstrate that production was based on fair pricing and sustainable and humane practices. The industry can consider premium payments to producers who demonstrate high welfare standards and outcomes.

Government can also ensure that taxation and other fiscal measures take due consideration of the environmental spill over effects of dairy farming. This can include carbon emissions and both animal and human health outcomes. Any penalties should be offset by rewards for best practice. There also needs to be a strong campaign for raising consumer awareness of the challenges facing the dairy farm sector and the need for fair pricing and the humane and sustainable management of the industry.

MONITORING FARM GATE MILK PRICES IN THE UK

...the price that dairy farmers are currently receiving and perceiving is significantly less than market indicators would dictate...

One of the key tests of how effectively a dairy industry supply chain is working is the extent to which farm gate milk prices respond to changes in the commodity market prices for dairy products. In the UK this issue has led to a range of claims and counter claims by dairy producers and processors. According to the National Farmers’ Union (NFU) “the price that dairy farmers are currently receiving and perceiving is significantly less than market indicators would dictate, and that suggests that there are some systemic problems in the way that the UK dairy supply chain operates” (The Dairy Site, 2011).

The analysis put forth by the NFU indicated that between 2006 and 2011, farm gate prices for raw milk were significantly below prices that would be expected based on the price of processed milk. This suppression of farm gate milk prices was attributed to the “weak bargaining power” of dairy farmers and the “exploitative” nature of supply contracts.

In response the NFU claims Dairy UK provided their own analysis that indicated a more even statistical correlation between farm gate milk prices and the average market commodity price for milk. The position taken by Dairy UK was that the British dairy market was “not dysfunctional compared to its global counterparts” (The Diary Site, 2011).

As with Australia, the UK dairy supply chain is impacted by increasing downward pressure on retail milk prices as major supermarket chains wage battles for market share through heavy discounting on daily consumables. Yet the lack of profitability by dairy processors has also played a role. In the past ten years the retail price of liquid milk in the UK has grown by around 60 per cent, yet the farm gate price has risen by only 34 per cent and the wholesale price by only 31 per cent (The Dairy Site, 2011). In essence the value and the margins are being captured by the major retailers at the end of the supply chain.

Farm gate prices have recently become decoupled from both commodity market indicators and farmers' production costs, indicating that farmers are not consistently able to recoup sufficient value from the supply chain.

One initiative that has apparently provided relief for the UK dairy farmer has been the creation of "dedicated supply chains" for the supply of drinking market milk for major supermarket customers. These agreements offer the farmers better prices and more security and stability. Some major retailers are also managing the supply chain via the provision of investment and extension services to assist farmers in becoming more financially viable and sustainable.

According to The Dairy Site (2011) major UK retailer Tesco has established a "Sustainable Dairy Group" and both Marks and Spencers and Sainsburys also have similar initiatives. However, only about 10 per cent of dairy producers were joined to these supply chain models as they were focused primarily on producers of fresh market milk for drinking. Other dairy farmers were supplying for processing and manufacture of cheese, butter and other dairy products. In their case the farm gate prices were lower, creating a "haves and have nots" division within the UK dairy producer sector.

Analysis of the UK dairy industry suggests that it is experiencing similar challenges to that found in Australia. Retail prices are not necessarily having a direct impact on farm gate milk prices. There is no long-term benefit to the retailers to damage the dairy producing sector. The creation of dedicated supply chains reflects a desire by major retailers to strengthen their supply chains and guarantee reliable supplies of quality milk. However, as in Australia there are problems with a lack of transparency in pricing due to the way that contracts are managed, and pressures placed on dairy processors lead to lower prices for milk to be used for manufacturing other dairy product.

A Voluntary Grocery Code of Conduct

"This government is committed to ensuring that all businesses have access to fair and open markets.

One initiative within the UK that has been targeted at the distortions created by excessive market power within the food supply chain is the introduction of the Groceries Code Adjudicator Act 2013 (UK Parliament, 2013). This legislation establishes an independent adjudicator to oversee the relationship between large supermarket operators and their direct suppliers.

The Act requires that large supermarket businesses abide by the "Groceries Supply Code of Practice". This requires that they treat their suppliers fairly and lawfully. It regulates the relationship between the ten largest supermarkets in the UK that have annual turnovers of more than £1 billion and their direct suppliers. The Code was established in 2010 following complaints of market abuse by major supermarket chains. Key features of the Code are that retailers are bound to deal with suppliers fairly and lawfully at all times, and may not make significant changes to supply chain procedures during the period of a supply agreement without reasonable notice. This must be in written form and the supplier should be compensated for any net costs resulting from the changes (Competition Commission, 2010).

Australia is following a similar path to that of the UK (Strauss and Gay, 2013). Negotiations between the Australian and Grocery Council (AFGC) and Australia's two largest supermarket retailers, Coles and Woolworths, for a voluntary industry Code of Conduct to govern food and grocery supply agreements, have recently concluded with an agreement reached on the terms of the Code (Mitchell, 2013). A draft Voluntary Code of Conduct entitled, *"Food and Grocery Prescribed Industry Code of Conduct",* (the Code) has been submitted to the Government for consideration prior to its release for public comment (ADF, 2013).

The purpose of the Code is:

- to help to regulate standards of business conduct in the food and grocery supply chain and to build and sustain trust and co-operation throughout that chain;
- to ensure transparency and certainty in commercial transactions in the grocery supply chain and to minimise disputes arising from a lack of certainty in respect of the commercial terms agreed between the parties;
- to provide an effective, fair and equitable dispute resolution process for raising and investigating complaints and resolving disputes arising from the commercial dealings between the parties or otherwise under the Code; and
- to enable industry participants to monitor the operation and efficacy of the Code in an industry-wide roundtable.

One of the overarching principles of the Code is a requirement for retailers and suppliers to deal with each other in good faith at all times.

One of the overarching principles of the Code is a requirement for retailers and suppliers to deal with each other in good faith at all times. This will require that retailers must conduct their trading relationships with suppliers in good faith, without duress and in recognition of the suppliers' needs for certainty regarding the risks and costs of trading, particularly in relation to production, delivery and payment issues.

The Code also requires that suppliers must conduct their trading relationships with retailers in good faith, and in recognition of retailers' needs for certainty regarding the risks and costs of trading, particularly in relation to delivery issues. Both retailers and suppliers must include an acknowledgement of the obligation to deal with each other lawfully and in good faith in all Grocery Supply Agreements.

The requirement for retailers and suppliers to act in good faith is significant as currently only NSW, through the common law, has an established requirement for parties to commercial agreements to act in good faith.

A key aspect of the Code relates to Grocery Supply Agreements. The Code provides for the minimum requirements for all Grocery Supply Agreements including, for example, requirements for the delivery of groceries, circumstances in which a retailer may reject groceries, the period within which a retailer will pay a supplier for groceries and the circumstances in which an agreement may be terminated.

Although each Grocery Supply Agreement must specifically address the minimum requirements set out in the Code, the actual terms and conditions of the requirements are a matter of negotiation between the parties to the agreement. This means that different agreements will have different requirements. For example, an agreement between Retailer A and Supplier A may have a termination clause whereas an agreement between Retailer A and Supplier B may not.

The Code also outlines requirements for other aspects of Grocery Supply Agreements, including restrictions on the unilateral and/or retrospective variation of these agreements. It also has provisions relating to the de-listing of a supplier's product, and provisions relating to the payment for products,

including payments for shrinkage and wastage. Finally, it deals with issues of product quality and standards.

Another key aspect of the Code relates to greater transparency on shelf allocation for branded and private-label products as well as a recognition of the importance of intellectual property rights in connection with both retailer and supplier products. Retailers will be required to publish or otherwise provide any supplier with product range and shelf allocation policies and will be required to act in accordance with these policies.

In order to aid in meeting the objectives of the Code, a comprehensive dispute resolution framework will be implemented. The dispute resolution section of the Code outlines the procedures for making a complaint under the Code including where the onus lies in establishing grounds for a complaint. Provisions relating to mediation and arbitration are also included. In order to effectively manage any complaints or disputes arising, the Code states that a retailer must appoint a Code Compliance Manager. This manager is the central point of contact for suppliers when raising any issues/disputes under the Code.

It is proposed that the Code will be prescribed by the Federal Government as a Voluntary Industry Code under the *Competition and Consumer Act 2010*. This will mean that once prescribed, the Code will be subject to the relevant provisions of this Act. This will enable the Australian Competition and Consumer Commission (ACCC) to investigate alleged breaches of the Code and instigate any remedial action available under the Act. The ACCC may be able to issue a public warning notice to the effect that a particular retailer or supplier has breached the Code, including specific details about the breach. The ACCC may also be able to require a party to provide information and records that are required to be kept under the Code in order to aid any investigation. Where a breach of the Code also breaches the Act, the ACCC will also be able to commence enforcement proceedings.

The immediate impact the Code with have on small business will be minimal.

The immediate impact the Code will have on small business will be minimal because it is unlikely that many small businesses (especially dairy and grocery farming businesses) would supply food or groceries directly to Coles or Woolworths. The Code does not extend to the commercial relationships between suppliers. For example, while an agreement between a fruit and vegetable wholesaler and a retailer is covered by the Code, an agreement between an individual farmer and a wholesaler is not covered.

It remains to be seen whether a new Code will be more effective than its predecessor, the "Produce and Grocery Industry Code of Conduct" which was overseen by an Ombudsman (Langley, 2013). Furthermore, one of the most significant issues investigations of retailer anti-competitive practices has been the lack of evidence to substantiate allegations made by suppliers, and the fear of retribution which prohibits many complainants coming forward.

Farmer groups also remain sceptical as to whether the new Code with do much to offer fairer pricing at the farm gate. National Farmers' Federation (NFF) CEO Matt Linnegar said that his organisation has supported the Code for two reasons. First, it would ensure that all major retailers operated within a code of conduct. Second, it would help to ensure that cases of abuse of market power within the supply chain would attract real penalties. However, the Victorian Farmers Federation and Australian Dairy Farmers (ADF) were less positive.

There is very little that can be done to stop the current process from continuing unless there are significant reforms to the CCA.

MGA, 2013

ADF President Noel Campbell felt that while it restricted major retailers' ability to change supplier agreements, or restrict the flow of branded against private-label products, it "does little to ensure a fairer farm gate price" (Bettles, 2013).

Amending the Competition Law

The Master Grocers Australia (MGA) advocates amendments to sections 46 and 46(1AA) of the *Competition and Consumer Act 2010* (CCA) to add an 'effects test' to the purpose test because of the difficulties in attributing an anti-competitive purpose to conduct.

Other amendments sought to strengthen the CCA include:

- A clarification in section 46 in relation to anti-competitive price discrimination;
- A new prohibition on "predatory capacity" inserted into section 46;
- Placing the burden on a corporation (with market power as great as that of Coles and Woolworths) to justify that a new acquisition does not offend section 46;
- Extending the scope of consideration under section 50 to the cumulative effect of an acquisition;
- A pre-notification requirement for mergers under section 50;
- Extension of the divestiture powers under section 81 to contraventions of either the proposed prohibition on predatory capacity in section 46, or the pre-notification requirement under section 50; and
- Implementing a Mandatory Supermarket Industry Code (MGA, 2013).

According to the MGA the major supermarket chains will continue to concentrate their hold on the retail grocery sector and thereby lessen competition unless changes are made to the CCA. As the conclusion of their report states:

> *"The law is deficient at the present time in that it does not properly assist any business to challenge the anti-competitive growth of other larger and more powerful business operations. The ACCC simply does not have the tools necessary to successfully challenge the continuous growth of the supermarket duopoly."* (MGA, 2013 p.16)

They point to the fact that a number of authorities have expressed concern over the behaviour of the major supermarket retailers. However, they have also not been able to take action due to a lack of legislative reform.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

> *"What we need to do is change that where on behalf of farmers, negotiators go in and sit down with those milk companies and we try and negotiate a better deal out of the companies, rather than just accepting what they offer."* (David Basham, South Australian Dairy Farmers' Association)

It is clear from the issues raised in this report that in its current form the NSW dairy supply chain is unfair and risks long-term damage to the state's dairy farm sector if reforms are not undertaken. Summarising the nature of the problem we can highlight three issues that have been identified in the preceding chapters. These are discussed briefly before making some recommendations.

PROBLEM 1: "CHOKE POINTS" IN THE SUPPLY CHAIN

One of the most significant problems is the existence of "choke points" within the dairy supply chain...

As discussed in Chapter 1, one of the most significant problems is the existence of "choke points" within the dairy supply chain created by excessive market concentration by a few large retailers and processors. The market dominance of the two largest retail supermarket operators has been compounded by their desire to engage in price discounting and the pursuit of their own private-label products as the expense of branded goods.

The behaviour of the major retailers has impacted most heavily on the processors who have had their margins squeezed and retail brands challenged by the private-labels. There is evidence of retailers placing excessive demands on processors to supply private-label milk at low margin in order to secure contracts for branded milk. Of concern are the potential abuse of market power by the major supermarket chains and the lack of transparency in pricing, price signals and pricing models (discussed further below).

The introduction of the Grocery Code of Conduct is a positive step, however, as outlined in Chapter 4 it remains voluntary and there is a strong case to have amendments made to the *Competition and Consumer Act 2010* (CCA) that would provide the ACCC with the power to take action against unfair dealing. The ACCC has been investigating whether the major supermarket chains have engaged in "unconscionable conduct" in their dealing with suppliers. They are also investigating whether the major supermarket chains have misused their market power in their desire to preference their own private-label brands over manufacturers brands. At this stage the ACCC is planning to report its findings in the first quarter of 2014 (Strauss and Gay, 2013).

PROBLEM 2: STRUCTURE OF THE NSW DAIRY INDUSTRY

As this report has demonstrated the NSW dairy industry is characterised by a more geographically fragmented farming sector with distinct regions dispersed around the state. NSW dairy farms are also significantly more focused on the supply of fresh "market milk" rather than supplying to manufacturers for butter, cheese, milk powder and other value added products, many of which are exported. The emphasis on the supply of fresh market milk forces NSW dairy farmers to engage in flat line production. This is more expensive to operate than seasonal production and risks placing many smaller farms in financial jeopardy.

The average dairy farm is a small, family owned business suffering low margins and rising costs.

The need to secure long-term contracts in order to enable flat line production to work has resulted in many dairy producers becoming “captured” by processors. The average dairy farm is a small, family owned business suffering low margins and rising costs. Farm gate milk prices have been subject to market supply-demand volatilities since the deregulation of the dairy market in 2000. Rising farm costs and low profitability has resulted in the loss of many farmers who took the opportunity to leave the industry. Those who remain are increasingly unable to raise the funds needed to expand their land holdings or invest in the technology that is required to maintain farm productivity.

Dairy farmers have little or no bargaining power against the major processors and are effectively price takers. Evidence of this dilemma is highlighted in the two-tier pricing system used by major processors such as Lion within the NSW market. This pricing system disadvantages the dairy producer and forces many to sell milk at below the cost of production. Whether or not the supermarket “Milk Wars” have driven down the farm gate price of milk, the two-tier pricing system is a disadvantage for the farmers.

The demise of the dairy Co-operatives

Dairy co-operative businesses such as Norco tend to provide their members with stable milk prices, and supply contracts. If they are of sufficient size and control retail brands and export channels they can serve as a buffer to protect dairy farmers. Victoria’s Murray Goulburn has demonstrated this and is also investing heavily in promoting the growth of a next generation of Australian dairy farmers. The existence of so many small dairy farms in Victoria and the area covered by Norco is a testimony to the influence of co-operatives.

Historically, the NSW dairy industry was once characterised by a large number of co-operatives that not only guaranteed a reliable market for milk, but also offered fair farm gate prices to producers, processed and marketed the milk, and distributed profits back to members. However, the past decade of market deregulation has seen the demise of the co-operatives, which were sold to large investor owned firms such as National Foods (Lion).

The motivation of many farmers to sell out the co-operatives in this way was driven by a desire to take a profit from their share capital. They were either retiring from the industry all together, or they used the money to retire debt and shore up their finances in the face of many years of drought (McKenzie, 2013). Unfortunately the benefits of privatisation for most NSW dairy farmers were short-lived and the disappearance of the co-operatives has left them with little or no bargaining power.

Fragmentation, stranding and pressure on wholesalers

The geographic distribution of the NSW dairy farm sector has also led to some farmers becoming “stranded” as their neighbours exit the industry and they are isolated. As discussed in Chapter 4, this can lead to major increases in transport costs placing further pressure on already tight farm income margins. As farms close the impact on regional communities can be significant from both a social and economic perspective.

In addition to the farmers, dairy produce wholesalers - which are mostly small to medium sized enterprises – are also feeling pressure. These firms are often squeezed between the milk processors and the major supermarket chains. The processors control their territorial distribution rights while the big retailers are undertaking the wholesale function.

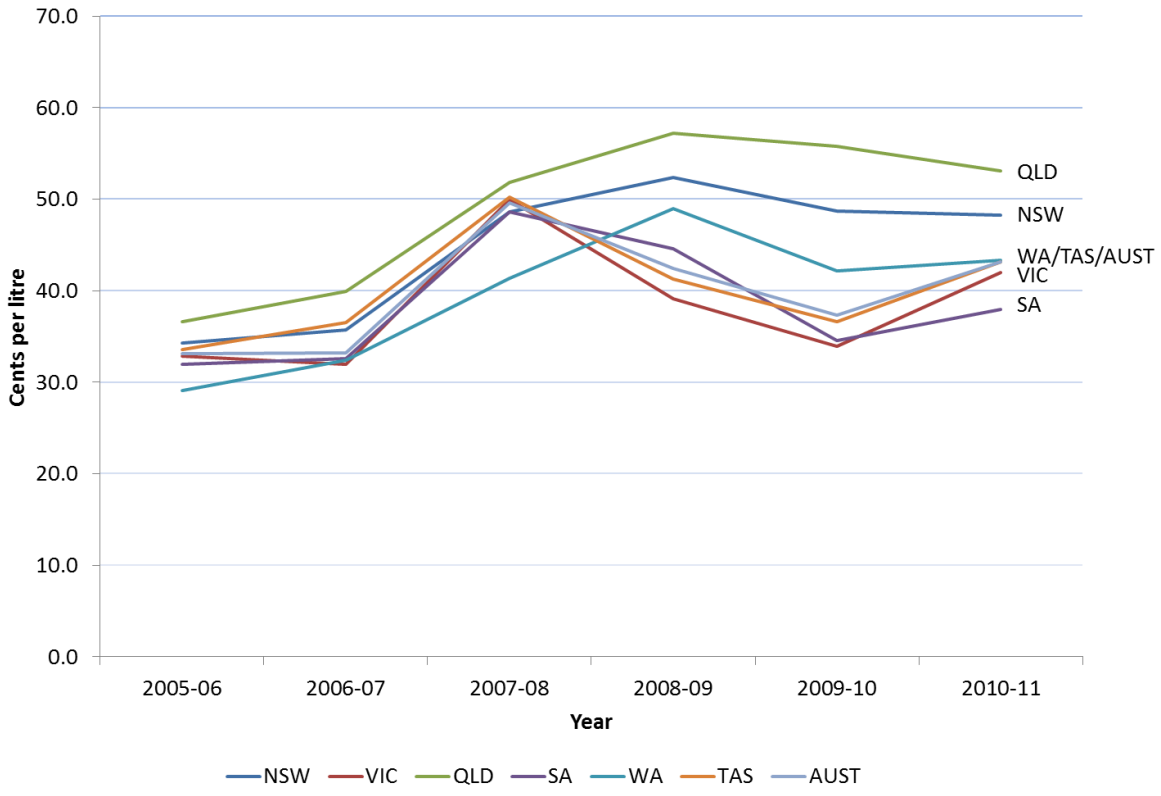
Unless dairy farmers can secure better farm gate prices for their milk and more secure and stable contracts, their numbers will continue to fall.

As the situation currently stands the NSW dairy industry supply chain will see further declines in the number of both dairy farms and dairy produce wholesalers. Unless dairy farmers can secure better farm gate prices for their milk, and more secure and stable contracts, their numbers will continue to fall. This could put at risk the ability of the NSW dairy sector to supply market demand. Wholesaler numbers will also decline as they are squeezed between the large processors and the major retailers.

Problem 3: Lack of Transparency in Pricing

The third problem confronting the dairy industry is the lack of transparency in the setting of prices. The major retailers' market share and their ability to set prices without regard to input costs and the market conditions have led to the abovementioned investigations by the ACCC. This has impacts down the supply chain and the processors (who control the other 'choke point') come under pressure to reduce margins.

Figure 6.1: Farm gate milk prices 2005-2011



Source: McKenzie, 2013

As illustrated in Figure 6.1 the farm gate price for milk has risen slightly since 2005, but remains fairly stagnant. It is driven by a range of factors but is largely tied up with the business models of the processors. Since deregulation there is no legislative control over the price that processors should pay their suppliers. Some manufacturers will pay significant differentials depending on the quality, seasonality and volume of milk supplied (McKenzie, 2013).

Farm gate prices in NSW have tended to be slightly higher than those in other states due to the high volume of milk supplied as fresh drinking "market milk".

It is better to import than to face oversupply and be left with the quandary of what to do with the surplus milk.

By contrast, milk supplied to manufacturers for processing into butter, cheese or powder is generally set against international milk commodity prices. The two-tier pricing system used by the major milk processors in NSW is generally able to offer higher "tier 1" farm gate prices when demand is high, but much lower (perhaps below cost of production) prices for "tier 2" milk. The major processors prefer a flat line demand as they don't wish to be caught with unwanted milk supply. Further, if they are unable to secure sufficient supply in winter, they will simply import from Victorian farmers. According to McKenzie (2013 p.10):

> *Processors indicate that their ideal is a milk supply that meets their flat line demand: in other words, they don't want spring flushes, as they only want what they can sell. They don't have processing capability to deal with surplus production and are therefore not prepared to pay more than what they can sell the surplus for. A winter supply that may drop below the processor's demand for fresh milk is not an issue, as the processor will top up with milk imported from southern producers. It is better to import than to face oversupply and be left with the quandary of what to do with the surplus milk.*

The policy of a co-operative such as Murray Goulburn is to take all the milk supplied by its members rather than the "pick and choose" model of processors such as Lion. This works best where the processor has the ability to convert the milk into value added products such as milk powder, cheese or butter, and where there is a strong export market. It is less sustainable where the processor is producing "market milk" predominately for the domestic market.

THE PRICING SYSTEM IS TOO COMPLEX

Market deregulation was meant to provide greater efficiencies in the system, but the integrity of any free market is compromised if the flow of pricing information is limited or distorted.

As discussed in Chapter 3 the current system of pricing farm gate milk is its lack of transparency and the diminished bargaining power of farmers in their negotiations with large processors. Payment systems for farm gate milk pricing vary considerably across NSW and Victoria. In NSW the approach has been to base price on a "cents per litre" model, while in Victoria the focus has been on dollars per kilogram of milk solids, as well as cents per litre (Gibb, 2012).

The cents per litre system is easy to calculate, but does not generally take into account the differences in the composition of protein and fat in the milk. There are substantial differences found between milk supplied from different producers and this can be influenced by season. The dollars per kilogram of milk solids model is more complex to calculate, but it is more closely related to the true cost of production. It also allows for a better assessment of differences in milk quality and composition. It enables milks to be compared across different farms, regions and seasons (Gibb, 2012).

Market deregulation was meant to provide greater efficiencies in the system, but the integrity of any free market is compromised if the flow of pricing information is limited or distorted. Information asymmetries occur when some players in a market are able to secure more timely or reliable data on supply and demand trends and the price signals that flow from them. This has certainly been a trend in the Australian dairy sector since deregulation.

As noted in Chapter 3, a key reform of the dairy sector in the United Kingdom has been the requirement that all levels of the supply chain to disclose information on pricing. DairyCo (UK) now provides key data on the annual average price paid per litre by each processor and the values of milk used

across different product lines. Data also includes average farm gate milk prices plus the margins and prices paid for liquid milk. This includes both gross margins and selling prices (DairyCo, 2011).

Key Recommendations

There is no suggestion that the industry should abandon the market reforms of the past decade...However, there is strong evidence that the deregulation process has failed to adequately protect the smaller operators...

In conclusion the problems facing the NSW dairy industry require a number of concurrent actions that must involve the collaboration of government and industry. There is no suggestion that the industry should abandon the market reforms of the past decade and return to regulation of pricing. However, there is strong evidence that the deregulation process has failed to adequately protect the smaller operators, and this is placing at risk the long-term viability of fresh milk supply in NSW. The follow recommendations are made to help overcome these challenge.

Recommendation 1: Building sustainable supply chains

To address the problem of excessive market concentration around the key "choke points" in the supply chain there should be a commitment by all players to build a more sustainable supply chain. The introduction of the voluntary conduct as proposed via the new Grocery Code of Conduct is a good foundation for this. However, it needs a strong commitment from the major retailers and processors to the building of a sustainable dairy supply chain.

Ideally this should be strengthened by the major supermarket operators adopting the practices of their UK counterparts in the formation of sustainable dairy supply chain programs. These could be run in conjunction with the processors to ensure a stronger and more sustainable supply chain. This can be facilitated by government through a process of advocacy and leadership to create the necessary forums through which the various players (e.g. farmers, processors, wholesalers and retailers) work together to resolve difference and set guidelines aimed at enhancing the overall integrity of the supply chain.

Recommendation 2: Adjudication

As with the recently announced appointment in the UK of a Groceries Code Adjudicator, there should also be some mechanism put in place for a formal process of adjudication for dealing with disputes within the supply chain. The voluntary, collaborative approach outlined in Recommendation 1 would be the ideal first choice. However, there will always be the opportunity for tensions to emerge within the supply chain over real or perceived abuses of market power.

An adjudicator function, perhaps operating under coordinated federal and state government control, would provide a mechanism for investigation into these claims. It would also provide a degree of support and protection to the smaller firms, including farmers, operating in the supply chain. The rise of interstate trade in dairy supply justifies federal government involvement.

Recommendation 3: Amendments to the CAA

There is also a strong case for a review of the CAA that will help to strengthen the ability of the ACCC to take action against excessive market power within industry supply chains. Of concern is the development of "cumulative effects", whereby the large retailers or processors gradually expand their dominance through vertical and horizontal integration. While each individual action by a key player may not be sufficient to warrant action under the CAA, over time the long term effect of this expansion of market power will create significant problems for smaller firms.

The amendments proposed by Master Grocers’ Australia (MGA) (see Chapter 5) in respect of sections 46 and 46(1AA) of the CAA are worth consideration. Attention should be given to this at the federal government level. The findings of the forthcoming ACCC inquiry into retail supermarket operators’ behaviour will be useful in determining the nature of such amendments.

Recommendation 4: Provide Reliable Data on Pricing

A final recommendation is that the Australian dairy industry should adopt a similar strategy to that of its UK counterpart and publish key data on pricing. As noted above the type of data that should be produced includes annual average price paid per litre by processor. This should be reported on the basis of the approach taken to setting prices (e.g. cents per litre or $ per kg milk solids).

Data on pricing should also include margins and prices paid (e.g. both gross margins and selling prices), with information provided along the entire supply chain. There should also be greater disclosure of the pricing differentials between different types of product (e.g. brand milk versus private-label), and more information on the nature of contracts. While consideration needs to be given to commercial sensitivities, the efficient operation of a free market demands greater transparency over how prices are determined, and how they relate to the true cost of production.

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