The business of dairy beyond the farm gate.

Understanding Australian dairy co-operatives and processors and future opportunities

A report for NUFFIELD AUSTRALIA FARMING SCHOLARS

by Adam Jenkins

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Foreword

The Australian dairy industry processing landscape has changed enormously over the past 10 years from being predominantly farmer owned co-operatives to a situation today where it is a mixture of private companies, publically listed companies and traditional co-operatives. For farmers there is great deal of conjecture around where you should supply your milk to gain the best farm gate returns. In Victoria it is said that the largest bulk milk processor, which happens to be a co-operative, sets the benchmark price for the industry. This farm gate price is closely linked to the world commodity price due the bulk processor's export exposure. Therefore, we have our whole industry reliant on one co-operative to be as efficient as possible to set a benchmark return for farm gate milk prices. What happens if it is not efficient? Is our whole industry farm gate return reduced? Do the processing companies have the right balance around competitive farm gate returns and a return on investor's capital right?

It is this reliance on the major processor that has led me to research and understand co-operatives and private companies in the milk processing business around the globe and investigate the possibility of a future global co-operative. I will also ask the questions: Which structure delivers the best returns from the market place? What aspects of our industry do we need to restructure to remain competitive?

As a primary producer we need to take full responsibility of our decisions today and what impact it will have on future generations. This research is critical as it highlights the importance to have the right processing structure in place to deliver the best returns to the farmers extracted from a very competitive market place. It also emphasises the need for continual improvement and thinking around current government policy to ensure that our agricultural sector can continually prosper and grow for future generations of Australians.

This research has taken me all over the world on a **Rabobank** sponsored Nuffield Australia Farming Scholarship. From India, Ukraine, Bahrain, France, Turkey and USA on my Nuffield Global Focus Program, I also visited Argentina, Chile, Netherlands, Italy, Germany, Ireland and the United Kingdom on my individual study trip. I was invited into many amazing businesses and conferences around the world enabling me to have a greater understanding of my research topic, but more importantly the world and culture in which we trade and live in as an agriculturalist.

Acknowledgements

Firstly, I would to thank Rabobank and Nuffield Australia for the amazing experience and opportunity I have had over the past 12 months.

To all the people and businesses that I met with, I thank you for your honesty, time and hospitality and now know that our friendships developed and experiences had will last a lifetime.

To the Bonlac Supply Company Board, thanks for your understanding and allowing me time away to pursue the scholarship.

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None of this would have been possible if I didn't have the enormous support from friends and family. We know that through these great experiences that anything is possible if you put your mind to it. Thank you to my parents Ron and Kaye for their ongoing support and encouragement. Thanks to David and Janet for their support and help on the farm. Finally, thank you Catherine, Lily, Poppy, Isabella and Harry you were and remain my inspiration.

Bert Mertens (Rabobank Director of Co-operative and member banks)

Abbreviations

GFC – Global Financial Crisis

PLC – Publically Listed Company

IOF – Investor Owned Firm

EU – European Union

UK – United Kingdom

USA – United States of America

NZ – New Zealand

ICA – International Co-operative Alliance

WMP – Whole Milk Powder

SMP – Skim Milk Powder

OMSCO – Organic Milk Supply Co-operative

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Executive Summary

This Nuffield report focuses on the understanding of the place of co-operatives, Investor Owned Firm (IOF) and Publically Listed Company (PLC) in the post Global Financial Crisis (GFC) dairy market. Also considered in this report is the theory of traditional co-operatives, the current processes for setting the farm gate price of milk, the importance and the role of boards of governance, the opportunities for joint ventures and the potential for co-operatives to become global.

Information was gathered as a result of travelling and studying in the following countries: New Zealand, India, Bahrain, Ukraine, Turkey, France, USA, UK, Ireland, Argentina, Chile, Netherlands with attendances at two world co-operative conferences in Italy and Germany.

The key findings of this report concludes that:

1. Corporate governance and board structure is paramount to the success of a business.
2. There is a lack of understanding of agribusiness principles and agricultural production systems amongst our processing and retail companies, boards, executive management and government policy makers. A greater understanding of profit maximisation through the whole agribusiness supply chain is required. There has been focus on production at any cost rather than sustainable profitability at least cost.
3. Government policy needs to evolve to allow our agribusinesses to meet future challenges and opportunities by allowing them to restructure to remain competitive.
4. There is a need for strong leadership amongst dairy farmers, advocacy bodies and companies to ensure they think outside the square to meet the future challenges and opportunities.

The information and research in this report would be of benefit to those involved in agricultural leadership positions, agricultural policy makers, current agricultural board directors and agricultural producers (with particular reference to the dairy sector). This report is written with the view to help facilitate discussion, to educate and to ensure farmers have the information and skills to drive their industry; their own businesses and Australian agricultural production to a very competitive level both domestically and internationally.

Objectives

This report and research is aimed at understanding dairy co-operatives and IOFs with respect to their structure, board governance and ability to extract the required returns for their members and suppliers in a challenging global and domestic environment. As part of this research, opportunities for global co-operatives will also be explored.

It is intended that this report will provide confidence for farmers to be involved and have influence in their industry, to ensure all stakeholders fully understand the key issues, opportunities and challenges of their dairy farm business.

Global Focus Group on a dairy farm in Salem, India.

Introduction

Throughout the Australian and global dairy markets there has been a strong history of milk processing co-operatives and statutory marketing boards. As the world has evolved and markets have become less regulated, trading among countries has increased with many developed countries taking advantage of, and exploiting their comparative economic position. However, the developed or mature markets are coming under far greater pressure from the emerging economies as we enter the "New World" of trading. Post the GFC, we have a convergence of markets, an increase in competition for resources leading to greater volatility in returns all the way through the supply chain to farm gate level. Apart from export market challenges the Australian dairy industry is facing its greatest challenge with decreasing margins in the retail sector with a duopoly that has 80% market share.

Traditionally, agricultural co-operatives have been seen as a vehicle to maximise farm gate returns and viewed as a trusted industry organisation with its farmer represented boards and bulk milk processing ability. The recent volatility in global milk prices has caused dairy farmers to question the co-operatives' ability to maximise the efficiency of their vertical integrated business and returns to their shareholder members. Contrary to this, IOF milk processors are trying to maximise the return to their investors which raises the question: **Can a dairy co-operative deliver a competitive milk price while maximising shareholder return and staying true to the fundamental co-operative philosophy?**

In order to gain a greater understanding of the complexity of the dairy industry in relation to the above mentioned question, this report will; explore a brief history of agricultural co-operatives, outline the current global dairy market trends in processor ownership models, discuss the major challenges of dairy co-operatives and IOFs with respect to company structures, investigate board structure and governance with emphasis on leadership, explore opportunities for global co-operatives and finish with a range of recommendations founded on this research.

Chapter 1: History and outline of the current situation

a. History and theory of agricultural co-operatives

The International Co-operative Alliance (International Co-operative Alliance, 2012) defines a co-operative as "*an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise*".

The agricultural co-operative has been in existence for as long as produce has been traded more widely than its place of origin. As the definition above demonstrates (in a historical context), producers co-operating by pooling supply and capital resources achieved greater economic efficiency. In particular, dairy co-operatives were able to build processing plants and create better marketing opportunities for member suppliers. The benefits were three-fold. Firstly, greater benefits were returned for the local community, secondly it delivered a better farm gate return for the farmers than otherwise would have been achieved on their own and thirdly, it created a strong patronage for the business that became stronger as the support and capital invested grew (Ortmann & King, 2007). Co-operatives gained greater prominence in the industrialised world as food began to be processed and stored and transported to large cities and export markets.

Co-operatives were seen as a solution to maximise the farmers' return (at the farm gate). However, as the world has evolved and become more competitive, the traditional co-operative has faced many challenges and achieving maximum returns has proven difficult. In the last 10 years, Australian co-operatives have not been exempt from these challenges, with some experiencing major change (eg. Bonlac Foods, Challenge Dairy and Dairy Farmers Milk Co-operative). Others have merged with like businesses (eg. United Milk Tasmania), while several have restructured themselves in order to remain competitive (e.g. Warrnambool Cheese and Butter Factory and Bega Cheese). Overall, it has been a challenge for the traditionally structured co-operative to evolve and uphold the fundamentals of the co-operative philosophy around the economic, social and cultural needs of the farming community.

If we further explore the characteristics of agricultural co-operatives we can see that a modern Australian co-operative may be explained by two theories of the firm: the Transaction Costs Theory and the Neo-Classical Theory (Bialoskorski Neto, 1998).

The Transaction Costtheory applies when patronage of supply (farmer co-operative members) is driven by the firm's ability to organise the transaction cost of delivering produce to market and managing the relationship of the farmer members with respect to members' patronage and property rights (sale of members' milk and use of members' capital to build plant etc.) in a far more efficient manner than the competitors. In fact this theory suggests that even if the co-operative doesn't deliver the highest price back to its members for patronage, the other benefits of belonging to an organisation generally prevail. The major problem with this type of co-operative is that they can become inwardly focussed and be supply driven in a market that is demand driven, thus making it difficult to adapt to the market place to ensure they maintain profit maximisation. An example of this in the Australian context would be when the industry entered 10 years of drought. Some manufacturing plants may have been underutilised and the board and management may have felt pressure during this time to balance the benefits for its members, the viability of the firm, as well as consideration for the farming community. A private firm or a PLC on the other hand would restructure to ensure that manufacturing efficiency is maintained to ensure shareholder returns are maximised in the long term.

The Neo-Classical theory of the firm concentrates on profit maximisation to ensure that returns are maximised and members are rewarded for their patronage and for inputs supplied. This theory suggests that the co-operative can serve the members' interests by taking produce to markets and extracting a better price from the market place than its competitors due to economies of scale. It suggests that a co-operative can counterbalance the oligopolistic or monopolistic power of large companies exerting market power (Ortmann & King, 2007). Arla, a large Scandinavian co-operative, has been able to merge with other co-operatives Milch–Union Hocheifel (Germany) and the Milk Link (UK) to provide a powerhouse in processing facilities and exerting some pressure against the retail sector giving its members a 10% premium on farm gate returns. However, if these co-operatives are not carefully controlled then they will struggle to maintain the loyalty of members particularly if they are unable to match competitors pricing. The Australian dairy landscape is a prime example of this as the major co-operatives are finding it more and more difficult to maintain the loyalty when they are unable to maintain a leading milk price (Spencer, 2012).

Another major consideration in co-operative theory is that of Agency Costs. The Agency Costs relate to those executive costs that separate the owners of the firm and the management team (Ortmann & King, 2007). An example of this is when the owners of the firm (the supplier members) want to extract the highest price for their product (eg. high farm gate milk price) and at the same time want to have a good return on invested capital. They also want a modern supply chain to move product to market efficiently. Management, on the other hand, may exceed sales volumes and targets but at a slightly decreased price to ensure they maintain market share. The surplus left over may be required to invest in plant and machinery, bonuses for senior managers and reward workers for achieving targets. These added management costs may even add risk to the business if not checked and balanced by the board (Fonterra, 2008). Sometimes the board are under-skilled and may be unaware of management's risky decisions that are putting members' capital at risk. This inadvertently adds to the cost of doing business and reduces the surplus margins available to its members; hence the name Agency Cost. To manage and minimise these costs, the Board needs strong leadership and the skill to develop a good balance of risk and reward for its executive team that is also aligned with the needs of the co-operative members.

One would suggest that in Australia the agricultural co-operatives are grappling with the theories mentioned above; perhaps this is why we are seeing more and more IOFs stem out of the traditional co-operative. The IOFs and co-operatives are finding it challenging to expand market share in an industry with low organic growth in milk volumes, and as time goes on, less loyalty from members and traditional suppliers. We have even seen dividends and loyalty shares distributed when the business is in urgent need of capital injections. This strategy is short-term gain for loyalty while possibly adding higher risk to the long-term objectives of the business.

b. Outline of the current situation

Prior to the record international dairy price heights and associated commodities boom of 2007-2008, dairy export prices for whole milk powder (WMP), skim milk powder (SMP) and other dairy commodities were relatively stable; with annual fluctuation being around $200US tonne (Rabobank International, 2011). Changes in international trade policies, coupled with a lack of reserves from traditional dairy stockpiles, contributed to the massive fallout and dairy price crash post the GFC. We now operate in a volatile trading environment with most dairy commodities moving up and down in price by $200US tonne per month (Dairy Australia, 2012). This volatility, along with foreign exchange movements and the

ongoing debt crisis in the EU, has added even further complexity to the operating environment for major dairy exporters.

Despite these challenges, the demand for dairy products is very strong. Research indicates that the long-term outlook is for continual growth of the middle class population in developing regions such as Asia and South East Asia, fuelling this ongoing worldwide growth in demand (Rabobank International, 2011). It is now a question of which type of dairy processor is best placed to take advantage of this growing demand, whilst maintaining supply, delivering a competitive farm-gate price and maximising shareholder return. This balancing act remains an ongoing challenge for agricultural companies and their boards of management; in particular those boards that are required to have farmer directors.

With respect to the Australian dairy industry, in today's current market the major bulk processor of dairy products (Murray Goulburn) sets a benchmark for each seasons farm gate milk price (presently this processor is also Australia's largest dairy co-operative). The average price of milk received by the average Australian dairy farmer closely resembles that of the global price of WMP, SMP and other internationally traded dairy commodities, due to the fact that Australia exports approximately 40-50% of its milk (Dairy Australia, 2012) and (Spencer, 2012).

The Australian retail sector and supermarket competition is beginning to resemble overseas markets where retailers are trying to claim more of the traditional dairy processors marketing margin, thus putting further pressure on margins and ultimately the farm gate milk price. An example of this is unfolding in the UK where the fresh milk market farm gate price in 1996 was 24 pence per litre (ppl), the processor received 17ppl and the retailer 2.25ppl. In 2012 the farm gate milk price was 28ppl, processor margin 7-8ppl and the retailer 20ppl (DairyCo, 2012).

This poses the question; where does the margin go? Will dairy processors have enough return to reinvest in technology to remain competitive, invest in their brands, return a competitive farm gate milk price and maximise shareholder return? What type of dairy processor will remain competitive and how will the traditional co-operative need to develop to remain competitive? How does any company maintain patronage of supply under an increasingly competitive market place?

Whilst this report will not go on to answer all the questions above it will outline areas that farmers and other interested parties may choose to consider for the future.

Chapter 2: Processor challenges

During the Nuffield scholarship year, and through meeting with executives and board members of dairy IOFs and co-operatives, an emerging pattern developing across the globe for dairy processors was observed. Although the challenges were somewhat different in degree, they were consistent. The shared challenges of IOFs and co-operatives included:

- patronage of supply
- maintaining a competitive farm gate milk price
- retaining an ability to reinvest in technology and infrastructure
- creating entry to new markets, attaining access to capital
- balancing investor and supplier returns
- keeping strong corporate governance including an understanding of agricultural economics and the ever changing political landscape.

A few of the larger successful co-operatives witnessed during the study tour were Fonterra in NZ, Freisland Campina in the Netherlands and Arla in Scandinavia. These co-operatives have been able to structure their constitution so that the core of the business remains 100% farmer owned. Within their strategy of delivering the best return to its members, they have also diversified their businesses by purchasing other like businesses, which they run more like private corporate companies.

For an IOF and co-operative there is a continual challenge revolving around the retention of milk supply to ensure a consistent throughput of milk through the factories to efficiently maintain and grow its market share. For an IOF it is a fine line between famer supplier returns and shareholder dividends. A co-operative is concerned with extracting and delivering the best returns to its members. In a very competitive market, such as in the Australian state of Victoria, a slightly unfavourable change in milk price can have a huge impact for the patronage of supply into that season. On the other hand, if strong shareholder returns are not delivered, access to ongoing capital may make investment plans untenable and a co-operative may lose the competitive edge and ultimately a reduction in market share. Therefore we see the IOF default their price to a position just above the commodity prices, which are often the prices paid by the major co-operative processors.

The challenges were highlighted further by a visit to a young couple's dairy farm near Garstang in the UK (who wish to remain nameless). These farmers no longer supply the co-

operative, but rather have chosen to supply milk on a direct contract through to the retailer via a third party processor. It was a lucrative deal at first, until commodity prices began to fall and once out of contract the farmer had to take the spot price of the day which was considerably less than the price on which they had based their initial investment decisions. Through this example we can see the relationship between the farm gate price, the processor and retail margins from 1996-2012 (see the DairyCo example given above), which shows the industry to be unequitable and unsustainable. Therefore, the retailer rewards suppliers by paying just above the commodity price. However, the supplier has no voting rights and no say in the company unless it is publically listed and they became a shareholder. This highlights the risk that leads to further volatility in the market place.

Conversely, another dairy farm business visited in the UK's Cumbria district (Parkes, 2012) had moved from being an organic produce co-operative to a conventional co-operative because the IOF processor and the retail supermarkets squeezed the farm gate price margin so much that it made more long term economic sense to supply a conventional co-operative. The co-operative has a long term goal of increasing the farm gate prices. Through this change the farmer also allowed himself to have a vested interest in the future of his supply chain and have his voice heard. This farmer found that the risk-return ratio for being an organic producer was out of balance. The supermarkets had gained the marketing margin returning to the producer a farm gate milk price unequitable for his risk return strategy.

The ongoing challenge for any milk processing business will be the procurement and retention of milk supply. Variability of supply is often determined by the seasonal nature of dairy farming; however procurement and retention strategies can also have a great impact on the volumes of milk entering processing plants at various times of the year. One of the advantages an IOF has over the co-operative is its ability to react and raise capital to take advantage of new markets; however, ensuring a reliable and regular supply then becomes more imperative. The co-operative, on the other hand, has to raise capital through its members or borrowings and this has implications on property rights and redemption risk. The downside for both IOFs and co-operatives is that if there is strong competition and they make incorrect decisions, they can lose major amounts of milk and thus cause their business strategy to be in jeopardy. A well-established Western Victorian dairy processor is an example of this scenario. The board agreed on a strategy to strip out costs across milk supply in order to post a better return on the business. However, they lost a lot of credibility and supply. This highlights the need for strong governance and leadership on their boards of management.

a. Governance and Boards

It was evident through research across NZ, UK, Ireland, Europe, South America and Asia that the success of the dairy company was often attributed to the strength and structure of its organisation. Conversations with agribusiness people and farmers throughout the world reaffirmed this view and many stated that it is one of the key critical areas for success.

The companies that had risk and reward well defined were often the companies that had a strong structure and were well represented by its supplier members. Meeting with co-operative directors (Tom Campbell of First Milk, Franz Keurentjes from Freisland Campina and Johnny O'Brien, Barry Roe and Bert Mertens of Rabobank), highlighted the importance of a multilayered governance structure with checks and balances, succession planning and board education. These organisations also appointed external skill-based directors to help oversee and drive the business strategy. The approach was very pragmatic and less political than for many other boards witnessed.

Freisland Campina's Board has a very strict policy around governing for its members. For the long term future and success of the co-operative, the board ensures that the reinvestment strategy comes first before any dividend returns. When this strategy is adopted the long term farm gate milk price can be maintained to provide sustainable returns to its farmer base (Keurentjes, 2012).

Successful co-operative and IOF boards were seen to have board members diverse in age, skill, experience and culture**.** They recognised the importance of strong governance, they understood the business and its operating environment better than its competitors, they had strong processes around governance development policies and decision making skills with a high importance on their communications strategy to members and shareholders. They also placed importance on education and training with respect to leadership. First Milk, Fonterra, Arla, Freisland Campina and Rabobank co-operatives have invested time to ensure the succession planning of the board takes place with skilled farmer directors. Those boards that were viewed as successful also had invested time and energy into the succession plan of its board. They recruited board members on the basis of skill rather than region. Some also had developed a lower tier of advisory councils that were the source of the next potential board members and industry leaders. The benefits were two-fold. Firstly, they had people who had a solid understanding of the business and could help articulate the business strategy to the wider

supplier base. Secondly, they developed leadership skills that were not only a benefit to their organisation, but enabled the board members to successfully serve their regional communities.

It was interesting to note the wide variety of structures used in the various organisations. Steve Spencer (2012) has investigated these variations in some detail.

1) *Table 1. Governance Structure Diagram (Spencer, 2012)*

	Structural model	Board members	% of milk collected by co-ops	Farmer directors	Independent professionals	Executive management	Basis for farmer board member selection	Other governance and representational devices	% of board made up of farmers
Murray Goulburn	Farmer-owned company	12	44	10	1	1	Regional	None	83
WCB	PLC	9		5	3	1	Skill	Supplier Advisory Forum	55
Bega Cheese	PLC	8		6	2		Skill	None	75
Fonterra NZ	Co-operative	13	89	8	5		Skill	Shareholders Council representing regions (NZ). Bonlac Supply Co Board and a seperate Fonterra Milk Supplier Forum (Australia)	61
First Milk (UK)	Farmer-owned company	11	30	6	3	2	Skill	Supplier Forum	55
Milk Link (UK)	Farmer-owned company	9		5	2	2	Skill	Supplier Forum	55
Arla Foods (Sweden)	Co-operative	23	90+	19	4#		Regional	Regional and District Committees	83
Frisland Campina (Netherlands)	Co-operative subsidiary	13	80+	9	4#		Skill	Members (210 members) and District Councils (21)	69
DFA	Co-operative	51	80+ (1)	51			Regional	Regional and District committees	100
Land O'Lakes	Co-operative	27		24	3*		Regional	Regional and District committees	100*

* These are advisory board members with no voting rights as directors.
# The inclusion of non-farmer directors follows European practices of having a number of professional directors on a "supervisory board". Companies are obliged to have these posts.
(1) The dominance of co-operatives in the US industry varies considerably region-to-region, but were no less than 76% in any one region in 2008.

Table 1 illustrates the professional governance structures within the dairy processing sector. While it does not represent all companies, it is interesting to note the range of structures. The importance of skill and farmer representation at the next level down at the farmer forum advisory council level is also well represented. It also highlights the importance of independent directors and whether the executive team form part of the board or not.

From this research it could be concluded that one of the major critical success elements for a board of a dairy company is for the board members to have a strong

understanding of the business of its members and/or suppliers. This skill set can be gained through one or more board members who is an expert in the area of agribusiness production systems or in agricultural micro-economics. Those with skills in this area will add value to the board through their understanding of the production and cost systems of dairy farms. By considering the issues faced by dairy company members and/ or suppliers (i.e. dairy famers), the organisation should be able to provide greater quality of governance and therefore drive business strategy for its members and shareholders at a more sustainable level.

b. Organisational structures

Providing the right structure and flexibility within the existing company seems to be another key critical success factor in a dairy processing business. Both the traditional co-operative and IOF have their challenges in dealing with raising capital, securing a sustainable milk source, reducing redemption risk and delivering a return on investors or members capital. This is even more prevalent in a highly competitive market for the procurement of milk.

Through investigating business structures one could surmise the IOF basic elements as outlined in Figure 1.

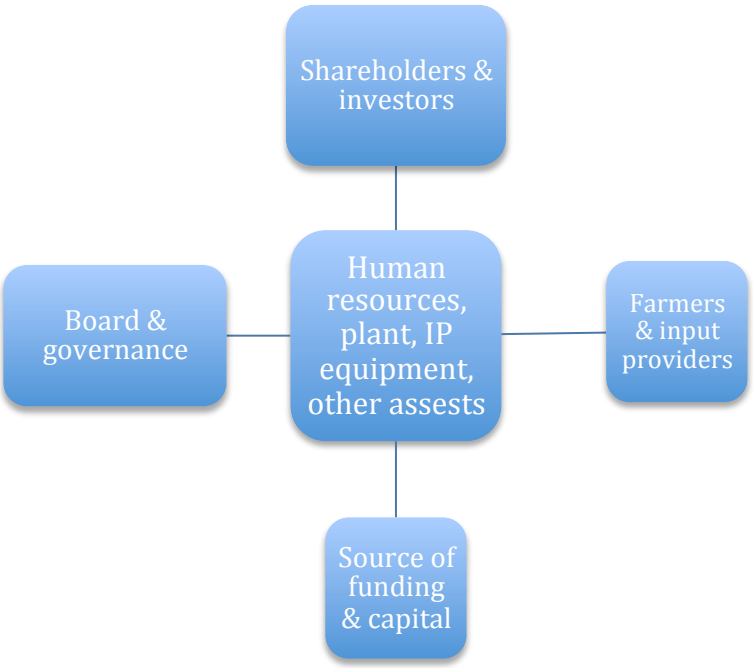

Figure 1. Structure of traditional IOF (Australian Institute of Company Directors, 2012)

The way most IOFs operate today, investors/shareholders are providing capital which is invested in human resources, intellectual property (IP) and other company assets. They

have the ability to source external capital and have a board of governors overseeing the company to ensure that the assets and resources are used in line with shareholder objectives and values. The inputs for a milk processor or trader are procured from farmers or other third parties (Australian Institute of Company Directors, 2012).

The advantage of this model is that it can be quite flexible in adapting to change in market signals. This model also allows for capital raising or borrowing in the event that it needs to invest and upgrade its current facilities to capture the new opportunities. Board approval is sought to source the funding and should be part of the overall company strategy. It also needs to meet the market in farm gate milk pricing. This structure has the advantage of being able to sell parts of its business at any stage (i.e. sell a brand). Alternatively, it can purchase new assets at any time. Bega cheese is an example of this model where it has been able to move quickly in to the space occupied by major retailers directly and form new projects that will hopefully reward its shareholders.

The disadvantage of this model is that it can only create loyalty through its milk price. If an anomaly occurred and it couldn't match the current farm-gate milk price then there is the potential that there could be a fast decline in milk volumes it receives, causing under utilisation of assets, reduction in its ability to meet market obligations and the subsequent failure to meet investor aims and objectives. It only needs to be slightly better than the general farm-gate milk price to build its supply. Being able to buy and sell parts of the business at any stage can develop uncertainty in the supply base.

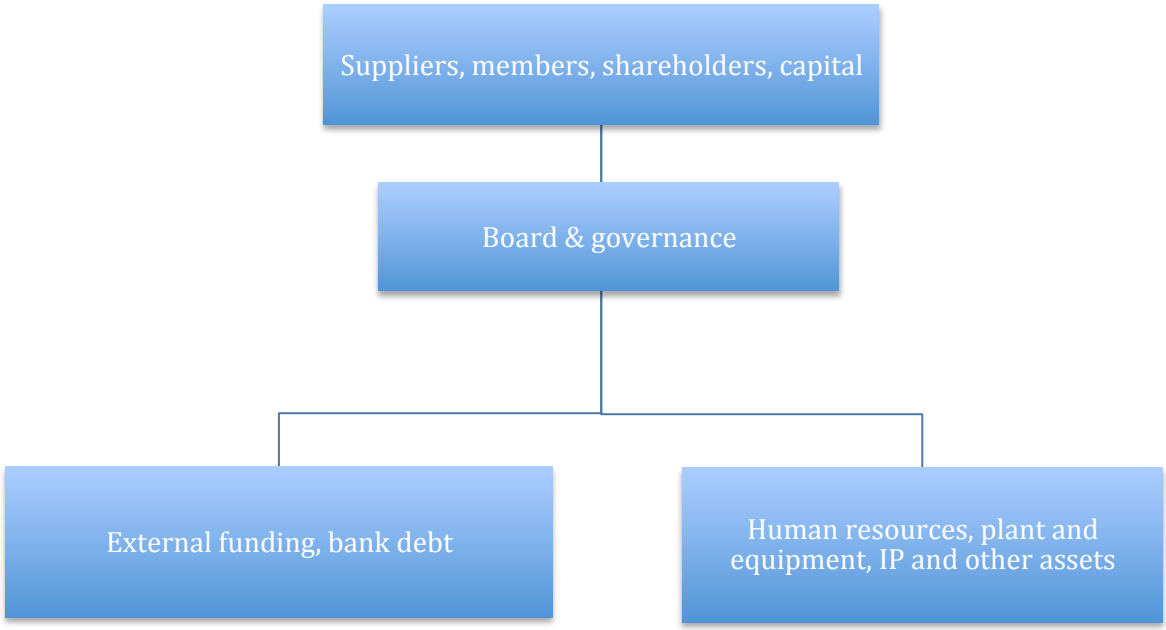

Figure 2. Structure of the traditional co-operative (Australian Institute of Company Directors, 2012)

From this research, a greater understanding of the structure of the traditional co-operative has evolved. Figure 2 details these structures further. The suppliers are either members or shareholders of the co-operative that is supported by the delivery of their milk to the co-operative. The members also have a say (most commonly through a vote) on how the co-operative is organised and run. The size of the vote is determined by the constitution of co-operative. The members can provide some or all of the capital and the board of governors govern it. The co-operative can also have external funding traditionally in the form of bank debt. The board will traditionally set a strategy in line with the members and shareholders values, ideals and objectives. The board is responsible for the appointment of an executive officer, who is then in turn responsible for the management of the co-operative and for the implementation of the co-operative strategy in order to extract the best value for the farmers' milk from the market. The co-operative will return to the members a price for the milk supplied and a dividend rewarding its member suppliers patronage.

One of the major differences between the current day co-operative and the IOF is around the membership shareholding. The IOF provides an amount of money it needs to fund a project; issues a prospectus and shares at a certain price until the desired amount is met. If the IOF is listed on the public stock exchange the shares will then trade at market value.

Depending on its policy the co-operative usually raises a large portion of capital through its member base.

How a co-operative manages its membership can be wide and varied. Some examples of the co-operative memberships witnessed are as follows:

- A traditional one dollar in for membership and one dollar out – Murray Goulburn Co-operative. This can be backed up by share off-take program where the member portions some of the income payment for milk supplied to be retained as a shareholding and build capital in the co-operative. This has been the traditional source of capital for the dairy co-operatives in Australia. Some overseas co-operatives had this model and the level of shareholding was capped at a certain value to ensure the shareholding was not too heavily weighted with one member.
- A straight membership fee for being in the co-operative. Members are rewarded with discounts on purchases; alternatively, for every dollar spent they gain an additional contribution to their initial membership that affords them further discounts (common throughout Europe in the rural produce and stockfeed industries eg. Four Farmers Co-operative).
- Contribution to the co-operative membership and shareholding that is capped at a certain value. For example, a milk producer in the Netherlands may build up capital in their milk company but to no more than a certain value.
- Membership and shares backed by milk production as used by Fonterra, NZ. That means members have to have a shareholding linked to the amount of milk solids produced.
- Certificates or bonds issued to members of the co-operative in relation to the milk supplied, current shares owned or issued, or produce bought. Often used when co-operatives operate across borders. It allows capital to build up in the co-operative taking into account when currency was not common.

The structure of the co-operative and the type of shareholding or membership is very important. The basis of most co-operatives is that the members' capital provides the sole source of finance which enables the business to succeed. This is acceptable if the company has a stable milk supply and a stable shareholder base. If members leave, depending on the co-operative constitution, the redemption of share capital can put the co-operative at risk. This risk can be compounded by the decline in asset utilisation through lower milk intakes.

Some of the more dynamic co-operatives are moving to a more modern model, similar to that of investor owned firms. Barry Roe co-operative in Ireland have set their co-operative strategy in line with community expectations and it helps provide jobs and a source of economy for the local area. As a result of this, they have very loyal suppliers that are prepared to take risks for the betterment of their business, that of the co-operative as well as the community.

The challenge for the modern co-operative is to be true to its origin but also be competitive enough to continue in the free market in which it operates. That is why we are seeing some co-operatives become more like IOFs and are balancing the co-operative principles with the corporate investor model. In fact, we are seeing a merger hybrid model evolve from the two systems. Warrnambool Cheese and Butter and Bega Cheese are modern examples of co-operatives that have merged into a public entity retaining strict guidelines around the governance structure and ownership rights, helping to ensure that the farm gate returns are maximised, as well as meeting the investor goals. Some would suggest that these examples have moved too far away from the co-operative model as public investors could trade off milk price for dividend returns. There is definitely room for more research into the compromise of the two systems where a hybrid co-operative becomes dynamic but maintains and rewards its current patronage.

The modern hybrid structure maintains the co-operative structure but allows it to bring in external capital or business units. This allows the co-operative to continually reinvest in its current plant and equipment to ensure that it can remain efficient and competitive. A major challenge for the co-operative is that to increase its asset base through shareholding of members, it needs to ensure it grows milk supply. This can be difficult when the market for milk is so competitive. On the other hand, the co-operative can stay true to its goals and invest in other like businesses and run them as a corporate entity with the aim of spreading the co-operative risk and trying to maximise their returns. The co-operative can source the capital externally from either bank finance or a restructure of the business to allow external investors. This also allows for members to retire from the co-operative and have external capital invested in the co-operative to ensure that it can continue its expansion plans. The critical element of this model is to ensure that the co-operative has a strong constitution, strong leadership and a highly skilled board and good communications with its member base. Fonterra NZ, whilst not a hybrid model, is moving to address the co-operative structure to

ensure 100% ownership remains with its members but allows redemption of capital that does not put the business strategy at risk.

The advantages of the hybrid model is that the co-operative can maintain its fundamental principles while also being flexible, in order to bring in new capital and business units to maintain a competitive market position. The hybrid model also has the opportunity to structure the business in a way which can decouple the milk price from the dividend return. The model should be structured to extract the best farm gate returns for its members and also have the processing capacity to achieve the right balance of products to return a competitive dividend. It is this model and the study of co-operatives that has lead to the investigation of the opportunity for a *Global Co-operative*. If we go back to the definition of the co-operative and its principles there should be a way to build a global co-operative that is competitive and true to the co-operative principles of inclusion and growth for all concerned.

Nicola Waugh (NZ Nuffield Scholar) and I using a fresh milk vending machine in France.

Chapter 3: Global cooperation

There are many challenges around forming any global business, however, creating a global co-operative appears to be a challenge that has not been undertaken in its entirety. The major challenges involved are political barriers, issues with market access, trade barriers, subsidised markets, developing and mature economies, seasonal conditions and government regulations around the competition policy of monopolies. Despite all of these issues the human element is one of the major factors inhibiting progress in this field. During the research for this report it emerged that this approach to building companies across borders became caught up in boardroom politics rather than focusing on the long-term benefits. Freisland Campina, Arla, First Milk and Milk Link are current examples where like-minded businesses have merged across countries and maintained the co-operative structure. Whilst there are many challenges as mentioned above, with the current power of the retail sector farmers are looking to the co-operative to maximise farm gate returns.

a. Challenges to the global approach

The following factors have hindered the development of the global co-operative:

- Political: Creating a global co-operative has major challenges in the formulation of government policy, particularly in relation to subsidies, trade tariffs and barriers. The style of government, socialist or communist, can be an obstacle. This has issues around property rights and wealth distribution.
- Economic status: Is the dairy market mature or developing? This can have different implications for businesses. Growing markets offer an opportunity for expansion. Mature markets can hinder development as they can offer little room for growth or it may be restricted by poor infrastructure.
- Board governance: Governance can become highly politicised, causing some boards to lose sight of the enormous opportunity ahead. Boards with trust and transparency issues may feel that it is difficult to build a business where they may not necessarily be involved or represented due to the size of their management commitment required.
- Seasonal conditions: these are highly variable across the globe and can present enormous challenges to filling market contracts.
- Capital raising and membership status: these would be some of the major challenges; membership structure and dividend payment can be highly controversial issues. Milk price

verses dividend return: If a global co-operative emerged how would each country's milk price be determined? What return do they get for their capital they invest in the co-operative, if any at all?

b. Opportunities for the global co-operative

Global co-operatives can capture the following opportunities:

- They can seek governments that have similar social objectives.
- Seasonal conditions can be an advantage, allowing the development of milk pools around the globe to cater for variations in the season.
- The opportunity for the world to move toward a global price that is more transparent. This could lead to a better allocation of resources as the farmer's ability to produce at a competitive cost will determine a more transparent world milk supply. You may get farmers allocating their resources to another form of agriculture, thus opening up markets for other more efficient producers of milk.
- Capital raising for the co-operative would have a larger market from which to source its capital.
- The opportunity for a more sustainable and transparent milk price allowing resources to be allocated efficiently. The ability for the co-operative to decouple milk price and dividend return on capital.
- Knowledge of local production systems in each milk pool region can be transferred, fostering growth in the developing countries and up-skilling their labour force.

Recommendations

Initially in this report, the question was asked: Can a dairy co-operative deliver a competitive milk price while maximising shareholder return and staying true to the fundamental co-operative philosophy? If the Australian dairy industry was to stay as it was today without major rationalisation, then the answer to this question, would be no. Throughout this project it has been found that there are many successful co-operatives and IOFs operating all over the world and there are several attributes that contribute to their success. Many of these factors could be applied to the Australian dairy industry and some of these have helped to form the basis of these recommendations. The Australian dairy industry has been successful to date both with the involvement of dairy co-operatives and IOFs. However, to ensure continued growth and sustainability of the industry, it is suggested that some if not all of these recommendations be implemented; only then, in the longer term, may the answer to the above question be affirmative.

1. Where to send your milk?

This report has not developed a recommendation in response to this question; what it does establish is that there is no right or wrong type of dairy company to supply. Differing types of dairy companies operating in Australia offer various incentives (both through pricing and share options) and these will appeal to farmers on an individual basis. It is strongly recommended that each individual farm business carefully assess their situation before deciding which milk company to supply their milk to, depending on how the incentives suit them. The long-term viability of dairy companies (both co-operatives and IOFs) depends on a continuous supply of milk from its farmers and because of this, the milk market in Australia is competitive and this is seen as a good thing. However, without a major co-operative operating in the Australian industry, the result could lead to a very different landscape. If this co-operative becomes even more efficient it will challenge other processors to deliver a competitive milk price and shareholder return. The industry could benefit greatly by further rationalisation of plant and transport by working more co-operatively or enter into joint ventures and partnerships to drive down overhead costs, restore profitability throughout the supply chain and fulfil obligations of continued supply into our growing markets.

2. Enhanced understanding of the cost of profitable farm production

In order for all dairy companies to remain viable in the world market place, it is imperative that they are able to maintain and grow supply. One could argue that the current milk price payment structure is promoting production at any cost rather than modest production at low cost and enhanced profit maximisation. While trying to bring plant utilisation up to an average of 70% all year round, the cross subsidisation of spring milk to shoulder (autumn, winter) milk is adding unnecessary costs and higher risk with limited value across the whole supply chain. Currently, the industry pays the least for milk in the time that it is the lowest cost to produce (in the spring), thus making it harder for farm businesses to make genuine surpluses. There is a huge opportunity for the Australian industry to drive the spring peak as high as possible, which will increase the necessary shoulder milk as well. This could be achieved by paying a flatter price across the season with less cross subsidisation. There is an enormous challenge and opportunity to build the necessary processing capacity and markets to cater for the spring milk. However, we seem to have lost focus on our competitive advantage and while companies fight it out for milk supply, we are losing the emphasis on actually growing milk organically and delivering it into overseas markets in their off season. Our high quality products needed to supply the growing markets of Asia, will only continue (and grow) if we have a profitable dairy farming sector. Australian milk companies need to ensure they not only understand their own profitability, but also that of the supply base. This profitability would be better understood if the farmers and the milk companies they supply, had a better knowledge of the cost of farm production, and the trigger points throughout the season that help to determine the profitability of the farm business. Milk companies (both co-operatives and IOFs) could develop tools and systems that could assist all farmers to further understand their costs of production, which in turn would help the company to understand the cost of profitable production of their supply base. This knowledge would then allow the company to develop a long-term strategy to sustainably grow milk for the benefit of the company, the farmer, the local community and Australia as a whole.

3. Investing outside the square

Australian dairy companies need to think of alternative investment options to enhance their long-term growth, viability and profitability. There are several examples in this report of co-operatives (large and small) throughout the world that have made a success of their businesses by investing in business ventures that are outside their co-operative model. Looking at different business opportunities could help a co-operative to spread risk, decrease

volatility, diversify and, if done well, could ultimately enhance profitability of its members. Examples of alternative investments could be:

a. Businesses that help to value add and enhance market access
b. Businesses that compete with fresh dairy products (i.e. powdered yogurts)
c. Agricultural industries that supply the dairy industry (i.e. grain producing properties). This would lead to more ownership and control of the dairy supply chain.
d. Consideration of re-structuring the business (i.e. transforming into a hybrid model).
e. Investigate opportunities for Australian producers to be part of a global co-operative.

Obviously these investments need to be researched, chosen carefully and well managed; otherwise they could put the co-operative at greater risk.

Although some might say that this type of investment is not staying true to the fundamental co-operative philosophy, one might suggest that the new co-operative philosophy is to think outside the square and challenge the boundaries, in order to remain a co-operative. After all, there is no point in having a traditional co-operative if it is not able to remain viable and is at threat of ceasing to exist.

4. Cooperation throughout the Australian dairy industry

As the world demand for dairy grows, there is an opportunity for Australian dairy companies to work together towards meeting this demand while enhancing the sustainability and profitability of our industry right through the supply chain. Rather than individual companies competing against each other at a national level, greater efficiency could be achieved through the development of joint ventures, partnerships and other business models. Australian dairy companies could work together to compete at global level on a scale equal to that of the international powerhouses of the dairy world. The objective being to maximise the utilisation of current Australian dairy manufacturing assets to drive efficiency through the supply chain, to deliver solid farm gate prices, while ensuring a strong and secure supply of quality Australian milk to meet the growing demand of consumers. Some examples are:

a. Rationalisation of commodity processing plants. Rather than each company building its own processing plants, companies could work together in partnership to build a super processing plant that could process each company's milk most

efficiently. After the manufacturing process, each company could take back control of its own product to complete the marketing process and delivery to consumer.

b. In line with this, Australian companies could develop a joint venture where a generic all-Australian brand could be developed and sold for the benefit of all.
c. Smaller supply organisations could develop partnerships with a variety of larger organisations that would enable them all to compete with the current retail duopoly.

5. Government policy

There are numerous areas of government policy that could be assessed to further enhance the long-term sustainability of agricultural production in Australia.

These include:

a) Competition policy #1 – this needs to be assessed and redeveloped to allow milk companies to work collaboratively to become larger and more powerful to ensure a greater global presence. Something many overseas companies are already permitted to do. This would open up the possibility for a global co-operative.
b) Competition policy #2 - if demand is outstripping supply then the true theory of economics says that the price will increase. However, the current Australian retail duopoly prevents this by causing processors to cut retail prices to secure shelf space, which in turn reduces their margin, then putting downward pressure on farm gate prices. Allowing an opening for some collaboration between milk companies, would give opportunity for more competition in the retail sector Changing this policy would require strict control and regulation to maintain trust, transparency and efficiency, while also ensuring there is no abuse of market power.
c) Industrial relations and Taxation reform: With small business, rural/regional businesses and larger manufacturing companies finding it more and more difficult to compete locally and globally, there needs to be a major rethink of taxation and incentive schemes to generate a sustainable future. Investments in technology (wind, solar), penalty rates, superannuation taxation, energy rebates and payroll tax could be redistributed in a way to inject vital co-partnering contributions into the regional and rural business sector.

6. It all comes down to board structures and governance

Australian dairy companies must ensure they have strong boards that are able to develop sound strategic plans to enable them to lead their company to a profitable future. In order to ensure long-term growth and viability, they must also safeguard the long-term profitability of their suppliers (i.e. the farmers). To do this, they must be highly skilled and governed. Board members need to have a sound knowledge of agribusiness supply chains with a particular understanding of agricultural production systems. For co-operatives and the industry to operate profitably, boards need to carefully balance the needs of farmers with the needs of the customers. If done properly this will ensure that all co-operative members can share in the value chain. Some specific recommendations are:

a) Skills, education, cultural and gender diversity correlate with good board room governance and overall company performance. Other skills developed off the farm can add valuable expertise. Similarly, age and gender diversity can provide balance.
b) Not just a farmer board. It can be valuable to have an outside view of an organisation and independent (non-farmer) directors allow for this.
c) Farmer directors with a range of shareholdings. This would allow for a good representation on the board, where all interests of shareholders (both large and small) are catered for.
d) Governance development plans should be encouraged in order to ensure the continual enhancement of skills of all board members (young, old, experienced and inexperienced)
e) Current and relevant board policies should be carefully developed and adhered to, and reviewed. These policies should include, but not be limited to, board code of conduct and board succession planning and risk management strategy.
f) Mentoring by all board members. This allows all members of the board to grow in capability and to help support the younger less experienced members.

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Plain English Compendium Summary

Project Title:	The business of dairy beyond the farm gate. Understanding Australian dairy co-operatives and processors and opportunities for the future.
Nuffield Australia Project No.:	1113
Scholar:	Adam Jenkins
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Objectives	To investigate international dairy processing businesses, aimed at gaining further understanding of the current Australian dairy industry co-operatives and processors.
Background	With current dairy farm gate prices and processor margins being squeezed, there is pressure on processors (both co-operatives and private processors) to operate efficiently to ensure the maximisation of farm gate milk prices and investor returns. The dairy co-operative has traditionally been seen to provide farmers with an opportunity to gain a share in the supply chain and therefore increased financial gains. Introduction of independently owned firms (IOFs) has added competition to the supply market place, causing farmers to question the benefit of the co-operative in the post Global Financial Crisis world. As a farmer I was challenged to know what options there were for processors in the Australian dairy industry.
Research	This study consisted of the Global Focus Program visiting India, USA, France, Bahrain, Turkey and the Ukraine. Following this saw visits on an individual trip to Argentina, Chile, Italy, Germany, Netherlands, Ireland, UK and New Zealand. In this time I met with many farmers and company directors from different types of dairy processors where I was able to gain valuable insight into a variety of dairy farming and processing businesses.
Outcomes	Dairy processors, both co-operatives and IOFs have had to meet the challenges of the changing global and domestic market conditions. Some have successfully changed their businesses through their company and board structures, investment strategies and global approaches to enhance their long-term sustainability, sustainable milk supply and delivery of strong farm gate milk prices and investor returns. Through this research we can obtain an understanding of the attributes of a successful dairy processor.
Implications	The Australian dairy farming community can gain valuable insight into the possible options for milk processing in the future. With other international dairy businesses having experienced or experiencing similar change in their domestic and global markets we can ensure that we take heed of their successes and failures to enhance the Australian industry.