

The Market for Organic Milk Products in Ireland: Irish Case Study in Comparison with Danish and Austrian Cases



DEARBHLA NÍ GHRAITH, ★
CATHAL COWAN ★★ AND
AIDAN DALY ★★★

INTRODUCTION

In recent years there has been considerable market growth for organic food products in Europe. As a consequence of, or a contributor to, this growth, the land under organic management in Europe more than tripled and further significant increases were forecast (Offermann and Nieberg, 2000). Not all countries have shown similar enthusiasm for organic products, its leaders being Austria, Denmark, Finland, Germany, Italy and Switzerland (Henchion et al., 2002; Michelsen et al., 1999).

The dairy industry is an important part of Ireland's economy, accounting for one-third of total agricultural output. The Irish liquid milk market alone is worth 457 million annually, with a per capita consumption of 143 litres per annum. Almost 98 per cent of the population consumes liquid milk; consumption of other milk products including cheese, yoghurt and butter is also high. However, the consumption of organic milk products is extremely low and there are only about 25 farmers involved.

Objectives

The objectives of this paper are to:

- explore the factors influencing the growth of organic milk products in Austria and Denmark;

★*The National Food Centre, Ashtown, Dublin 15*

★★*Food Marketing Research Group, The National Food Centre, Ashtown, Dublin 15*

★★★*Department of Marketing, The National University of Ireland, Galway*

- discover if the growth factors in Austria and Denmark are being or could be used to drive growth of organic milk products in Ireland.

RESEARCH METHODS

Porter's Diamond Model was the construct used to examine the drivers of growth in the three markets examined. In depth interviews were held with twelve key personnel in the following organisations in Austria and Denmark:

- The Danish Dairy Board
- The Danish Organic Centre
- FDB (major retailer)
- MD Foods (largest milk processor)
- The Danish Organic Research Institute
- The Austrian Ministry of Agriculture
- Billa (the largest Austrian retailer)
- Tirol Milch (a milk processor)
- Agrarmarkt Austria (food marketing organisation)
- Ernte (organic farming organisation)
- Institute Fur Agraraeonomik, University of Bodenculture (a university agricultural faculty)
- SGS Austria (a certification body).

Key players in the Irish dairy and retail sectors were then interviewed in person. The Delphi method was used to predict future market shares for organic milk products in Ireland.

PORTER'S DIAMOND MODEL

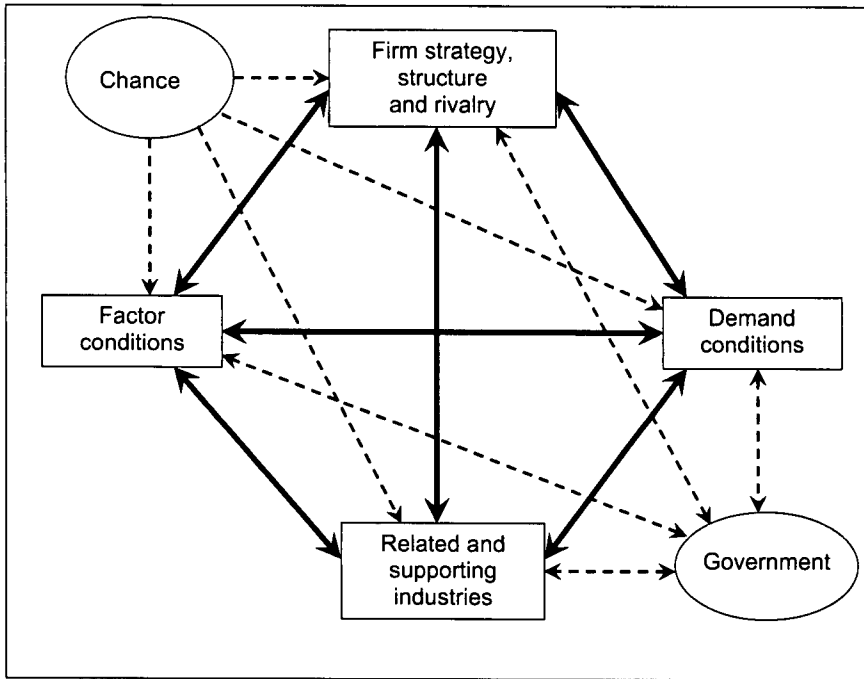
Porter's Diamond Model, consisting of six elements as shown in Figure 9.1, conceptualises how a nation can achieve success in a particular industry. While the elements work independently an advantage in one element can produce, or improve, an advantage in another. However, an advantage in all of the elements is not necessary for industry success. Individually and as a system, the determinants create the context within which the nation's firms are created and compete (Yetton et al., 1992). The elements of the model are briefly outlined below.

Factor Conditions

These are the factors of production, such as land, labour or infrastructure, which are needed to compete in an industry. Factors can be basic or advanced, generalised or specialist and so assist or hinder a firm's potential.

Factor conditions are most strongly influenced by domestic rivalry. Local competitors will stimulate development of skilled human resources, related technologies, market-specific knowledge and specialised infrastructure.

Figure 9.1: Porter's Diamond Model Showing Interdependent Variables that Determine the Competitiveness of an Industry



Competitors will attempt to develop appropriate factors to gain competitive advantage. When factors are advanced and specialised in these markets, it is possible to gain sustainable competitive advantage. Production and processing are the main factor conditions considered in this study.

Demand Conditions

This means the type of market for products or services. It is in the market where the essential advantages of the enterprise are created and sustained and where a firm's strategy is developed and implemented to take advantage of demand conditions. Naturally, the existence of large and/or growing market segments for the products in question results in favourable market conditions. For smaller firms, competitive advantage can be achieved in smaller niche markets in which larger firms may not be interested.

Another characteristic is sophisticated and demanding buyers, who pressurise firms within the industry to produce specific products. In this study, consumer demand, market size and retailer premia and promotion are the main entities considered under demand conditions.

Related and Supporting Industries

The existence or non-existence of related and supporting industries may assist or hinder the development of the industry in question. Examples would be

cost-competitive suppliers, supportive public R&D and distribution channels eager to support the products in question. As will be seen later, there is a network of a small number of supportive players pursuing the same goals in Austria and Denmark.

Firm Strategy, Structure and Rivalry

This deals with the conditions that govern the creation, organisation and management of companies, as well as the domestic rivalry of firms. It includes strategies, structures, goals, managerial ways, individual attitudes and intensity of rivalry in the industry. The strategies and roles of dairy processors and retailers in Denmark and Austria were analysed to identify whether similar strategies are feasible in the Irish situation.

Government

Government policy can have a critical influence on the success of an industry. For instance, subsidies and other support schemes affect factor conditions. Demand conditions too are affected by such issues as product regulation and standards. Fiscal and tax policies affect industry potential. Apart from this, government policy, as is evidenced in Austria and Denmark, was a key driver of development of the organic food industry.

Chance

Certain events occur outside the control of firms, such as pure inventions, breakthroughs in technologies, wars, external political developments and major shifts in foreign market demand. The BSE scares and the "foot and mouth" problems were chance events that had huge impacts on the food industry. Chance creates discontinuities that change the competition. Exploiting chance may turn a situation to advantage.

THE DANISH ORGANIC MILK MARKET

As early as the late 1970s Danish farmers detected consumer interest in organic foods and so established the Danish Association for Organic Farming in 1981. However, by 1986 there were only 8 organic farms in Denmark. By 2002 this number had risen to 750 and organic dairy farms now account for about 6 per cent of all dairy farms.

Factor Conditions

While a small country, Denmark has excellent arable land and, allied to its climate, is well suited to dairy production. Danish farmers have adapted well to new farming techniques, including introducing new milking herds; they are productive and have achieved an international reputation for producing quality food products.

Until the mid-1980s, the farmers processed their own organic milk, selling it at the farm gate or to local markets. Some was also sold to conventional milk

processors. A key development, as explained by Boon (1999), occurred in 1988 when MD Foods (now Arla Foods), Denmark's largest conventional dairy company, began processing organic milk. Further impetus was added in 1992 when Klover Maelk (since merged with MD), then the second largest conventional dairy company, also began processing organic milk and, like MD Foods, supplying organic liquid milk and related products to the market (Boon, 1999). The entrance of these significant players provided a major kick-start to the Danish organic milk market. Added to this, farmers received a 30 per cent premium for organic milk, ensuring that organic dairy farms could outperform conventional farms. These factors incentivised farmers to convert to organic production (Boon, 1999).

Demand Conditions

The profile of consumers of organic foods has changed considerably over the years. In the early 1980s the pioneering customers were a mixture of the health conscious, traditionalists, ecologically aware artistic types, trendies and yuppies. Now consumption occurs across all market segments, the more frequent purchasers being families with children resident in cities and large towns.

By 1997 a much smaller percentage of people (13 per cent) said they never bought organic food (compared to 70 per cent in 1990) (O'Doherty Jensen et al., 2001). The review of Torjusen, Sangstad, O'Doherty Jensen and Kjaernes (2004) provides considerable insight into European consumer perceptions. The motivations to use organic foods are many, including healthier living, and environmental considerations are highlighted in a number of studies (Arve, 1999; Beckmann et al., 2001; Danmarks Statistik, 2002; O'Doherty Jensen et al., 2001; Wier and Calvery, 1999). Animal welfare concerns are mentioned by many consumers (Beckmann et al., 2001; Danmarks Statistik, 2002). Quality and sensory aspects are also frequently mentioned by most of the reports. One study mentions curiosity and desire to be fashionable (Arve, 1999). With the increase in purchasing, market shares have grown also and these vary considerably across different foods. Organic liquid milk is one of the most popular purchases; among purchasers dairy products had been bought by over 90 per cent in the last week (Fibiger Norfeldt, 2000). Organic products with large market shares include wheat meal flour (22 per cent) and eggs (13 per cent).

Firm Strategy, Structure and Rivalry

In the early 1990s, farmer representatives approached FDB, a major retailing group, to persuade them to stock organic milk products. They found a consumer interest related to motivations about their own health and environmental concerns. Subsequently, FDB and the dairy processor MD Foods became key drivers in the development of the Danish organic milk market. Both companies developed specific marketing plans for organic milk products. Klover Maelk, then the second largest conventional dairy company, began processing in 1992.

Initially, "green" consumers interested in an alternative to conventional milk were targeted. Niche strategies were used to focus on specific target

markets emphasising product quality. The product went through a niche life cycle but quickly developed to a mainstream product.

In October 1993, FDB dropped organic prices from 40 per cent to 20 per cent above conventional prices and increased advertising and in-store promotions to promote organic foods. As a result significant increases in organic milk sales were achieved. This marketing approach is claimed to have been a major influence on the development of the organic market in Denmark (Torjusen et al., 2004). It allowed the mainstreaming of distribution, centralised wholesale purchases and related economies of scale. Nielsen, Linnenberg and Vestergaard (2004) point out that a minimum premium was charged in the same way as for conventional foods which, along with the overall distribution and marketing strategy, meant prices could be kept reasonably low for many products.

By the mid-1990s the strategy of both companies was so successful that demand exceeded supply. Some of the FDB stores such as Kvikly and Irma began to specialise in organic foods.

FDB, confident that they had successfully established a loyal market, encouraged other processing companies to produce organic milk products and assist in further developing the market. Specifically, MD Foods and Klover Maelk developed strong advertising campaigns highlighting organic milk as a natural premium product. In 1996, as part of their campaign, MD Foods launched the "Harmonie" organic milk brand. This and the lower prices helped develop consumer loyalty such that "Harmonie" is now the principal brand in this category in Denmark. By the year 2000, it was estimated that MD Foods had 80 per cent of the market. Promotion continues to stress the healthiness and environmental friendliness of organic products.

Related and Supporting Industries

Different organic food markets have also helped the organic milk market grow. All other sectors are growing, especially the fruit and vegetable market and the bakery market and each of these is supporting the other. This is largely because consumers satisfied after trying one type of organic product are more likely to purchase another.

Government

In 1987 the Danish government introduced legislation to regulate the organic industry. In 1995 the Ministry of Agriculture devised an Action Plan (Mathiesen, 1999) which set objectives for development including strengthening R&D, increasing the market within the public sector and making farmer conversion more attractive. The government developed a second plan in 1999 (Organic Foods Council, 1999).

The government also introduced the ø label, the national organic certification mark (Mathiesen, 1999). The government actively promoted organic food including the certification mark with a focus on creating brand awareness. Brand recognition is now very high and Danes see the brand as a symbol of quality.

Organic production by farmers is subsidised in Denmark. Policy debate suggests that a tax on polluting inputs would help reduce pollution and encourage a move to organic production.

Thus, the Danish government was among the first in Europe to introduce legislation on organic farming and also subsidised farmers to bridge conversion to organic farming, supporting farmers with R&D and public sector purchasing.

Summary

Farmers, processors and retailers, and government support all working together have acted to develop the market for organic milk. Danish farmers established the Danish Association for Organic Farming in 1981. Consumers were becoming increasingly concerned about conventional methods of farming, specifically about the affects of the over-use of fertilisers on the environment and general health. Economic analysis showed organic dairy farms could outperform conventional farms due to price premiums and government subsidy support. Farmers perceived organic foods as a means of differentiating themselves from competitors and earning increased profits. As a result, output of organic foods increased from 1986 onwards.

While in Denmark in the 1980s there was a growing public support for organic foods and farmer interest, three organisations stand out as the main drivers of the successful development of organic foods and specifically organic milk. These organisations were MD Foods (now Arla Foods, Denmark's largest conventional dairy), the retail group FDB and finally the government.

In Denmark, many unorchestrated forces came together to move public opinion towards organic foods. The initial push came from farmers and a health/environmentally conscious public. At the same time two astute businesses sensed the market attractiveness of organic milk products. While government support played its part, it was the combined movement towards organic food that fostered the growth of the sector.

THE AUSTRIAN ORGANIC MILK MARKET

Much of the interest in organic farming in Austria came from the fear that, following EU membership, Austrian agricultural products would not be as competitive as those from other EU countries. In 1991 the Austrian government started a subsidy scheme to organic farmers (Austrian Ministry of Agriculture, 1999 No. 93). In 1995 Austria joined the EU, thus allowing the government to make payments to organic farmers under Regulation 2078/92.

Factor Conditions

Austrian farms are not large, with most farmers in the country having less than 50 cows. However, the farmers are recognised as capable. In 1993 there were 7,000 organic farms in Austria and by 2002 this had grown to around 20,000, nearly half of which had a dairy quota (9,150 farms in 2002).

Many organic farmers in Austria are members of organic farming associations. These associations have even stricter guidelines than EC 2092/91 or the codex Alimentarius Austriacus. Being part of an association gives the farmers the right to use that association's label for marketing their products. More than half of the organic farmers are part of the ERNTE organisation that negotiates prices on their behalf. The ERNTE label is displayed on products sold by member farmers. In 1995 the organisation negotiated contracts with Billa, a major retailer, to guarantee farmers a market for five years.

Demand

While there was a strong consumer demand for organic products in Austria, large promotional campaigns undertaken by retailers has driven market growth. The strategy of Billa, the main retailer, was a differentiation focus strategy. They focused on the different type of milk that they were offering. The product developed a niche in the market, focusing on high quality as well as its organic attributes. Billa were trying to fulfil the needs of a certain customer in the market. They were trying to satisfy the growing consumer interest in organic food. They also ensured that a correct understanding of the word organic was portrayed to consumers. Advertising was introduced in the stores to promote the organic milk and introduce consumers to it.

There is a concern about food safety in Austria and the BSE and salmonella scares have caused distrust among consumers (Datamonitor, 1999). This has contributed to the growth in organic food. Nonetheless, the main reasons for Austrians purchasing organic food are no different to other parts of Europe. As Klasz (1999) found for Austria, Jones and Tranter (2004) recently outlined the two main reasons for five other European countries (UK, Italy, Ireland, Denmark and Portugal), i.e. consumers perceive organic food to be better for their health and also more environmentally friendly due to a reduction of artificial fertilisers, pesticides and herbicides. The environmental considerations appear to be less important than health and safety. Other reasons for Austrians include knowing where the product came from, a better taste and a concern for animal welfare (Klasz, 1999). However, if the advertising campaigns had not been undertaken, many of those interviewed believe that consumer demand would not have been strong enough to drive the market.

Klasz (1999) also profiled the types of consumers who were buying organic food:

- People who see a strong link between food and health and who generally have a healthy lifestyle;
- People for whom environment protection is important and who prefer to buy food that is environmentally friendly;
- Well-educated people;
- Women (with children);
- Town dwellers;
- People who enjoy cooking.

Supermarkets are the main outlets for organic sales (87 per cent of organic sales (Datamonitor, 1999)). The main retailers in Austria are Billa and Spar, controlling over 50 per cent of the market between them.

In Austria, organic natural yoghurt has the highest share of organic milk products – over 10 per cent, closely followed by organic liquid milk at 9 per cent. The cheese and butter markets are still very small. The price premium for organic liquid milk fell from 30 per cent to about 18 per cent above conventional prices in recent years. The higher price premium has been a factor deterring consumers from changing to organic milk consumption. It is believed that the premium may fall a little lower in coming years due to oversupply.

Related and Supporting Industries

Other organic food sectors have assisted the growth in organic milk products. In Austria, three segments have high market penetration – bakery and cereal, dairy products, and fruit and vegetables – though all segments have similar growth rates. The demand for each type of conventional food has helped stimulate the other.

The conventional dairy industry is also strongly related to the organic industry and organic milk products have become a part of the established dairy market.

Firm Strategy, Structure and Rivalry

The role of Billa, the largest Austrian retailer, was a key market success factor in the growth of organic milk products. In 1994, recognising a trend towards healthier food and an increasing concern for the environment, Billa approached ERNTE, the farmers' organisation, to persuade farmers to produce organic foods. Starting with organic milk in 1995, Billa negotiated five-year supply contracts with organic farmers. While the processor's role was less important, three different dairies agreed to collect and process the organic liquid milk for the retailer. Billa anticipated that liquid milk products would gain a 10 per cent market share by the year 2000.

Billa produced and implemented a focused marketing strategy for organic liquid milk. The brand name "Ja! Natürlich" was developed to identify organic products and promotion, including advertising, clearly positioned the meaning and benefits of organic milk products. Starting with liquid milk, the organic milk products range quickly included yoghurts, butters and cheeses.

By the year 2000, just five years after launch, these products were well established and have become common products. Within Billa stores, organic milk products are sold alongside their conventional counterparts, targeting the health conscious, mainly women and children. Organic products command premium prices with organic liquid milk achieving approximately a 20 per cent share of all Billa's liquid milk sales.

While Spar has entered the market and introduced its own brand "Naturpur" for its organic range, Billa retains its outright leadership in sales of organic foods.

Government

The Austrian government was the first in the world to fix guidelines for organic farming. In 1983 the Federal Ministry for Health and Environment Protection introduced organic rules (Hagg, 1999). In 1989 official guidelines for organic farming were introduced into the Austrian Food Codex. In 1991 Austria outlined the first regulations for organic production of animal-derived products. Since joining the European Union in 1995, Council Regulation 2092/91 has also applied to Austria.

In 1995 the government set up Agrarmarkt Austria, an organisation to promote Austrian food. A subsidiary group of AMA, Agrarmarkt Austria Marketing (AMA, 2000), ensures that farmers comply with food regulations. AMA Marketing also introduced a national organic label, the BIO label, which deals with subsidy payments to farmers for organic production.

There are two variations of the AMA organic label, one with indication of origin and one without. One label guarantees that the raw materials of the product originated in Austria; the other, without indication of origin, certifies that a product is organic though it may not have been grown in Austria. Imported raw materials can only be one-third of the finished product. The national label for organic food has been another positive influence on the growth in the market.

Chance

Two chance factors were very influential in the organic milk market in Austria. Firstly, entry to the EU meant farmers had to find a more profitable means of farming and organic farming was chosen as one option. The second was the entry to the market of the retailer Billa, who was, like any business searching for competitive advantages, interested in developing a separate niche, and chose organic food to be one means to do so.

Summary

The Austrian government was the first government to introduce legislation on organic farming. They have also subsidised farmers to help them through conversion and to establish themselves in organic production. This type of aid has resulted in almost one in every ten farmers in Austria farming organically. The retailer push was very important. Billa, a major retailer, set market targets and introduced an organic own-label brand, "Ja! Natürlich", positioned as a high-quality organic brand. Billa encouraged and contracted farmers to get involved in organic production. Billa's marketing has driven market growth and it continues to dominate retail sales. Without this drive consumer requirements for organic milk products would probably remain unsatisfied.

THE IRISH ORGANIC MILK MARKET

The Irish agriculture and food industry has long been a major contributor to the Irish economy. It is still one of the country's most important industries and remains a major contributor to Ireland's impressive export performance.

Factor Conditions

The basic factors of production are the farmers producing organic products and their land and resources. In Ireland there are about 1,000 organic farmers (Department of Agriculture and Food, 2003). This includes those already converted and those in the process of conversion. The organic farms are generally smaller than conventional farms; almost 70 per cent of organic farms are smaller than 40 hectares, mainly producing vegetables and beef. Organic milk volumes are very low, with production less than 0.01 per cent of conventional milk production from about 25 farmers including conversion farmers.

There is only one processor of organic liquid milk in the country, Glenisk Dairies in Tullamore, Co. Offaly. They also process organic yoghurt. Donegal Creameries process organic UHT milk. Other small companies make some butter and cheese (WDC, 2001). For logistical reasons, all of the organic milk produced is not used in organic processing but sold to conventional processors. The farmers receive a higher price for their organic milk than they would receive for conventional milk. Even so, farmers are slow to convert due to increased labour and higher farm costs. There are more summer organic milk producers than winter milk producers because conventional winter milk prices are attractive to farmers. This causes problems for the processor who needs a stable supply to maintain shelf space in the retail outlets.

Demand Conditions

The Irish organic market is in the early stages of development, yet in the last couple of years there has been an increase in consumer interest in organic products. This growth in interest has been associated with health and also with the taste of organic food.

Irish consumers of organic food are more likely to be in the ABC₁ socio-economic group, female, married, from a small to medium-sized household and more likely to live in urban areas (Bord Bia, 2000). A more recent Bord Bia study found three distinct types of organic food buyers: those who purchase a lot, those who purchase a narrow range frequently and those who buy on an *ad hoc* basis (Bord Bia, 2003).

Organic milk is 20–30 per cent more expensive than conventional milk. The price premium for organic yoghurt is much lower. Organic cheese and butter premiums are generally a little higher than those of yoghurt or milk.

Bord Bia (2003) found most Irish consumers did not recognise any of the main organic certification symbols with only 19 per cent of consumers claiming to be familiar with the symbols. The main outlet for organic purchases is supermarkets, followed by health stores and specialist shops. Supermarkets control two-thirds of the market and most of these purchases are in the major urban stores. The demand for organic liquid milk and milk products is still quite small but increasing over time.

Related and Supporting Industries

The Irish organic food market, worth about 38 million (Bord Bia, 2003), is in the early stages of development. In the last couple of years there has been an increase in interest generally in organic products. Fruit and vegetables emerged initially as the most important market and have maintained their importance (Roddy et al., 1994). The organic meat market is the next largest, followed by the dairy market. As yet, there is no evidence that other organic sectors have helped growth in organic dairy product markets.

For many years the Irish dairy industry has been a strongly competitive industry. Growth rates, productivity and investment for dairy products have been one of the highest in Europe (O'Connell et al., 1998). Nonetheless, more recently the need for rationalisation and product development has become a focus for discussion on the future of the sector (Promar, 2003). In this context, market development of organic milk products has been hindered by lack of market entry by any of the major processors.

Firm Strategy, Structure and Rivalry

The largest dairy processor, Glanbia Foods, controls almost 70 per cent of the liquid milk market but has no organic products. The only major player to have entered the organic dairy market is Golden Vale, with an organic cheese. Thus, the two main rivals in the Irish market are the Tullamore-based Glenisk Dairies and Yeo Valley, an English-based company. Both companies are concentrating on organic yoghurt, which has the largest market share of all the organic milk products. It is estimated that organic yoghurt has over 5 per cent market share with a market value of about 2 million.

The other principal firms in the organic dairy market in Ireland are the super-market multiples. The multiples are gradually stocking more organic food. All the stores appear to have a positive attitude towards organic products. Organic products are usually placed beside the conventional equivalents. However, some stores are operating strategies where the organic dairy products are separated from the conventional products and given a special section. The range of products is limited and many stores in rural areas do not stock any organic dairy products.

Firms in the Irish organic milk industry have not been aggressive in developing the market and many of the firms are recent entrants. As yet the market has not been developed beyond a small niche market.

Government

In 1990 the Department of Agriculture and Food set up an Organic Farming Unit to develop organic farming in Ireland. The Department authorised private inspection bodies to carry out inspection and certification (Mackin, 2002). There are three certification bodies in Ireland and discussions are ongoing on future certification in the context of new EU regulations.

The Department of Agriculture, Food and Rural Development operate the following two support schemes (Department of Agriculture, Food and Rural Development, 2002a):

1. Supplementary Measure 6 of the Rural Environment Protection Scheme (REPS). The financial assistance offered to organic producers is mandatory EU support.
2. Scheme of Grant Aid for the Development of Organic Farming under the National Development Plan 2000–2006. This offers financial assistance to farmers, groups, companies or cooperatives for grading, packing, storing and distributing organic products. This is the first major indication of a more active role being taken by the government in the sector.

The government has recognised the potential of the sector with the setting up of an Organic Development Committee. In a report in 2002 (Department of Agriculture, Food and Rural Development, 2002b), the committee recommended that major dairy processors give more serious consideration to allocating processing facilities to organic milk and encouraging some of their larger suppliers to convert. They also recommend the processors who take positive steps to develop the organic dairying sector be given practical support as needed by relevant agencies.

The Organic Development Committee recommended that a Steering group be set up to drive development of the sector. They also recommended a partnership working group be established to coordinate, facilitate and monitor training, education and advice for the sector and an organic Market Development Group be established with responsibility for developing a national marketing strategy for organic food. These groups have now been set up and are expected to facilitate developments in the coming years. Market developments of relevance to organic milk will include the design of a national organic label and establishing the feasibility of a new distribution channel linked to central distribution systems.

Chance

The most significant chance events have been the BSE and the “Foot and Mouth” situations. It appears that they have not impacted the Irish organic milk market but BSE impacted negatively on conventional food production, reducing meat and in particular beef consumption. However, organic beef consumption probably rose (Mannion et al., 2000).

Expert Opinion

In Ireland, additional research was undertaken with two separate industry panels, a Delphi and an in-depth interview panel. The panels included experts from dairy manufacturers and retailers. With the first panel, growth expectations were determined by the Delphi method (Ni Ghraith et al., 2004). The findings were later supported by in-depth interviews with industry experts in the second panel.

The organic liquid milk market in Ireland is expected to grow from almost zero to a 1 per cent market share in 2006. The organic yoghurt market is expected to have an 11 per cent market share and the organic butter and organic cheese markets will grow to 0.7 per cent and 2 per cent market shares by 2006 (Table 9.1).

**Table 9.1: Market Share 2000 and Predicted Shares 2006
for Organic Dairy Products**

	2000	2006
	%	%
Organic Milk	0.1	1
Organic Yoghurt	5	11
Organic Butter	0	0.7
Organic Cheese	0	2

Experts believe there is considerable consumer interest in organic milk products but a lack of supply is curtailing retailer involvement. They also feel that if farmers were paid more for milk and a large processor entered the market, they would be more encouraged to convert to organic production. The somewhat higher price of organic milk will not deter consumers provided the premium is not too high, but they believe a strong brand is needed for market development. Finding the right balance between farmer and consumer prices will be important for market growth and supply stimulation.

Summary

The production situation in Ireland will not improve if retailers and processors do not become much more involved in market development. Unless there is a constant supply of organic milk, large processors will not enter the market, retailers will be unable to stock the products and therefore unable to satisfy consumer demand. While the new Steering Group recommended by the Organic Development Committee is expected to facilitate development, at present all the determinants and variables work individually. For a system to show competitive advantage, the determinants and variables discussed must work more closely and push the market to its true potential.

IRELAND, DENMARK AND AUSTRIA COMPARED

Market share for organic liquid milk in Ireland is less than 0.1 per cent compared with over 20 per cent in Denmark and 9 per cent in Austria. Certain similarities present in the Austrian and Danish markets are not yet present in the Irish market. Both the Austrian and Danish markets are advanced organic markets. All the factors of the Diamond Model worked to grow the organic food market in Denmark and Austria. One of the dominant features of the Austrian and Danish organic milk industries is the strength of the key players in the market. Although farmers and consumers are very important, the influence of government and the firms in the industry has been the key success factors. The Austrian and Danish governments were the first in Europe to introduce legislation on organic farming and also subsidised farmers to bridge

conversion to organic farming. In Denmark, government action plans have encouraged and supported development. In both Denmark and Austria retailers have driven the market. For example, in Denmark, following approaches in 1993 from farmers' representatives, the major retail group FDB lowered organic milk prices to entice consumers to switch from conventional milk. This strategy increased sales and many consumers became loyal organic milk purchasers. The main processor in Denmark, Arla Foods, also supported the move to organic milk and successfully launched the "Harmonie" organic brand and moved the market from niche to mainstream. In Austria, Billa, a major retailer, was very influential. They set market targets, introduced an own-label brand – "Ja! Natürlich", positioned as a high quality organic own-label brand, and encouraged farmers to switch to and increase organic production by offering them five-year contracts at fixed prices.

At present in Ireland the elements of the Diamond Model, i.e. factor conditions, demand conditions, firm strategy, structure and rivalry, related and supporting industries, government and chance, are operating as individual factors in the industry. Due to this lack of integration, the development of the organic milk industry is restricted. The Irish market is underdeveloped. The strategies Irish firms, both processors and retailers, choose will be critical to market development.

To achieve high growth, processors, retailers and the government need to invest in the market. All of the Diamond elements are dependent on each other and the strengthening of only one of the elements will not necessarily lead to success. Production of organic milk products will not increase unless consumers, retailers, processors and government drive this development. Unless there is a constant supply of organic milk, large processors will not enter the market, retailers will be unable to stock the products and therefore unable to satisfy demand. Major expansion of the existing processor base or investment from large conventional firms will be necessary to develop brands and promote organic milk to consumers. If the Irish organic milk market is to develop to the stage that Austria and Denmark have reached, a strong and easily recognisable brand is required, such as the "Ja! Natürlich" or "Harmonie" brands.

High growth requires the Diamond elements to work interdependently to achieve a sustainable competitive advantage. The current situation in Ireland lags behind much of Europe. At present, countries such as Austria and Denmark are exporting organic milk products. This could adversely affect the strong conventional export market that Ireland holds. The conventional milk sector in Ireland is very competitive but has not shown an interest in organics, whereas in Denmark the largest conventional milk processor is the main player. The small size of the organic milk market means it is not a major area of rivalry at retail level. However, this could change if importers perceived that organic products provided an opportunity. The Irish dairy industry should consider the need to meet Irish and European consumer demand for organic dairy products to maintain its strong competitive position.

An increased role by government is a necessary but not sufficient condition

for market growth. It will stimulate production-factor conditions but more interest from management in the dairy and retail industry is crucial to achieve even some of the growth of Austria and Denmark. The potential of the Irish market will ultimately depend on how the relationship between the elements in the Model develops.

CONCLUSION

Denmark is one of the most developed organic food markets in the world and Austria, one of the most significant in Europe. Using Porter's Diamond as a framework for analysis, detailed case studies of these countries were undertaken to identify the key drivers in the growth of consumption of organic milk products, particularly organic liquid milk.

In Denmark and Austria, most, if not all, of the elements of the Diamond Model worked independently but cohesively to drive growth in organic milk product markets in those countries. In Ireland there is considerable consumer interest in organic foods. However, none of the main players seems to be ready to champion the introduction and development of organic milk products. If it were otherwise, faster growth rates could be achieved than those currently forecast. The recent decline in production in Denmark and Austria suggests the market has matured in those countries and renewed growth is unlikely. The challenge for Ireland is to realise an overall 3 per cent target of agricultural land for organic output in the coming years and achieve a market share much lower than the 15 per cent and the 10 per cent at which the market is stabilising in Austria and Denmark, respectively. For milk, achieving even 1 per cent will require much greater interest from industry players.

Recommendations for Management Consideration

Existing liquid milk suppliers and processors need to consider this analysis and examine the technical, economic and market feasibility of market entry. For example, offering an organic alternative at the doorstep should be examined.

Guaranteed markets, such as those developed by Billa in Austria, could be the push farmers need. Without constant supply, firms and retailers cannot invest in the market and develop brands. Retailers should consider whether the organic sector might offer an opportunity to differentiate them for their competitors.

Organic milk is a new product and not fully understood by the majority of Irish consumers. Therefore, advertising campaigns are necessary and the product and its attributes must be explained in an effective manner for product acceptance.

Government and support agencies are developing a new strategy for supporting the development of the Irish organic sector. Managers need to be informed about these developments. They could also provide some of the impetus needed for interested parties to enter the market.

ACKNOWLEDGEMENTS

The project was supported by Teagasc Walsh Fellowship scheme. The assistance of many people in Denmark, Austria and Ireland is appreciated.

REFERENCES

- Agrarmarkt Austria Marketing (2000) Marketing Plan 2000.
- Arve, A.M. (1999) "Catering for Demand? Organic Milk: The Danish Case", *4th Annual UK Dairy Conference: Innovation and Diversification*, Danish Dairy Board.
- Austrian Ministry of Agriculture (1999) Document on support schemes for organic farming, No. 93.
- Beckmann, S., Brokmose, S. and Lind, R. (2001) *Danske Forbrugere Og Okologiske Fodevarer*, Copenhagen: Copenhagen Business School Press.
- Boon, A. (1999) *Organic Agriculture in Denmark*, Aarhus, Denmark.
- Bord Bia (2000) "Prospect for Organic Food in Ireland", Bord Bia, Clanwilliam Place, Dublin 2.
- Bord Bia (2003) "Organic Food Market Developments: An Irish Perspective", Bord Bia, Clanwilliam Place, Dublin 2.
- Danmarks Statistik (2002) *Nyt Fra Danmarks Statistik*, 25 September 2002.
- Datamonitor (1999) "Natural and Organic Food and Drink 1999", Datamonitor, Europe, London.
- Department of Agriculture and Food (2003) Annual Review and Outlook for Agriculture and Food, 2002/2003.
- Department of Agriculture, Food and Rural Development (2002a) "Schemes and Services", *Organic Farming*, pp. 40-4.
- Department of Agriculture, Food and Rural Development (2002b) Report of the Organic Development Committee, April, p. 93.
- Fibiger, N.T. (2000) "Organic Agriculture in Denmark", in Steffi Graf/Helga Willer (eds) *Organic Agriculture in Europe*, Bad Durkheim, Germany: Stiftung Okologie and Landbau (SOL) (available on: www.organic-europe.net).
- Hagg, V. (1999) "Austria: The Farming Future", in *EurOrganics 1999 Conference*, London: Agra Europe (London) Ltd.
- Henchion, M., O'Reilly, P. and Cowan, C.A. (2002) "Organic Food in Ireland: A Supply Chain Perspective", *Irish Business and Administrative Research (IBAR)*, pp. 31-52.
- Jones, P. and Tranter, R. (2004) "Assessment of Consumer Demand for Conversion-Grade Products", 5th Framework Conversion Working Paper DL 6.0 (QLK5-2000-01112), Centre for Agricultural Strategy, University of Reading.
- Klasz, W. (1999) "Organic Farming in Austria", in *Organic Food Conference*, London.
- Mackin, F. (2002) "Organic Farming: Stimulation and Regulation", *Principles of Successful Farming*, Dublin: Teagasc, pp. 150-3.
- Mannion, M., Cowan, C. and Gannon, M. (2000) "Factors Associated with Perceived Quality Influencing Beef Consumption Behaviour in Ireland", *British Food Journal*, Vol. 102, No. 3, pp. 195-210.
- Mathiesen, D.F.D. (1999) "Organic Farming: The Danish Example", Agricultural Economics Society of Ireland, University College Dublin.
- Michelsen, J., Hamm, U., Wynen, E. and Roth, E. (1999) *The European Market for Organic Products: Growth and Development*, Stuttgart-Hohenheim: Universat Hohenheim.
- Ni Ghraith, D., Cowan, C. and Daly, A. (2004) "The Market Potential for Organic Dairy Products in Ireland", *Irish Marketing Review*, Vol. 16, No. 2, pp. 41-50.

- Nielsen, R., Linneberg, M. and Vestergaard, J. (2004) "Organic Consumers' Attitude towards Ecology and Conversion Grade Products: Focus Group Results". Working Paper 03-5, Department of International Business, Aarhus School of Business, Denmark.
- O'Connell, L., Van Egeraat, C., Enright, P. and Pitts, E. (1998) "A Big Industry in a Small Country: Dairy Processing in Ireland", in W.B. Traill and E. Pitts (eds) *Competitiveness in the Food Industry*, London: Blackie Academic and Professional.
- O'Doherty Jensen, K., Larsen, H.N., Molgaard, J.P., Andersen, J.-O., Marckmann, P. and Astrup, A. (2001) *Okologiske Fodevarer og Menneskets Sundhed*. Rapport fra vidensyntese udført i regi af Forskningsinstitut for Human Ernaering, KVL. Tjele, Forskningscenter for Okologisk Jordbrug (FOJO).
- Offermann, F. and Nieberg, H. (2000) "Profitability of Organic Farming in Europe", *Agricultural Economics Society Annual Conference*, Institute of Farm Economics and Rural Studies, Federal Agricultural Research Centre, Braunschweig, Germany, Manchester.
- Organic Foods Council (1999) "Action Plan II: Developments in Organic Farming", Danish Ministry of Food, Agriculture and Fisheries, Copenhagen.
- Organic Service Centre (1999) "Danish Organic Produce: Overview", Organic Service Centre, Aarhus.
- Porter, M.E. (1998) *The Competitive Advantage of Nations*, UK: Macmillan Press.
- Promar International (2003) "Prospectus: Strategic Development Plan for the Irish Dairy Processing Sector". Report for Department of Agriculture and Food, Enterprise Ireland, Irish Co-operative Society and Irish Dairy Industries Association of IBEC, Dublin.
- Roddy, G., Cowan, C. and Hutchinson, G. (1994) "Organic Food: A Description of the Irish Market", *British Food Journal*, Vol. 96, pp. 3-10.
- Torjusen, H., Sangstad, L., O'Doherty Jensen, K. and Kjaernes, U. (2004) *European Consumers' Conceptions of Organic Food: A Review of Available Research*, National Institute for Consumer Research Post Box 4682, 0405 Oslo, Norway.
- Western Development Commission (2001) "Background Document to Blueprint for Organic Agri Food Production in the West". Report prepared by C. Cowan, M. Henchion, P. O'Reilly and A. Conway.

Copyright of The Irish Journal of Management is the property of Irish Journal of Management. The copyright in an individual article may be maintained by the author in certain cases. Content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.