Large Companies Active in Changing Dairy Industry

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The dairy industry has dramatically restructured in the last 50 years. New processing technologies, shifts in consumers' preferences, and changes in economic conditions have changed the way dairy companies process fluid milk, manufacture dairy products, and market their beverages and products. Economies of scale (lower per unit production costs for large-scale operations versus smaller scale ones) have led to fewer and larger dairy marketing firms.

Traditional dairy companies that manufactured and sold a full line of dairy products (fluid milk, ice cream, cream, cheese, butter, and canned milk) have disappeared from the scene. In the 1960's and 1970's, institutional investors—pension funds, mutual funds, and the like—favored conglomerates and companies that diversified into a variety of product lines. Of the seven largest companies in the U.S. dairy business in 1975, five were or became conglomerates comprised of a variety of unrelated businesses, and two were diversified. Conglomerates eventually fell out of favor. They were a profitable means of buying and selling businesses but were exceedingly difficult to run profitably.

Today, Wall Street investors favor companies that produce or market high-margin branded products and those that specialize in "core competencies." These companies concentrate on much narrower lines of products. For instance, in the dairy business, they may deal only in cheese, only in yogurt, or only in premium ice creams. Other dairy firms have moved toward specialization in a single segment of the dairy market, such as branded products for the grocery store trade, products for foodservice, or ingredients for manufacturers of other foods. Dairy companies have also tried to capitalize on consumers' interest in lower fat foods by developing and promoting reduced-fat and nonfat (skim) milk. Lower fat versions of frozen desserts, yogurt, and cheese were also tried, but the loss of flavor discouraged many consumers and sales of high-fat versions of these products have begun to grow again.

Farmer-owned dairy cooperatives, such as Land O' Lakes, are larger and fewer in number today, manufacturing and distributing significant shares of butter, natural cheese, and nonfat dry milk.

Credit: Land O'Lakes, Inc.

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Milk processing firms produce fluid milk products—those described as beverages—such as whole milk, lowfat milk, and chocolate milk. Cheeses, butter, ice creams, and nonfat dry milk are some of the products produced by dairy manufacturing firms. Manufactured dairy products are further described as hard (cheese and butter) or soft (ice cream, yogurt, sour cream, and cottage cheese).

Firms that produce fluid milk and dairy products are either dairy cooperatives or proprietary companies. Many of the proprietaries are large companies in themselves or are subsidiaries of some larger company. Dairy cooperatives are businesses owned by the farmers who supply them with milk. Farmer cooperatives range from very small, either by volume or membership criteria, to very large. Proprietary companies have gravitated toward the fluid milk and ice cream businesses, cooperatives have dominated butter manufacturing, and both have been important to cheese.

Proprietary Dairy Companies Consolidating

Mergers, acquisitions, leveraged buyouts, and divestitures have drastically changed the dairy industry. Large firms—those with food and nonfood sales in 1998 of $800 million or more (not including retailers)—accounted for 69 percent of U.S. dairy sales in 1998 (table 1). In 1975, firms of comparable size accounted for 56 percent of sales. Smaller companies have lost sales share since 1975, from about 44 percent to 31 percent in 1998. The sales share for large proprietary companies has grown from 39 percent in 1975 to 42 percent in 1998, while the share for large cooperatives has grown from 17 percent to 27 percent during the same period. The sales shares suggest that the lost sales of the smaller companies have been largely taken up by the large dairy cooperatives.

Proprietary companies are not classified as dairy companies unless 50 percent or more of their domestic sales are of dairy products. Based on that criterion, there were six large U.S. proprietary dairy companies in 1998—Dean, Suiza, Leprino, Schreiber, Southern Dairy Group, and Dreyer's/Edy's (table 2). Dean, Suiza, and the Southern Dairy Group sell mainly consumer packaged fluid milk and ice cream. Dreyer's/Edy's, an ice cream maker, is 22 percent owned by Unilever, a multinational food and household products manufacturer. Dreyer's/Edy's obtains a substantial share of its revenues from manufacturing and/or delivering products for other premium and superpremium ice cream companies

Table 1
Large Dairy Companies and Cooperatives Account for 70 Percent of Total U.S. Dairy Sales[1]

Type of firm	1975	1985	1994	1998	1975	1985	1994	1998
	Million dollars				Percent			
Large proprietary companies:	7,864	13,363	16,343	24,751	39.3	36.0	33.1	42.2
Diversified[2]	7,536	12,263	12,098	13,756	37.6	33.0	24.5	23.5
Specialized[3]	328	1,100	4,245	10,995	1.6	3.0	8.6	18.8
Domestic	7,364	9,931	10,731	18,132	36.8	26.8	21.7	30.9
Foreign	500	3,432	5,612	6,619	2.5	9.2	11.4	11.3
Large U.S. cooperatives	3,392	7,600	11,796	15,779	16.9	20.5	23.9	26.9
Smaller companies[4]	8,771	16,143	21,207	18,088	43.8	43.5	43.0	30.9
Total	20,027	37,106	49,346	58,618	100.0	100.0	100.0	100.0
Minimum sales for a large firm	250	433	630	800	NA	NA	NA	NA

NA = Not applicable.
[1]Sales value of raw bulk milk, packaged fluid milk products, frozen desserts, cottage cheese, butter, natural and processed cheese, dry milk products, canned milk, and bulk condensed milk from U.S. operations.
[2]Sales 50 percent dairy products or less.
[3]Sales more than 50 percent dairy products.
[4]U.S. and foreign companies, including smaller cooperatives.
Source: Alden Manchester and Don Blayney, ERS, USDA, drawing on information in *Dairy Foods* and *Dairy Field* magazines.

Table 2
U.S. Dairy Industry Exhibits an International Flavor

Company	Sales: Domestic operations[1]: Total sales	Sales: Domestic operations[1]: Total domestic	Sales: Domestic operations[1]: Domestic dairy	Sales: International operations: Total international	Sales: International operations: Dairy products	Dairy products sold
	Million dollars					
U.S. companies:						
Proprietary—						
Dean Foods	3,755	3,748	2,984	7	0	Packaged fluid milk products, ice cream
Philip Morris/Kraft	57,813	36,429	4,300	21,384	0	Cheese
General Mills	7,073	5,973	620	1,100	0	Yogurt
ConAgra	24,594	24,094	970	500	0	Packaged fluid milk products, cheese
Simplot Industries	3,000	2,600	350	400	0	Cheese
Michael Foods, Inc.	1,021	1,021	139	0	0	Cheese
Mars	14,000	8,000	205	6,000	0	Ice cream
Suiza Foods	3,321	2,904	2,572	417	244	Packaged fluid milk products, ice cream
Leprino Foods	1,300	1,300	1,300	0	0	Cheese
Schreiber	1,300	1,300	1,300	0	0	Cheese
Southern Foods Group[2]	600	600	550	0	0	Packaged fluid milk products, ice cream
Dreyer's/Edy's	1,022	1,022	842	0	0	Ice cream
Cooperative[3,4]						
Dairy Farmers of America	7,963	7,963	7,963	0	0	Bulk milk, cheese
Land O'Lakes	5,174	5,124	3,275	50	0	Packaged fluid milk products, ice cream, cheese, butter
Foremost Farms	1,376	1,376	1,191	0	0	Packaged fluid milk products, cheese
California Milk Producers	962	962	962	0	0	Bulk milk, cheese
Prairie Farms	1,620	1,620	1,620	0	0	Packaged fluid milk products, cheese
West Farm Foods	931	931	931	0	0	Bulk milk, cheese
AMPI	964	964	964	0	0	Bulk milk, cheese
Foreign companies:[5]						
Diageo, plc	16,303	8,007	320	8,296	100	Ice cream
Danone, S.A.	14,386	922	522	13,464	5,779	Yogurt
Bongrain, S.A.	2,040	360	360	1,680	1,680	Packaged fluid milk products, cheese
Bols Wessanen	2,912	1,922	961	990	407	Packaged fluid milk products, ice cream, cheese
Fromageries Bel	1,650	104	104	1,546	1,546	Cheese
Nestle, S.A.	51,991	10,615	300	41,376	13,595	Ice cream
Sodiaal, S.A.	3,077	240	240	2,837	2,837	Yogurt, butter
Unilever	44,895	8,546	1,035	36,349	3,100	Ice cream
Saputo Group	1,274	927	927	347	302	Cheese
Lactalis, S.A./Besnier	4,970	850	850	4,120	4,120	Cheese
Parmalat	5,959	450	450	5,509	5,509	Packaged fluid milk products
Allied Domecq, plc	6,248	1,285	200	4,963	0	Ice cream
Avonmore Waterford	1,616	200	200	1,416	948	Cheese

[1]Domestic operations are manufacturing plants in the United States, and sales include exports of products from those plants.
[2]Proprietary company share; the other 50 percent is included in Dairy Farmers of America.
[3]Sales of most include bulk milk.
[4]Includes estimated sales of dairy products in joint ventures.
[5]Includes proprietary companies and cooperatives.
Source: Alden Manchester and Don Blayney, ERS, USDA, drawing on information in *Dairy Foods* and *Dairy Field* magazines.

such as Ben and Jerry's, Mars Dove brand, and Nestlé. Leprino and Schreiber are well-known cheese companies. Another famous cheese-maker, Kraft, is a major subsidiary of the food/nonfood conglomerate Philip Morris.

Perhaps the more interesting note relating to U.S. proprietary dairy companies is the names that are not anywhere on our list. Companies like Borden, Sealtest, Pet, Beatrice, and Carnation, large dairy companies still in the 1970's, have gotten out of the dairy business altogether or were swallowed up by other companies. Also missing are the names of some retail food chains, companies particularly important in the evolution of fluid milk processing structure and competition.

Retail food chains became a significant part of fluid milk processing in the 1950's and 1960's when many bought or built large, efficient plants to process high volumes of fluid products for their stores. Retail food chains operating their own bottling plants—that is, integrated into fluid milk processing—sold about 17.5 percent of the fluid milk in 1980. By the late 1980's, the three largest chains of the 1970's that were integrated—A&P, Kroger, and Safeway—had made major readjustments and disposed of many milk plants. A&P had closed many supermarkets, including entire divisions of stores in geographic regions, leaving their milk plants with overcapacity. For a while, the A&P milk plants packaged milk for other supermarket chains but eventually got out of the business. Safeway and Kroger went through major restructuring in the 1980's, which eventually led to disposal of a number of milk bottling plants and greater reliance on buying milk from other companies, although both still package much of their milk. Integrated convenience stores, such as 7-Eleven and Cumberland Farms, also came into prominence over the last 25 to 30 years and, for a while, owned and operated significant numbers of milk processing plants. They too have left bottling.

The merger wave among retail supermarkets during the 1990's has provided some incentives to fluid milk processors to acquire other processors to supply private label (store brand) milk and ice cream to the growing supermarket chains (see "Grocery Retailers Demonstrate Urge To Merge" elsewhere in this issue). Suiza and Dean have been active in this regard. Suiza Foods grew rapidly in the 1990's through acquisitions and joint ventures with Dairy Farmers of America, the largest dairy cooperative. Kroger, a leader since the 1920's in the integrated milk business, merged in 1999 with Fred Meyer, a company also integrated into fluid milk processing. Kroger also acquired a milk plant when it purchased Winn-Dixie's Texas stores in 1999. Other changes in recent years include Michaels Foods, a large egg producer and processor, entering the dairy product business; Simplot Foods selling its cheese plants to Besnier (now called Lactalis) in 1999; and Labatt, a Canadian brewing company, selling its U.S. fluid milk business to Interbrew, a Belgian brewer, which in turn sold the last of its dairy subsidiaries in 1996.

Dairy Cooperatives Consolidating, Too

Dairy cooperatives are the primary marketers of bulk (raw) milk from U.S. dairy farms. This raw milk is sold to proprietary dairy processors or kept by the dairy cooperatives that have processing and manufacturing capacity for their own use. Dairy cooperatives process, manufacture, and distribute significant shares of butter, natural cheese, and nonfat dry milk. Cooperatives sold 61 percent of the butter, 40 percent of the natural cheese, and 76 percent of the nonfat dry milk in 1997. Consistent with trends in agriculture and other sectors, dairy cooperatives are fewer in number and are handling larger volumes of milk (table 3).

Today's dairy cooperative landscape has been shaped by merger activity perhaps more than at any time since the 1960's and 1970's, when the large regional dairy cooperatives were formed. Dairy Farmers of America (DFA) emerged in 1998 as the result of a merger of four regional cooperatives (Milk Marketing, Inc., Mid-America Dairymen, Inc., the southern division of Associated Milk Producers, Inc., and Western Dairymen). Land O'Lakes and California Milk Producers, as they existed in 1998, were the result of merger actions. Three large cooperatives in California united in 1999 to form California Dairies, Inc., a cooperative that might be as large as Land O'Lakes, the second largest in the country. Cooperatives continue to look at mergers and consolidations for various reasons, including gaining more milk supplies for their manufacturing plants and adding products to already existing lines.

Foreign Companies Engaging in U.S. Dairy Markets

Foreign-owned companies have been a growing presence in the U.S. dairy industry, particularly for frozen products, cheese, and yogurt. In 1998, large foreign-owned proprietary firms accounted for about 11.3 percent of domestic U.S. dairy product sales, up from 2.5 percent in 1975 (table 1). The foreign companies' share grew the most between 1975 and 1985. (We should point out that some proportion of the smaller company share in table 1 is from foreign-owned companies, but there

Table 3
Cooperatives' Share of U.S. Milk Deliveries Rose 9 Percent Since 1973

Year	Cooperatives	Producer members	Milk marketed to plants and handlers by U.S cooperatives: Quantity	Value	Share of total milk delivered
	Number	Number	Million pounds	Million dollars	Percent
1973	592	281,065	83,227	6,102	76
1980	435	163,549	95,634	13,666	77
1987	296	120,603	105,798	16,548	76
1992	265	110,440	122,622	20,239	82
1997	226	87,938	127,418	23,374	83

Source: Compiled from Liebrand, 1995; Ling and Liebrand, 1994; and Ling, 1999.

is no way to determine the amount; it is likely to be small.)

Up through 1975, the only foreign companies in the U.S. dairy business were Nestlé and Unilever, each marketing a variety of dairy products. Since then, each has narrowed its dairy line in the United States to a single product—ice cream. In the 1980's, 12 other companies—all European except Labatt, the Canadian brewer, which came and went—have acquired U.S. dairy operations in order to expand their companies' marketing opportunities. Some of these acquisitions were facilitated by favorable exchange rates for their national currencies. In almost all cases, the acquired operations produced the dairy product line in which they specialized in their home country.

In 1998, Wessanen (Dutch), Bongrain (French), and Parmalat (Italian) were in fluid processing and Danone (French) was in yogurt. Unilever (British-Dutch) produces frozen products (Good Humor) and soft cheeses, Diageo (U.K.) makes frozen products (Häagen-Dazs), and Nestlé (Swiss) is in frozen desserts, dairy-based beverages, and other dairy product markets. Allied Domecq (U.K.) produces and sells frozen desserts (Baskin-Robbins), and Sodiaal (French cooperative) makes yogurt, butter, and dairy ingredients. The other foreign-owned companies listed in table 2 produce mainly cheese. Many smaller foreign companies also manufacture cheese in the United States on a more modest scale. Saputo Group, a Montreal-based cheese manufacturer, acquired Stella Cheese in 1997 and Avonmore-Waterford's Wisconsin cheese plants in 1998.

Brand Differentiation Weak

The decline in numbers and the growth in size of proprietary dairy companies and dairy cooperatives are seen by many as evidence of their growing market power—the ability to obtain a higher price for products. Manufacturers of consumer goods derive market power by differentiating their brands in consumers' minds. Strong brand preferences for most dairy products have always been more difficult to create than for many other foods.

Basic dairy products were standardized at an early date. For example, Federal law established the composition of butter (how much milk fat and what added ingredients are allowed) in the early 1900's. Products with rigid standards of composition are harder to differentiate. Standardized products generally are differentiated on the basis of quality, uniformity of quality, or variations in flavor or texture created by manufacturing or aging techniques. At one time, certain dairy companies were recognized for their high-quality brands for basic products like butter, cheese, or even milk. However, the value of such brands diminished greatly as quality became much more uniform.

Fluid milk and ice cream were subjected to more flexible standards than butter and cheese. Variations in butterfat content above minimum levels were important in earlier times for fluid milk, and some brands of high butterfat (4 percent) milk gained loyal customers. But in the last 20 years, milks with high butterfat have virtually disappeared. Somewhat more variation was, and still is, possible in butterfat content and other ingredients and flavorings for ice cream. Thus, ice cream makers are able to differentiate their products and command premium prices.

Product differentiation is relatively weak for most dairy products. Brands are important for processed cheeses, higher priced ice cream, some specialty cheeses, yogurt, and to some extent, butter. For the dairy products that are not so dependent on brands, such as fluid milk, market power rests on other sources—packaging and new product development are examples. Dean Foods and Prairie Farms have introduced consumer-friendly containers similar to those for bottled water and soft drinks, which are carried in backpacks and pockets. Suiza is testing three low-fat milks with added nutrients, hoping to gain sales and loyalty among consumers looking for ways to increase calcium in their diets.

The structure of the dairy industry is often the subject of debate and has become more so as the firms involved have grown larger. The questions concerning the dairy industry are an outgrowth of the growing concerns about industrialization and concentration in agriculture. Farmers, consumers, and policymakers are asking questions about the prices agricultural product processors pay to farmers, the continuing viability of small family farms, and impacts on rural communities, farm families, and food costs for consumers. However, as the new century begins, nothing on the horizon suggests that the trends will not continue.

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