The Future Opportunities and Challenges for one of the World‘s Largest Dairy Export Firms: Fonterra in New Zealand

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Fonterra is the world's largest exporter of dairy products and the fourth largest dairy company in the world responsible for about a third of international dairy trade (Rabobank, 2002). Based in New Zealand, Fonterra operates in 140 countries through its two main subsidiaries NZMP[1] and New Zealand Milk.[2] As a co-operative, Fonterra is owned by its 10,400 supplier/shareholders who can elect directors and shareholder councillors to govern and monitor the company. Since its formation in 2001, Fonterra has continued an aggressive programme of acquisitions, joint ventures and worldwide alliances whilst simultaneously undertaking an innovative capital restructuring process. Funding this aggressive growth strategy as well as maintaining and improving various debt to equity ratios has not met with all shareholders' approval. Fonterra's domestic milk supply market share has fallen from 95% in 2001 to around 87% in 2014 and as more overseas competition move into the domestic market this percentage is expected to drop even further (Patterson, 2014). As New Zealand Milk has continued to grow in real terms, Fonterra has been shielded from this drop in percentage. But the quantity of milk that New Zealand produces cannot grow forever and this is expected to plateau in the near future.

INTRODUCTION

Fonterra was established in 2001, and was essentially a merger between New Zealand Dairy Group (NZDG), Kiwi Dairy Co-operative and the New Zealand Dairy Board (NZDB). This merger saw the simultaneous removal of the NZDB's statutory exporting monopoly and therefore the deregulation of the New Zealand dairy industry which required government intervention to ensure approval by the Commerce Commission. There were some smaller milk processors who chose not to amalgamate, notably Tatua and Westland, but overall the new Fonterra Co-operative accounted for approximately 95% of the New Zealand milk supply (Fonterra Co-operative Group, 2003). The strategic reasons for the amalgamation which created Fonterra were encapsulated by Fonterra's first Chairman John Roadley in a speech to a Ravensdown conference in 2001:

> "*The more immediate challenge and opportunity that I am focussed on is ensuring we respond well to the globalisation of our dairy industry… That's driving the acquisition of dairy companies already working in protected markets, and the alignment with them in joint ventures. The other key driver for industry consolidation is globalisation by our customers. The top 25 food retailers in the world – our customers – are now involved in a dozen or more major acquisitions annually… You must have scale to have any leverage with a customer as powerful as a Wal-Mart. That reality is driving*

dairy companies to merge, to acquire and to enter into joint ventures with one another… That's the dynamism of the international dairy industry that we are part of. There are going to be fewer and fewer, but bigger and bigger companies chasing milk supply and customers." (Roadley, 2001)

In global terms Fonterra is the world's largest exporter of dairy products, and the fourth largest dairy company in the world (Rabobank, 2002) responsible for about a third of international dairy trade. It operates through its two main subsidiaries, NZMP (dairy ingredients) and New Zealand Milk (consumer products) in 140 countries. Since its formation Fonterra has continued an aggressive programme of acquisitions, joint ventures and alliances worldwide, whilst simultaneously undertaking an innovative and controversial capital restructuring process. However despite, or perhaps because of these changes, Fonterra's market share of New Zealand milk supply has declined from approximately 95% in 2001 to around 87% in the first six months of 2014 (Patterson, 2014). Of the four different co-operative models identified by Stranskov (1996), Fonterra is adhering to the large farmer controlled co-operative model supplemented with addition finance from outside institutional investors in order to fund this aggressive growth strategy as well as maintaining and improving various debt to equity ratios.

The New Zealand agricultural industry has changed dramatically from being a highly regulated and subsidized industry to the only non-subsidized agricultural industry in the world (Lattimore & McKeown, 1995). There has also been consolidation of farms so land is increasingly being dominated by fewer and larger farms (Mairi, 2006), and as such there is significant capital invested with each farming entity. Fonterra has been formed to prosper and advance in the new world of customer globalization, and as a vertically integrated co-operative need to maximize profits and margins in order to provide a good return for its shareholders. It is commonly reported that Fonterra alone makes up 7% of New Zealand's GDP, and approximately 95% of its earning are generated outside New Zealand by direct sales to more than 100 countries through a network of international processing and distribution investments. Fonterra is a private company, co-operatively owned by its 10 600 farmer shareholders who supply the milk and has 16 000 employees (6000 of these offshore) (Gray & Le Heron, 2010).

Fonterra has 35 manufacturing plants outside of New Zealand, which receive and process milk externally sourced as well as dairy ingredients supplied from New Zealand in order to manufacture a diverse range of dairy products. As Deputy Chairman Greg Gent noted in 2001, "If Fonterra wants to sell (offshore) yoghurt and semi-fresh high value products it needs to use non-New Zealand origin product. You can't export water profitably so it makes sense for us to source these ingredients from other suppliers". This approach has resulted in the development of a number of strategic joint ventures and alliances with other dairy processors and manufacturers such as Nestle, Dairy Farmers of America (DFA) and Soprole in order to maximise foreign returns from what is essentially a commodity product.

The sheer size of Fonterra in relation to the New Zealand business landscape, and the fact that it also operates as a co-operative appears to frighten a number of politicians. This could perhaps be best described by Akoorie and Scott-Kennel (1999), "*co-operatives (certainly in the New Zealand context) are seen as a less desirable form of enterprise organisation, or an anomaly in a hierarchical capitalist world. Their monopoly powers (it is suggested) stifle innovation, create inefficiencies and act as a barrier to competition, which as Crocombe et al. (1991) suggested is critical to the development of international competitiveness. On the contrary, we would suggest that the co-operative structure may be best suited to the nature of the agricultural industry in which it operates*". While politicians and analysts best debate how Fonterra should be operated, and argue how the co-operative model may lead to inefficiencies, Gentzoglanis (1997) examined the relative performance of Canadian dairy co-operatives to Investor Owned Firms (IOFs) using data from six major dairy co-operatives and six IOFs from 1986 to 1991. His results contradict the theoretically expected relationship: specifically, the co-operatives have a higher profitability, higher liquidity, and lower leverage than the IOFs. These studies however fail to address the difference in financing the co-operative's capital and the financial viewpoint of the owners of the co-operative, that is, the members. (Rafat et al, 2009) This issue was identified and addressed by Fonterra through the Trading among Farmers (TAF) initiative which in 2010 allowed for outside finance to invest in Fonterra shares to enable a profit share and a capital gain or loss.

Indeed while Fonterra may be accused of being a monopoly or using monopolistic behaviour (Fox, 2010) domestically, in the global context Fonterra is only the fifth largest dairy company worldwide (Gray & Le Heron, 2010) in what is a traditionally a very competitive market. In a New Zealand context Fonterra, as well as all other dairy processors and manufacturers is subject to the Dairy Industry Restructuring Act (DIRA), which in its current form Fonterra is legally obligated to supply start-up competitors (most of which are foreign owned) milk at cost price with conditions that are beneficial to the competitor and then allow for the competitor to export in direct competition to Fonterra. In the first full dairy season following Fonterra's formation the company collected 96% of New Zealand's total milk production. But over the intervening years, Fonterra's market share has steadily declined. By the 2013 dairy season this market share was 88% and over the first six months of the 2014 season this share had slipped further to 87% (Patterson, 2014).

If the co-operative structure that currently is Fonterra failed or fragmented in any way, and left farmers to fend for themselves in the current free market; it is thought that a distinct change in farmer behaviour would occur. This is perhaps best described by Nuffield Scholar Desiree Reid (2011) when she noted "*The removal of collective ownership and marketing encourages farmers to act individually. They are economically led to make short-term decisions for themselves, rather than for the whole industry and for the long-term. This individualist behaviour restores the inherent inefficiency in the dairy value chain, and results in a poorer financial return in the medium term. This decision of individualism versus a macro-view is similar to the proposition of contract milk in Fonterra. In the short-term contract milk is economically attractive for the individual. Supplying milk on contract can be more profitable because the capital investment in processing assets is not required. However, if all Fonterra farmers acted individually and supplied under contract, farmers would no longer own Fonterra. As demonstrated by the experience in the United Kingdom, the focus of the processor would likely shift, and maximising Milk Price would no longer be an objective.*"(p. 7). If this scenario were to occur, it is my belief that dairy farmers would no longer have any form of control and would have to accept whatever price the processor offered. With dairy farmers already highly leveraged as a group, this would place extreme financial pressure on many farming businesses as New Zealand Reserve Bank Governor, Graham Wheeler (2014) explains, "*The elevated debt level means that some farmers are potentially highly exposed if there are substantial declines in the milk price pay-out, or if land prices fall. With dairy production techniques becoming more intensive and with a higher cost structure, the implied 'breakeven' pay-out for individual farm profitability has increased over time. A significant decline in the milk pay-out, for example, could place some highly indebted farmers under financial strain, particularly with the market for farmland being more illiquid in times of stress. Higher debt levels mean that farmers are also exposed to rising interest rates, especially with close to 70 percent of dairy debt comprising floating rate mortgages.*"

Another risk for Fonterra's future relates around the loss of reputation among customers, particularly around food safety and security. This was perhaps best demonstrated with the recent Whey Protein Concentrate (WPC) 80 scare, but the brand has also been threatened with a subsidiaries fatal melamine contamination and a DCD scare. Perhaps to Fonterra's detriment, there is countervailing evidence that suggests "liability of a good reputation" (Rhee & Haunschild, 2006). That is, being known for something can lead to enhanced expectations that may be hard for the firm to meet. For example, Rhee and Haunschild (2006) study suggests that having a good reputation for product quality may result in greater market share losses following product recalls (in particular, automobile recalls resulting from severe defects). (Lange, et. al, 2011). This combined with a sensationalistic media can exacerbate and amplify any possible quality mishap in the eyes of the consumer.

FACTS / DATA

All respondents were concerned with the impact on the New Zealand economy if Fonterra was forced to downsize or fragmented completely. A leading Australian dairy authority compared the impact to mining in the Australian economy: *"I saw with interest the other day when GDT*[3] *went up, whole milk powder went up 25% and your dollar went up 2 cents. The impact of Fonterra on the New Zealand economy is like the mining industry here. New Zealand created Fonterra, it's something a little bit special, and you need to do whatever you can to protect that, and your farmers probably need to understand the world doesn't end at New Zealand, have a look outside New Zealand and look at other co-operatives around the world and what happens to the dairy industry in that country when they lose their co-operative…I think the farmers need to understand what happens when you do lose it."*

Another view from the banking sector: *"If it* (Fonterra) *failed that would catastrophic, it would be catastrophic for the New Zealand economy and if you take Nokia as the example in the Finnish economy - Nokia was the Finnish economy."*

The loss of supplier/shareholder control and the breakdown of the co-operative business model are of real concern to farmer respondents. That is, where the company's priorities shift from maximising milk price returns to its suppliers to maximising profit for its shareholders. In the corporate model the shareholders are not always farmer suppliers. This concern was expressed by an Australian farmer:

> *"I think it's really important that you hang onto that co-operative structure for your success in New Zealand. Because once you start to lose that you become another pawn in the market and I think that if I was a New Zealand dairy farmer I'd be promoting the value of the co-operative to your farmers…use the Australian industry as an example - if you don't protect your co-operative as to what can actually happen."*

Respondents raised the possibility of a milk supply plateau. If that occurs, Fonterra's diminishing market share will result in a *tipping point* where the company will be unable to fully utilize existing plant and capital assets to provide a competitive return to supplier/shareholders. As described by a current Fonterra director: *"There's definitely a tipping point, and I made the example where we're really the only model being a co-operative that will pay the farmers the most they can. The corporate model pays less, if they didn't, they would have their own milk price independent of ours and they would be trying to bump us off in terms of milk price - but they're not they're just paying enough to get milk."*

As a result of falling milk supply through loss of market share and increased competition, there would be a *tipping point* where the underutilization of existing assets begins to undermine any value gains and/or returns to shareholders and this could create some difficulty for Fonterra to return the best possible value back to shareholders due to the increased overheads. Although a number of figures were mentioned with 80% of milk supply seen as a psychological tipping point for the company, most of the respondents indicated that Fonterra's market share would eventually drop to 70-75%, with possibly up to 10-12 dairy companies collecting and processing milk by 2020.

A Fonterra Shareholder Councillor also commented that Fonterra "*have to fight for every litre*" or they risk losing their "*comparable advantage, losing the one advantage you have which is temperate climate lots of water and low population."* The only way identified to mitigate this scenario was through performance. As a former Fonterra director says: *"Easy to say, not so easy to do. I still think that performance is the only way. You can complain about this or complain about that but around scale and around influence Fonterra should be untouchable by other scale ingredients players."*

However, with recent volatility in the commodity milk markets, this has shown that Fonterra needs to move away and diversify from bulk commodity products into more specialised, value added products that are not subjected to the extreme price fluctuations of commodities. As one of New Zealand's leading agricultural finance specialists noted: *"The one part of the Fonterra business that I think is exceptional is the food service business. What they are doing in China in food service is exactly the right thing to be doing. They are delinking from commodity and really focussing on delivering solutions to customers and those solutions don't need to be for the end consumer they can be for the intermediate product they just need to be innovative and different but I think if we are going to play in the commodity game, as I said 5 years ago, others will pass us as they can do bigger volumes at lower cost."*

The share capital required to supply Fonterra is perceived to be a large barrier to entry into the company for many potential suppliers and for existing shareholders this has been an easy source of capital to be released. Some respondents believed a combination of this and a dissatisfaction among some shareholders around the value of the share dividend that has perhaps led to more Fonterra supplier/shareholders being prepared to look seriously at other opportunities. It was thought that Fonterra's overly zealous approach to capital restructuring into the Trading among Farmers (TAF) model has isolated them and desensitized directors and management to other equally pressing and valid shareholder concerns.

DATA ANALYSIS

The research showed that three key risks could potentially threaten Fonterra's future viability. The first is Fonterra's falling market share in domestic milk supply. When Fonterra was formed in 2001 they were responsible for collecting and processing approximately 96% of the New Zealand milk supply. In 2014 this percentage had fallen to 87% and it is expected to decline further. This has been brought about by the advent and increasing number of foreign owned corporate processors who have been able to exploit niche markets and selectively recruit milk suppliers who meet their own specific criteria. In real terms the amount of milk Fonterra currently collects has increased and as a result the company has been buffered the effects of losing this market share. However, all respondents in the research agreed that New Zealand milk supply would plateau in the near future making this a major concern to Fonterra. Likewise, the respondents agreed that the advent of domestic competition had resulted in Fonterra's falling milk supply share and that the only way to combat this would be for Fonterra to *outcompete* rival processors in terms of performance and payout. This could be extremely difficult due to the smaller company's niche requirements and Fonterra's legal obligations.

The second risk identified is the possibility of political interference that could dramatically impact Fonterra's performance and/or viability. Due to Dairy Industry Restructuring Act 2001 (DIRA) obligations and the requirement to collect all available milk, Fonterra must have enough processing capacity to cope with peaks of milk flows which can be approximately 92 million litres/day. As a result, Fonterra is forced to convert this raw product into basic commodity products like whole and skim milk powders in order to assist processing throughput. This has serious implications for a company that has plans to increase value added products and reduce exposure in bulk commodity markets. Under the same legislation Fonterra is legally obligated to supply/subsidise any new competitor in the New Zealand domestic market with up to 50 million litres of milk annually and a predetermined market rate for a minimum time period of three years in order to assist competition and provide choice for farmers and suppliers. Under the original legislation, this requirement ceased when Fonterra's market share fell to 88%, however in 2009 it was determined by government that this should be recalibrated to 80%.

The third risk identified is the loss of customer reputation and how the resultant loss of sales or reduced premium for products would impact on financial performance and viability. This was perhaps best illustrated with the 2013 Whey Protein Concentrate (WPC80) quality recall where tests showed the presence of botulism in milk powder and the resultant scramble to track and quarantine affected product. In the end the test was actually a *false positive* but the haphazard way and poor communication with which the recall was conducted caused a major breach with customer confidence with which Fonterra is still affected and suffering from today.

As dairy farming has evolved into a much more intensive and diversified business, possibly since the days when wives needed to work off farm to supplement a low dairy pay-out, the farmers and agri-business owners have become more aware and demanded a better return on capital. Mechanisation has improved productivity and with these added infrastructural costs farmers have become more aware of opportunity costs on capital invested. To help grow their equity and diversify their risk dairy farmers are more inclined to look at other investment options. Fonterra has some pressing concerns to recognise and mitigate in the short to medium term, and this research potentially identified a number of options that the company could consider.

CONCLUSIONS / RECOMMENDATIONS

With the formation of Fonterra the New Zealand dairy industry changed forever, however Fonterra has not reached its potential or delivered on its promises. With competition increasing domestically and globally, Fonterra cannot afford to become complacent and must ensure that its supplier/shareholders continue to receive the best possible returns for their milk and to show this in a transparent manner.

The real issue for Fonterra, to maintain critical mass and shareholder support, is being able to maximise the value of milk so that it can generate an acceptable return to shareholders both now and in the future. All survey respondents unanimously stated that for Fonterra to maintain shareholder and supplier support, it all came back to performance. If it was perceived that Fonterra was not performing well, shareholder flight was inevitable. Although Fonterra's market share of New Zealand milk has declined over 14 years of operation, in real terms this volume had actually increased and had buffered the company from any adverse effects. However, what does Fonterra do when the New Zealand milk pool plateaus?

To reduce exposure to the volatility of world commodity markets, Fonterra needs to invest more into innovation and research and development to access the higher value premium markets. While innovative research and development is essential for Fonterra, they must also continue focusing on being world's best in the ingredients business to maximise current returns for shareholders while using joint ventures to minimise the costs of entering new markets or promoting new products. If Fonterra stays in the milk powder commodity markets then in twenty years there will be overseas competitors who could produce more milk at a lower cost. The assertion is that Fonterra needs to continue growing value added premium dairy products to better serve both customer and shareholder. If this requires a change in business structures such as joint ventures or other type of alliances then this is seen as a positive move for the co-operative.

Retaining milk supply will require the company to adopt a more personable approach with its day-to-day dealings towards shareholders. To a certain extent Fonterra has recognised this and has put in place some measures to try to bridge that gap. An example of this is the Farm Source initiative that is currently being rolled out and breaking this down into regional level so localised concerns can be addressed. The benefits of this initiative need to be better explained to shareholders and constantly reinforced so that a better uptake can be achieved.

It was generally accepted among respondents that Fonterra has an extremely important role to play within the New Zealand dairy industry. Specifically, being able to effectively determine the national milk price through economies of scale as well as being able to calculate what an efficient milk processor should be able to produce for a set quantity of product. If New Zealand farmers lost the opportunity to be members of a dominant co-operative like Fonterra and the marketplace fragmented into a number of smaller corporates then there is a high probability that farmers' financial returns would be worse. With no national milk price to be benchmarked against, corporates would only have to pay their suppliers whatever was required to keep them in business with no obligation to maximise supplier returns.

This would have a devastating effect on the New Zealand dairy scene with many farmers forced out of business due to low returns and many placed into a position of negative equity as the value of their land reduced over time as the realisation of lower returns filters through the industry. While most farmers would survive, in reality they would have to be in populated dairy areas with easy access to a processing plant or they would be refused pick up and dairy farming would struggle even more to entice people into the industry when the perceived benefits have been substantially reduced. Overseas experience has shown us that when farmers lose control of their industry, they lose their collective voice and ability to collaborate and determine conditions other than price.

As well as the value created within the dairy sector, there is a multiplication effect right through the entire breadth of the New Zealand economy and this needs to be better communicated. The respondents agreed that if the dairy sector lost approximately $5-6 billion (NZD) dollars in revenue, there would be a ripple effect on the economy that would create some adverse effects for government and private sector alike.

For these reasons New Zealand must retain a Fonterra type of company in the dairy industry so that value is maximised and kept within New Zealand for the benefit of all New Zealanders. In order to remain relevant, Fonterra needs to:

- Communicate better with shareholders and especially customers to determine what their needs truly are,
- Invest in more research and development so that new innovative products can be made in order to enhance value, and emphasis the science behind the product. Especially important in order to "futureproof" the company and reduce exposure to commodity markets,
- Continue to maintain the highest quality food standards and improve product traceability to world's best,
- Continue to develop new markets and products through the use of joint ventures in order to minimise risk and costs.

ENDNOTES

1. NZMP – dairy ingredients.
2. New Zealand Milk – consumer products.
3. GDT – Global Dairy Trade Price Index - weighted-average of the percentage changes in dairy prices.

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