TAF-why did we need it, how well is it working and where to in the future.

Kellogg Rural Leadership Programme

Course 37 2018

James Courtman

I wish to thank the Kellogg Programme Investing Partners for their continued support:

NZRLT PARTNERS

Strategic Partners

Programme Partners

Media Partners

Contents

Executive Summary 1

Acknowledgements 3

1.0 Introduction 4

2.0 Aims, Objectives and Method 6

3.0 Overview/ Background 7

- 3.1 History 7
- 3.2 Share market Listing 7
- 3.3 TAF Stage 1 & 2 9
- 3.4 TAF Stage 3 10

4.0 Results and Discussion 14

- 4.1 Why did we need TAF and were there Alternatives? 14
- 4.2 How well is it performing 17
- 4.3 Where to in the future 20

5.0 Conclusion 24

6.0 References 26

7.0 Appendices 27

Executive Summary

The decision by Fonterra to implement TAF (Trading Among Farmers) back in 2012 was a major decision in the history of the co-operative and was predominantly to address an issue know as Redemption risk. This redemption issue was something Fonterra conceded to in the process of forming Fonterra in 2001. Government at the time wouldn't allow the mega co-operative to be formed without shareholders and their capital to leave freely.

The final vote to implement TAF saw some shareholders raise concerns the process becoming the first step towards a public share listing and loss of farmer control. There was a strong belief that retained earning could address Redemption risk.

The aim of this report is to look at the TAF model now that it has been in place for close to 6 years. The report aims to look at why did we need TAF, how well is the model working, where would we be without it and where does Fonterra's capital structure need to head in the future.

My study process involved reading background information that Fonterra provided its shareholders during the capital restructure process to understand why we needed. Talking with and asking some set questions of people who were involved in the process. Gaining the opinion of respected industry people who have no strong links to Fonterra through a questionnaire to build some common theme's or opinions. Putting together a table showing Fonterra's capital expenditure over the past 10 years, along with some key metrics of milk supply change, pay-out and gearing ratios. Analysing this data set to make some assumptions of where Fonterra would be placed without TAF. The final section deals with the fact that capital structure is an ever evolving model in co-operatives and where does Fonterra need to head in the future.

The key findings from the report are that, Redemption risk was very real issue that Fonterra faced, and we were much better placed to deal with issue back in 2007-2012 from a position of strength. It would have been a much more challenging issue to deal with now as Fonterra continues to lose milk supply via cessations and to rival competitors. Certainly, doing nothing or having greater retained earnings were not viable solutions, it simply meant kicking the can down the road. TAF is complicated to fully understand but no other viable options were really put forward at the time. TAF has given Fonterra the confidence of permeance in the balance sheet to go out and continue making capital investments without having the concern of shareholders leaving the co-operative and taking their capital with them.

Heading to the future Fonterra needs to be talking with its shareholder base on a regular basis about what they want from their co-operative and how this aligns with strategy and capital structure. Capital

structure is an ever-evolving process and everyone in the business needs to be brave and open enough to good strong discussions on all options. Most outside commentators believe a two-business model one where the processing assets are separate from the value add/brands part of the business would serve the co-operative best. This would drive better performance from each unit and allow farmer shareholders to have greater choice over the level of capital they invest in their co-operative. At the end of the day there is no right or wrong answer, but it is important that discussion is strong and robust. Shareholders needs and wants from their co-operative will change over time and they are the ones who control its future direction of travel.

Acknowledgements

This project is a very time-consuming process especially when trying to balance that time with your paid day job. I would like to acknowledge the support of my equity partners and staff members who have had to deal with my reduced presence.

The support of Gareth Lash, a former Fonterra employee who has provided vast knowledge and support through this process.

All my fellow Kellogg members who have gone through this process and the facilitation team of Scott, Lisa, Anne and Patrick.

Most importantly my late Grandfather Les Walker who was Fonterra shareholder, a great advocate of life long learning and provided me with funds to finance the costs associated with this course.

James Courtman
0273416907
jamescourtman14@gmail.com

1.0 Introduction

The decision to implement TAF (Trading Amongst Farmers) was probably the second most important event in the history of Fonterra behind that of its formation in 2001. This decision was a slow and time-consuming decision for the business to get something that a large majority of suppliers supported. TAF appeared to be well received during the early consultation process with shareholders and received close to 85% support during the stage one and two votes. When the board went back to shareholders to get approval for stage three which was the implementation of TAF some shareholders had begun to grow uncomfortable about the loss of farmer control. They believed that the formation of the shareholders fund and it's listing on the stock exchange was a first step towards a public listing something shareholders has strongly rejected in 2007. Most of these opponents proposed for greater retained earnings to deal with redemption risk, the main driver of capital restructure. Since the vote Fonterra suppliers have had to deal with 2 very low pay-outs, had redemption risk not been dealt with before these events then amount of capital taken out the business could have had a severe impact on the companies' ability to follow strategy of trying to turn more milk into high value products and grow the value add side of the business.

Fonterra was created in July 2001 when farmers voted to merge New Zealand's two largest dairy co-operatives, New Dairy Group and Kiwi co-operatives with an 84% majority. The merger approval was followed by the Dairy Industry Restructuring Act (DIRA) which deregulated the industry, opened it up to competition and enabled the New Zealand Dairy Board to be folded into the new entity, creating a single integrated "cow to consumer" Co-operative. (Fonterra, 2007).

Fonterra opened for business in October 2001, owned by just over 13,000 supplier shareholders representing some 96% of New Zealand's dairy farmers and 1,111 million kilograms of milk solids. (Fonterra, 2007)

Fonterra's milk collection for the 2017/18 season is predicted to be 1,480 million kilograms of milk solids down 3% on the previous season. (Fonterra, 2018). This compares with a peak production figure of 1,614 million kilograms of milk solids during the 2014/15. Since this record season, production has continued to decline due to a combination of reduced milk supply and loss of supply to rival competitor's. The number of Fonterra supplying shareholders is now listed at 10,500. The company employs 22,000 people and accounts for 25% of New Zealand export earnings. (www.fonterra.com)

Fonterra's percentage of milk collection has fallen from 85% of total milk solids collected during the record 2014/15 season down to a predicted 80-81% for the 2017/18 season.

The DIRA (Dairy Industry Restructuring Act) which was put in place after the formation of Fonterra was to allow for a competitive market place which would be viewed favourably by our international trading partners. The result was that Fonterra had to adhere to some unique rules when compared to other Co-operatives or milk processors in the New Zealand dairy industry or around the world. The key ones are listed below

- Be an open co-operative that accepts (subject to limited exceptions) all milk supply offered by any dairy farmer in New Zealand who is willing to hold shares in Fonterra in proportion to their milk supply;
- Ensure the terms of supply that apply to new farmer shareholders only differ to those applying to existing farmer shareholders to reflect different circumstances;
- Allow farmer shareholders to supply up to 20% of their weekly production throughout the season to another processor;
- Allow farmer shareholders to leave the Co-operative and, on leaving, purchase their milk vats (subject to specified conditions). The leaving farmer also takes his share capital with him at the end of the season.
- Supply independent processors with limited amounts of milk. This being 600 million litres or 3.5% of Fonterra supplies with provisions for this to lift to 5% in the future. (Fonterra, 2012).

During the early years of Fonterra's formation these regulations weren't a great barrier to Fonterra's performance due to three main reasons, lack of competition, a rapidly growing milk supply base and a period of reasonably stable economic and climatic environments. The merging together of multiple co-operatives during the formative years also used up a lot of governance time and energy.

A rapidly growing milk supply base meant as new milk supply was processed by the company these businesses then had to buy shares in the company. This new capital allowed Fonterra to build new plants for processing and invest capital further down stream to increase farmer returns from milk supply.

Fonterra's governors first brought capital restructure to the table in 2007 before both the Global Financial crisis and the 2008 wide spreadsheet drought year. The 2007 capital restructure proposal which involved listing shares on the stock market was soundly rejected. During this time both the 2008 global financial crisis struck, and the New Zealand agricultural sector was hit by widespread drought.

The global financial crisis resulted in Fonterra having to run the business with lower levels of debt (gearing ratios had to be in the 40s not the 50-60s), this debt had previously been used to fund investment in businesses further up the value chain or redeem shares when milk supply fell or left the co-operative. (Fonterra, 2009)

When the 2007/08 drought hit the country, Fonterra was forced to redeem $742 million worth of shares due to the fall in production levels. Before TAF as farmers milk production levels fell they were

able to buy back shares from the co-operative as they no longer had milk supply to back those shares. (Fonterra, 2009)

These two events further confirmed that capital structure and namely redemption risk was a real threat to the co-operative and late 2012 TAF was implemented after farmer shareholders voted for the proposal in June 2010. The proposal gained 66% shareholder support which was a drop from farmer support of around 85% for the first two stages.

2.0 Aims, Objectives and Method

In this report I will aim to look at what I consider three key parts of TAF, they are:

1. Why did we need TAF and were there alternatives out there that could resolved the three key issues raised by the Fonterra board at the time (Redemption Risk, Enhancing shareholder choice, Providing capital for growth).
2. How well has TAF performed, with focus on the impact of low milk price, a theoretical severe drought and aggressive targeting of milk supply from a new processor.
3. My final area of focus will look at how Fonterra needs to continue to evolve its capital structure going forward.

To carry this report out effectively, I undertook a lot of reading of the historical information Fonterra provided to farmers during the capital restructure process. This was required to get myself up to speed and get my head around the range of factors and issues at play. I also organised to meet with a current and previous employer of Fonterra both of whom were heavily involved in the process that lead to the construction of TAF. I also interviewed Sir Henry van der Heyden to get his views around what drove the process (questions to this interview are included in the appendices at the back).

To answer my three questions under Aims & Objectives, I sent a survey of questions to respected industry people. Outside of Sir Henry van der Heyden I tried to avoid surveying people who had any strong links to Fonterra. This survey provided me with some good trends and aligned views from those respondents that I could use in my analysis of the three questions.

For part two I used a spreadsheet template to examine how Fonterra's milk supply (which effectively brings in new capital), debt to equity gearing ratio and capital investment looked during the period before and after the implementation of TAF.

Part three was covered off in my questionnaire plus I also read articles from industry and businesses commentators around the challenges of accessing new capital for Co-operative business models.

Along with articles that dealt specifically with how Fonterra needs to deal with capital structure if it is to fully chase it's business strategy.

3.0 Overview/ Background

3.1 History

As mentioned in the introduction to this report Fonterra's original capital structure was a result of amalgamating numerous farmer owned milk processing co-operatives together over relatively brief period. The last stage involving the bringing together of the two largest processors New Zealand Dairy Group and Kiwi Co-Operatives which required government approval and legislation to be put in place. This resulted in DIRA which places some unique rules around the way Fonterra must operate in the market place with regards to milk collection and processing.

It is the DIRA regulations and the unique situation Fonterra has of collecting and processing such a significant percentage of the New Zealand milk supply, 96% in 2001 when formed that means it capital structure is unique to any other dairy processing co-operative in the world market place.

The energy in the early years of Fonterra's formation were used bringing together two large co-operatives who in turn were a combination of numerous smaller co-operatives. This brings with it numerous challenges and use of time around getting all parties working together heading in a similar direction.

3.2 Share market Listing

In early 2007 after a strategy refresh, Fonterra identified that to pursue their refreshed strategy they would need a more relevant capital structure to meet future growth opportunities.

Fonterra's new strategy at that point in time was

1. Ensure Fonterra remains one of the lowest cost, sustainable dairy co-operatives in the world- an absolute priority.
2. Build trusting partnerships with customers by being a multi-origin supplier, allowing us to build more valuable relationships through supply chain integration and innovation.
3. In high growth markets, where it not practical to use New Zealand produced milk, we will leverage our cow to consumer expertise to build profitable businesses using locally-produced milk.
4. Make Fonterra products the first choice of customers and consumers where we do business. (Fonterra, 2007).

It was this new strategy refresh that drove Fonterra to take a fresh look at its capital structure. At the time board and management commented that strategy and capital structure go hand in hand. That is why we need to be looking now at what capital structure will best serve our strategy and deliver the answers to the other issues farmers want resolved, such as redemption risk, retaining control of their co-operative and choice about where their money gets invested. (Fonterra, 2007)

At this point in time the Board was very forward looking and had identified that they had been in very fortunate position over the history of New Zealand dairy co-operatives where milk supply had grown favourable amounts. Growth of five percent during the nineties and growth of two to three percent up to 2007 which they were predicting would occur for another 10 years. This had allowed the early co-operatives and Fonterra to gain additional capital as more milk supply came on line. To supply extra milk farmers had to buy more shares and this brought about additional capital for growth.

The board at the time could see that in time this growth would slow due to environmental pressures and lack of new land to convert. They could also see the big growth opportunities in the world dairy market but realised that to achieve these more capital than that linked to milk supply would be required to pursue those opportunities. The belief at the time was that without changing capital structure Fonterra would have to review its strategy and fall back to regional commodities business.

The proposal that the Fonterra board and management put to shareholders in 2007 was:

- Create two companies, Fonterra the farmer co-operative which would deal with milk supply and processing and Fonterra the listed company.
  The listed company would be 80% owned by farmers, 65% through the farmer co-operative and 15% through their own shareholding. The remaining 20% would be owned by the public with no one outside shareholder owing more than 10%.
- Farmers would then hold two forms of shares, supply backed shares and those in the listed company.
- Two boards will be created for each company and both will have a majority of farmer supplying shareholders on them.

At that time there were three key reasons why the board promoted this option over other options it had viewed. That was because in their opinion it best addressed the following six issues, Redemption risk, Shareholder choice, Capital for growth, Farmer control, Strategy and Maximising listing value.

The board at the time stated that the key goals of any capital restructure are to:

- **Reduce redemption risk,** current capital is all linked to milk supply. As a result, the co-operative has no permanent capital on it’s balance sheet. This makes it extremely difficult for

the board to feel confident when making large investment decisions. Under the preferred option redemption would be eliminated for Fonterra and substantially reduced for the farmer co-operative.

- **Enhance shareholder choice,** the preferred options allow shareholders to reduce their exposure to Fonterra by holding no investment shares or hold many to participate in their investment strategy.
- **Provide extra capital for growth,** issuing share to the public would raise the extra capital and at the most competitive cost. (Fonterra, 2007)

This proposed structure received mixed feedback when presented to farmer shareholders and as a result the board realised that achieving 75% support was unlikely. At this point they went away and came back with another proposal in 2009/10 called TAF (Trading Amongst Farmers).

During the first proposal and the implementation of TAF in 2012 two major events occurred which brought the issue of redemption risk much more to the front shareholders minds. Those events were the Global Financial crisis and a widespread drought in the 2007/08 season. The board also went away from the first proposal knowing that any proposal with less than 100% farmer ownership and control wasn't an option.

3.3 TAF Stage 1 & 2

The board went away and came back to shareholders with a more staged approach in 2009. This approach involved 3 steps with the last step being the implementation of TAF.

The first two steps involved

- Strengthening the share structure
- Restricted share value

These first two steps were voted for in November 2009 and received strong support with an 85% mandate. Strengthening the share structure allowed Fonterra shareholders to hold shares up to 120% of their recent production, the excess shares or the 20% extra would receive a dividend. Previously these excess supply shares were just capital that a farmer supplier wasn't receiving a return on therefore had no incentive to hold these extra shares. This change meant those extra shares would earn a dividend payment on the value add component of Fonterra's milk supply. When TAF was implemented this dry share, limit was lifted to 200%.

The restricted share value vote was simply a vote to change the way Fonterra valued its shares. Once Fonterra farmers gave a strong indication that a public listing wasn't likely in the near future, the board then recommended that share value be adjusted to reflect that of a restricted market where only a

small range of potential owners can hold Fonterra shares. This change lowered the value of Fonterra shares, this reduced some of Fonterra's redemption risk exposure because farmers had less equity they could take out of the Fonterra business if or when they choose to leave the Co-op.

Both these two steps were teaks to the system and did little to address the two key issues that TAF proposed to deal with Redemption risk and access to extra capital.

3.4 TAF Stage 3

TAF was finally voted for in June 2010 and implemented in November 2012. It deals very well with addressing redemption risk and maintains 100% farmer ownership and control. It provides Fonterra with permeance of capital which gives it greater confidence to invest in downstream activities but only goes a small way to addressing the issue of extra capital for growth in the value add area of Fonterra's strategy. If we look at Fonterra's strategy house below TAF has probably allowed more of the "Can Do's" to be carried out but extra capital is restricting the ability to pursue many of the "Want to do's"

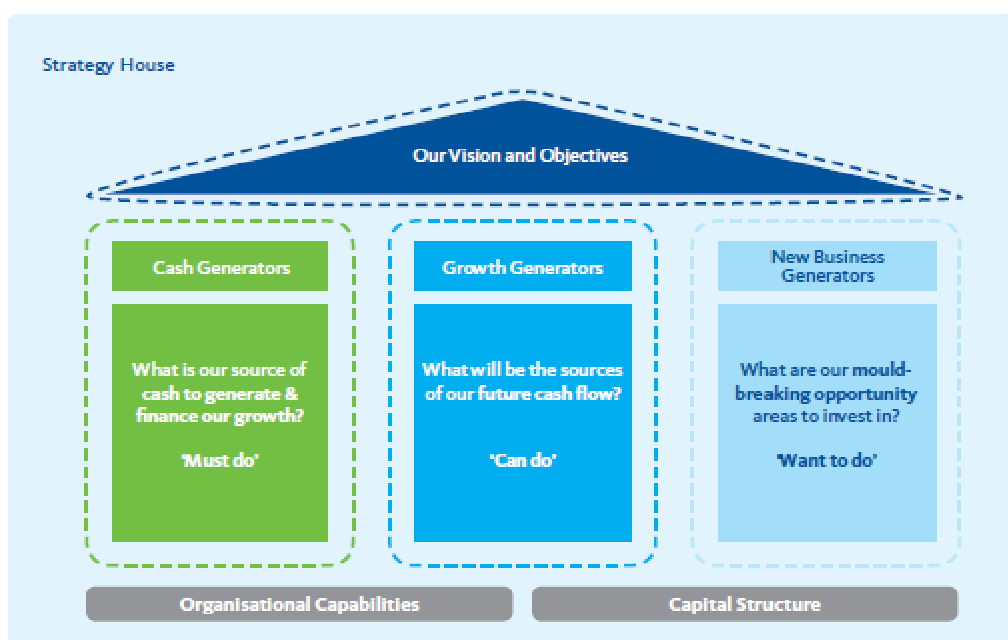

Figure 1: Fonterra Strategy House

Some of the other less talked about but key benefits of TAF are more flexibility in the following areas

- Ability to adjust your shareholding throughout the year, this allows farmers to better match share purchases to cashflow. Previously all share trading was carried out on one day of the year.

- As farmers shareholding is now based on a three-year rolling average. This smooths out seasonal fluctuations of production from climatic or economic events reducing the amount of share trading a farmer needs to carry out.
- Farmers retiring from the Co-operative have three years to sell their shares while those new to the Co-operative can share up over six-year period with a growth contract. For a brief period, Fonterra had a 10-year growth contract as well. (Fonterra, 2012).

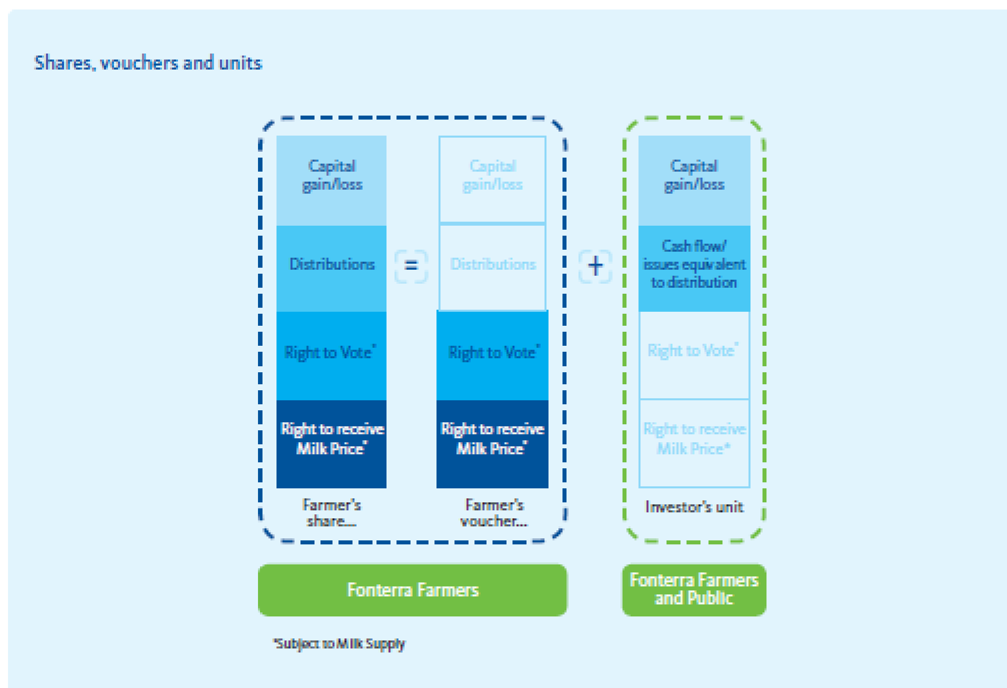

Figure 2: Shares, vouchers and units

So how does it all work, figure 2 above gives a good breakdown of how share, vouchers (these were a one offer that Fonterra gave to farmers during the implementation process of TAF) and units work under TAF.

Under TAF a fully shared farmer is represented by the left-hand diagram, that farmer has the right to receive the milk price, right to vote, he receives the dividend or distributions on shares from the value add part of the business and is open to any capital gain or loss on shares.

TAF then allowed a fully shared farmer to also have the option of selling his economic rights of those shares to the Fonterra shareholders fund. This allowed the farmer to free up some extra capital but still supply milk to the Co-operative. By doing this the farmer could stay loyal to the Co-operative, he would still receive the full milk price and vote to right. The farmer however gives up the right to receive any dividend and any capital gain or loss on shares.

The outside public or Fonterra farmers are then able to buy Fonterra units these receive any dividend and capital gain or losses in share value. Fonterra farmers can convert shares to units (this needs to take place through the Fonterra Farmer Custodian), but units cannot be converted to shares unless they are backed milk supply.

A Fonterra farmer that is fully shared up can also buy dry shares up to 200% of their rolling three-year production average. These extra shares are entitled to the dividend and share capital gain or losses, they however don't have voting rights unless they become backed by production over time.

Since it's inception Fonterra has also allowed new suppliers to supply milk to Fonterra without shares. This can be done by signing up to a programme called Mymilk which is only available in the South Island or by signing a growth contract. The most common of these growth contracts is a six-year contract where 1000 shares are brought up front and the remaining shares are brought in relatively even instalments during years four, five and six. In both these cases farmers supplying this milk receive only the milk price and Fonterra has the ability to give this milk a slight discount over that of share backed milk supply. Currently this is a five-cent deduction which is put aside as savings to go towards share purchase for that supplying farmer.

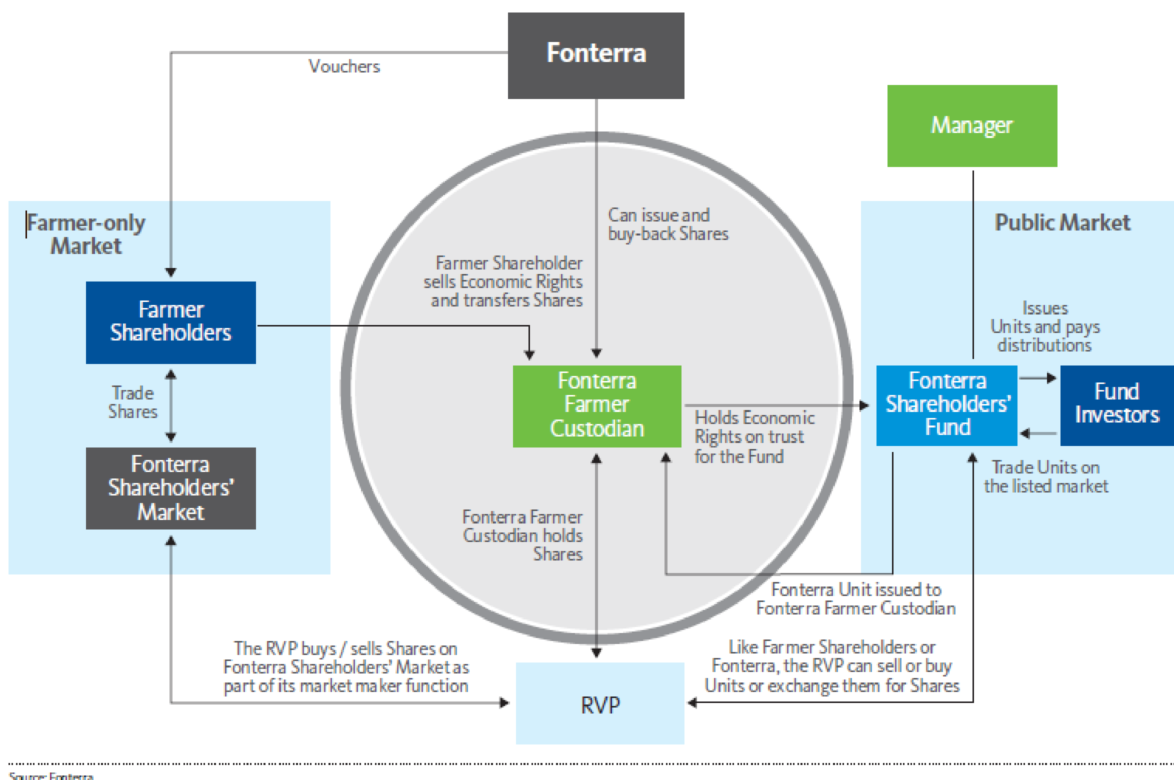

Figure 3: Detailed overview of Trading Among Farmers structure

Figure three gives a detailed overview of how TAF works. The basic essence is that two markets are at work. The first being the Farmer only market where Fonterra farmers trade shares between themselves. This is the key change where Fonterra no longer must buy and sell these shares from Farmers, this substantially removes Redemption risk.

The second market is the Public market where farmers or investors can buy units in Fonterra which entitles them to distributions and change in capital share value. Although the markets are separate, they have been designed to work together. Farmer shareholders, Fonterra and the RVP (Registered volume provider) can buy or sell shares in the Fonterra shareholders market and buy or sell units. They can effectively exchange shares for units and vice versa and therefore can shift between the two markets. (Fonterra, 2012).

When it was first launched Fonterra farmers were able to sell 25% of their wet shares to the Fonterra Farmer Custodian. This allowed the farmer access to the capital value of the share while still retaining voting and supply rights. The custodian could then transfer the economic right of the share into the Fonterra shareholders fund where the public could buy this share as a unit and therefore become entitled to the distribution and change in capital value of the share. The Fonterra Farmer Custodian is a special purpose company incorporated to hold legal title to the shares in three separate capacities. (Fonterra, 2012). The Custodian has been established for the sole purpose of acting as the trustee of three separate trusts, it shouldn't undertake any other business activities. (Fonterra, 2012). A key change during the final stages of TAF was that the Custodian be owned by Fonterra farmers and not Fonterra itself. (Fonterra, 2012).

The RVP plays a very important part in this market operating effectively. Firstly providing a liquid market and secondly to promote price convergence between shares and units. The two keys parts to making the market liquid are by providing a large enough fund size, both Fonterra and the government agreed this needed to be $500mil. The RVP then assists in making sure this market is liquid by being continuously active in offering to buy and sell shares. (Fonterra, 2012). The effect of these two points is to provide a deep and liquid market that avoids major troughs and spikes in share price. This removes the effect of speculation and provides more certainty for investors. The second key role of the RVP is to promote price convergence between the value of shares and units. They can undertake this because they can exchange share for units and vice versa. There is however no guarantee that they will achieve convergence.

During the process of TAF some key protections and rules were put in place by the Fonterra board and the Fonterra Farmer's shareholders council. These protections are a mixture of good business practise

but also to alleviate Fonterra farmers concern about a loss of control which was a major issue when tackling redemption risk. The key protections are listed below.

- The Fonterra Farmer Custodian is owned by Fonterra farmers not Fonterra, the custodian also has the right to veto any changes to the fund that it doesn't agree to. (Fonterra, 2012).
- The fund operates separately from Fonterra. (Fonterra, 2012).
- A limit of 15% of units that can be held by any person and their associates in the fund. (Fonterra, 2012).
- Manage the number of dry shares on issue within the Farmer market to around 5% of total farmer shares on issue. (Fonterra, 2012).
- To manage and control the fund size limit, the constitution only allows for 33% of wet shares economic rights to be sold into the fund. (Fonterra, 2012)
- Fonterra has the right to completely halt the flow of economic rights to the fund in both wet and dry shares under the Fund size risk management policy. (Fonterra, 2012).
- Under the Fund size risk management policy Fonterra need to keep the number of actual units between 7-12% of total shares on issue and the Potential fund size between 7-15% of the total shares on issue. (Fonterra, 2012).

The last bullet raised above is of importance as Fonterra's share of milk supply continues to fall its makes it more challenging to stay within those limits. The result of this is Fonterra still carries some Redemption risk under TAF as it may need to buy back units to manage the fund size in the future. Under TAF however Fonterra has more time to manage and plan for this Redemption risk factor.

4.0 Results and Discussion

4.1 Why did we need TAF and were there Alternatives?

One of the big challenges with the capital restructure proposals that Fonterra put forward to its farmer shareholders was getting farmers to engage and fully understand the key issues around redemption risk. When the issue was first raised in 2007 Fonterra had been through a period of reasonably stable performance without any major financial or climatic shocks. Many farmers questioned why if the company was performing reasonably well was capital restructure required.

The widespread drought and global financial crisis helped bring this more to farmers attention through the real impact of Fonterra having to redeem $742mil worth of capital at the end of the 2007/08 year.

1. Redemption → higher debt → higher interest payments → reduced farmer income
If the Co-operative finances redemptions by taking on more debt, interest payments go up which eats into profitability and farmer shareholder returns.

2. Redemption → sell assets → lower earnings → reduced farmer income
If the Co-operative finances redemptions by selling assets, it no longer gets a return from these assets which also reduces profits and farmer shareholder returns.

3. Redemption → financed by other farmers from retentions → reduced farmer income
If the Co-operative finances redemptions through retentions, that money can't be paid out or used to grow the business. In 2007/08, the 24 cents per kgMS retention meant that the average farmer contributed about $28,000 in capital to partly fund $600 million of redemptions. This money could not be applied to new opportunities to strengthen the Co-operative to grow future earnings.

Figure 4: How loyal Fonterra farmer shareholders pay for redemptions

The diagram/points above demonstrate a good example of how Fonterra were able to get farmers to further engage and better understand some of the issues Redemption risk brought to the Co-operative. That loyal supportive shareholders were carrying the burden when less co-operative minded shareholders left the business.

In a dairy exporter article from June 2012 Murray Gough a former New Zealand Dairy Board chief executive and independent advisor to TAF explains that freedom of entry and exit for farmer shareholders along with their capital was the major concession that the industry had to make to get Government approval for the formation of Fonterra. He goes on to say, "no co-operative in its right mind anywhere in the world would willingly have that sort of commitment in its structure". (Gough, 2012).

One of the real risks if redemption risk wasn't addressed is that the Fonterra co-operative model could experience what is called a run on capital. A group of shareholders or shares could leave the co-operative due to one or more factors e.g. (drought/climatic issues, bio security scare, competitor aggressively targeting milk supply or increased financial pressure). This could put pressure on Fonterra balance sheet and performance, other shareholders could then begin to worry that their own capital was at risk. They would choose to exit the co-operative before the value of their own capital/shares begin to fall in value. This begins to create a snowball effect or run on capital which can put the whole

existence of the business at risk. You are then left with either outside capital or a government intervention to remedy the situation and strengthen the balance sheet.

During the process of implementing TAF very little alternatives outside the original Fonterra idea of listing on the stock exchange were put forward. One the most common ideas put forward by a vocal group of shareholders was that of greater retained earnings. This idea does very little to address redemption risk, it does strengthen the balance sheet of the business but this in turn drives the value of shares higher which further increases the redemption risk as shareholders take more capital with them when leaving.

One other option could have been to try push for the legislation in DIRA to be changed to remove the freedom of entry and exit clause. Given that it was a Labour led government who were in power when DIRA was implemented and National led government when Fonterra was trying to address redemption risk. You would have to believe neither party was that open to the ideal of removing this provision from DIRA and that concerns around a monopoly type market in the New Zealand dairy industry could have influenced trade agreements.

From my questioning of people who understand the dairy sector all agree with Fonterra's strategy of trying to move more milk into the ingredients and consumer foodservices business to generate extra value and returns. The majority agreed that redemption risk was a very real issue that needed to be dealt with, some thought TAF was working well if not better than planned while others thought it's value was only beginning to be tested now that Fonterra's milk supply was on a continual decline.

One of the qualities you look for in a good board is their ability to be forward thinking and trying to recognise what problem or opportunities are the business going to be dealing with in 5, 10, 20 years' time. In that regard we are fortunate the board was able to identify that redemption risk would become a much harder issue and problem to deal with in a declining milk supply environment. They were able to tackle the problem from a position of greater strength. Regardless of whether you agree with TAF, the worst option or outcome would have been doing nothing. Sir Henry van der Heyden believes one of the best way to judge the success of TAF is the fact that one really talks about it now.

When we look back at Fonterra's key reasons for wanting to change or address capital structure you would say that it has dealt very well with addressing redemption risk for the medium term. It has provided Fonterra shareholders the ability to withdraw some capital from the business by selling economic units in a proportion of their shares. It has done very little to provide Fonterra with extra capital for growth opportunities but the permanence of capital in the balance sheet has allowed them to invest with more confidence. The implementation of TAF has also been very good in buying the

business more time when it comes to addressing Fonterra's future needs around capital structure. Capital structure is an ever-evolving issue for co-operatives, given that TAF was implemented in 2012 after discussion through 2009-2011 it is probably some what disappointing that the current board hasn't brought this back to the table for discussion with shareholders much earlier. Fonterra is business owned by 10,500 shareholders and as a result any major decision making, or consultation is a slow-moving process which will be time consuming process.

4.2 How well is it performing

Trying to measure how successful TAF has been is a complicated argument as there is no obvious way to measure its success. There are some measures put in place regarding the shareholders fund and the risk management policy that is aligned to this. These however are more to do with providing Fonterra shareholders with comfort around control than a measure of performance.

The true success of TAF is around providing permanence of capital to help pursue its strategy of investing more money into the ingredients and consumer foods business. It should also be noted that due to the DIRA regulations Fonterra also had to put money aside to build new processing capacity for expected increases in milk production. In a lot of cases this was capital used to build dryers to produce milk powder or extra commodity products.

I however have chosen to look at some key metrics in the Fonterra business before and after TAF to see whether TAF has had any major impact on these. The metrics looked at were milk price, Fonterra's milk supply and the change from the previous season, the debt to equity ratio on the balance sheet and finally the amount of capital expenditure by Fonterra that financial year.

Milk supply to Fonterra and change in milk supply are important because extra supply requires more processing stainless steel to cater for the spring milk flush period. Change in milk supply is of relevance to demonstrate the effects on Fonterra before the implementation of TAF and how this falling or extra milk supply would affect capital flows in and out of the business. Debt to equity ratio is important because it shows whether Fonterra is using the balance sheet to fund its capital expenditure. In the change of milk supply column, it should be noted this now isn't a direct correlation with capital leaving the Fonterra business each year as would have historically been the case pre-TAF. Shareholders now have three years to sell their shares and new suppliers have three years to share up or if they sign a growth contract this share up period is extended even further into the future. This is even further complicated by Mymilk suppliers in the South Island who require no shares. Under TAF it harder to gauge how up much extra capital is coming into or leaving Fonterra balance sheet each year, what we can say is that exiting suppliers will be removing capital faster (they must sell shares within 3 years) than new suppliers will be bringing in capital into Fonterra (growth contracts and Mymilk mean some

milk has no capital tied to it or some of this capital won't enter the business for a 6-10 year after supply begins).

Problem: Has TAF been successful?

Background: Purpose of TAF was to solve redemption risk (money washing in/out of the balance sheet)
For the purpose of executing strategy better i.e. investments to 'turn the wheel' or sell more value add products.

Complication: There is no counterfactual i.e. obvious way of measuring success

Solution: The analysis below attempts to measure the success of TAF by looking at Fonterra's ability to continue to execute strategy in years when it otherwise would have had to redeem shares because of decreases in milk supply

1 The following table shows the annual milk supply and change in milk supply.
Under the old capital structure Fonterra would have had to redeem shares when milk supply decreased.
The redemption is not absolutely aligned to the milk supply change; however, this is a useful proxy.

		Season											
	Units	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18p
Payout- Milk Price	$	$ 3.87	$ 7.59	$ 4.72	$ 6.10	$ 7.60	$ 6.08	$ 5.84	$ 8.40	$ 4.40	$ 3.90	$ 6.12	$ 6.75
Fonterra Milk Supply	Millions of kgMS	1,246	1,192	1,281	1,286	1,346	1,493	1,463	1,584	1,614	1,566	1,526	1,500
Annual Change	Millions of kgMS		-54	89	5	60	147	-30	121	30	-48	-40	-26
NZ Production (DCANZ)		1,312	1,270	1,394	1,438	1,513	1,685	1,657	1,825	1,890	1,863	1,851	1,834
Fonterra Market Share		94.9%	93.9%	91.9%	89.4%	89.0%	88.6%	88.3%	86.8%	85.4%	84.1%	82.4%	83.2%

2 DDE is a measure of balance sheet leverage. Target range is 40-45%.
Should be looked at in conjunction with the likely share movements above, and the investments made below.

	Financial year ending date											
	May-07	Jul-08	Jul-09	Jul-10	Jul-11	Jul-12	Jul-13	Jul-14	Jul-15	Jul-16	Jul-17	Jul-18
Economic debt to debt plus equity ratio	52.1%	57.6%	53.0%	44.9%	41.8%	39.1%	39.6%	42.3%	49.7%	44.3%	44.3%	>45%

3 The following table shows annual capex by Fonterra.
This is useful with the years where Fonterra would have likely faced significant share redemptions.

	Financial year ending date											
	May-07	Jul-08	Jul-09	Jul-10	Jul-11	Jul-12	Jul-13	Jul-14	Jul-15	Jul-16	Jul-17	Jul-18
millions $		755	734	492	644	888	925	969	2287	944	851	

What the table above does show is that during the last 10yrs Fonterra has been able to hold its capital expenditure at a reasonably steady level. There were slightly lower levels of investment during the 2010 and 2011 period due to a recalibrating of acceptable to debt to equity ratios after the 2007/08 financial crisis. During the period from 2007-2014 Fonterra could invest extra capital because growing milk supply meant extra capital coming into the business and this covers over the issue of redemption risk. The real value of TAF and what the table aims to demonstrate is that during an environment where Fonterra's milk supply is falling and likely to continue to trend that way over time. TAF has allowed the board and management to still invest capital into value add business ventures without having to try and factor how much capital will be leaving the business each year in share redemptions as would be the case without TAF. So, the true value of TAF hasn't really been tested until the past few years where Fonterra's milk supply has begun to fall, and this essentially was what the board predicted in documents supplied to farmers during the capital structure information process. A good example of this is that after the extremely high capital expenditure year of 2014/15 where Fonterra spent over $2.2 billion in capital, they were then able to still make capital expenditure of amounts of $944 million (2015/16) and $851 million (2016/17). This was all carried out with milk supply losses of 48 million litres (2015/16) and 40 million litres (2016/17). Before the implementation of TAF this would have meant between $250-300 million of capital leaving the balance sheet each year.

4.3 Where to in the future

Capital structure is an ever-evolving process for co-operatives and Fonterra is no different. Given this where does Fonterra's capital structure need to head in the future. In this section I will aim to look at some the challenges Fonterra faces and what options expert commentators believe are out there. Fonterra has begun to start making comments around discussion beginning again regarding capital structure, this is driven by a need to become more flexible to farmers needs and address the continue loss of milk supply to rival competitors. The cost of buying shares is a common reason new farms choose to supply rival companies and the value of money tied up in shares is a common reason why shareholders leave the co-operative.

I think a key starting point that Fonterra needs to cover with it's supply base is asking where do we want to play. Everyone always says we need to move milk away from base commodity powders and into higher earning value add products. What people struggle to recognise is that add value part of the business is a very capital hungry space. What is a very innovative product one year is a commodity product a few years later, to stay ahead in this game you need to be out the market place constantly assessing your consumers needs and then pouring lots of money into research and development to meet the needs of the consumer. Synlait for example has yet to pay a dividend to shareholders because it chooses to return any profits to the business to continually drive innovation, it is young

business and fortunate to have good alignment of shareholders who are happy to see growth in share value over distribution returns.

The Fonterra shareholders council has probably got the first step of this idea rolling by starting an information gathering exercise to find what out why farmers supply the Fonterra co-operative and what drives them to do what they do every day. This is good starting point for the co-operative we really need to establish whether we want to be strong player in the market of FMCG (Fast moving consumer goods) or are our values and risk appetite more aligned to producing high value base products that we sell to international food companies who already have strong brands in the consumer products space. Neither is option is right or wrong but doing one option poorly due to a lack of capital or misaligned strategy isn't a good option for the business.

In making this decision Fonterra shareholders need to consider some of the following points. The relevance of co-operatives today is less obvious than why they were established 100's of years ago. Milk is a highly perishable product and when produced in an isolated corner of the world hundreds of kilometres from world markets then having someone who would collect and process that milk was of very real importance. Historically the world dairy products market has been one of oversupply and dumping of excess product onto world markets. The evolution of the Dairy Board and co-operatives gave farmers confidence that their milk would be processed and sold to the world for the best returns possible. Today with cheaper transport costs, air freight of liquid milk to markets and the major advancement in technology at all levels the farmer producer is closer to the end consumer or customer than we have ever seen before.

How do we position the co-operative for the next generation farmers coming through, it's no secret that Fonterra has an aging population base in line with the New Zealand age demographic, many of the baby boomers are now looking to retire from farming. They have worked hard and been rewarded with significant lifts in land values over their period of farming. These higher land values mean younger farmer carrying high debt levels need greater returns than before to run a viable business model. Older farmers are more likely to be risk adverse to change whereas younger suppliers are more likely to open to innovative ideas and taking risks or exploring new opportunities. How does Fonterra and its older shareholder base not hamstring future growth opportunities for the younger generation. As the dairy industry matures, it will become more common for businesses to become multi-generational and this provides challenges around making sure the next generation is well educated and is able to challenge the thinking of the previous generation.

Another point to consider is that when speaking with Murray Gough a former chief executive of the Zealand Dairy Board he believed that Fonterra hadn't really made any progress in generating extra

returns from the value add side of the business compared with 20yrs ago. One of the major reasons for this could be due to the DIRA regulation of Fonterra having to collect all new dairy supply since its formation. This has resulted in Fonterra having to spend a lot of capital on building new processing factories just process milk into base commodity products. The opportunity going forward for Fonterra with a shrinking milk supply base is that it does risk having some stranded assets, but it also has a much more flexible product mix. This will allow it to divert more milk towards its highest earning products in any one year. The current dairy market is fitting example of this where fat products have become fashionable again. In the current season Fonterra will pay its suppliers 130% for the value of fat in the milk compared with protein, this compares with Fat being worth only 43% the value of protein in the 2014/15 season. OCD (Open Country Dairies) however is only paying fat at about 40% the value of protein for the current season and protein is still going to be worth 1.5 times the value of fat for the coming season. This is simply because they haven't invested in such a wide base of product streams and therefore don't have a market for fat products.

Some possible options going forward for Fonterra to raise capital are to further increase the number of dry shares on offer, allowing retiring Fonterra farmers to hold onto dry shares, relying more on joint ventures with other companies, have a greater retentions policy or explore further the option along the lines of the original proposal where co-operative is broken into two parts.

Fonterra has around 1.6 billion shares on offer, each of these shares earns a dividend of between 25-40 cent per year based off the past 5 yrs. Currently Fonterra retains on average around 10 cents for investment and the rest is distributed to shareholders. Going forward Fonterra could look to retain a greater percentage of it's dividend. Retaining 100% of the dividend could bring in $500-650mil of capital each year. Such an approach would have to consider the effect on share price as a different type of investor would buy shares in a business with no or small dividend policy. As a point of comparison Australian dairy co-operative Murray Goldburn was sold for $1.3 billion back in March last year. Fonterra's 18.8% share purchase of Beingmate cost around $755 million. The value of food company Nestle was estimated at around $350 billion back in 2015. This shows greater retained earnings could provide extra capital but only go a small way to making an investment in a large food playing company. It is interesting to note that pre TAF Fonterra appeared to have a greater retention policy, this could be attributed to some redemption risk factors but also the fact that Fonterra could retain profits out of both milk price and dividend. Now with two different investor groups Fonterra can no longer retain profits from milk price to invest in dividend related activities.

The most commonly talked about option is along the lines of a two-company structure or model whereby the processing assets of the company are split away from the brands part of the investment.

This model gives the farmer choice over whether they want to invest in the capital intensive and higher risk part of the business. The model gives the farmer security of the milk processing assets giving them confidence that their milk can be collected and processed into a stable long-life form. This model also has some benefits in that would provide greater clarity between the performance of each unit of the Fonterra business. At present there is certainly some shareholders animosity towards the performance of the value add/brands part of the Fonterra business. It would take away the time, cost and regulation related to establishing a fair milk. Fair value prices for any value creating processes achieved inside the farm gate such as A2, grass fed, organic, carbon neutral and free range would be established in a more open market. It would also allow a more relevant board to be established for each business unit and better skill sets matched for each business. Fonterra has recently gone through a governance review but given the performance in the value add/brands side of the business questions remain in my opinion over whether the co-operative is best served by having 7 farmer shareholder directors and 4 independent directors. Do farmer shareholder elected directors really have the skill sets to govern a billion-dollar food company?

I think Fonterra's board and management need to be brave enough to continually bring to the table the idea of the two co-operative model and be prepared to have a good robust discussion on this topic. In 2007 the idea was quickly dropped because shareholders voiced their concern around loss of control. This is a fair enough point, but it seems we are a little bit immature if we can't have a more robust discussion around why loss of control is such a critical issue. Why are we as farmers so fixated around 100% control? Is it a bad reflection on us as an industry? Everything we do in life has some risk associated with, but we generally put controls in place to minimise those risks plus obtain the benefits linked with that risk. As co-operative we shouldn't be afraid to discuss the tough topics, what are the benefits of outside investors? What are the risks and how do we minimise them.

Some non-financial benefits of outside capital in my opinion would be the following. Land values become more a true reflection of the productive capacity of the land. As you create more value to a raw product such as milk beyond the farm gate and don't separate those returns out. The value of those extra returns then becomes capitalised into land values. Tatua is probably a good example of this, they have done extremely well in the value add/brands sector of the dairy business but because all these returns go straight back to the farmer shareholder this has become capitalised into their land values. Tatua farms when sold on the open market demand a premium to identical properties supplying another milk company. The issue with capitalising these returns into land values is that it makes it harder for younger farmers to achieve land ownership.

We always seem to view outside investors in a bad light but what if they are every day New Zealanders, would allowing them to invest an industry that accounts for around a quarter of New Zealand exports earnings be so bad. We spend millions of dollars each year trying to educate people in schools and the New Zealand public about the value of New Zealand's primary sector. If we allowed them to invest in the industry surely this would drive them to get a more educated view of the sector and as a result allow them to have a better understanding of what farmers do every day. It could reduce some of the public scrutiny the primary sector, dairy especially currently faces from the urban population. We also employ people within the Fonterra business who hugely passionate about the company and what we do. Are there any potential downsides if they can own shares in the business?

There is no right or wrong answer for where Fonterra's capital structure needs to head in the future, but a couple of points are of real importance. Capital structure continually needs to be evolving to match changing business needs and choosing not to have good open and honest discussions about these options isn't in the best interest of Fonterra.

5.0 Conclusion

The formation of Fonterra in 2001 was a bold decision by New Zealand dairy farmers it gave them the scale in the world dairy export market which has allowed them to become a key and dominant player in base commodity ingredients. The trade off to achieve this position was having to accept farmer shareholders could come and go as they choose. This resulted in Fonterra carrying the burden of Redemption risk and having to put extra capital towards processing assets.

The implementation of TAF in 2012 was a very sound and forward-looking governance decision. It may not be perfect and is more complicated to understand than some rival co-operative businesses in the New Zealand dairy sector, but Fonterra has its own unique set of rules that it must abide by. The options of greater retained earnings or doing nothing were only going to push the problem down the road and make it harder to address in the future.

The true value of TAF is only beginning to be seen now as Fonterra has a stagnate or diminishing milk supply in New Zealand. The strength and permanence of capital in the balance sheet over the past few years has allowed Fonterra to continue with a strong capital expenditure programme. Going forward Fonterra should be able to direct most of its capital expenditure towards value add investments rather than processing assets. Flat or diminishing milk supply will also provide it with some flexibility in processing capacity allowing it to direct milk supply to products that are achieving the best returns.

Fonterra needs to be regularly assessing whether its capital structure is appropriate for its strategy and open to having honest and frank discussions about all options. It's important that all shareholders

engage in these discussions about what they want from them co-operative and that this could change rather dramatically over the next 10-20yrs as many of the baby boomers leave the industry. Fonterra is a great asset to the New Zealand economy and primary industry but adapting to the future needs of both it's shareholders and consumers will continue to be as important now as it is into the future.

6.0 References

1. Fonterra. (2007). Capital Structure 2007
2. Fonterra. (2018, March). March Global Dairy Trade

   https://nzfarmsource.co.nz/assets/contentsPages/financial/Gloabal-Dairy-Update-March-2018.pdf
3. Fonterra Website

   https://www.fonterra.com/nz/en/about-us.html
4. DCANZ website. (2018, April) Latest New Zealand Milk Production report.

   https://www.dcanz.com/userfiles/DCANZ/file/New%20Milk%20Production%2016Apr2018.pdf
5. Fonterra. (2012, April). Trading Among Farmers- What you need to know.
6. Fonterra. (2012, October 26th). Your Opportunity- Fonterra shareholders fund prospectus and investment statement.
7. Fonterra. (2009). Capital Structure- Evolution of Fonterra's Capital Structure.
8. Gough, M. (2008, February). Doing nothing isn't a good option! Dairy Exporter Article.
9. Gough, M. (2012, June). Dairy Exporter Article.

7.0 Appendices

Questions for Henry van der Heyden

1) During the process of informing farmers did you come across or were you presented with any other options outside those that Fonterra put forward that would enable Fonterra to pursue its strategy?
2) What areas of the TAF process would you do differently if you had to go back in time and complete the entire consultation process again?
3) Were there measures put in place at the implementation of TAF to measure how well it was working?
4) How successful do feel TAF has been? Why?
5) The vote to implement TAF only received a 66% mandate below the 75% threshold required from Farmer shareholders. From a governance perspective why did the board feel it was so important to implement TAF?
6) Part of my project will look at where Fonterra could have been positioned without the implementation of TAF especially with reference to the two years of low milk price. In your opinion where do you think Fonterra would currently be placed if TAF hadn't progressed?
7) How do you think Fonterra's capital structure should evolve to allow it to fully maximise returns to farmer shareholders?
8) Fonterra's first proposal for capital structure re-form was around creating two Fonterra companies one which was floated on the share market. Why was the two company structure the board and managements preferred option?
9) Where do you think this structure could have taken the Co-operative?

Questions for The Honourable Damien O'Connor

1) The vision behind TAF (Trading Amongst Farmers) was to drive Fonterra's strategy of being able to raise or free up more capital for the consumer foods/value add area of the business. Do you agree with the strategy of Fonterra trying to push more milk into the consumer foods/value add?
2) Do you agree that redemption risk posed a threat to providing the Fonterra business with a stable capital base to drive extra investment to the consumer foods business? Why or why not?
3) How do we access the extra capital required for driving more milk into the consumer/value add side of these businesses?
4) At parliament when speaking with the Kellogg group you proposed a five-year share trading process that Fonterra could have used to reduce redemption risk. Could you explain how this would work in a little more detail given most of the other alternatives I have heard of simply involved greater retained earnings.
5) What benefits do you believe your five-year share trading process could have over the TAF system Fonterra has adopted?
6) Do you see any potential limitations would this system could have to the current TAF model?
7) Are you totally against the idea of farmer Co-operatives using the stock market as a platform to access extra capital?
8) Outside potential loss of farmer control what do you believe are the other perceived risks to Co-operatives from listing shares on the stock exchange?

9) With reference to capital structure and strategy where would you like to see Fonterra in 5-10yrs time?

Questions for Kellogg Project

1. TAF (Trading Amongst Farmers) predominant driver was dealing with Redemption risk. Do you believe this was a serious risk to the Fonterra Co-operative that had to be addressed?

2. Was the option of greater retained earnings a viable way to address redemption risk?

3. Outside of something similar to Fonterra's first proposal of listing on the stock market was there any other viable options that would have addressed redemption risk?

4. How well do think TAF has performed as a way of addressing redemption risk and providing Fonterra with a more stable base for investment?

5. Do you agree with Fonterra's strategy of moving more milk into the consumer foods/value add market?

6. If TAF wasn't implemented where do you think Fonterra would be positioned today? Regarding its share of the New Zealand milk market and earnings from the value add market?

7. Where do you think Fonterra's capital structure needs to head in the next 1-10yrs to achieve strategy?

8. What lessons can Fonterra take from other New Zealand primary industries around capital structure?