BABCOCK INSTITUTE DISCUSSION PAPER
NO. 2007-3

COMPETITIVE STRATEGIES OF
DAIRY PROCESSING FIRMS IN IRELAND

William D. Dobson

The Babcock Institute for International Dairy Research and Development
University of Wisconsin-Madison, College of Agricultural and Life Sciences
240 Agriculture Hall, 1450 Linden Drive
Madison, WI 53706-1562 USA

The Babcock Institute offers continuing opportunities for sponsorship of our market and trade analysis, international dairy research, international market development activities and educational materials, including our website. If you are interested in discussing these opportunities, please call Karen Nielsen at 608-265-4169.

The Babcock Institute for International Dairy Research and Development
is a joint program of the
University of Wisconsin-Madison College of Agricultural and Life Sciences
University of Wisconsin-Madison School of Veterinary Medicine
University of Wisconsin Extension Cooperative Extension Division

The views expressed in Babcock Institute
Discussion Papers are those of the authors;
they do not necessarily represent those of the
Institute, nor of the University.

Funding for this study was provided by CSREES USDA Special Grant 2006-34266-17274

ISBN 978-1-59215-118-3

The Babcock Institute
College of Agricultural and Life Sciences
240 Agriculture Hall, 1450 Linden Drive
Madison, WI 53706-1562

Phone: 608-265-4169; Fax: 608-262-8852
Email: babcock@cals.wisc.edu
Internet: http://babcock.cals.wisc.edu

CONTENTS

INTRODUCTION 1

KEY ELEMENTS OF THE COMPETITIVE ENVIRONMENT FACING IRELAND'S DAIRY PROCESSORS 3

THE STRUCTURE OF IRELAND'S DAIRY PROCESSING INDUSTRY 4

STRATEGIES OF IRELAND'S DAIRY PROCESSORS 6

- **Strategies of Ireland's Big Four Processor-Exporters** 7
- **Strategies of the Irish Dairy Board** 7
- **Strategies of Glanbia plc** 9
- **Strategies of Dairygold Cooperative** 11
- **Strategies of the Kerry Group plc** 12
- **Summing Up on Strategies** 14

REFERENCES 15

LIST OF TABLES AND FIGURES

Table 1. Irish Government Awards to Dairy Processors, 2007 **5**

Table 2. Revenues and Geographic Scope of Operations for Ireland's Big Four Dairy Processor-Exporters, 2006 **6**

Figure 1. Boston Consulting Group Matrix **10**

COMPETITIVE STRATEGIES OF DAIRY PROCESSING FIRMS IN IRELAND

William D. Dobson[1]

INTRODUCTION

"The essence of formulating competitive strategy is relating a company to its environment."
– M.E. Porter, Harvard Business School [19, p.3]

This statement by Harvard Business School strategy guru, Michael Porter, provides a broad framework for analyzing the effectiveness of strategies employed by Ireland's milk processors and exporters. These firms have adapted in different ways to the unique combination of conditions in the Ireland dairy sector. These include a limited internal milk supply due to European Union (EU) milk quotas, a limited domestic market due to a small population, and extreme seasonality in production due to a grass-based production system.

Ireland's dairy industry also is finding that it needs to adjust to important changes in the economic-political environment. The country's strong "Celtic Tiger" economy has created labor shortages on dairy farms and raised milk processors' costs, necessitating changes in plans and operations. In addition, sea changes underway or in prospect for EU agricultural policies have created an operating environment where Irish processor-exporters discover that a strong premium is placed on operating efficiently in evolving dairy international markets.

Individually and collectively, Ireland's dairy firms have obtained detailed information and analyses relating to their competitive environment and recommendations regarding options for operating profitably in that environment. Especially important among sources of industry intelligence is the 2003 Prospectus-Promar International (PPI) report entitled, *Strategic Development Plan for the Irish Dairy Processing Sector* [20]. This discussion paper will cite a limited number of figures and passages from the PPI report but will not duplicate the extensive amounts of material from that comprehensive publication since it is available on the internet.[2] However, questions will be raised about certain recommendations appearing in that report.

This discussion paper will briefly summarize key elements of the competitive environment facing Ireland's dairy processors, the overall dairy industry structure that has emerged in Ireland, and the strategies of the processing and exporting firms in Ireland's dairy industry. The profitability of Ireland's dairy industry will be shaped in important ways by how successfully Ireland's major dairy firms implement their strategies and whether the strategies produce their hoped-for results.

---

[1]The author is Professor Emeritus, Department of Agricultural and Applied Economics, and Agribusiness Economist, Babcock Institute for International Dairy Research and Education, University of Wisconsin-Madison. This report was prepared in conjunction with a Babcock Institute study of the dairy sector of Ireland. A condensed version of this material is included in a separate Discussion Paper relating to the overall study.

[2]Accessible at the Irish Government Department of Agriculture, Fisheries, and Food website http://www.agriculture.gov.ie/index.jsp?file=publicat/irish_dairy/index.xml

KEY ELEMENTS OF THE COMPETITIVE ENVIRONMENT FACING IRELAND'S DAIRY PROCESSORS

Elements of the competitive environment summarized below will influence how successful Irish dairy firms are likely to be in executing their strategies:

- Ireland's rapidly growing "Celtic Tiger" economy has created strong domestic demand for dairy products, but has put upward pressure on wages and processors' costs for electricity, gas, and insurance in recent years.
- Appreciation of the Euro relative to the U.S. dollar and some non-Euro zone currencies has made Irish dairy products less competitive in international markets outside the Euro zone. This development is important since Irish firms export about 80 percent of dairy products produced in the country.
- Changes in EU dairy policies have created uncertainties for the industry. EU dairy policy changes include reductions in intervention prices for butter and skim milk powder, elimination of subsidies for firms using skim milk powder to produce milk-replacer calf feeds, and elimination of, or sharp reductions in, EU export subsidies for several dairy products. Milk quotas, which have been a fixture in the EU since 1984, are likely to increase after 2008 and be eliminated after 2014/2015.
- Profits available from "selling into the Common Agricultural Policy (CAP)" have caused Ireland to rely more heavily than many other EU countries on EU-CAP dairy intervention payments and dairy export subsidies. In Ireland, production of commodity dairy products—e.g., butter, casein and skim milk powder—which could be sold into intervention or exported with subsidies, has been emphasized. Profits from the CAP have retarded R&D efforts and industry efforts to develop new value-added (differentiated) dairy products.
- Ireland's pasture-based dairy farming system creates excess capacity in milk processing. Dairy processors operate at or near full capacity during May, June and July, but at only about 60 percent of capacity on an annual basis. This places the Irish firms at a competitive disadvantage in terms of processing costs compared to foreign processors who enjoy a more even seasonal milk flow into their plants.
- Competitive pressures caused major consolidations in Ireland's dairy processing industry during the 1990s and early 2000s. However, this consolidation has not proceeded as far in Ireland as it has in New Zealand, Denmark, the Netherlands, and other countries with export-oriented dairy industries.
- Economic conditions in Ireland (e.g., limits on capital available from farmer members and limits on debt capital available from lenders) have encouraged Ireland's dairy cooperatives to develop innovative business arrangements. Several have devised cooperative-public limited company business structures that have enabled the hybrid firms to raise capital in the share market and gain other advantages.
- Supermarkets have acquired additional market power in countries where Ireland's dairy industry sells dairy products. The supermarkets require delivery to specification for prices that frequently yield low margins for processors and distributors.
- Current or prospective profit squeezes in Ireland's dairy business have created incentives for major Irish cooperatives to diversify into non-dairy product lines and engage in foreign direct investment.

THE STRUCTURE OF IRELAND'S DAIRY PROCESSING INDUSTRY

Ireland's dairy industry might be described as the "Big Four" processor-exporters plus a competitive fringe. The Big Four consists of the Irish Dairy Board (IDB), Glanbia, Dairygold Cooperative and the Kerry Group. The IDB is a cooperative while the other three firms are cooperative/public limited companies.

The IDB is a commercial cooperative that markets the products of member manufacturing cooperatives. The IDB does not have single-desk or monopoly exporting privileges. Thus, Ireland's larger cooperative/public limited companies export dairy products for their own account.

The Big Four cooperatives and cooperative/public limited companies do business alongside many smaller dairy cooperatives (part of the competitive fringe). The Irish Cooperative Organization Society reports that a total of 31 multi-purpose dairy cooperatives existed in Ireland in the mid-2000s [14]. Cooperatives and cooperative/public limited companies accounted for 99 percent of milk collection and 98 percent of milk processing in Ireland in this same period.

Ireland's dairy processors place considerable emphasis on bulk dairy products. The PPI report described the composition of output for Ireland's dairy industry in the early 2000s, as well as needed changes, as follows [20, p. 89]:

Portfolio Products	Product Portfolio In Early 2000s	Product Needed in 2015
	Percent of Total Portfolio	
Functional & Organic Foods	Zero or trace	5%
Consumer Products	Approx. 15%	20
Value-Added Ingredients	20	30
Base Products	65	45

In the above schedules, functional products include bioactive spreads, certain yogurts, protein extracts, and certain cheeses. Consumer products include fluid milk, dairy desserts, yogurts and a host of other branded products. Value-added ingredients provide unique benefits to buyers and food manufacturers through special formulations or special applications of technologies. The base products include bulk dairy products (bulk butter, skim milk powder, whole milk powder, cheese, and casein).

The recommendation in the PPI report calls for increased production of value-added (differentiated) dairy products by 2015. This reflects the assumption that Ireland's dairy industry can develop competitive advantage by producing more differentiated products rather than by continuing to focus heavily on bulk products which, over the longer-run, typically can be produced profitably only by low-cost producers possessing major economies of scale.

PPI indicates that about 80 percent of the milk in Ireland was processed by the six largest firms in 2001 [20, p. 25]. In this same year, one firm processed 80 percent or more of the milk in both New Zealand and Denmark and two firms processed 80 percent or more of the milk in the Netherlands. Such figures understate the amount of concentration in milk production in New Zealand, in particular, where one cooperative, Fonterra, processes in excess of 90 percent of that country's milk.

Authors of the PPI report recommended that Ireland's dairy industry adopt strategies that would reduce fragmentation for the following reasons [20, p. 25]:

> *The relatively large number of processors in the Irish industry leads to duplication of effort, particularly of support services such as information technology, human resources, finance and management, testing, product development and marketing, and inefficiencies in assembly and processing.*

The report recommended that the efficiency of Ireland's dairy processing industry be increased by reducing the number of butter, milk powder, casein and whey product processing plants to four sites [20, p. 93]. In the early 2000s, there were 11 butter plants, 11 milk powder plants, and 7 casein processing plants in Ireland.

The diagnosis and recommendation represent standard arguments for merger of firms in many different industries. While there could be advantages of further concentration of Ireland's dairy processing businesses, the current competitive environment does not appear to provide strong incentives for rapid further industry consolidation. Indeed, for the sort of consolidation in

TABLE 1. Irish Government Awards to Dairy Processors, 2007.

Recipient		**Amount ($mil.)**	**Purpose**
Big Four Firms:			
Dairygold Cooperative	Project No. 1:	12.7	Improve quality and efficiency of cheddar cheese production. Increase capacity and quality of whey production.
	Project No. 2:	4.7	Finance whey fractionalization initiative.
	Project No. 3:	7.4	Increase production of specialty cheeses at Mogeely plant.
Glanbia	Project No. 1:	13.0	Expand specialty cheese production at Ballyragget plant. Finance initiative to produce specialized protein products.
	Project No. 2:	12.2	Equip firm's whey protein concentrate facility at Ballyragget to focus on products developed to specification.
Kerry Ingredients	Project No. 1:	13.3	Develop new mineralized whey producing facility at Listowel.
	Project No. 2:	7.8	Consolidate and upgrade butter and skim milk powder producing facilities at Listowel and Charleville.
Other Firms:			
Arrabawn Cooperative		9.3	Improve and expand whey, skim milk powder, and butter production.
Carbery Milk Products	Project No. 1:	9.2	Expand production of value-added cheeses and improve cheese processing efficiency.
	Project No. 2:	4.2	Install new dryer and evaporator to manufacture customized, fractionated and nutritional value-added dairy-based milk powder ingredients.
	Project No.3:	13.0	Develop facilities to recover value-added whey components and produce edible-grade lactose.
Glenisk		4.2	Develop facilities for manufacturing organic yogurt and organic milk for the UK and continental Europe markets.
J&L Grubb		3.1	Double output and improve production efficiency for Cashel Blue and other specialty cheeses.
Lakelands Cooperative	Project No. 1:	4.4	Improve capacity for producing high-value whey products for a niche export market.
	Project No. 2:	11.8	Upgrade the Bailieboro plant with a new spray dryer and upgrade building facility to enhance processing efficiencies.
Newmarket Cooperative		9.1	Improve and expand cheddar cheese production and expand range of cheeses manufactured.
Tipperary Cooperative		7.4	Upgrade, modernize, and expand the firm's Emmental cheese producing facility.
Town of Monaghan Cooperative		4.7	Upgrade the firm's butter packing facility.
Wexford Creameries		3.5	Improve the firm's cheese producing facility.
Total		$155.0	

Source: Cheese Reporter [3].

commodity processing recommended in the PPI report to materialize there would need to be some sort of central coordinating organization in Ireland's dairy industry with the power to force, or provide strong incentives for, such consolidation. Few capitalist economies have such bodies. As noted later, two members of Ireland's Big Four processor-exporters have addressed potential weaknesses associated with fragmentation by adopting measures that fall short of merger.

STRATEGIES OF IRELAND'S DAIRY PROCESSORS

This analysis first examines industry strategies of both large and small firms and secondly completes a more detailed analysis of strategies of Ireland's Big Four processor-exporters.

Inferences regarding the strategies being pursued by Ireland's large and small dairy processors can be gleaned from the information on the awards made by Ireland's government to the country's dairy firms in 2007 (Table 1). The $155 million (40 percent of total) in awards made by the government is to be matched by spending by the dairy firms in the amount of $233 million (60 percent of total), for a combined total of $388 million. The matching funds requirement helps to ensure that Irish dairy firms attach strategic importance to the projects financed.

Two major tendencies are evident from the data in Table 1. The first is that the government grants are aimed at changing the product mix of Ireland's dairy industry in the direction of more value-added products. Approximately two-thirds of the projects (measured by dollar value) are directed primarily at increasing the production of value-added products, the remaining one-third are aimed mostly at increasing the efficiency of production. Thus, the first trend is consistent with recommendations that the value-added portion of the product portfolio of Ireland's dairy industry be substantially increased.

The second trend underscores the absence of incentives for further substantial mergers and consolidation of Ireland's dairy industry. Nine non-Big Four firms received grants, suggesting that the government and the smaller firms themselves believed they have a chance to operate profitably as separate entities. Also, the grants to three of the Big Four firms appear to contain few, if any, incentives for mergers. It would be surprising if it were otherwise, since the EU Competition Authority said that the grants should not be used to foster mergers.

TABLE 2. Revenues and Geographic Scope of Operations for Ireland's Big Four Dairy Processor-Exporters, 2006.

Firm and Location of Headquarters	2006 Revenues (€Billion)	Geographic Scope of Operations
Irish Dairy Board, Dublin, Ireland	2.074	Export sales made to 93 countries in 2006. The Board operates DPI Specialty Foods through which it distributes perishable and dry specialty food items in the U.S.
Glanbia, Kilkenny, Ireland	2.100	Maintains operations in Ireland, Europe, and the U.S. and has joint venture businesses in the UK, U.S., and Nigeria.
Dairygold, Cork and Mallow, Ireland	0.543	Main operations are located in Ireland with subsidiaries in the UK, U.S. and Germany. The firm has entered into a joint research program with Meiji of Japan.
Kerry Group, Tralee, Ireland	4.646	Sells food ingredients, flavoring products and other food items in 140 countries. The Group has manufacturing facilities in 19 countries and international sales offices in 20 other countries.

Sources: [12, 9, 5, 15, 22].

Strategies of Ireland's Big Four Processor-Exporters

In addition to analyzing more fully how the strategies of the Big Four coincide with the value-added and concentration recommendations of the PPI report, this paper examines how closely those strategies parallel the strategies described by Zwanenberg of Robobank.

Zwanenberg indicated that multifaceted growth strategies are prominent in the strategies of leading firms in the world's dairy industry. Such growth strategies, Zwanenberg reports, help the firms to achieve the following results [23]:

- Become more efficient in manufacturing.
- Open new markets.
- Gain market share and market power.
- Expand their brand portfolio.
- Strengthen their innovative capacity.
- Secure milk supply.
- Improve their access to capital.

Revenues for 2006 and information on the geographic scope of operations for Ireland's Big Four processor-exporters appear in Table 2. The firms' 2006 revenues ranged from approximately €0.5 billion for Dairygold Cooperative to €4.6 billion for the Kerry Group. With the exception of the Kerry Group figure, the 2006 revenues for the four Irish firms were relatively small compared to competing firms in international markets. For example, Fonterra of New Zealand and Arla of Denmark-Sweden had 2006 revenues of €6.4 billions and €6.2 billion, respectively [2,17]. International dairy-food giants, such as Nestle, Kraft, Unilever and Danone, had revenues that were many times larger than IDB, Glanbia, and Dairygold.

The comparative revenue figures have relevance if the Irish firms enter into head-to-head competition with the larger firms in international markets. This would be the case, for example, if the Irish firms sold dairy commodities in competition with Fonterra of New Zealand. Fonterra would likely enjoy scale and other cost economies not possessed by the Irish firms. If the Irish firms produce and sell mostly value-added dairy products they would not necessarily operate at a cost disadvantage to larger foreign firms. Hence, the merits of the movement toward increasing sales of differentiated products indicated by the pattern of government awards and investments by Irish dairy firms, described in Table 1.

Ireland's Big Four dairy processor exporters exhibit substantial geographic dispersion in sales and foreign direct investment. This pattern, of course, is most evident in the figures for the Kerry Group, which sells food ingredients and other food items in 140 countries. Thus, as a group the Irish firms have placed emphasis on the "opening new markets" growth strategy mentioned by Zwanenberg.

Strategies of the Irish Dairy Board

Established in 1961, the IDB's major function is to market the products of its member manufacturing cooperatives and dairy companies. The IDB accounts for approximately 50 percent of Ireland's dairy exports and owns the well-known Kerrygold brand. The Board's main product lines can be divided into three main segments: consumer business, food ingredients and commodity trading.

The Board's subsidiaries located in Europe and the U.S. market a number of branded consumer products, dairy ingredients, and specialized grocery, delicatessen and gourmet food items of both Irish and non-Irish origin. In markets where the IDB does not have a subsidiary, the firm's sales are managed from Dublin through a network of distributors.

Export sales of the IDB among the 93 countries noted earlier were grouped as follows in 2006 [12, p. 15]:

Country or Region	Percent of IDB Export Sales
UK	24
Other EU	45
Africa	13
North America	11
Central & South America	2
Middle/Far East	4
CIS	1
Total	100

The IDB reported strong sales in the U.S. for 2006 (and predicted higher future sales) through Irish Dairy Board Inc. and the firm's DPI Specialty Foods Unit, as follows [12, p.11, 13]:

Consumer branded sales in the USA increased by 5% over 2005, the highlight being Kerrygold butter, now ranked as the number one imported brand in the US. A number of new products were launched in late 2006 which secured strong distribution in key national retail accounts offering an effective platform for additional growth in 200 . . . DPI continued to strengthen its relationship with major retailers and also gained additional business in the food service sector. Turnover during 2006 increased by 14% year-on-year and the company has now consolidated its position as one of the top three national marketers and distributors of specialty food products in the U.S.

Dr. Noel Cawley, former IDB Managing Director, described in 2005 how the IDB is addressing challenges in international dairy markets. The statement, appearing below, represents a proxy for the Board's strategies [13].

The Irish Dairy Board's response (to challenges) is multi-faceted and continues to focus on the branded and food ingredients business. An ambitious program of new product and market development (including emerging markets such as China) is underway and its international portfolio of brands, led by Kerrygold, will be extended, strengthened and consolidated as appropriate.

Mr. Noel Coakley, current Chief Executive of the IDB, elaborated on the above statement in the Board's 2006 Annual Report [12, p. 12]:

In line with the Board's brand expansion strategy, Kerrygold was launched in China with a range of butter and cheese products listed with strategic supermarket chains in Beijing and Shanghai.

In another strategic adjustment made in 2006, the IDB was reorganized along divisional lines to form three key business units: Consumer Foods, Food Ingredients, and Distribution Plus, Inc. (DPI), the Board's specialty food distribution business in the U.S. This adjustment was made to meet "evolving needs of the marketplace [12, p. 9]."

These comments indicate that the IDB is helping Ireland's dairy processors to implement strategies focusing more heavily on developing and marketing value-added dairy products. It is not clear how much of the IDB's revenues are still obtained from commodity exports.

Given the substantial number of smaller dairy cooperatives that operate in Ireland, there is a place in the country for an export marketing board. However, the IDB's role may be increasingly confined to serving the needs of the smaller processors since the processor-members of Ireland's Big Four have the ability to export products for their own account.

IDB efforts to export more Irish dairy products for larger processors could encounter the "weak selling" problem that existed in New Zealand. The "weak selling" argument says that when multiple sellers from one country export dairy products into a foreign market, the sellers end up competing with one another and driving down prices in the destination market. This argument apparently was sufficiently important that prevention of "weak selling" was used as a partial justification for keeping the New Zealand Dairy Board's (NZDB) single-desk (monopoly) exporting privilege for many years prior to 2001. However, by 2001 the New Zealand Dairy Group and Kiwi Cooperative—two cooperatives that processed over 90 percent of the milk in New Zealand—had acquired such strong marketing capability that there apparently was little need for a separate dairy export marketing board in New Zealand. As a result, the NZDB was merged with these two cooperatives to form Fonterra, which does not have monopoly exporting privileges.

There may be ways to short-circuit the "weak selling" problem. For example, Glanbia, which exports certain dairy products through the IDB, reports that the firm monitors sales to limit the amount of product that it sells in direct competition with the IDB in foreign markets.

A more serious threat to maintaining IDB operations relates to trends in development of value-added products in Ireland. As Ireland's dairy firms develop certain new value-added products, they need to be in position to work with final customers to explain the technical characteristics and applications of the products. Firms developing the new products also may wish to make price concessions to the final customer. It is difficult to explain technical characteristics or make needed price concessions when working through an intermediary such as the IDB.

Strategies of Glanbia, plc

Glanbia ("pure food" in Gaelic) was formed in 1997 from the merger of Avonmore Foods and Waterford Foods, two publicly traded dairy-food companies. The parent companies themselves were the product of numerous mergers and acquisitions, dating back to the 1960s and before.

The acquisitions of Avonmore and Waterford in the 1980s established both firms in international markets and helped shape the configuration of Glanbia [10]. Avonmore made a series of strategic acquisitions after a 1988 reorganization, including a cheddar cheese and food ingredients business in Idaho, liquid milk and cheese businesses in the UK, a mozzarella cheese business in North Wales, and European meat businesses. Waterford in the 1980s made a number of acquisitions in the UK and acquired cheese processing plants in Wisconsin. The 1980s were a period of experimentation for both firms during which business units were established that were later built upon or spun off by Glanbia.

Glanbia's present core activities consist of the following:

- *Consumer Foods:* In Ireland, Glanbia has leading market and brand positions in liquid milk. The firm's brands include Yoplait, Avonmore, Premier and Kilmeaden.
- *Food Ingredients:* These operations include the firm's U.S. and Irish ingredients businesses. The U.S. businesses include the Twin Falls, Gooding, and Richfield, Idaho and Clovis, New Mexico cheese operations.
- *Nutritionals:* Glanbia Nutritionals produces functional and processed foods, sports nutrition products, infant and adult foods, health products and nutritional supplements. Glanbia's technologies and capabilities in formulating whey proteins in the U.S. and Ireland represent the foundation for the firm's Nutritionals business.
- *Agribusiness and Property:* The principal functions of Agribusiness operations are farm input sales, feed milling, and grain trading in Ireland. The Property operation has the responsibility of maximizing the value of the firm's property portfolio.

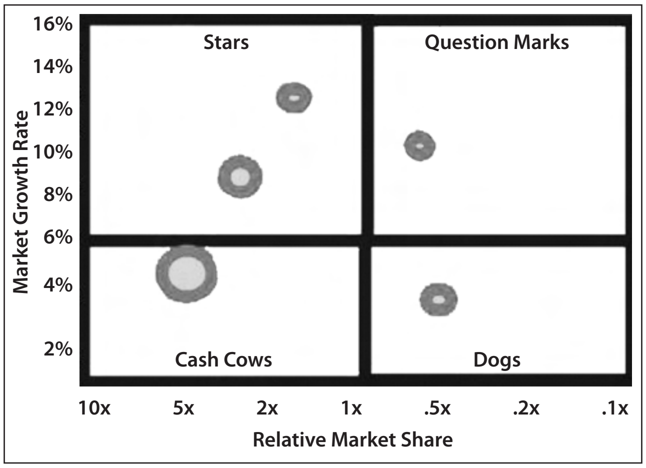
The following statement describing Glanbia's activities in the early 2000s provides an overview of how the firm's current strategies emerged [1, p. 5]:

> *Glanbia achieved a new phase in its growth in 2000 when it signed an agreement with the United States' Leprino in which it transferred a 49 percent stake in its Glanbia Cheese Division in exchange for Leprino's cheese technology. The deal made Glanbia the leading producer of mozzarella and pizza cheese—Leprino's specialty—in Europe. In the United States, Glanbia's operational focus switched to Idaho, where it began a large-scale expansion of its cheese production facility. . . . In 2003, the group created a joint venture with Dairy Farmers of America and Selected Milk Producers to build a new whey processing plant.*
>
> *As Glanbia continued to refine its focus, targeting the new and fast-growing 'nutritional' foods segment, the company began selling off its non-core segments, including its processed meat component, which as sold in 2002 . . . In 2003, the company announced that it had reached an agreement with Uruguay's Conaprole Cooperative to create and market dairy products for the Latin American market.* **Glanbia, already one of Europe's top dairy groups, now set its sights on joining the ranks of the global dairy giants** *(emphasis supplied).*

Glanbia's initiatives in the U.S. are consistent with the objective of becoming a global dairy giant. However, as the figures in Table 2 indicate, the firm has a substantial way to go before achieving such status.

A Glanbia official interviewed by the study team indicated that Glanbia used the Boston Consulting Group's matrix as a conceptual tool for formulating acquisition and divestiture strategies. The prescriptions recommended by the Boston Consulting Group for use of the matrix are actually fairly strict. However, many businesses—including Glanbia—use the device to obtain general guidance on which business units to nurture and which to sell.

FIGURE 1. Boston Consulting Group Matrix [21].



The business units falling in the different quadrants of in the Boston Consulting Group matrix (Figure 1) have the following meanings [21]:

- Stars have high market share and high growth potential.
- Cash cows have relatively high market share but slow growth potential.
- Question markets have high growth potential but low market share. Cash cows are sometimes used to generate cash needed to turn question marks into stars.
- Dogs, characterized by low market share and low market growth rate, are often divested.

The market share numbers on the horizontal axis of Figure 1 refer to a business unit's share relative to that of the next largest competitor. Thus, if a business unit had a 20 percent market share and the largest competitor had the same market share the ratio would be 1:1. Associated with the use of the market growth rate variable on the vertical axis is the assumption that economies of scale exist in the industry and that business units with a large market growth rate would generate large amounts of cash.

Glanbia's decision in late 2006, described below, to sell the firm's interest in Cheese Company Holdings to UK joint venture partner Milk Link Ltd., appears to be consistent with a prescription that might emerge from use of the Boston Consulting Group matrix [18]:

Glanbia, the food and dairy group, has sold its interests in Cheese Company Holdings for EUR 70 million, less than three years after setting up the joint venture vehicle to target the UK cheese market. . . . Commenting on the sale, Glanbia group managing director, John Moloney said: We have had a mutually very satisfactory relationship with Milk Link since 2004 during which the Cheese Company has developed into a strong integrated business. We consider now to be an appropriate time to dispose of our remaining interest and to focus on the development of our fast growing international businesses.

Glanbia officials did not refer to EU intervention sales as cash cows. However, such sales undoubtedly once functioned much like cash cows, which could be used to generate funds to finance the development of "question marks" into star businesses or to acquire potential stars. For reasons noted earlier, changes in the EU-CAP have largely eliminated such EU cash cows.

How well are Glanbia's strategies working? Glanbia reported that the firm's global market positions in 2006 were as indicated below.

- *U.S.:* No. 1 in barrel cheese and whey protein isolate, No. 3 in lactose, and No. 4 in American cheddar cheese.
- *Ireland positions:* No. 1 processor of liquid milk and cream (branded products) cheese, and butter.
- *Europe:* No. 1 supplier of customized nutrient premixes and pizza cheese.
- *Global:* Leading supplier of advanced technology whey proteins and fractions.

The firm described the performance of Southwest Cheese in the U.S as follows [8, p. 6]:

Southwest Cheese, a joint venture with main partners Dairy Farmers of America and Select Milk Producers, Inc., was commissioned in 2006. This plant, which produces cheese and whey proteins, is based in New Mexico and continues to ramp up to full capacity, forecast for the second quarter of 2007. Southwest Cheese is already producing to world class standards and is forecast to perform as planned in 2007.

Glanbia officials interviewed by the study team confirmed that Southwest Cheese was performing up to expectations or better. The officials noted that the new technology incorporated in the plant was easier to install and performed better than retrofitted equipment installed to update Irish cheese processing operations.

A Glanbia official interviewed by the study team speculated that Southwest Cheese and other large cheese plants in the U.S. will effectively eliminate medium-sized commodity cheese plants as viable competitors in the U.S. While this comment may exaggerate the future structural change in U.S. cheese processing, it is noteworthy. It suggests that the U.S. cheese processing business in a few years will consist of a limited number of large commodity cheese plants located near western milk production areas and many smaller specialty cheese plants located in Wisconsin and elsewhere in the U.S.

Additional summary information on the focus and effectiveness of Glanbia's strategies appears in Glanbia PLC 2006 Results, as a progress report [8, p. 6]:

> *Irish operations continue to focus on key aspects of business execution which drive performance, productivity, and cost competitiveness. International operations are expected to perform well in 2007 and Food Ingredients USA, Nutritionals and Joint Ventures are well positioned for good growth . . . Glanbia is successfully developing a strategic international presence, which today represents nearly 40% of revenue and profits. This gives the Group a strong platform from which to continue to grow and develop overseas. At the same time, the Group continues to consistently and solidly improve the long-term sustainability of the Irish dairy operations. . . . As to the future, Glanbia is on target to deliver double digit earnings growth in 2007 and we believe the outlook is positive for sustained growth.*

The comments on the effectiveness of Glanbia's strategies suggest that the firm is working on improving the efficiency of Irish operations and plans to focus most of its growth in the U.S. and other foreign locations. The efforts to improve the Irish operations include working with Dairygold Cooperative to share milk assembly and milk processing functions. Each firm levies a toll charge on the other for reciprocal processing. These reciprocal arrangements provide some of the cost savings of mergers without actually requiring that the mergers take place.

In summary, Glanbia has implemented several growth-oriented strategies that other leading world dairy processors have pursued. These include securing milk supplies in the U.S. rather than in quota-constrained Irish dairy industry, becoming more efficient in manufacturing by establishing large U.S. cheese manufacturing plants, and opening new markets in the U.S. and Latin America, all of which have helped Glanbia gain market share and market power. Thus, Glanbia's strategies encompass nearly the full range of growth-oriented strategies identified by Zwanenberg.

Strategies of Dairygold Cooperative

Dairygold Cooperative, the smallest of Ireland's Big Four dairy firms in terms of total sales, processes about 20 percent of Ireland's milk [11]. Dairygold represents the 1990 merger of two long-established cooperatives, Michelstown Cooperative (founded in 1919) and Ballyclough Cooperative (founded in 1908) [11]. Michelstown Cooperative and Ballyclough cooperative both absorbed 17 smaller cooperatives prior to their 1990 merger to form Dairygold.

In recent years, Dairygold has carried out a strategy study and rationalization activities that reduced the cooperative's work force and increased the efficiency of the firm's processing operations. The strategy study carried out in 2005 and early 2006 specified the following key objectives for the cooperative [11]:

- Develop non-core assets into a sustainable, growing, profitable business.
- Ring fence (separate) core businesses from activities carrying unacceptable risks.
- Set up non-core businesses to make an unassailable contribution to milk/grain price.
- Give members access to the value of their assets not involved in servicing active farmers.
- Maintain value of current owners' asset base.
- Allow members and the cooperative to experience capital appreciation.
- Develop a dividend flow for members and core business.
- Achieve a funding model that works effectively.

The main change that emerged from this specification of objectives was the splitting of the cooperative into two components in 2006, consisting of:

- *Core Farm Businesses:* The milk processing and agri-trading Core Farm units were tasked with maximizing farmer suppliers' income and farm gate prices and minimizing farm input costs.
- *Reox Holdings plc:* The units in this unlisted plc were charged with maximizing the return from the cooperative's property, consumer foods, and home hardware assets. The Reox Holdings assets also are expected to develop a dividend stream and shares with liquidity and real value.

Dairygold's individual farmer-members retain 100 percent ownership of the Core Farm Businesses and Reox Holdings plc. Reox shares can be held or sold by Dairygold's farmer-members at a time of their choosing. This flexibility with respect to holding or selling shares is a valuable attribute, which many cooperatives located outside of Ireland do not possess.

Dairygold's Chief Executive, Jerry Henchy, described strategies of the firm as follows in the Cooperative's 2006 Annual Report [5, p. 4]:

> *Dairygold will . . . continue to develop and secure higher value markets for an increasing percent of its product range . . . Our successful move into the specialty cheese markets with Jarlsberg and Manchego cheese are examples of how this will be achieved and we will build on this success to add further value to . . . (producers') milk supply in the coming years.*
>
> *Dairygold is fully supportive of industry initiatives to improve the efficiency and competitiveness of dairy processing capacity on a nationwide basis. We believe that our ground breaking co-processing arrangement with Glanbia points the way forward in this regard. The focus of the industry must be on efficient processing, regardless of the ownership of the processing assets. This will allow precious resources to be concentrated on adding value through market innovation and new product development.*

John Walsh, Dairygold's Chairman, described the above-mentioned co-processing arrangement with Glanbia in Dairygold's 2004 Annual Report, as follows [4, p. 4]:

> *2005 opened with our announcement of a groundbreaking co-processing arrangement with Glanbia plc. The Glanbia arrangement will see us take on 25 million gallons of milk annually from Glanbia from April 2006 for dairy processing at the Mitchelstown manufacturing facility while Glanbia will take some 9 million gallons of our cream for the contract manufacturing of Dairygold butter at its Ballyragget facility.*

These comments are straightforward descriptions of strategies to increase the proportion of value-added products in the cooperative's portfolio and reduce processing costs via co-processing.

Strategies of the Kerry Group, plc

While no longer primarily a dairy firm, the Kerry Group of Ireland provides a dramatic example of a firm's successful strategic adjustments to a sometimes hostile economic environment.

The Kerry Group plc is now a diversified food ingredients, consumer foods and bioscience company. The firm grew from a small cooperative that had sales of about U.S.$50 million in 1974 to a multinational company with sales of €4.6 billion (about U.S.$6.1 billion) in 2006, a 122-fold increase.

Much of Kerry's growth in the late 1980s and 1990s was achieved by acquisitions of food ingredients companies. These acquisitions doubled Kerry's revenues about every five years during the late 1980s and 1990s. About two-thirds of the Kerry Group's revenues were obtained from food ingredient sales at the end of the 1990s.

An accident of history shaped the strategies of the Kerry organization in important ways. In the early 1970s, a brucellosis eradication program reduced the milk supply of Kerry Cooperative (parent of the current organization) by about 20 percent. Facing this situation, the Kerry Cooperative's management and board of directors concluded that, if the firm was to grow, it needed to reduce its reliance on commodity dairy products and diversify into differentiated products. Accordingly, the firm embarked on a path that included the following strategies [6]:

- Emphasize production and sale of food ingredients.
- Acquire firms selling branded food products.
- Beginning in 1986, exchange the assets of Kerry Cooperative for a majority holding in a public limited company, mainly to obtain capital for growth.
- Emphasize quality and continuity in management.
- Increase expenditures on R&D to 2 to 3 percent of sales in order to remain competitive in the food ingredients business.
- Emphasize growth through acquisitions, especially of profitable food ingredients businesses.
- In the early 1990s, seek 15 percent per year earnings growth—10 percent from organic growth and 5 to 6 percent from acquisitions.

In May 2004, when Kerry completed the acquisition of the former Quest Food Ingredients business, the Group established the Kerry Bio-Science division [16]. This division innovates and applies new technologies relating to bio-ingredients and pharma ingredients for the pharmaceutical, culinary, snack, bakery, confectionery, dairy and beverage markets worldwide.

Implementing these strategies propelled the firm into a world leadership position in food ingredients and other highly differentiated products. Simultaneously, adoption of these strategies and others noted below caused sales of Irish-based dairy products to decline to about 12 percent of the firm's total revenues in the mid-2000s.

While the Kerry Group continues to make a limited number of acquisitions, the nature of the firm's overall strategies changed as the firm matured in the mid-2000s, as noted below [15]:

- A restructuring program was launched in 2006 to optimize asset use and enhance supply chain efficiencies with the goal of increasing efficiencies throughout the Group. This action is expected to produce a 25 basis point improvement in Group trading margins in 2008.
- The Group's focus on research, development and application led to a 10 percent increase in roll-out of new products in 2006. Expenditures on these activities increased from €125 million in 2005 to €139 million in 2006.
- A share repurchase program was launched in the mid-2000s, suggesting that this use of Group funds was more attractive than available acquisitions or other investments.

These sorts of strategic adjustments are to be expected from a firm that wishes to consolidate and improve the efficiency of operations after a period of rapid growth.

How well have the strategies of the Kerry Group worked in its dairy-related units? The firm reported the following results for 2006 [15, pp.5, 9]:

> *In dairy markets, returns were negatively impacted by the relatively weak market conditions in the first nine months of 2006. As the EU transitions from direct market supports through the processing sector to direct milk producer payments, significant market fluctuations are possible dependent upon supply/demand balances. While considerable firming of international dairy markets occurred prior to year-end, nevertheless processor returns for 2006 were well below the previous year. With the increasing trend towards healthy lifestyles and greater demand for wellness products, Kerry Dairy Ingredients has made significant progress through the development of milk proteins with specific nutritional and functional benefits. Further investment in dairy flavor technology has led to innovative developments in culinary and savory bakery markets, working in partnership with the Group's global ingredients businesses . . .*
>
> *In the UK and Irish cheese categories, Kerry had an excellent year with good growth across all branded segments. The Charleville and Coleraine brands continue to grow their leading market share positions and the extension of the Low-Low brand into cheese was the market's star performer with 40% year-on-year growth. In the processed cheese sector, EasiSingles brand share has declined slightly as private label captured an increased market share. The brand will benefit from new packaging formats and increasing marketing support in 2007 to support growth in the snacking sector.*

Kerry reported the following regarding the progress of its new Bio-Science Division [15, p. 6]:

> *Kerry Bio-Science continued to make good progress in European markets. Its "DuraFresh" range of shelf-life extender products recorded good growth in the cheese, yogurt and flavored milk sectors. The Division's full line of products, including emulsifiers, stabilizers, specialty proteins and enzymes made encouraging progress in the dairy sector as processors seek product differentiation through innovative health offerings.*

Kerry's success in transforming itself from a small dairy cooperative into a profitable multinational firm provides lessons for dairy firms in Ireland and other countries. Kerry's early decisions were partly a product of an accident of history. However, those actions also reflect Kerry's decision to avoid tying its fortunes to the quota-limited Irish dairy industry. Secondly, the firm pursued a strategy that involved exchanging Kerry Cooperative's assets for a majority holding in a public limited company. By selling Kerry shares on the Dublin and London exchanges, the Kerry Group was able to raise expansion capital. While Kerry's successes probably reside more with continuous, capable management than with converting to a plc, the change to a cooperative/plc may be worthy of emulation by capital-short cooperatives located outside of Ireland. Finally, Kerry's shift from commodity dairy products to differentiated dairy products, non-dairy food products, food ingredients, flavorings and bioscience products may be a model for other dairy companies.

Summing Up on Strategies

In summary, the strategies of Ireland's dairy processors represent reasonable, orthodox adjustments to changes in the economic environment. The move on the part of the Irish processors to increase the production of value-added products is a suitable adjustment to the decline in EU-CAP subsidies for commodity dairy products. Furthermore, Glanbia's strategies recognize that a producer of commodity products must be a large-scale, low-cost producer if it is to be profitable over the long-run. Hence, the firm's decision to build the large cheese and whey processing plants in the U.S., which have a chance to produce commodities at a profit, appears sound. Glanbia, of course, will find that the U.S. dollar earnings from these plants will convert into a substantially smaller number of Euros when returned to Ireland.

The problem of fragmentation of the industry has been addressed in a number of ways. The co-processing arrangements of Glanbia and Dairygold represent efforts to achieve processing efficiencies approaching those of a large-scale operator without actually consolidating processing plants. Also, the Kerry Group, which decided decades ago, and many smaller Irish cooperatives, which decided more recently (with the help of the IDB), to increase production of differentiated dairy products have adopted reasonable strategies. Their actions will allow them to avoid having to compete directly with commodity producers on a cost basis.

The Irish Dairy Board may have a smaller market for its services in the future when a larger number of Irish processors begin to produce specialty dairy products. It is difficult to market such products effectively through an intermediary such as the IDB, but as long as Ireland's dairy industry remains somewhat fragmented and commodity dairy products remain important in the portfolio of Ireland's dairy industry, the IDB will have a role to play in the country.

Glanbia and the Kerry Group have adopted strategies that span nearly the full list mentioned by Zwanenberg. The one area where there appears to have been little strategic adjustment relates to problems associated with the pronounced seasonality of milk production. Glanbia, of course, has dealt with the problem partly by establishing large dairy processing operations in the U.S. where seasonality of production is lower. Finally, of course, all the strategies analyzed are works in progress.

REFERENCES

1. Answers.com. "Glanbia plc," 2006, http://www.answers.com/topic/glanbia-plc.
2. Arla Foods. "Annual Report 2006."
3. Cheese Reporter. "Irish Government Awards $155 Million in Grants for Cheese, Whey, Other Projects," April 27, 2007.
4. Dairygold Co-operative Society Limited. "Annual Report, 2004."
5. Dairygold Co-operative Society Limited. "Annual Report, 2006."
6. Dobson, W.D., J. Wagner, and R. Hintz. "When Will U.S. Firms Become Major Dairy Exporters and Bigger Direct Investors in Foreign Dairy-Food Businesses?" Babcock Institute Discussion Paper No. 2001-3, 29 pages.
7. Glanbia PLC. "2005 Results," Glanbia Corporate Communications, News Release.
8. Glanbia PLC. "2006 Results," Glanbia Corporate Communications, News Release.
9. Glanbia PLC. "Annual Report 2006."
10. Glanbia PLC. "Glanbia History," 2005.
11. Henchy, J. CEO of Dairygold Cooperative. "Presentation for CEO Forum," November 6, 2006.
12. Irish Dairy Board. "Annual Report, 2006."
13. Irish Dairy Board. "2005 A Good Year for International Dairy Markets," Press Release, 20-12-2005, http://www.idb.ie/PRESSYE.HTM.
14. Kearns, G. "A Profile of the Irish Dairy Industry," presentation to Delegation from the Bulgarian Ministry of Agriculture and Forestry, undated.
15. Kerry Group plc. "Results for the year ended 31 December 2006, preliminary statement," www.kerrygroup.com.
16. Kerry Group. Profile 2006, http://kerrygroup.com/about1_page.asp
17. Fonterra. "Annual Report 2005-06."
18. Oliver, E. "Glanbia in EUR 70m deal," The Irish Times, December 30, 2006.
19. Porter, M.E. Competitive Strategy-Techniques for Analyzing Industries and Competitors, The Free Press, New York, 1980.
20. Prospectus-Promar International. "Strategic Development Plan for the Irish Dairy Processing Sector," 2003.
21. Wikipedia. "Growth-Share Matrix, redirected from B.C.G. Analysis," 2007. http://en.wikipedia.org/wiki/B.C.G._Analysis.
22. Wright Reports. "Kerry Group PLC - Company Profile Snapshot," 2007, http://wrightreports.ecnext.com/coms2/reportdesc_COMPANY_C372ER900.
23. Zwanenberg, A. "Consolidation in the Dairy Industry-A New Merger, Acquisition or Alliance Every 2.5 Days," Rabobank International Industry Note: Food & Agribusiness Research Issue 017-2001, June 2001, pp. 1–4.