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### Response to <u>dairyinquiry@accc.gov.au</u>

Dear Dairy Inquiry Team,

I would like to thank the Treasurer for initiating the ACCC inquiry into the dairy supply chain in Australia.

I have worked in the dairy industry since 1976 and have experience across both public and private sectors related to the industry.

This submission is designed to provide some of the insights I have gained over the years and asks some questions that may stimulate a better outcome for the inquiry.

In summary

- J The banking sector has a 4 pillar (some suggest 5 would be better) policy to maintain competition within the market. Analysis using the Herfindahl- Hirshman index (used in the USA) shows that the retail distribution system in Australia is highly concentrated. One of the reasons for the 4-pillar policy was that there was concern that monopolistic firms (or in the case of the supermarkets the so-called DUOPOLY) would not provide enough competition at all stages of the supply chain, resulting in undue pressure being put on those without enough market power. This is quite possibly the case in Australia.
- Australia ranks 193 out of 197 milk producing countries in milk volume growth since 2000.
   New Zealand ranks 6 out of 197, these figures come from the FAO statistics database.
   History will show that there has been a grand social experiment playing out between the dairy industries of Australia and New Zealand.
  - Australia has dispersed its national assets of marketing bodies, training, research and development, with the hope that the invisible hand of the market will ensure that these functions are delivered as needed by private funding. To add to this there has been an insistence that competition remains within each of the states, while trading between the states is allowed. The result is smaller companies who do not have economies of scale. Australia seems to have forgotten that our total population (24 million) is approximately 63% of the population of the greater Tokyo metropolitan area. The result is a dysfunctional dairy industry.
  - New Zealand allowed the formation of Fonterra with strict governance rules allowing for internal competition and growth but also allowing the formation of a world scale business which has economies of scale to compete effectively around the world. This is from a country with a population of 5 million. Part of the success was the inclusion of the NZ Dairy board into the company, support of Massey and Lincoln university which have major dairy focus.
  - Australian culture, law system and knowledge are like New Zealand's, the only difference is policy areas.
- ) Margins along the dairy supply chain are hard to measure without confidential knowledge of the organisations. Since Deregulation there has been a movement of margins towards the

distribution sector. Included in this submission are records from the 1980's obtained from Annual Reports from the Western Australia Dairy Industry Authority. These show quite different cost and margin structures from today's situation.

- As we live in a global society, international events and policy changes affect our industries.
   My view is that the major factors affecting the Australian industry include
  - The EU deregulation / removal of production quotas, the recent milk reduction subsidy scheme and Russia ban on European dairy products which has disrupted trade flows. The result has been growth, but now a reduction of 1.8% in milk volume.
  - The USA has several support mechanisms including a subsidised margin protection program for dairy. This programs premiums, I believe are subsidised to the tune of 65% by the USA government. The result is that farmers will always receive a positive margin in their business. The result – Milk production is up 2% in the USA.
  - China has grown massively since the year 2000. This growth is maintaining and the change from the single child policy to the 2-child policy may make a difference soon.
- ) I have carried out a Porter Analysis (supplied in a separate document) for the three sections of the Australian dairy supply chain. I hope the ACCC report writers can refine or better this work as it will assist in understanding the industry.
- ) I recently completed a report titled "Market failure in the Western Australian Dairy Industry." This is based on observations that Western Australia has more than enough agricultural resources to be totally self-sufficient in dairy – in fact it is possible to have a world scale industry in WA alone. However, due to rational actions by the local processors, an irrational situation has resulted where there is a claim of "Excess milk in the state" even though 35,000 tonnes of cheese and 10,000 tonnes of butter and 40 million litres of Ice cream are carried westward across the Nullarbor plain!!
  - Market failure is defined as an irrational outcome has developed from seemingly rational actions. I believe this is the case in Western Australia.
  - o This report is attached separately.

I have run out of time to refine the report, so please accept my apologies for the presentations. I hope there are points that assist the development of outcomes that will make Australia's dairy industry great again.

Andrew Weinert Niche Agribusiness Consulting Western Australia.

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## The Dairy Inquiry

On 27 October 2016, the Treasurer, the Hon Scott Morrison MP, issued a notice requiring the Australian Competition and Consumer Commission (ACCC) to hold an Inquiry into the competitiveness of prices, trading practices and the supply chain in the Australian dairy industry. The Inquiry commenced on 1 November 2016.

The ACCC's Inquiry will cover all geographical and major product markets within the Australian dairy industry. Through the inquiry, the ACCC will analyse the industry to identify structural and behavioural issues that affect its performance.

The Inquiry will involve broad consultation, including seeking feedback in response to this Issues Paper, requesting information from businesses, and holding forums in producing regions.

The ACCC must submit its report following the Inquiry to the Treasurer before 1 November 2017. The report will then be publicly released.

#### Terms of Reference

The Terms of Reference for the Inquiry, as set by the Treasurer, state that matters to be taken into consideration in the Inquiry must include, but not be restricted to:

#### the nature of competition between processors for both the acquisition of raw milk and the supply of processed milk and dairy products.

a. The competition between processors for raw milk supply is based on free market principles and individual supply contracts. It should be noted that there are significant differences in market power between the farmers who have minimal or atomistic market power vs the processors who have significantly more market power. Often the conditions require dedicated supply and in some cases exact supply volumes.

# the nature of retail pricing arrangements for milk and dairy products, and their impact up the supply chain

- b. The distribution sector has significant market power in Australia. The margins put on milk and dairy products are discretionary to the retailer. These margins vary significantly depending on the strategy of the retailer. There are 5 groups that make up the retail market distribution sector:
  - i. Woolworths
  - ii. Coles
  - iii. Metcash
  - iv. Aldi
  - v. Others.

One way to measure market power is to allocate a score to the market share of the top companies. The score is derived from the square of the % market share. For example, a company with 40% market share has a HHI score of  $40 \times 40 = 1600$  if the share is 10% then the score will be  $10 \times 10 = 100$ 

	Percent of	ННІ
	market	Score
Australia	share.	
Woolworths	40.2 %	1616
Coles	33.3 %	1109
Metcash / IGA	9.5 %	90
other	8.9 %	79
Aldi	8.1 %	66
Total HHI	<mark>100</mark>	<mark>2960</mark>

(Business Insider, 2015) The market shares have been accessed from the "Business Insider".

The USA Department of justice says this about HHI scores. "The agencies generally consider markets in which the HHI is between 1,500 and 2,500 points to be moderately concentrated, and consider markets in which the HHI is in excess of 2,500 points to be highly concentrated." (USA Department of Justice, 2015)

The USA, department of justice looks at powerful merger effects based on industry HHI scores. In relation to this they say "Powerful buyers are often able to negotiate favourable terms with their suppliers. Such terms may reflect the lower costs of serving these buyers, but they also can reflect price discrimination in their favour." (USA Department of Justice , 2015)

From these web sites, it is reasonable to expect that concentration levels of this nature would be investigated by the authorities in the USA!

The following table shows the market power across the supply chain, while it is not the correct use of the HHI, it does show the difference in market power of different organisations across the supply chain.

	ННІ	% market share	HHI - Market share <sup>2</sup>
Company	Sales		
Woolworths	\$ 58,000,000,000	45.841%	2,101.4
Coles	\$ 35,000,000,000	27.663%	765.2
Metcash	\$ 13,500,000,000	10.670%	113.8
Aldi	\$ 9,844,000,000	7.780%	60.5
Lion	\$ 2,536,000,000	2.004%	4.0
Fonterra	\$ 2,500,000,000	1.976%	3.9
Murray Goulburn	\$ 2,385,000,000	1.885%	3.6
Parmalat	\$ 1,233,000,000	0.975%	0.9
Веда	\$ 1,010,000,000	0.798%	0.6
Warrnambool B&C	\$ 497,000,000	0.393%	0.2
Largest Dairy in WA	\$ 18,000,000	0.014%	0.0
Average Dairy in WA	\$ 1,225,000	0.001%	0.0

A list of dairy processors can be found in the Productivity commissions paper on the relative costs of processing in the dairy industry.

Table 2.1	Major da	airy produc	t manufa	acturing co	mpanies in Austral	ia, 2012-13ª							
Company	Quantity of raw milk purchased	Share of total raw milk purchased	Revenue	Employees	Major dairy products	Major dairy brands		Col	lect	ion	State	95 <sup>b</sup>	Number of plants <sup>b</sup>
	Million litres	Per cent	A\$ million				NSW	Vic	Qld	SA	WA	Tas	
Murray Goulburn	2 990	33	2 385	2 268	Cheese, butter, milk powder, drinking milk, cream	Devondale, Liddells	*	*		~		*	8
Fonterra	1 600	17	2 500	2 000	Cheese, butter, milk powder, drinking milk, yoghurt	Mainland, Western Star, Nestle Ski	1	~				1	10
Lion	1 000 <sup>c</sup>	11	2 536	d 2 300 <sup>d</sup>	Drinking milk, cheese, yoghurt	Pura, Coon, Dairy Farmers, Yoplait	~	~	~	1	~	~	16
Warrnambool Cheese and Butter	890	10	497	424	Cheese, butter, milk powder, drinking milk	Sungold Milk, Warrnambool Cheddars, Great Ocean Road		~		1			2
Parmalat	850 <sup>c</sup>	9	1 233	e 1847	Drinking milk, yoghurt, custard, cream	Pauls, Vaalia, Harvey Fresh	~	~	1	1	*		9
Bega Cheese	641	7	1 010	1 700	Cheese, drinking milk	Bega Cheese	1	~					6
Other	1 2290	13	3 271	c 7 013 <sup>c</sup>		**	**	**	**	**	**	**	430 <sup>c</sup>
Total	9 200	100	13 432	17 552									481C

a Data are for 2012-13 except where specified. b As at August 2014. c Estimate. d Lion 'Dairy & Drinks' business (includes juice and soy products). Year ended 30 September 2011. O Total sales in Australia. 2013.

Sources: ABS (2014b, 2014c); Bega Cheese (2012, 2013); Binsted (2014); Fonterra (2013b, 2014a); IBISWorld (2014); Lion (2011, 2014a); Murray Goulburn (2013, 2014a); Parmalat (2011b, 2014); Warrnambool Cheese and Butter (2013, 2014).

(Australian Productivity Commission, 2014)

#### the effect (direct or indirect) of domestic retail and export prices, and level of domestic and overseas demand, for Australian processed milk and dairy products on dairy producers and processors

- c. Australia exports approximately 40% of the total milk production.
- d. Reduced export sales prices result in increases in local supply and price competition for local milk. That is, the prices will go down to match the export price for milk.

the nature of the commercial relationships between dairy producers and acquirers of raw milk and the impact of corporate structures adopted (including cooperative structures) upon those relationships.

e. No comment.

#### the mechanisms used by acquirers of raw milk to determine prices paid when acquiring raw milk and the transparency of those mechanisms

- f. There are significant differences in milk pricing systems, depending on processor requirements and industry sizes. Generally consistent year-round milk supply will cost more due to varying feed sources for the cows and varying weather conditions. For example, in hot weather the cows will eat less and produce less (Heat Stress), similarly, in cold weather, the cows will use more energy keeping warm and so produce less milk. Heat is an issue in climates with hot summers, dry or humid, although high humidity increases heat stress. In the southern states, the high cost production period is winter where it is too cold for grass to grow and cold wet conditions. These conditions also make the cows uncomfortable and hungry, also reducing milk production.
- g. Significant work has been done on the costs of year round milk supply vs seasonal milk supply by Dr Jon Hauser of www.Xcheque.com one of his articles can be found at <a href="http://archive.xcheque.com/blogs/item/6536-finding-value-in-seasonal-milk-iii-the-diy-factory">http://archive.xcheque.com/blogs/item/6536-finding-value-in-seasonal-milk-iii-the-diy-factory</a>

#### the availability, transparency and accessibility of market price information, and its effectiveness for forecasting movements in farm gate milk prices

h. No comment.

#### the terms on which raw milk is acquired from dairy producers and the means by which such terms are agreed i. No comment.

## the allocation of commercial risk across the dairy supply chain

## j. Michael Porter is an Economist who developed several analysis tools and

- questions to understand the economics of markets.
  - i. In the attached document, I have compared the situations of the farmer, the processor and the distribution sector (acknowledging that there are several sections of this sector)
  - ii. As time, has been limited, the information here is basic and has been included as thought starters for those writing the final report.
- k. One of the Analysis tools used is the VRIO (Value, Rarity, Imitable, Organised) tool. The graphs that come from this show the lack of market power that individual farmers have compared to large food distribution companies.
- I. Porters 5 forces are graphed. The comparisons between all sections of the supply chain are as follows
  - Buyer groups farmers and Processors sell their products in large volumes. Farmers sell all their product to one company. Processors have several of purchasers and the distribution sector has millions of customers.
  - ii. Seller groups In Australia some farmer groups have developed supply co-operatives, in Western Australia the farmers generally fend

for themselves in this market. Processors cannot collude and the Distribution sector is by its huge scale a supplier group

- iii. New Entrants New entrants are not common in this supply chain although there is an international group, Aldi entering the distribution space. New processors are rare as the volume of milk available in Australia is dropping rather than increasing. Therefore, there is no need for new processing assets and those that own existing assets are focussing on how to keep them running at maximum efficiency.
- iv. Substitutes. Not since the advent of margarine, has there been a major threat of substitutes in the dairy industry. The distribution sector can switch easily and the rise in alternative "Milks" can easily be accommodated by the distribution sector. Processors can process other liquids with some capital expenditure, but Farmers are locked into their dairy cows – So they are most at risk for substitutes.
- v. Competitive Rivalry This increases up the supply chain. Farmers do not see other farmers as direct threats, although there are times when there is competition. Processors compete via a range of products and when the same product is produced, by price competition. This is evident in WA in the drinking milk industry where \$1 per litre milk came into existence almost as soon as deregulation took place. This phenomenon took almost a decade to reach the Eastern States. The processors analyse their margins and act accordingly. Supermarkets are competing vigorously to get customers in their doors and as milk is a staple item, it is discounted heavily to entice customers to enter. As a small supermarket, will cost \$10 million in a small suburb, the drive to get traffic to pay for the capital expenditure is huge.



(Breed, 2003 updated)



FIGURE 2 WHY SUPERMARKETS PLACE MILK AT THE BACK OF THE STORE AND PROMOTE HEAVILY.

# the role of collective bargaining in the dairy industry and its effectiveness

m. Collective bargaining can assist farmers who are classed as atomistic suppliers in the Herfindahl-Hirshman Index documentation gain market power.

the existence of, or potential for, anti-competitive conduct and the possible impacts of any such conduct on businesses within the dairy supply chain.

n. No Comment.

# any other factors affecting farm profitability. <u>Market power</u>

Market power is a complex issue, but one in which the dairy supply chain is significantly affected by

A simple but effective and internationally recognised model of market power calculation is the Herfindahl Hirshman index

An online calculator of this index can be found <u>http://www.unclaw.com/chin/teaching/antitrust/herfindahl.htm</u> (Chin, 2001)

Australian Supermarkets	Sales \$-millions	Supermarket Percent of market share.	HHI Score
	\$39,400,		
Woolworths	(Woolworths, 2016)	40.2	1616
	\$38,000		
Coles	(Coles , 2016)	33.3	1109
	\$13,541		
Metcash / IGA	(Metcash , 2016)	9.5	90
other	\$12,686 <sup>1</sup>	8.9	79
Aldi	\$9,844 <sup>2</sup>	8.1	66
Total HHI	<mark>\$113,471</mark>	<mark>100</mark>	<mark>2960</mark>

FIGURE 3 - THE HERFINDAHL-HIRSCHMAN INDEX FOR AUSTRALIAN SUPERMARKET SECTOR.

(Business Insider, 2015)

<sup>&</sup>lt;sup>1</sup> By calculation

<sup>&</sup>lt;sup>2</sup> By calculation

Dairy Processor name	Sales \$-millions	Processor %Share	HHI (%Share)²
Lion	\$ 2,536	24.96%	623
Fonterra	\$ 2,500	24.60%	605
Murray Goulburn (Murray Goulburn, 2016)	\$ 2,385	23.47%	551
Parmalat	\$ 1,233	12.13%	147
Веда	\$ 1,010	9.94%	99
WBC	\$ 497	4.89%	24
Other	\$ 3,271	32.19%	0
sum – "No others"	<mark>\$10,161</mark>		<mark>2049</mark>
Sum of all processors – no HHI for others.	<mark>\$13,432</mark>		

FIGURE 4 HHI FOR DAIRY COMPANIES IN AUSTRALIA

If the whole supply chain is included, the serious differences in revenue and market power show up.

It is accepted by the author that this is not the correct use of the HHI, which normally is used for investigating horizontal mergers within a sector. It does show the inequalities between the segments of the supply chain when the turnover of individual firms is included in this analysis.

	нні	% market share	HHI - Market share <sup>2</sup>	HHI Sector area only	Internal Sector HHI
Company	Sales				-
Woolworths	\$39,400,000,000	32.661%	<mark>1,066.7</mark>	1,624.8	
Coles	\$35,000,000,000	29.014%	841.8	1,282.2	-
Metcash	\$13,500,000,000	11.191%	125.2	190.8	-
Aldi	\$ 9,844,000,000	8.160%	66.6	101.4	
other	\$12,686,000,000	10.516%	110.6	132.0	<mark>3,331</mark>
Lion	\$ 2,536,000,000	2.102%	<mark>4.4</mark>	622.9	
Fonterra	\$ 2,500,000,000	2.072%	4.3	605.4	
Murray Goulburn	\$ 2,385,000,000	1.977%	3.9	550.9	-
Parmalat	\$ 1,233,000,000	1.022%	1.0	147.2	-
Bega	\$ 1,010,000,000	0.837%	0.7	98.8	
Warrnambool B&C	\$ 497,000,000	0.412%	0.2	23.9	2,049
Largest Dairy in WA	\$ 9,000,000	0.015%	0.0	1,798.0	
Larger Dairy WA	\$ 8,000,000	0.010%	0.0	799.1	-
Larger Dairy in WA	\$ 5,000,000	0.008%	0.0	554.9	-
Average Dairy in WA	\$ 1,225,000	0.001%	0.0	8.3	-
Average Dairy in WA	\$ 1,225,000	0.001%	0.0	8.3	3,168
Revenue to all businesses including downstream double ups.	\$120,633,450,000		2,225		

FIGURE 5 HHI FOR FULL SUPPLY CHAIN OF DAIRY. TO SHOW DIFFERENCES IN CAPITALISATION

I urge the writers of the report to contact international economists who have investigated market power along supply chains. One paper that I have recently read that may shed light on this is

" A new approach to identify market power along agri-food supply chains – the German dairy supply chain" this document and the authors details can be accessed at the following address. <u>http://ageconsearch.umn.edu/bitstream/235897/2/9075\_Grau%26Hockmann\_A%20new%20</u> <u>approach%20to%20identify%20market%20power%20along%20agri-</u> <u>food%20supply%20chains%20%E2%80%93%20the%20German%20dairy%20supply%20ch</u> <u>ain.pdf</u> (A. Grau, 2016)

### <u>Comparison between the 4-pillar bank policy and the food</u> <u>distribution sector.</u>

I have often pondered the basis of the 4-bank policy which was put in to place and why other crucial sectors do not have similar restrictions.

One explanation is offered by "The Conversation,"– "Australia's four pillars banking policy was originally intended to preserve competition in financial services by maintaining separation of the main players" (The Conversation, 2015)

In an article in "The Conversation" in 2014 the following quote could easily apply to the food distribution sector "The arguments against allowing such mergers are less clear. One concern has been that if the Melbourne banks (INSERT MAJOR DISTRIBUTORS) merged, then the Sydney banks (INSERT MAJOR DISTRIBUTORS) would do so as well, reducing the system from four big banks to two. The inference is that in a much more concentrated banking system the benefits from the larger scale may not be passed on to consumers"

(The Conversation, 2014)

A HHI analysis of Banking monthly data (sorted on "total resident assets") retrieved from the APRA web site supports this concept and shows the HHI of the Big 4 banks is 2,354, almost 2500, the concentrated market level. However, if the top 16 banks are included, the HHI drops to 1,901 which is moderately concentrated.

The definition given by the USA, Department of Justice is - "The agencies generally consider markets in which the HHI is between 1,500 and 2,500 points to be moderately concentrated" indicates. (USA Department of Justice , 2015)

The call for a 5<sup>th</sup> pillar in "The Conversation" (The Conversation", 2015) would increase competition as it would take the HHI for the top banking companies into competitive territory.

These figures are derived from the spread sheet Bank shares of "Total resident assets".

Using the market shares for the top 5 supermarket chains (Including "Others") the number derived by one HHI analysis (page 9) results in a score of 3,331, indicating a HIGHLY concentrate market.

# If the food distribution sector operated under the same system as the banks, things would be different.

This discussion does not cover areas such as the fact that Australia's population is small by world standards, that the major supermarket chains are not the same scale as European and USA's supermarket chains and other factors. It only focuses on the HHI score and its implied effect on competition / market power.

HHI calculations for top 16 banks in Australia based on total resident assets.

	31/10/2016	нні	% market share	HHI - Market share <sup>2</sup>	HHI Sector area only	
	Banking Company	Total resident assets (\$ million)				
1	Westpac Banking Corporation	797,515	24.536%	602.0	811.7	
2	Commonwealth Bank of Australia	744,684	22.911%	524.9	707.8	
3	National Australia Bank Limited	680,393	20.933%	438.2	590.8	Sector HHI
4	Australia and New Zealand Banking Group Limited	576,583	17.739%	314.7	424.3	2,534.6
5	Macquarie Bank Limited	84,893	2.612%	6.8	649.1	
6	Bendigo and Adelaide Bank Limited	62,685	1.929%	3.7	353.9	
7	Suncorp-Metway Limited	60,304	1.855%	3.4	327.6	
8	ING Bank (Australia) Limited	51,903	1.597%	2.5	242.6	
9	Bank of Queensland Limited	48,729	1.499%	2.2	213.9	
10	HSBC Bank Australia Limited	24,687	0.759%	0.6	54.9	1,842.0
11	Sumitomo Mitsui Banking Corporation	22,504	0.692%	0.5	492.8	
12	Citibank, N.A.	21,560	0.663%	0.4	452.3	
13	Members Equity Bank Limited	19,708	0.606%	0.4	378.0	
14	Bank of China Limited	18,806	0.579%	0.3	344.2	
15	The Bank of Tokyo- Mitsubishi UFJ, Ltd	18,793	0.578%	0.3	343.7	
16	Rabobank Australia Limited	16,654	0.512%	0.3	269.9	2,280.9
		\$3,250,401		1,901		

Sources - ://gbkeegbaiigmenfmjfclcdgdpimamgkj/views/app.html

http://www.apra.gov.au/adi/publications/pages/monthly-banking-statistics.aspx

FIGURE 6 HHI FOR THE BANKING SECTOR IN AUSTRALIA.

# Changes in margins along the drinking milk supply chain **<u>and</u>**

# What happened to the 11-cent levy that funded restructure of the dairy industry, after its set period ended?

# Did milk prices drop 11 cents per litre, was it returned to processors or farmers or????

The following illustrations are extracts from the annual reports of the Western Australian Dairy Authority and updated copies developed in 2011 from local data and information from the Senate committee into the dairy industry.

The copies used are housed at the Department of Agriculture and Food, Western Australia (DAAFWA) Bunbury.

The use of the RBA inflation calculator <u>http://www.rba.gov.au/calculator/</u> will give values in current Australian dollar AUD terms. (Reserve Bank of Australia, 2016)

#### Estimated cost structure of milk per litre of milk sold in Perth

#### Supermarket branded milk at \$1 per litre produced in 2011 (multiple sources used for information) \$1.00 per litre



#### (DAFWA (DEPARTMENT OF AGRICULTURE AND FOOD WESTERN AUSTRALIA), 2011)

FIGURE 7 ESTIMATED COST STRUCTURE OF 1 LITRE OF MILK SOLD FOR \$1 PRODUCED IN PERTH IN 2011.

#### INDUSTRY STATISTICS

#### **FIGURE 13**

COST STRUCTURE FOR MILK SOLD IN PERTH IN ONE LITRE CARTONS AS AT 30 JUNE 1990

#### **RECOMMENDED CONSUMER PRICE** 92 CENTS PER 1 LITRE -MILK VENDOR 21.32 cpl 23.17% (Milk Distributor) 8.58 cpl 12.74 cpl (Shop) PROCESSING & STORAGE 26.24 cpl 28.53% -&HANDLING DIA 2.54 cpl 2.76% -TOTAL: 0.94 cpl 0.30 cpl Administration Promotion Milk Premium 0.60 cpl 0.70 cpl Country Freight DAIRYFARMER 41.90 cpl -45.54%

NOTE

Bulk milk transport from farm to processor is paid by dairyfarmers.
Commonwealth Dairy Industry Research, Promotion, Dairy Marketing Corporation and Market Support Levies are paid by dairyfarmers.

#### TABLE 13 RECOMMENDED<sup>1</sup> PRICES IN PERTH METROPOLITAN AREA (cents per litre) AS AT 30 JUNE 1990

	MILK DISTRIBUTORS/ VENDORS	ENDORSED OUTLET	CONSUMERS
10 & 20 Litre Bag-in-Crate	66.93	75.51	
2 Litre Carton	69.68	78.26	91.00 (182)
2 Litre Plastic Container	69.68	78.26	91.00 (182)
1 Litre Carton	70.68	79.26	92.00 ( 92)
600 millilitre carton	72.01	80.59	93.33 ( 56)
300 mililitre carton	82.01	90.59	10333( 31)

\* Prices not set for sale direct to consumers

(1) As from 1 January 1990 all prices are recommended.
 (2) Endorsed outlet-for resale or commercial purposes (trade outlet endorsed on a licence).
 (3) Prices quoted in ( ) are price per unit.
 (4) One litre plastic bottle price is set by DPFs.

#### (Dairy Industry Authority WA, 1990)

FIGURE 8 MILK COST BREAKDOWN 1990 WA DAIRY INDUSTRY AUTHORITY



\_(DAIRY INDUSTRY AUTHORITY OF WESTERN AUSTRALIA, 1989) FIGURE 9 MILK COST BREAKDOWN 1989 WA DAIRY INDUSTRY AUTHORITY



#### (Dairy Industry Authority WA, 1988)

FIGURE 10 MILK COSTINGS 1988





FIGURE 11 MILK COSTING 1984

### The social experiment –

# Comparing the NZ dairy industry vs, the Australian dairy industry.

The following is for contemplation by the writers of the ACCC report.

#### General facts.

- 1. Australians and New Zealanders have a similar culture and education level.
- 2. Australia and New Zealand have similar cows.
- 3. The pasture systems used in Australia and NZ are similar.
- 4. Australia and New Zealand have similar laws and legal system.
- 5. Australia has a lot more land than New Zealand on which dairy farming is possible.
- 6. New Zealand has a lot less people than Australia.
- 7. When Analysing the raw milk production statistics of 197 countries identified by the FAO as producing milk and comparing their production in 2000 and then in 2014 (latest statistics) WHY DOES AUSTRALIA COME IN AT 194<sup>TH</sup> position????

#### The question.

If the Australian dairy industry in the year 2000 produced approximately 10.8 billion litres of milk (Dairy Australia , 2016) and

the New Zealand dairy Industry in the year 2000 produced 11.6 billion litres (Dairy NZ , 2016)

and now

The Australian Dairy Industry in the year ending June 2016 produced 9.54 billion litres a drop of 1.3 billion litres (Dairy Australia , 2016) and

The NZ dairy industry produced 20.9 Billion litres (Dairy NZ , 2016) and increase of 9.3 Billion litres!!

To put this in perspective an analysis of statistics publicly available from the FAO (FAO, 2016) were analysed and the production figures of year 2000 were subtracted from production figures of year 2014. In this period, NZ grew by 9 BILLION litres, the 6<sup>th</sup> largest gain in the world. Australia in the same time has reduced its production by 1.3 BILLION litres, giving Australia a rank of 194<sup>th</sup> out of 197 countries!! If this was a sporting event – the news channels would be screaming!!!

What is the difference?

#### The Answer in my opinion:

POLICY the discussion is on the following pages.

#### Discussion

At the time of deregulation, the systems in Australia and NZ were similar with central marketing boards, centralised research and centralised training.

Australia **DISPERSED** its centralised marketing systems (The Australian Dairy Corporation), its world class R&D at CSIRO, its training at Gilbert Chandler Institute of Dairy Technology and its state based training systems. It has not allowed companies to merge and become world scale operators. Now there are no Australian dairy companies in the world's top 20 dairy companies by Turnover (Rabobank, 2016)

New Zealand implemented the dairy industry restructure act (NZ Commerce Commission , 2014) **which allowed the formation of a world scale company**, but maintained the right for competitors to source milk at a standardised price, it rolled the NZ dairy board into the company, it maintained its R&D base and its training base at Massey University (Massey University, 2016) I do not claim to be an expert on this act, but the results show that it was written in a way that allows competition – companies such as Tatua and Westland have continued to operate. Open Country Cheese (Open Country Cheese, 2016) and Miraka (Miraka , 2016) have come into being since Fonterra was formed allowing companies to express their entrepreneurial spirit, while the industry grew and developed international marketing systems and a world-wide reputation for quality and reliability.

There is a view that Australia is a world scale country, while that may be the case in land area, our population of 24 million out or 7000 million people represents 0.3% of the world's population. NZ is 1/5 this percentage. Both Australia and NZ's population combined is less than the largest cities in the world.

If this is the case, it may be reasonable to develop policies that allow the development of world scale companies in Australia, especially in Agriculture.

Governance has been built into the near monopoly situation in NZ and the milk price paid to farmers reflects the world auction prices received for their products. In fact, NZ has developed its own auction system to ensure that any sales fees are collected by the NZ farmers rather than by external operators.

These factors affect the prices that are returned to farmers. Large scale businesses have economies of scale. These bring about higher returns and so more profits to the farmer suppliers

A graphic example of the effect of these policies.

FIGURE 12 A MAP COMPARING MILK PRODUCTION (TONNES) IN 2000 AND IN 2014



- Australia - New Zealand

(Knoema, 2010)

Figure 13 A year by year comparison of milk production in Australia and New Zealand from 1961 to 2014

## International factors affecting the Australian Dairy Industry

The following factors are some that are rarely discussed. I will not cover the more common ones.

**USA** – The dairy industry in the USA is highly regulated. One support mechanism that is rarely discussed is the dairy Margin Protection Program.

This program ensures that farmers maintain a margin. As the industry in the USA is mainly a feed lot industry where feed is purchased rather than grown on farm as in Australia, it is easier to calculate margins.

An extract from one of the information pages

## Explaining the Dairy Producer Margin Protection Program

The dairy safety net program included in the 2014 farm bill is entering its third year. Known as the Margin Protection Program for dairy, MPP helps protect against the type of catastrophic losses that many dairy farmers experienced in 2009 and again in 2012. It does this by allowing farmers to use an insurance-style program to cover the margin between national average milk prices and feed costs.

The National Milk Producers Federation strongly encourages producers to use the program going forward. The following pages explain how it works. Those already enrolled can change their coverage levels for 2017. Those not already enrolled can use this summary to familiarize themselves with the details of the program as they make their coverage decisions for 2017 and beyond.

#### The Basics

- The program operates on a calendar-year basis.
- All farms that produce milk commercially are eligible, and the program benefits all producers, regardless of size.
- Producers insure their operations on a sliding scale, deciding both how much of their production to cover and the level of margin to protection.

#### More information can be found at

http://www.futurefordairy.com/sites/default/files/images/MPP-brochure-text-FINAL%202016.pdf.

(National Milk Producers Federation, 2016)

FIGURE 14 EXTRACT OF WEB SITE DISCUSSING THE MARGIN PROTECTION PROGRAM OF THE USA

This program supports dairy farmers through tight economic times. The USA is the largest producer of milk in the world.

This year USA's production is up a bit less than 2% - excess will enter the export markets.

U.S. milk	produc	tion									Sour	ce : USDA
in 1 000 t	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	*	% cured
Jan	7 079	7 247	7 319	7 267	7 436	7718	7 760	7 840	8 022	8 037	+ 0.2%	+ 0.2%
Feb	6 495	6 884	6 692	5 694	5 839	7 398	7148	7 215	7 333	7 671	14.6%	1 2.3%
Mar	7 317	7 465	7 477	7 536	7 706	8 037	8018	8 097	8 203	8 351	- 1.8%	+ 2.1%
Apr	7 150	7 314	7 325	7 446	7 553	7 816	7 824	7 929	8 068	8 148	* 1.0%	11.0%
May	7 339	7 578	7 623	7 729	7 837	7 984	8 080	8 207	8 359	8 447	- 1.1%	+ 1.7%
Jun	7 020	7 235	7 228	7 418	7 492	7.564	7.682	7 858	7 940	8 062	+ 1.5%	+ 1.7%
Jul	7 128	7 255	7 266	7 455	7 475	7 523	7615	7 908	8 013	8 131	+ 1.6%	+ 1.6%
Aug	7.042	7 147	7 138	7 300	7 449	7 4 4 0	7 615	7813	7 894	8 025	+ 1.7%	1.1.0%
Sep	6745	6 862	6 821	7 049	7 159	7 115	7 161	7 491	7 637	7 693	+ 2.1%	+ 1.7%
Oct	6 972	7 083	6 994	7 212	7 384	7 379	7 473	7 743	7 770	7 961	- 2.5%	+ 1.8%
Nev	6810	6 900	6 836	7 030	7 176	7 261	7 259	7 507	7 570			
Dec	7 091	7 212	7 152	7 325	7 510	7 630	7 616	7 863	7 926			
Total to date	70 287	72 066	71 883	73 106	74 329	75 974	76 396	78 091	79 138	80 526	8	
% previous	in the second	+ 2.5%	+0.3%	+1.76	+ 1.7%	+ 2.2%	+ 0.6%	+ 2.2%	+ 1.5%	+1.8%	0	
Total	84 187	86 178	85 870	87 461	89 015	90 865	91 270	93 460	94 634			-
S previous		+ 2.4%	- 0.4%	+ 1.9%	+ 1.8%	+ 2.1%	+ 0.4%	+ 2.4%	+ 1.3%			



(European Commission, 2016)

FIGURE 15 MILK PRODUCTION IN THE USA 1.8% GROWTH IN 2016

The USA is on track to produce 96.5 billion litres of milk in the calendar year 2016, this is up from 95.8 billion litres in 2015.

There are other measures used to support the dairy industry in the USA including the privately funded "Co-operatives working together" program that subsidises exports and helps maintain herd numbers down and the provision of food for schools and other welfare programs as shown in the illustration below



FIGURE 16 QUANTITATIVE CHEESING - GOVERNMENT PURCHASING PRIVATE CHEESE STOCKS TO ASSIST THE INDUSTRY.

An example of Co-operatives working together is seen in this article written on the 7<sup>th</sup> of December 2016 <u>https://dairybusiness.com/dairybusiness-news/cwt-assists-with-1-8-million-pounds-of-cheese-export-sales</u>

(Dairy Business, 2016)

#### The EU

The EU has identified that the increase in milk production after lifting quotas is detrimental to the world situation. The EU has taken steps to reduce milk production and they are working.



(EUROPEAN COMMISSION , 2016)FIGURE 17 MILK PRODUCTION IN THE EU SHOWING THE EFFECTS OF INTERVENTION POLICIES TO REDUCE MILK PRODUCTION STARTING IN EARLY 2016



(European Commission , 2016).

FIGURE 18 CHANGES IN MILK PRODUCTION IN THE EU BY COUNTRY 2016

The EU has taken the rapid growth of milk after deregulation in Europe seriously It has put several incentive schemes to reduce milk production These schemes have attracted more than EURO 500 million funding including Euro 150 million specifically to reduce milk volumes. (EU Commission, 2016)



There has been significant investment in infrastructure to dry milk in Europe. An Article in Hoards Dairyman shows the level of investment. In the same time, Australia has not invested much, as milk volumes are falling.

(Hoards Dairyman, 2016)

FIGURE 19 EUROPEAN INVESTMENT IN DRIED MILK PLANT FROM 2012 TO 2015 - ANTICIPATING GROWTH FROM DEREGULATION.

Note: in this same time Australia, has significantly less investment in processing equipment.

#### China

China's milk production is expected to remain flat while there are mixed messages about the effect of the implementation of the 2-child policy. There has been a massive increase in UHT milk imports, but due to the high production levels in the EU, margins are low all along the supply chain.

#### The World

The USA's foreign Agricultural Service report for June 2016 shows that an extra 6 billion litres of milk will be produced in the world in the year from 2015. This is more than Australia's total export volume.

		1,000 Metri	c Tons			
	2012	2013	2014	2015	2016	201
					Dec	Ju
ows Milk Production			1.00			
Argentina	11,679	11,519	11,326	11,552	11,650	10,00
Australia	9,811	9,400	9,700	9,800	10,010	9,70
Belarus	6,766	6,633	6,703	7,047	7,413	7,17
Brazil	23,008	24,259	25,489	26,300	27,100	27,10
Canada	8,614	8,443	8,437	8,682	8,685	8,68
China	32,600	34,300	37,250	37,550	38,000	38,00
European Union	139,000	140,100	146,500	149,600	149,000	151,60
India	55,500	57,500	60,500	64,000	68,000	68,00
Japan	7,631	7,508	7,334	7,375	7,340	7,34
Korea, South	2,111	2,093	2,214	2,200	2,193	2,19
Mexico	11,274	11,294	11,464	11,736	11,857	11,93
New Zealand	20,567	20,200	21,893	21,582	20,745	21,15
Russia	31,831	30,529	30,499	30,550	29,980	30,08
Taiwan	348	358	363	374	380	38
Ukraine	11,080	11,189	11,152	10,700	10,100	10,10
Others	18	19	20	21	22	2
Subtotal	371,838	375,344	390,844	399,069	402,475	403,46
United States	91,010	91,277	93,485	94,620	96,345	96,34
World Total	462,848	466,621	484,329	493,689	498,820	499,80

#### Course Mills Deschartion and Consumptions. Summary For Selected Countries

(US Foreign Agricultural Service, 2016)

FIGURE 20 STATISTICS FROM THE USDA CHANGES IN MILK PRODUCTION FROM SELECTED COUNTRIES.



FIGURE 21 YEAR 2012 WORLD MILK PRODUCTION DERIVED FROM FAO STATISTICS.



FIGURE 22 YEAR 2013 WORLD MILK PRODUCTION FROM FAO STATISTICS



FIGURE 23WORLD MILK PRODUCTION 2014 FROM FAO STATISTICS

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