

The Structure of the Irish Dairy Industry: A Constraint to Profitable Dairy Expansion?

A report for



**NUFFIELD IRELAND
Farming Scholarships**

By James Murphy 2008 Nuffield Scholar

Sponsored by: Irish Co-Operative Organisation Society (ICOS)



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Executive Summary

The argument for the Irish dairy industry to consolidate is compelling given international experience and recent developments. In essence we are losing competitiveness with other international exporters, due to a lack of scale and inadequate integration between processing and marketing within the industry. A large integrated processor would be better able to react to the market and forge links with other international exporters for the betterment of Irish dairy farming.

Ireland needs to work towards developing a fully integrated industry with farmers in control, and the Co-Op model, with a well structured capital base, seems best suited to providing this.

As was the case with Arla in Denmark, it is highly unlikely that Ireland will achieve the above by consensus. There are too many individual co-operatives, with over 300 directors, all with their own view points. In the absence of consensus in Denmark, the four largest dairies amalgamated into one company in 1970 and by merger and acquisition by 1986 the company had gained more than 50% of all milk deliveries. If Dairygold and Glanbia merged at present they would have 55% of the total Irish milk pool. Planned expansion in milk production within these two co-ops could result in them having approx. 65% of the Irish milk pool. Following the Danish experience, the merged Co-op's could then seek to integrate processing and marketing by taking a controlling interest in the Irish Dairy Board.

In Ireland with large scale amalgamation, there may be a lack of competition in setting milk price. However our actual competitors are those we are competing with in the international marketplace. In Holland, Freisland Campina have overcome this by creating a guaranteed milk price which is calculated on the weighted average milk price paid by neighboring processors in Germany, The Netherlands, Denmark and Belgium. This is a clear and transparent mechanism. In Fonterra milk price is based on commodity returns plus a premium paid on farmer shares which is derived from selling premium ingredients and investments in consumer brands around the world.

Farmer Chairmen need to demonstrate true leadership by leading the process of consolidation from the front. In Holland the Farmer Chairmen of both Freisland and Campina co-operatives initiated the discussions for amalgamation. These two farmer chairmen showed huge leadership for the betterment of their members. In Fonterra Co-op. in New Zealand they have a Leadership Development Programme and also a Board Candidate Selection Committee. This ensures that board members are well educated and not put forward for election if not considered suitably qualified by the Selection Committee. In NZ, while Fonterra have regional representation at share council level, the board of directors are elected from a single constituency. This ensures that the board represents all the members and that decisions are not influenced by local issues.

In Ireland there are currently 19,000 dairy farmers. There are 74,000 shareholders in the 27 dairy co-operatives (ICOS, 2011), with greater than 300 directors between them. The sharehold register of Irish Co-operatives needs to be more in line with the active membership, as is the case with Arla, FrieslandCampina and Fonterra, where you cease to be a voting member on ceasing milk supply.

It has been estimated that the World population will dramatically increase from the current 7 billion to 9.2 billion by the year 2050, thereby creating a huge global challenge to meet the demand for feeding the world population. World dairy production growth will need to expand by 1.8% - 2% annually over the next decade to meet consumption growth (EU Commission, 2011). With limited arable land, the available farmland per capita is expected to further decrease dramatically. In addition to the increasing world population, due to economic improvement there is significant growth in the middle classes. This increase in disposable income coupled with e.g. government policy in China for increased dairy consumption, has resulted in increased demand for dairy produce. With the abolition of quotas in 2015, Ireland and its dairy industry will be in a good position to expand its production and avail of a share in the global market. However if we aim to export our 50% planned growth (Food Harvest 2020) outside the EU, we need to develop and enhance our routes to market.

In the writer's view the current structure of the Irish Dairy Industry is a constraint to profitable dairy expansion, but is optimistic that a consolidated Irish industry has the potential to be a significant world player. All key stakeholders agree that consolidation is necessary and as there has been no substantive argument against it, what is now required is action.

The writer recommends implementation of this report's findings in full.

Introduction

The writer is a dairy farmer in Cork in the South of Ireland, and since 2007 has been a member of the East Cork Regional Committee of Dairygold Co-operative, and is a member of Dairy Ireland-dairy discussion groups or Ireland.

For my Nuffield studies I decided to look at dairy industries that are comparable to Ireland, in that they are mainly export-orientated. I travelled to New Zealand, Denmark and Holland to explore how they had developed and consolidated their dairy industries, in particular their integration of processing and marketing.

Today in Ireland there are nineteen main milk buyers, two of which operate as Plc.'s, the rest are co-operatives. Ten of the nineteen milk buyers process milk. Eighteen sell some or all of their exports through the Irish Dairy Board, while at the same time they are selling product into the same marketplace, and are therefore in competition with the Irish Dairy Board. Most product is in commodity form and eighty three per cent of all product is exported, with butter accounting for fifty seven per cent of dairy exports for 2008.

Table 1: Dairy Industry Comparisons

Country	Milk Processors	Integrated Processing and Marketing	% Exported
Ireland	11 (100%) *	No	83%
Denmark	1 (90% Arla)	Yes	65%
Holland	1 (85% Freisland/Campina)	Yes	55%
New Zealand	1 (95% Fonterra)	Yes	97%

*Excludes infant formula

Sources: Annual reports.

Aims and Objectives

Irish Co-Operatives export approximately 83% of all dairy products produced. This report will:

- Look at comparable dairy industries that are predominantly export-oriented and co-operative based, to see how they are structured.
- Draw comparisons with the Irish Industry.
- Examine the current processing and marketing systems in the Irish Dairy Industry.
- Establish if there is a market for extra Irish production.
- Make recommendations for the future of the Irish Dairy Industry.

The main objective for this study was to look at how New Zealand, Denmark and Holland consolidated their dairy co-operatives with integrated processing and marketing and to make recommendations for how their experience could apply to the Irish Dairy Industry. This report will inform farmers at all levels within the industry of how comparable export-based dairy industries have developed and add to the debate that has already started with the imminent abolition of milk quotas in 2015.

Methodology

To research this topic the writer:

- Travelled to New Zealand, Denmark and Holland and met with Co-operative farmer members, Co-op managers, Farmer Directors, bankers, industry consultants and farmers from the different representative levels of their respective co-operatives.
- Drew on his experience of the Irish dairy industry and networked with colleagues nationally.
- Reviewed research relevant to this study.
- Kept up to date on topical debate

Chapter 1

Holland: Friesland Campina



History and Rationale for Consolidation

The Dutch dairy industry currently exports 55% of its Dairy Produce. In 1990 there were 20 milk processors in Holland, by 2007 through various mergers and amalgamations there were 4 major entities, with two of these four: Friesland and Campina, accounting for 80% of milk intake.

Kees Wantenaar, first chairman of Friesland Campina, outlined the background and rationale for consolidating the Dutch dairy industry. In 2004 Campina proposed a merger with Arla of Denmark. This failed mainly due to the proposed merger being presented to members before significant details had been agreed. Learning from this outcome, when Friesland and Campina were exploring the possibility of merging, the Farmer chairmen of both co-operatives initiated the preliminary discussions. There were regional and cultural differences between the North and South of the country, and structurally the farms in Friesland (North) were larger, these two farmer chairmen showed huge leadership for the betterment of their members. All issues were resolved by both boards and management, including governance, company valuation and member shareholdings and milk pricing policy. A final detailed merger agreement was then presented to the members for debate and subsequently both sets of shareholders voted in favour.

Friesland Campina Co-operative was formed in 2008. It now processes 80% of Dutch milk, and is a multinational dairy company owned by Zuivelcoöperatie FrieslandCampina, in which marketing and processing are fully integrated. It has 14,829 member dairy farmers in the Netherlands, Germany and Belgium.

At the time reasons identified for amalgamation were:

- Increased scale giving the Co-operative strength and stability.
- Synergies would lead to lowering costs (€175 million by 2012) equating to 2 cent per litre.
- Value created would not only benefit the members, but also employees and customers.

Frans Keurentjes, current Friesland Campina board member, stated that facilitators in dairy industry consolidation include: strong farmer board leadership; positive view by key outside influences; focus on the future benefits that consolidation would bring. Low milk price is a motivator for farmers seeking consolidation. When milk price

differentiation between processors exceeded 1.5 cent per litre, there was a strong move among farmers for consolidation.

Bart Ijntema, Rural and Retail Strategist with Rabobank International, and a former Agri Account Manager within the Netherlands stated that Friesland Campina suppliers get more favourable lending conditions from Rabobank, than their competitors in CONO Cheese makers and DOC kaas. This is due to Rabobank valuing the stability of Friesland Campina which consistently pays a higher, more stable milk price.

FrieslandCampina aims at realizing a trend-setting, market-leading milk price for the entire volume of milk supplied by their farmer members. The performance of FrieslandCampina is part of the milk price.

- Members have the right to
 - Deliver all their milk to FrieslandCampina
 - Take part in decision making process/vote
 - Pass on membership to a successor

- Members are obliged to
 - Deliver all the milk to FrieslandCampina
 - Take part in the members' financing of the company
 - Comply with the regulations

Governance

The Member Council is composed of 210 representatives elected from 21 district councils. A Chair is elected from each district, these make up the Co-Operative council. The Member Council has the power to remove any Board director at any time and any merger, acquisition or sale must be approved by them. The Cooperative Council has specific duties, including identifying, assessing and determining director candidates. The Cooperative Council makes a binding recommendation to the Member Council for the preferred director candidates. The Cooperative Council director recommendation is ratified by the voting member base. The Cooperative Council has the power to suspend any director at any time. The Board is comprised of 9 farmer directors and 4 independents. Directors have a maximum tenure of 12 years.

Milk Price

The guaranteed milk price is calculated on the weighted average milk price paid by neighboring processors in Germany, The Netherlands, Denmark and Belgium on 46 billion kgs of milk. It is published on the first Monday of each month. This is a clear and transparent mechanism. For the members and the company the guaranteed price reflects the market value for raw milk and is a starting point to calculate the profit of the company FrieslandCampina.

Capital

In talking to Frans Keurentjes, farmer director of FrieslandCampina, he explained the company financing structure as follows:

50% of profits are added to the general reserve every year, a further 20% of profit is added to fixed member bonds (this policy is reviewed every 3 years) and the

remaining 30% of the profits are paid to milk suppliers at the beginning of the following year. This is in addition to milk price.

Fixed member bonds are transformed into free member bonds when a farmer ceases milk supply. Members can buy and sell free member bonds at an internal market. Member certificates were generated once, in Dec 2008, with the merger and are transformed into free member bonds when a farmer ceases milk supply.

Frans stated that when he looks at his annual earnings per litre of milk supplied, he not only looks at the guaranteed milk price, received monthly; the 30% of company profits, paid at the end of the year; and the 20% of company profits that are added to his fixed member bonds (which attract competitive dividends usually above the cost of borrowings); he also looks at the 50% of retained profits that are added to the general reserve in cent per litre, which is what he as a farmer has contributed to the company finances.

Shares

Recently the capital requirement for members has changed from €4 per 100kg of milk, to €10 per 100kg. A share has a nominal value of €100/share. When a member retires from milk supply, they can gift/sell their shares to a successor, sell their shares to another member, or sell them to the approved market liquidity provider i.e. Rabobank.

Chapter 2

Denmark: Arla

History and Rationale for Consolidation

In 1963 the Danish Dairy Board was the main exporting arm for all Danish dairy co-ops, which was very similar to the current position of the Irish dairy board. The Danish Dairy Board at that time tried to create "Dairy Denmark" by voluntary agreement. Dairy Denmark was to be an amalgamation of all national dairy co-ops with the Danish Dairy Board. For this to succeed all dairies would have to join. Preben Mikkelsen, of 'PM Food and Dairy consulting' and former head of the Danish Dairy Board (DDB), informed the writer that this almost succeeded, but in the end a few large dairies declined and the plan was dropped. Instead Mejeriselskabet Denmark (later MD Foods) was established by 4 dairies in Jutland and the strategy was to gather all Danish milk in one company by merger and acquisition. This continued in the 1970s and '80s and by 1986 the company had gained more than 50% of the milk deliveries. The company wanted to change the structure of the Danish Dairy Board by changing the statutes to allow one company to gain a majority. This succeeded and from 1987 to 1992 all the commercial activities of the Board were dismantled and the companies gained control. This included Lurpak advertising, most of the generic promotion of dairy products, and closing of DDB's sales offices in Germany, UK, USA, Canada, Middle East, and Spain (more than 300 employees). DDB now handled the political interests of the industry, generic research, and other service-related tasks.

The Danish experience shows that it is very difficult to change the structure by consensus: market forces determined the changes. Although it was more brutal, it resulted in a successful outcome and no one could now question the position of Arla as the leading company, processing 90% of Danish milk.

Going forward the Arla strategy states: 'We want to be the best dairy company for the more than 250 million consumers in northern Europe/UK through three global brands - Arla, Lurpak and Castello. We aim to be the world market leader in value added whey proteins'.

When asked what his recommendation for Ireland would be Preben Mikkelsen replied: "I believe that the key issue for the Irish dairy sector is to create a company that seeks a dominating position, whatever it takes".

Governance

The governance structure of Arla is clearly outlined in Figure 1.

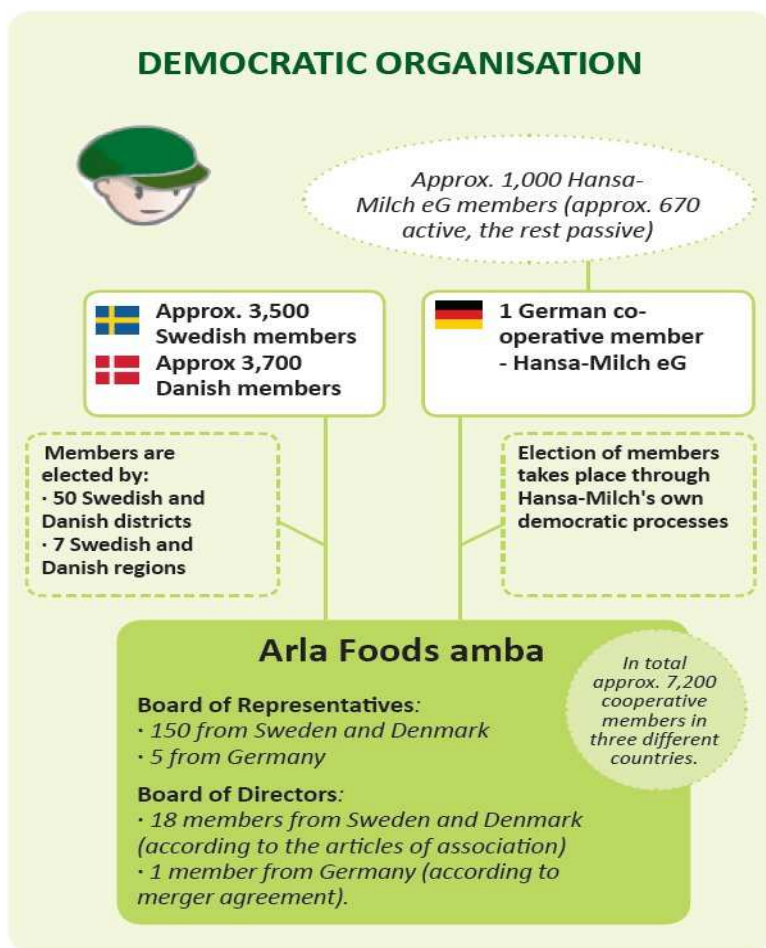


Figure 1: Arla Governance Structure

District committees-Members are elected from the 50 Swedish and Danish districts, on a representational ratio of 1 per 25 co-operative members. Committee members meet annually with the district they represent. Hansa-Milch, a German co-operative has recently joined Arla and has its own democratic processes.

Regional Committees-The above 50 Districts make up 7 regions: 3 in Sweden and 4 in Denmark. The Chairmen of the 4 Danish Regional Committees are Board Directors. The Regional Committees function is to carry out work as directed by the Board of Representatives.

Board of Representatives- meets a minimum of three times per year. It is responsible for strategic direction and the annual allocation of profits to members. The Board of Representatives is made up 150 farmer representatives from Sweden and Denmark, plus 5 from Germany. They directly select 10 directors for the Board of Directors.

Board of Directors -is comprised of 15 farmer representatives and four employees' Representatives. Board seats are allocated by country. In Denmark four farmer seats are allocated to the Chairs of the four Danish Regional Committees. The remaining four Danish farmer seats are elected by the Board of Representatives. In Sweden an election committee recommends candidates, and the six Swedish seats are elected by the Board of Representatives. Germany has one director as per the merger agreement.

Capital

Capital in Arla Foods is divided into four significant areas:

- Capital account - holds the undistributed company equity
- 'Deliver-based ownership certificates' – these hold undistributed equity which has been allocated against individual farmer's capital accounts, and which can be cashed in when the farmer retires from milk production.
- Strategy fund - available to the Board of Representatives
- Reserve fund B - consists of reserves set aside on the incorporation
Of the company

Milk Price

Milk Price is set within Arla. Theis Brøgger, of Arla, stated that the aim is to pay the highest attainable Milk Price to farmer members, while still maintaining a 2.5% profit margin for the whole business.

Further Expansion

In May 2012 Arla and Milk Link in the UK proposed a merger. Farmer members from both co-operatives have resoundingly voted in favour and the merger is currently awaiting regulatory approval. If approved, Arla will process 12 billion litres of milk per annum.

After a transitional period, Milk Link's 1,600 farmer suppliers will receive the same level of return as existing Arla farmers.

Chapter 3

New Zealand: Fonterra

History and Rationale for Consolidation

In New Zealand I met with Directors of Fonterra Co-op, as well as the chairman and members of its shareholders' council. The New Zealand dairy industry began to expand in the 1960's. It diversified its product line and sought out international markets. New Zealand butter and cheese was sold in the United Kingdom in the late 1920's through 'Amalgamated Dairies'. In 1961, the Dairy Board and the Dairy Products Marketing Commission were combined to form the Dairy Production and Marketing Board, and branched out into Asia, launching its first overseas milk recombining plant in Singapore. The industry continued growing at a rapid rate in the following years. By 1964, New Zealand's dairy farmers had over two million cows. Expansion continued to remain at the forefront of dairy farmer's strategy during this time period. To bolster the country's international trade exposure, New Zealand took special interest in the happenings of the General Agreement on Tariffs and Trade (GATT). In 1978, this organization began to address agricultural trade, and after years of negotiations and meetings, agriculture was officially added to GATT's agenda at the GATT Uruguay Round meetings in 1994.

In order to compete in an international marketplace, the New Zealand dairy industry took measures to strategically position itself among the leading dairy exporters in the world. The Dairy Board Act was passed in 1987, giving the Board financial independence from the New Zealand government. In 1992, the domestic milk and dairy products' market in New Zealand was deregulated. By 1995, the Dairy Board was 80 subsidiaries strong, making it the largest marketing network across the globe. The dairy industry continued to operate in a co-operative fashion i.e. local dairy farmers owned portions of their processing plants and those plants owned part of the Dairy Board, somewhat similar to the current Irish structure.

Success in the dairy industry was, and is, crucial to the overall health of the New Zealand economy. Today it accounts for 7% of GDP and 27% of total exports. Due to this dependence on export trade, dairy farmers were vulnerable to fluctuations in international economies, especially those in the United States and Asia. Therefore during the late 1990s, industry leaders began planning to ensure New Zealand's place among the leading dairy exporters across the globe.

The plan was to amalgamate the country's two largest dairy co-operatives, New Zealand Dairy Group (NZDG) and Kiwi Co-operative Dairies (Kiwi), with the New Zealand Dairy Board, therefore creating one entity responsible for processing and marketing all dairy produce. The merger created Fonterra Co-operative, New Zealand's largest company and one of the top ten dairy companies in the world, with assets of \$5.8 billion. In order for the deal to go through, the New Zealand government passed laws that allowed competition in its domestic market, thereby preventing a monopoly as the law stated that Fonterra were required to supply competitors with up to 50 million kg of milk each. This could total up to a maximum of 400 million kgs. The Commerce Commission approved the merger. NZDG and Kiwi had to formulate an acceptable merger agreement and 75 percent of the co-operative farmers had to vote in favour of the deal.

An agreement was finally reached between the companies, and shareholders voted on the deal on June 18, 2001. The three heads of the merging companies: John Roadley, Henry van der Heyden, and Greg Gent, argued in favour of the merger, stating that the merger was crucial to the advancement of the industry. They claimed the fusion of the three businesses would provide many benefits: increasing global competitiveness; keeping the assets of the NZDB in one piece so that New Zealand companies would not have to compete against each other in international markets; maintaining a profitable co-operative structure; and integrating both manufacturing and marketing businesses in a cost-effective fashion. At the time the total savings of the merger were calculated at \$300m. Former Fonterra Chairman, Henry van der Heyden, stated that subsequent to the merger the three companies were competing against each other in the Australian market, with divided resources and independent strategies. Post merger the synergies and savings in this market alone was in excess of the envisaged savings of \$300m. The Farmer Leaders believed that the merger would point the New Zealand dairy industry in the right direction for future growth. Fonterra has about eleven thousand members and collects eighty nine per cent of New Zealand's milk. Its milk pool is almost four times as large as Ireland's. Fonterra trades in over one hundred and forty countries. It has joint ventures or partnerships with some of the world's biggest dairy processors, including Arla, Friesland/Campina, Nestle, Dairy Farmers of America and more.

On a recent visit to Ireland Mr. van der Heyden stated that he frequently hears people who are arguing for consolidation talking about reports. He believes that information in many of these reports is virtually "censored" to ensure that commercially sensitive information is protected. Farmer leaders should embrace the necessity for change. The belief that consolidation is strategically the right thing to do for the future of the industry needs to take precedence. This would allow those leaders to engage in a more open process of negotiation. Mr. Van der Hayden also stated that, as was the case in New Zealand, when their dairy industry was facing major expansion, the increase in supply for processing was a significant stimulant for consolidation.

Capital

A farmer's shareholding in the Co-Op was tied to his milk supply, with one share per kg milk solids supplied. On ceasing milk supply a member is entitled to encash his shareholding. In the event of a lot of shareholders retiring or moving to a competitor, this could potentially result in a huge drain on the capital base.

Currently Fonterra are responsible for over one third of internationally traded dairy products, and as Jim van der Pole, Fonterra director, explained to me they intend to increase this share with Asia and China in particular, as these countries have major export market potential. All this demand will not be met with New Zealand product and non-national milk is playing an increasing importance in Fonterra development. All this, coupled with the instability of their capital base, led to a capital structural review by the board in 2008, which was quite controversial.

The proposal by the Fronterra board was that the assets of Fonterra be transferred to a separate company, and then within two years, if approved by a further farmer vote, the Co-Op would own sixty five per cent of this company, the farmer shareholder

fifteen per cent, and a further twenty per cent floated in the New Zealand stock exchange. This, in the board's view, would have given farmers more choice in their investment in Fonterra, provide capital for growth and give Fonterra a more permanent capital base. Harry Bayliss, a former director of Fonterra, who was leading the charge against the board's proposal, explained that farmers ultimately could lose control of their industry, and even with the most stringent mechanisms for setting milk price, the conflict between PLC Shareholder returns and milk price would, over time, prove too great. This view resonated strongly with the members as anathema to the co-operative ethos. Subsequently the board revised their preferred choice of going down the PLC Route and in consultation with the Shareholders' Council decided to allow members to purchase 20% additional shares over and above their production entitlement. Farmers have voted to allow members to trade shares among themselves, thereby creating a more stable capital base.

Shares are valued on an annual basis by an independent share valuation committee.

Governance

Fonterra is governed by four external groups:

Shareholders- Fonterra is owned by nearly 11,000 New Zealand dairy farmers who supply more than 14 billion litres of milk each year. Shareholders represent 95 per cent of the country's dairy farmers and are spread throughout New Zealand. Any shareholder has the right to be considered for board directorship, and may apply to enroll on the leadership development programme.

Shareholders' Council- is made up of 35 shareholders representing 35 wards, all over New Zealand. The Council operates independently of Fonterra and no board director sits on the council. The council is resourced with 5 administrative staff at head office. Its main responsibility is to monitor the performance of the Board and Company and to ensure the needs of supplier shareholders are recognized by the Board. The council meets for a 2 day meeting approx 10 times per year. All proposed changes to Fonterra's constitution must be ratified by the council before it is submitted to the shareholders, and a 75% majority is required for approval.

The council appoints observers to the share valuation committee, and also appoints the milk commissioner. They receive an annual statement of intention from the board for comment. They then receive a quarterly company performance report which includes a progress report on the board's statement of intentions. The council can request a formal report on any aspect of the business, and the council has the power to call an EGM. The Shareholders' Council produce a report which is included with the annual company report.

The council has four subcommittees: Governance and Ethics; Representation; Performance; and Cooperative Development. Each councillor must serve on at least one of the four sub committees. The leadership team of the council consists of the chairman, the deputy chairman and two other councillors.

The Council has developed a Leadership Development Programme whose function is to invest in the development of farmer members as potential future board directors.

There is a selection committee composed of two directors and two councillors, who select, then mentor and evaluate the successful candidates.

The Shareholders' Councillors select 690 Networkers from the 35 regions. Networkers have no decision-making functions as their names suggests their function is to network with the broader membership.

Fonterra Board of Directors- There are 13 Directors on the Board. Nine farmer members are elected by shareholders and the other 4 are appointed by the Board. The board appointed directors bring outside expertise to the company. Candidates for election to the board have to undergo evaluation by the Candidate Evaluation Panel, which is made up of two directors and two councillors, and an independent chairman is recruited. This panel make their recommendation to members, as to a candidate's suitability, in advance of voting. Farmer Directors are elected on a single constituency basis. Directors are appointed for a 3 year term.

Milk Commissioner- The Milk Commissioner is appointed by the Shareholders' Council to mediate any disputes between shareholders and Fonterra.

Milk Price

The Milk Price aims to give farmers confidence that their milk cheque fairly reflects what their milk is worth on global markets. The Milk Price model calculates the revenue as if all Fonterra's milk was processed into basic dairy commodities (with no added value) and sold into world markets. Deductions include what it would cost to ship the raw milk to their processing factories, make these same commodities in an efficient way, freight them to market and make a reasonable return on investment. The balance is paid to farmers as the Milk Price.

Whatever Fonterra can earn over and above this Milk Price, such as by adding value to milk via selling premium ingredients and via investments in consumer brands around the world, is treated as profit. Profits are paid to farmers as dividends on the Fonterra shares they own, over and above what they are paid for their raw milk. The setting of the Milk Price is overseen by an independent group that includes leading accountancy firm Ernst & Young. All the criteria for setting out the milk price are available in The Milk Price Manual, which can be freely accessed on the Fonterra website (<http://www.fonterra.com>).

Chapter 4

The Irish Dairy Industry

History and Rationale for Consolidation

The Irish dairy industry has had few structural changes at processing and marketing level, despite the quota restricting output growth, and the number of dairy farmers reducing from 68,000 in 1984 (DAFF, 2009) when the quota was introduced, to 19,000 today. The Government target of a 50% increase in milk output by the year 2020 (Food Harvest 2020, 2010), and the abolition of quotas on dairy production in 2015 has stimulated a range of individuals and organizations to examine the structure of the Irish dairy industry at farming, processing and marketing levels. In the writer's view this is not before time, as major structural changes are required if we are to deliver on the above target.

Unlike every other major dairy exporting country who have consolidated their dairy industry into one major entity (see list of the top 10 world dairy co-ops in appendix 1), in Ireland there are twenty seven dairy co-operatives. Eleven of these process milk, and two - Kerry and Glanbia - operate as Plc.'s. There are 19,000 dairy farmers, while there are 74,000 shareholders in the 27 dairy co-operatives (ICOS, 2011) with greater than 300 directors between them. Table 2 demonstrates the rapid consolidation within the industry particularly at times of rapid expansion e.g. in the 5 year period between 1970 and 1975 on joining the EEC, in comparison to the relative stagnation in the 26 years from 1985 to 2011 since quotas were introduced.

Table 2: Dairy Co-ops, Ireland 1931-1995

Year	No. of Dairy Co-ops	Year	No. of Dairy Co-ops
1931	272	1980	50
1941	214	1985	48
1951	193	1990	35
1961	186	1995	35
1970	158	2011	27
1975	57		

Sources: Knapp (1964) & ICOS Annual Reports

Milk Purchasers -There are 83 registered milk purchasers, many of which are small private cheese producers. The main dairy co-operative purchasers are: Dairygold, Glanbia, Kerry, Lakeland, Wexford, Drinagh, Bandon, Barryroe, Lisavaird, Newtownsandess, Fealesbridge, Boherbue, North Cork, Tipperary, Mullinahone, Callan, Town of Monaghan, Connaght Gold, Drombane, Arrabawn, Madabawn and Glenveagh.

Milk Processors and Processing Plants-There are 10 main milk processors and 16 processing plants as outlined in table 3 below.

Table 3: Milk Processors and Processing Plants
(Excluding liquid milk, infant formula and consumer foods)

Processor	Plant	Product
Town of Monaghan	Monaghan	Butter
Lakeland	Baileyborough	Butter and Powders
Lakeland	Killeshandra	Powders and Casein
Glanbia	Virginia	Powders
Glanbia	Ballyraggett	Butter, Powders, Casein and Cheese
Kerry	Listowel	Butter, Powders and Casein
Kerry	Charleville	Powders
Kerry	Newmarket	Cheese
Dairygold	Mitchelstown	Powders, Casein and Cheese
Dairygold	Mallow	Powders
Dairygold	Mogeely	Cheese
North Cork	Kanturk	Butter, Powders and Casein
Arrabawn	Nenagh	Butter, Powders and Casein
Tipperary	Tipperary	Butter, Powders and Cheese
Wexford	Wexford	Cheese
Carberry	Ballineen	Cheese

Source: ICOS (2011)

Our processing and marketing remains largely unintegrated. Irish co-operatives are multipurpose i.e. they have significant non-milk processing businesses e.g. feed mill, grain intake and agri-supplies. As profits from different aspects of the business are not clearly stated in annual reports, the farmer shareholder is unclear as to whether milk price is being subsidised or subsidising other aspects of the business, as opposed to our chief competitors (Arla, Fonterra, Freisland Campina) who have only milk supplier shareholders. The top 6 co-op's process 80% (Prospectus, 2009) of the national milk pool and of these 6, Kerry, Glanbia and Dairygold are among the major players. For consolidation to be meaningful it will necessitate at least two of these three coming together.

Kerry plc. is 21% owned by Kerry co-operative, and they have recently voted to further reduce this to a possible 10%. Kerry has been the most successful co-operative that has gone down the plc route and are now a well-recognised international food and ingredients company. Kerry Chief financial officer Brian Mehigan is recently quoted as stating that the Irish dairy industry needs to consolidate, but "Kerry won't be doing it" (Irish Farmers Journal, 2012)

Glanbia plc. was formed in 1997 from the merger of two of Ireland's leading publicly-quoted dairy food companies - Avonmore Foods plc. and Waterford Foods plc. Glanbia has the biggest milk pool in Ireland (1.5 billion litres). In 2004 a grouping of shareholders within Glanbia Co-op suggested to the board that the co-op should buy out the remaining shareholding of the plc. At the time this was rejected by the board. In 2010 the board put forward a proposal to the membership of the co-op to buy the Irish assets of the plc. This vote needed a 75% majority to be carried, however this was defeated as only 73.5% voted in favour. Even though this vote failed it

demonstrated that the vast majority of members were in favour of returning the Irish assets to co-operative control. In the summer of 2012 Glanbia proposed to spin off its Irish milk-processing business as part of a proposed joint venture with Glanbia Co-op, as both parties prepare for the abolition of milk quotas in 2015. The proposed transaction differed from the plan mooted in 2010, which would have seen the co-op demerge from the plc., and Glanbia plc. completely exit the Irish dairy-processing business. Under the proposed arrangement, it was envisaged that Glanbia Co-op would take a 60 per cent shareholding in the new structure, with Glanbia plc holding 40 per cent and a facility for the co-op to purchase the remainder over time. This proposal has since been approved by 83% of the farmer shareholders and paves the way for putting the milk processing assets in total co-op control within 6 years.

Dairygold is Ireland's largest fully farmer owned co-operative with a strong co-operative ethos. It was formed in 1990 when 2 of the "big 6" co-op's in Ireland merged, namely Ballyclough and Mitchelstown. It has a milk pool of 960 million litres. While 70% of the business is dairying, active milk producers only own 50.2% of the shares. It is the writer's view that the shareholding should reflect the activity of the co-op.

Glanbia and Dairygold are the two companies with the most potential for expansion and currently have a good working relationship. They have a co-processing arrangement whereby Glanbia process all Dairygold's butter and Dairygold process cheese on behalf of Glanbia. Both co-operatives have recently carried out farmer surveys on future milk expansion intentions. Preliminary results suggest that Dairygold will expand by 63% and Glanbia by >50% from 2011 to 2020.

The Irish Dairy Board (IDB) is the marketing arm of the dairy export industry. It is a second tier co-operative owned by farmers through the member co-ops, but not all exporters are members e.g. Kerry. The IDB is not involved in milk processing in Ireland. Farmers help fund the IDB directly through a milk levy amounting to €4.5m/year, however the farmers do not directly own shares in the IDB.

Eighty three per cent of all Irish dairy produce is exported, mostly in commodity form. In 2011 66% of the exportable volume of IDB members' produce was traded through the IDB, about 70% of its members' butter output, 80% of cheese and 50% of powders, excluding infant formula. Until recently they were selling produce into the same marketplace, and were therefore in some cases in competition with the IDB. The IDB is a valuable business with important facilities in Britain, Germany, Belgium and the US, owns Kerrygold (a well known key Irish brand), and has established international routes to market.

The Irish Dairy Board is one step removed from processing core functions, therefore the capacity/capability of this resource is not being maximised (Prospectus, 2009). Irish products continue to compete against one another due to the under-development and lack of coordination of marketing functions (Prospectus, 2009), However the IDB now has total control of the Irish cheddar sales into the UK and a tighter grip of lactic butter sales in Germany. This is somewhat of an improvement.

The current IDB chief executive Kevin Lane and his board have developed a strategy encompassing both the expected increase in milk volumes and the rapidly changing international market place for dairy products. Kevin Lane has stated that "our role is to market and sell dairy products on the international markets on behalf of our members and to run all our individual business to deliver acceptable return. Our

defined role is to create value and optimize industry returns. Let's be clear: our mandate is not to restructure or consolidate the industry as many commentators suggest.”

While this position is understandable from his point of view, as his current mandate is to market exports supplied by its members, (a job the IDB does very well with e.g. the Kerrygold brand and its routes to market). However it adds nothing to the possible synergies and cost savings for their members that would be achievable through the consolidation of processing and marketing.

Irish Co-operative Organization Society (ICOS)

The Irish Co-operative Organisation Society (ICOS) is a co-operative umbrella organisation that serves and promotes commercial co-operative businesses and enterprise, across multiple sections of the Irish economy, with Dairy Co-Operatives being their largest segment. As a representative umbrella organisation for the co-operative movement in Ireland, ICOS is focused on driving the evolution of the Irish co-operative sector through the promotion of best practice, change and helping to enhance the sustainability of their member co-ops. Among their main listed aims are:

- Advocacy of greater engagement and fostering greater interaction between ICOS and their member's
- Collective voice and lobbying capabilities
- Challenge members to promote continuous improvement and competitive change, and be open for challenge themselves within ICOS
- Promote the principles of the co-operative movement to ensure stronger governance, education, and cooperation
- Develop their membership base through the training and education of grass-roots membership
- Promote greater member participation within co-operatives, particularly with younger generations of members
- Deliver tangible value to members in the services provided, the initiatives they lead and the programs they promote.

Pat McLoughlin former ICOS president firmly believed that ICOS has a role in facilitating informed discussion on where the Irish dairy industry is going. In the recent past, ICOS have invited representatives from Arla, Fonterra and FrieslandCampina to address their annual conferences. Board members of Irish Co-ops were invited to attend these conferences. In 2009 ICOS put forward the Milk Ireland concept, as a template for the industry's future development. This body would be merged with the Irish Dairy Board. All milk supplies would be pooled under Milk Ireland which would then contract out the manufacture of dairy products from this milk pool. Its main benefit would be in giving the industry greater focus by developing an overall marketing strategy and a centralized research and development policy. It is vital that we bring the marketing function closer to the decision making and strategic planning of the industry. ICOS president at the time Pat McLoughlin maintained that the Milk Ireland initiative, or a variant of this concept, will have to be introduced if the dairy sector is to be able to compete in Europe and beyond. This was an attempt to try and achieve the commercial efficiency of a single company, while retaining local

ownership. In the writers view this would help to mitigate against some of the barriers to consolidation e.g. the loss of identification with your local co-op.

In 2010 the ICOS dairy expert committee co-ordinated an initiative called “Project Cream” with KPMG to independently assess the current Irish dairy processing industry structure and performance in an International context. All the processors participated in the project. CEO’s and Chairmen of the processing companies were consulted to explore their concerns and ambitions. Processors were benchmarked in an Irish context versus international key players. The report highlighted a number of issues which the industry needed to address in particular: Irish milk processing costs merit further attention including improving energy cost per tonne, together with plant utilisation at peak and optimisation off peak; Developing new markets and the products demanded by these global customers will require newer, more novel approaches to working capital requirements; The analysis shows that investment in new product innovation is low when compared with our international peer companies. It also highlights the potential product and value added growth opportunities for the Irish dairy industry that can be exploited through innovation and marketing.

The findings of Project Cream have provided the decision makers within the dairy co-ops with international comparisons of processing costs, but also importantly they are now in a position to see where costs in processing the Irish milk pool can be optimised. While the writer appreciates that this information cannot be put into the public domain due to commercial interests, the potential savings have now been identified, putting the onus on the board of individual co-op’s to engage in a process that will maximise these savings for their farmer supplier owners.

ICOS are successfully keeping their members informed on what is happening in the international dairy industry and are meeting their responsibility to “sense the future, innovate and help evolve the co-operative movement to help meet the needs of its members and the needs of the market place” (ICOS, 2011). It is now up to the dairy industry to make a definitive decision to progress with consolidation.

Irish Farmers Unions

There are a number of farmer unions in Ireland, the 2 largest being the Irish Farmers association (IFA) and the Irish Creamery Milk Suppliers Association (ICMSA).

The IFA is the largest Irish Farmers’ union with over 87,000 members in 947 branches nationwide. With the rapid decline of dairy farmer numbers since the introduction of milk quotas, dairy farmers are now in the minority in the IFA. The IFA are broadly supportive of consolidation within the dairy industry and initiated the aforementioned Prospectus reports in 2003 and 2009, calling for consolidation. They have hosted a series of regional meetings around Ireland, inviting farmer co-op board members to debate the issues around consolidation of the industry and have written a series of papers on moving the industry forward. The IFA president has released press statements on relevant issues, as they arise, yet this message has not been conveyed sufficiently to their local members on the ground. More resources need to be allocated to this.

The **ICMSA** emerged initially to mobilise farmers to protest against low milk price, and emphasises the importance of farm families, especially the need to ensure the viability of small and medium sized farms. There are 40,000 members who are enabled to voice their opinion at local branch level which leads to their view being represented at county, regional, national and European levels.

Both organisations have a huge part to play in consolidating the Irish dairy industry. The writer believes that a proactive and consistent approach is now needed, with vocal support for consolidation, now required from both the IFA and ICMSA, similar to the very successful level shown on other issues such as CAP changes by the EU and budgetary changes by national government affecting farmers.

Dairy Ireland-Discussion Groups of Ireland

This group was formed in 2009 to represent members of dairy discussion groups from all over Ireland in the debate on dairy consolidation. It fosters a positive mindset towards change amongst farmers, stakeholders and policy makers. They propose to drive this change through education, information sharing and the identification of solutions.

Dairy Expansion Activation Group

Following the Food Harvest 2020 Report, In October 2010, the Minister for Agriculture, Fisheries and Food, established the Dairy Expansion Activation Group to recommend actions required from the dairy industry to implement the 2020 Food Harvest Report.

The Group was chaired by Dr. Sean Brady and consisted of 8 individuals incorporating farmers, processors and Teagasc. The areas covered by the group were: Market Opportunities/Milk Processing Efficiency/On-farm Production/General Agriculture Strategy/Policy. The group presented their recommendations in February 2011.

Towards Consolidation

The 2003 Prospectus Report recommended consolidation stating that the production and processing sectors were both highly fragmented in terms of the number of milk suppliers and processors. The industry is competing in international markets against much larger enterprises that are increasing their scale at a faster rate than Ireland. There has been significant and rapid industry consolidation in recent years in the major competing countries (Denmark, Netherlands and New Zealand) where dominant players have emerged. The Prospectus report 2009 states that little progress has been made in restructuring of the Irish dairy milk processing sector since the "Prospectus Report" of 2003. The 2020 Food Harvest Report (2010) has set a target of 50% expansion of the dairy industry by the year 2020. The report reiterates the above stating that key players within the industry should develop a national plan to consolidate and rationalise capacity with the primary processing sector by the end of 2010 and should co-operate in measures on implementation by 2015.

2010 has come and gone, the Dairy Expansion Activation Group reported their recommendations in 2011 and while there is some Coopetition between processors e.g. Dairygold/Glanbia co processing, this does not grasp the maximum benefit of a fully consolidated/integrated dairy industry. To date there has been no substantive argument against consolidation. In fact all CEO's of the major co-ops have been vocal in their support for consolidation. What is now required is action.

Chapter 5

Growth in World Dairy Demand

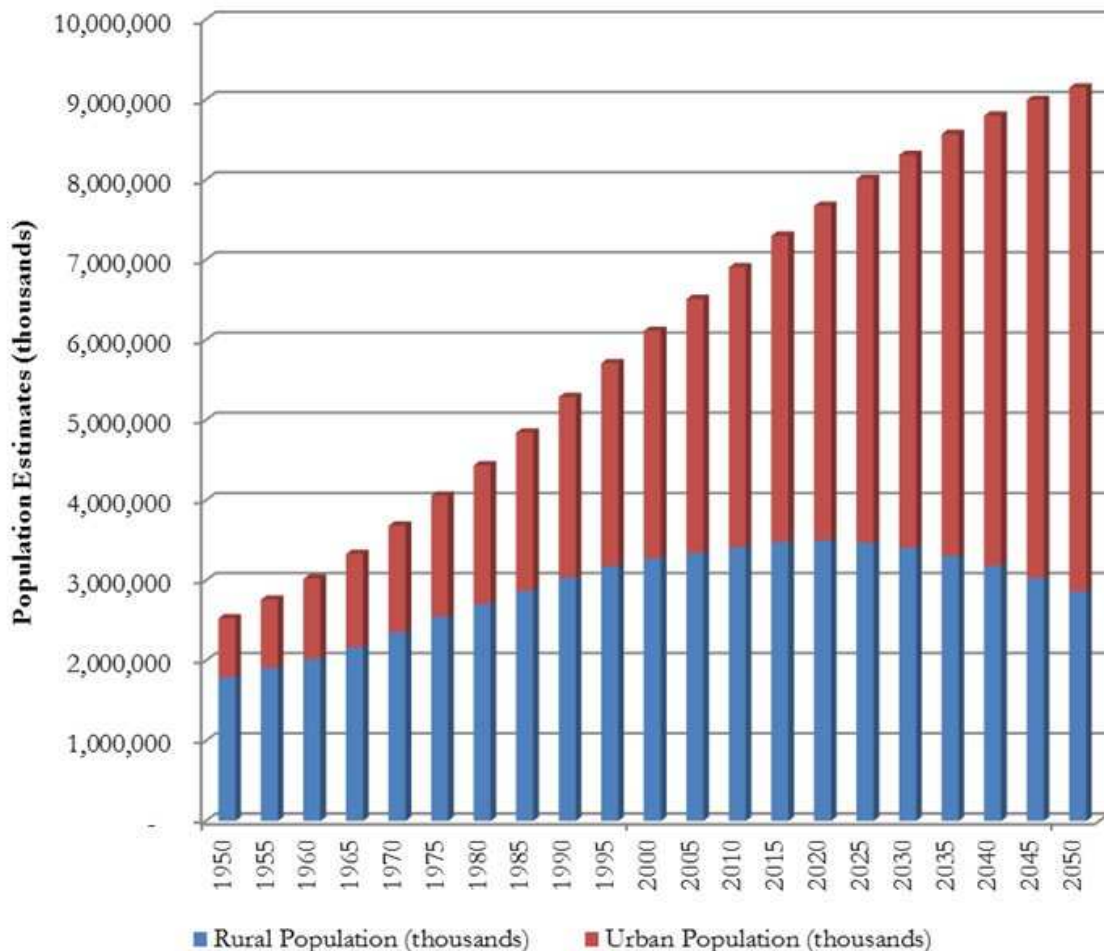
World population

It has been estimated that the World population will dramatically increase from the current 7 billion to 9.2 billion by the year 2050 (Fig.2), thereby creating a huge global challenge to meet the demand for feeding the world population. World dairy production growth will need to expand by 1.8% -2% annually over the next decade to meet consumption growth (EU Commission, 2011). This is over twice the total Irish annual production at 0.9% of world milk production.

Figure 2: World Rural and Urban Population

World Rural and Urban Population 1950-2050

(thousands)
Source: United Nations, Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision, CD-ROM Edition.



Land available for Food Production

With limited arable land, the available farmland per capita is expected to further decrease dramatically, this is clearly illustrated in table 4.

Table 4: World Population and Farmland

Year	World Population (billion)	Arable Land and Permanent Crops (billion hectares)	Farmland per person (hectares)
1950	2.5	1.3	0.52
1975	4.1	1.4	0.34
2000	6.1	1.5	0.25
2025	8.0	1.5	0.19
2050	9.2	1.5	0.16

Source: Milton Suzuki, Bayer Crop Science. "Presentation at Nuffield Conference Australia 2008"

Growth in the middle class population in the Developing World:

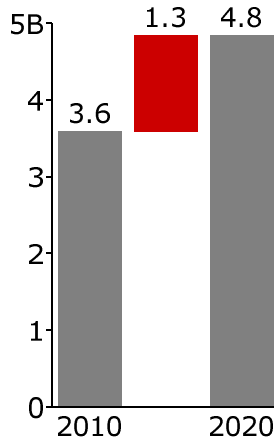
In addition to the increasing world population there is also a shift in demographics in the developing world: due to economic improvement there is significant growth in the middle classes. This increase in disposable income coupled with e.g. government policy in China for increased dairy consumption, has resulted in increased demand for dairy produce. This is outlined Fig. 3 below.

Figure 3: Growth in the world's middle class.

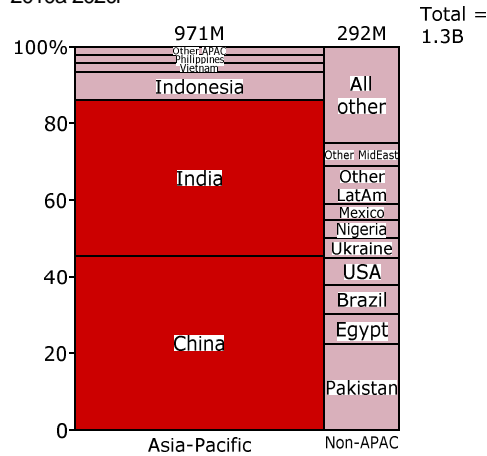
Two-thirds of the population growth in the global middle class will come from just China and India



World population with HH income +\$5K USD



Share of the 1.3B growth in global middle class between 2010a-2020f



November 2011

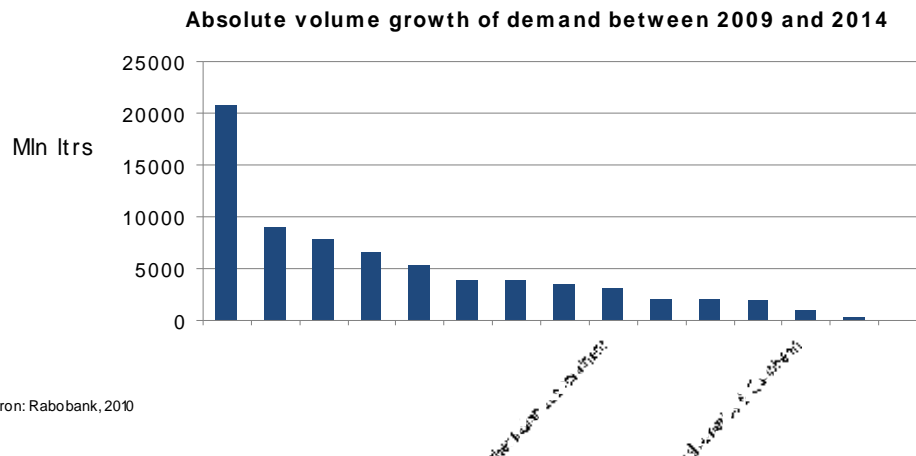
Slide 18

Source: John Maloney (CEO Glanbia) Presentation 9 November 2011

Milk Expansion Potential

Figure 4 illustrates world rising demand for dairy products. International dairy trade absorbs approximately 10 per cent of globally produced cow milk (USDA, 2012). Asia in particular will increasingly call upon the global market to meet its dairy requirements, as their domestic dairy industries will be unable to meet the increasing demand for dairy produce. New Zealand has a bilateral trade agreement with China since 2008 which gives their dairy industry preferential access to the Chinese market and they are currently seeking a similar arrangement with India. However, New Zealand will be unable to fully meet this demand, creating a growing opportunity for suppliers other than New Zealand, to play an increasingly role in supplying Asia.

Figure 4: Growth in demand for Dairy Products. (Source: Rabobank)



At present 80% of Irish dairy exports are into the EU. As outlined in the graph above, there is limited growth potential within the EU. With the abolition of quotas in 2015, Ireland and its dairy industry will be in a good position to expand its production and avail of a share in the global market. However if we aim to export our 50% planned growth (Food Harvest 2020) outside the EU, we need to develop and enhance these routes to market. While opportunities will be considerable, Rabobank believes that the heightened volatility evident in global dairy markets in recent years is more than just a passing phase, and while there will be significantly higher pricing in the international market than has been offered through most of the last decade, there is a high likelihood of ongoing market volatility. Business models and strategies need to account for this risk (Shaken but Not stirred, Rabobank 2010). International practice as outlined in the foregoing chapters, demonstrates that a consolidated dairy industry model is how our competitors have structured their industries, and in the writer's view best helps an industry to mitigate against these risks.

Chapter 6

Conclusions and Recommendations

In the writer's view the current structure of the Irish Dairy Industry is a constraint to profitable dairy expansion. Facilitators for industry consolidation include:

- Strong farmer board leadership
- A positive view by key outside influences –Government, The Media, Farmer Union's.
- Focus on the future benefits that consolidation will bring.
- Low milk price is a motivator for farmers seeking consolidation. Volatility in dairy markets over the past few years has exacerbated the frequency that farmers have received lower milk prices. This volatility is projected to continue.
- The potential increase in supply for processing is a significant stimulant for consolidation.

Increasingly the above facilitators are becoming more evident in the Irish dairy debate. The writer believes that the implementation of the recommendations below will ensure that, with the proposed structural reform, the future structure of the Irish dairy industry will no longer be a constraint to profitable dairy expansion. The writer is optimistic that a consolidated Irish industry has the potential to be a significant world player.

Conclusion 1

The argument for the Irish dairy industry to consolidate is compelling, given international experience and developments. Freisland Campina estimated that synergies from consolidation would lead to lowering costs (€175 million by 2012) equating to 2 cent per litre. Fonterra aimed to maintain a profitable co-operative structure, integrating both manufacturing and marketing businesses in a cost-effective fashion. At the time the total savings of the merger were calculated at \$300m. Current Fonterra Chairman, Henry van der Heyden, stated that prior to the merger the three companies were competing against each other in the Australian market, with divided resources and independent strategies. Post merger the synergies and savings in this market alone was in excess of the envisaged savings of \$300m. In essence we are losing competitiveness with other international exporters due to our current lack of scale and poor integration within the industry. A large integrated processor would be better able to react to the market and forge links with other international exporters for the betterment of Irish dairy farming.

Recommendation 1

Ireland needs to work towards developing into a fully integrated industry with farmers in control; and the Co-Op model, with a well structured capital base seems best suited to providing this.

Conclusion 2

When Freisland and Campina were exploring the possibility of merging, the Farmer chairmen of both co-operatives showed great leadership in initiating the discussion as they believed that it was the best option for their farmer members. Mr. van der Heyden of Fonterra made a very salient point in stating that emphasis on reports when discussing dairy industry consolidation is a fruitless exercise, as prior to merging these entities are competitors, therefore information in reports is virtually “censored” to ensure that commercially sensitive information is protected. Leaders should acknowledge that strategically it is the right thing to do for the future of the industry. This acknowledgement would allow the leaders to engage in a more open process of negotiation. To date there has been no substantive argument against consolidation, therefore in this writer’s view, the leaders are already aware that it is the right direction for the industry. What is now required is strong leadership. Farmer Chairmen need to demonstrate true leadership by leading the process of consolidation from the front, for the benefit of their members.

Recommendation 2

Farmer Chairmen of Irish Co-operatives to demonstrate leadership by initiating merger talks to consolidate the Irish dairy industry.

Conclusion 3

As was the case with Arla in Denmark, it is highly unlikely that Ireland will achieve the above by consensus, as there are too many individual co-operatives, with over 300 directors, all with their own points of view. In the absence of consensus in Denmark, the four largest dairies amalgamated into one company in 1970 and by merger and acquisition by 1986 the company had gained more than 50% of all milk deliveries. The merged company subsequently gained a controlling interest in the dairy board, thereby fully integrating marketing and processing. The top six Irish co-ops process 80% (Prospectus, 2009) of the national milk pool and of these, Kerry, Glanbia and Dairygold are among the major players. For consolidation to be meaningful, it will necessitate at least two of these three coming together. Kerry Chief financial officer Brian Mehigan was recently quoted as stating that the Irish dairy industry needs to consolidate, but “Kerry won’t be doing it” (Irish Farmers Journal, 2012). Glanbia and Dairygold are the two companies with the most potential for expansion and currently have a good working relationship. They have a joint processing arrangement whereby Glanbia process Dairygold’s butter and Dairygold process cheese on behalf of Glanbia.

Glanbia Plc. has just recently spun off its Irish milk-processing business as part of a joint venture with Glanbia Co-op, as both parties prepare for the abolition of milk quotas in 2015. The transaction differs from the plan mooted in 2010, which would have seen the co-op demerge from the plc and Glanbia completely exit the Irish dairy-processing business. Under the current arrangement, Glanbia Co-op has taken a 60 per cent shareholding in the new structure, with Glanbia plc holding 40 per cent and a facility for the co-op to purchase the remainder over time.

If Dairygold and Glanbia merged they would have 55% of total Irish milk. With expansion in milk production in these co-ops, this figure will be greater going forward. The merged company could gain a controlling interest in the Dairy Board, which inevitably would pave the way for full integration of marketing and processing. Co-operatives outside of the merged company would look at the potential gains for their members in joining this new company, and the potential vulnerability to their business by remaining outside of it, leading them to support the rationale for consolidation.

Recommendation 3

Glanbia to return their Irish processing assets in full to co-operative control, paving the way for a co-op merger. Glanbia Co-op and Dairygold to merge. Subsequently, other like-minded co-op's to join the merged group, and this group to integrate processing and marketing by seeking a controlling interest in the Irish Dairy Board.

Conclusion 4

Approximately 10% of world dairy production is traded internationally. Our annual production is 0.9% of world production. Ireland has set itself an ambitious target of a 50% increase in milk production by 2020 (Food Harvest 2020, 2010). There is an expected increase in world demand for the next decade of between 1.8% and 2% annually. There will be a market for this extra production. This production will be exported outside the EU, where 80% of our current exports go, as the demand within the EU is projected to remain static.

Recommendation 4

Build and enhance routes to world market, outside of the EU.

Conclusion 5

With large scale amalgamation within the Irish dairy industry, there may be a lack of competition in setting milk price. However our actual competitors are those we are competing with in the international marketplace. In Holland, Freisland Campina have overcome this by creating a guaranteed milk price which is calculated on the weighted average milk price paid by neighbouring processors in Germany, The Netherlands, Denmark and Belgium, on 46 billion kg.s of milk. In addition to this guaranteed price farmers receive a percentage of company profits at the beginning of the next fiscal year. This is a clear and transparent mechanism. In Fonterra milk price is based on commodity returns plus a premium paid on farmer shares which is derived from selling premium ingredients and investments in consumer brands around the world.

Recommendation 5

In the future a consolidated Irish dairy industry will need to have a clear and transparent Milk Pricing model. A combination of a percentage of the milk price being based on the Friesland Campina guaranteed milk price model, and a percentage on the Fonterra commodity linked price model, with a percentage of company profits being paid in addition to these as detailed in recommendation 6.

Conclusion 6

Post consolidation the aim should be for a common milk price for all suppliers. However initially this may not be fair, as pre-merger the co-op's capabilities on milk price may have been dissimilar. Therefore as part of the merger proposal a definite date for milk price convergence should be set. In Freisland Campina 50% of company profits are added to the general reserve every year, a further 20% of profit is added to fixed member bonds (this policy is reviewed every 3 years) and the remaining 30% of the profits are paid to milk suppliers at the beginning of the following year. This is in addition to the guaranteed milk price. Fixed

member bonds are transformed into free member bonds when a farmer ceases milk supply. Members can buy and sell free member bonds at an internal market. In addition to the above recommendation for a clear and transparent milk price mechanism this is a good model as company profits are paid to the farmer. This model puts pressure on the company to pay a guaranteed milk price that is in line with competitors and also creates an increased sense of ownership and reward by distribution of company profits. As well as creating a model for incentivising management with pay related to company profits, it is a win win for management and farmers.

Recommendation 6

A percentage of Company Profits to be paid to suppliers per litre of milk supplied.
A percentage of Company Profits to be allocated to suppliers in the form of interest bearing bonds, which are cashable on milk supply cessation. On a 3-year cycle, the Board of the Co-op should decide on the percentages for both to be paid out.

Conclusion 7

In New Zealand there is a Leadership development programme and a board candidate selection committee. This ensures that board members are well educated and not put forward for election if not considered suitably qualified by the selection committee. While Fonterra have regional representation at share council level, the board of directors are elected from a single constituency. This ensures that the board represents all the members and decisions are not influenced by local issues. In a merging Irish Dairy industry a single constituency election may not be supported. However, to overcome this, the writer believes that at the outset of the merger an interim arrangement should be agreed that would result in moving toward a single constituency election after an initial three-year election cycle. This allows for people to feel secure at the outset and as confidence grows in the new entity, single constituency elections will then be supported.

Recommendation 7

Set up a Candidate Board Selection Panel with three-year pre-agreed regional elections to the new board. After three years Board Candidates to be elected from single constituency.

Conclusion 8

Our international competitors are almost totally dairy focussed. By comparison Irish co-operatives are multipurpose in that they have significant non-milk processing businesses e.g. feed mill, grain intake and agri-supplies. As profits from different aspects of the business are not clearly stated in annual reports, the farmer shareholder is unclear as to whether milk price is being subsidized, or if it is subsidising other aspects of the business.

Recommendation 8

In multipurpose Dairy Co-operatives profitability between the dairy and non-dairy parts of the business need to be clearly shown in annual reports, so that all members are treated equally.

Conclusion 9

Currently there are 19,000 dairy farmers, and there are 74,000 shareholders in the 27 Irish dairy co-operatives, with greater than 300 directors between them. The shareholder register of Irish Co-operatives needs to be more in line with the active membership. This is the case with Arla, Fonterra and FrieslandCampina, where you cease to be a voting member on ceasing milk supply, with farmer's capital being returned within a defined period.

In FrieslandCampina the capital requirement for members has recently increased from €4 to €10 per 100kg of milk, with a share having a nominal value of €100. When a member retires from milk supply, they can gift/sell their shares to a successor, sell their shares to another member, or sell them to the approved market liquidity provider i.e. Rabobank.

Recommendation 9

On ceasing milk supply members are entitled to encash their shareholding in full. If they wish to leave it within the co-op, they will receive a competitive interest rate but will have to forfeit all voting rights.

Members need to have a minimum shareholding of 4 cent/litre.

A share trading mechanism between members needs to be created.

Acknowledgements

I wish to thank Nuffield Ireland and my sponsors Irish Co-Operative Organisation Society (ICOS) for providing me with the opportunity to carry out this study. Also, to my wife Katie and my daughters Emer and Orla, I acknowledge their patience and support during my study. I would like to acknowledge the people that I met, for their generosity in sharing their experience and knowledge with me, in particular:

Frans Keurentjes, current Freisland Campina board member

Gerard Heerink, Manager Cooperative Services and Support at FrieslandCampina

Jan van Beekhuizen, Food & Agri Sector Manager, Rabobank, Netherlands

Bart Ijntema of Rabobank.

Adriaan Krijger, of the Dutch Dairy Board

Michael Pedersen, Danish Agricultural Advisory Service

Preben Mikkelsen, PM Food & Dairy Consultant, Formerly of the Danish dairy board

Jørgen Friis Pedersen of Arla, Denmark

Theis Brøgger, Chief Press Officer at Arla Foods

John Tyrell, former Director General ICOS

Jim Woulfe, CEO Dairygold.

Harry Bayliss, Former Director Fonterra, New Zealand.

Kevin Wilson, Rural Economist, ANZ National Bank, New Zealand.

Alvin Reid, Director Livestock Improvement Corp. Ltd, New Zealand

Jim van der Poel, New Zealand.

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Appendix 1

The Largest dairy cooperatives in the world

The top 10 largest dairy co-operatives in the world, measured by revenue in billions of euros over the past few years.

Position	Company	Country	Revenues (mld euro)		
			2006	2007	2010
1	Fonterra	New-Zeeland	6.4	7.5	9.1
2	FrieslandCampina	Nederland	8.3	9.1	8.8
3	Dairy Farmers of America	United States	5.9	7.5	7.4
4	Arla Foods	Denmark	6.1	6.4	6.9
5	Land O' Lakes	United States	5.5	6.1	7.8
6	Humana Milchunion / Nordmilch	Germany	2.9	3.4	4.8 (2008)
7	Tine	Norway	2.2	2.4	2.4 (2009)
9	Glanbia Society	Ireland	1.9	2.2	2.1
10	Irish Dairy Board	Ireland	2.0	2.1	1.9