

Competitive Strategies of US Fluid Milk Processors: A Case Study

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Competitive strategies emphasized by the case firms will shape the restructuring of the US fluid milk industry. Case firms profited from employing the Beatrice Model for plant acquisitions. Dean Foods and Prairie Farms Dairy emerged from the 1980s as highly profitable firms and Borden's strategic moves promise to make that firm a formidable competitor in the dairy business in the 1990s. Cooperatives will have incentives to merge to countervail market power gained by investor-owned firms and develop replacements for joint ventures entered into during the 1980s. Federal milk orders may require revisions to reflect expanded milk plant sales areas and cope with instability stemming from asset redeployment. © 1992 John Wiley & Sons, Inc.

Fluid milk processing is a textbook example of a stable, mature industry producing a commodity-like product. For such industries, one management textbook prescribes strategies that involve (a) pursuit of greater volume of sales, (b) expanding territories served, (c) monitoring operations of other distributors with a view to takeover, (d) optimizing length and sales volume of delivery rounds, (e) increasing sales per customer, (f) product line extensions to include items in addition to the commodity, and (g) concentrating throughout into larger process-

Financial support for portions of this research was provided by a cooperative agreement between the Dairy Division of the Agricultural Marketing Service, US Department of Agriculture, and the Department of Agricultural Economics at Purdue University. Financial contributions for the research from the Federal Milk Market Administrators are gratefully acknowledged. Constructive comments on the manuscript were received from J. Blum, S. Capponi, H. Lough, and anonymous reviewers.

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ing plants.¹ These prescriptions are followed by many US fluid milk processors. Focusing on efficiency of operations makes sense when, as at present, raw product costs are established by federal milk orders and cooperatives and demands of powerful customers tightly limit prices the firm can charge for fluid items. But many processors also are putting increased emphasis on other strategies to escape shackles that go with competing in a stable, mature industry.

In this article, the strategies of 10 fluid milk processors are analyzed to assess how their strategies will shape the restructuring of the US fluid milk industry. The term *restructuring* relates to changes in the size and location of plants, changes in organizational arrangements used by firms, and changes in competitive strategies of firms. Implications are drawn from the results relating to these questions: Which strategies will help fluid milk processors remain competitive in the 1990s? What policy implications emerge from the findings for revising federal milk orders? Findings having implications for strategic management in other industries are noted.

FIRMS ANALYZED

Firms whose competitive strategies for processing and marketing fluid milk and soft dairy products (ice cream, yogurt, cottage cheese, etc.) were analyzed are as follows:

- Borden, Inc., New York, New York
- Dean Foods, Franklin Park, Illinois
- The Kroger Company, Cincinnati, Ohio
- MorningStar Foods, Dallas, Texas
- Royal Wessanen, Amstelveen, The Netherlands
- John Labatt, Ltd., London, Ontario, Canada
- Dairymen, Inc., Louisville, Kentucky
- Land-O-Lakes, Inc., Arden Hills, Minnesota
- Mid-America Dairymen, Springfield, Missouri
- Prairie Farms Dairy, Carlinville, Illinois

These firms were chosen for study because they represent a cross section of investor-owned firms and cooperatives, serve different areas of the United States, and have adopted innovative business strategies.

The eight US-based firms in the group had the sales and positions in the Fortune 500 lists which appear in Table I, for 1990. John Labatt, Ltd., the Canadian brewer and food company that acquired fluid milk processing plants in New York, New Jersey, Maryland, and Pennsylvania beginning in 1985, had total sales of CA\$5.3 billion (US\$4.6 billion) in 1990.² The two dairy companies included in Wessanen USA (Marigold Foods, Inc., and Crowley Foods, Inc.) each have sales of about \$300 million per year.³

Borden and John Labatt, Ltd., are conglomerates with diversified offerings in food and nonfood product lines. Borden acquired Meadow Gold Dairies (formerly part of Beatrice Foods Company) in 1986, increasing Borden's annual dairy sales by about \$900 million (60%).⁴ Dean Foods Company sells canned vegetables, frozen vegetables, and other food products in addition to dairy products, but nearly two-thirds the company's sales were obtained from dairy products in 1990.⁵ Dean Foods is the second largest fluid milk processor in United States,

Table I. Sales and Position of Selected Case Firms in Fortune 500 Lists.

Firm	Sales for 1990 ^a in Millions of Dollars	Position in Fortune 500 Lists ^{a,b}
Borden	\$7,633	64
Dean	\$1,990	214
Kroger	\$20,261	5 ^d
MorningStar Foods	\$850 ^c	NA ^c
Dairymen, Inc.	\$985 ^c	90 ^f
Land O'Lakes	\$2,415	188
Mid-America Dairymen	\$1,863	226
Prairie Farms	\$660	440

^aSources: "Fortune 500 Largest U.S. Industrial Corporations," and "The Service 500—The 100 Largest Diversified Service Corporations and the 50 Largest Retailers," *Fortune*, various issues 1988, 1989, and 1990.

^bFigures refer to position in the Fortune 500 List of US Industrial Corporations unless noted otherwise.

^cFigures for 1988.

^dRanked fifth among the 50 largest retailing companies included in the Fortune Top 500 Service Companies.

^eCompany with sales equivalent to firms positioned 378th in Fortune Top 500 Industrial Corporations in 1990.

^fRanked 90th among the 100 largest diversified service firms included in the Fortune Top 500 Service Companies in 1988. Dairymen, Inc., did not rank in the Fortune Top 100 list of Diversified Service Firms in 1989 or 1990.

ranking only behind Borden. Kroger is an integrated retailer whose dairy and other food-processing plants mainly supply the firm's supermarkets.

The configurations of Kroger and MorningStar Foods reflect the competitive environment faced by Kroger and Southland Corporation (parent of MorningStar Foods) during the 1980s and their desires to avoid takeover or other financial problems. Kroger took on \$4.1 billion in debt in 1988 partly to discourage a takeover attempt.⁶ As part of the restructuring of Southland Corporation, MorningStar Foods was established in 1988 in a leveraged buyout of the Southland Corporation's 10 regional dairies by officials of Duncan, Cook, and Company of Houston, Texas, and managers of MorningStar Foods.⁷ In 1991, MorningStar Foods came under the control of Hicks Muse, a Dallas, Texas, buy-out firm that planned to take the firm public in 1992.⁸

The four cooperatives in Table I are regional fluid milk processors. Land O'Lakes is a diversified dairy, food, and farm-supply cooperative that is widely known as a processor of manufactured dairy products. The firm expanded its fluid milk operations in the late 1980s using Country Lake Foods (a publicly held firm incorporated as a wholly owned subsidiary of Land O'Lakes) as a vehicle for acquiring regional fluid milk processors for stock rather than cash. Mid-America Dairymen, Inc., Dairymen, Inc., and Prairie Farms Dairy had approximately 9,600, 5,000, and 700 members, respectively, in 1989.⁹⁻¹¹ In terms of members, Mid-America Dairymen is the second largest dairy cooperative (second only to Associated Milk Producers, Inc., of San Antonio, Texas) in the United States.

Table II. Management Strategies of Selected US Fluid Milk Processors, 1980–1989.

Firm	Type of Firm	Emphasis Placed on Management Strategy during 1980–1989 ^a				
		Product Diversification across All Items Sold by Firm	Development of New Dairy Products	Use of Joint Ventures in Milk Processing	Reducing Fluid Milk Processing & Marketing Costs	Acquisition of Fluid Milk Plants
Borden ^{b,c,d,e}	National	H	H	M	H	H
Dean ^{f,g}	National	M	M	L	H	H
Kroger ^{d,h}	National, Integrated Supermarket	M	M	L	H	L
MorningStar Foods ^{i,j}	National	L	L	L	M	H
Royal Wessanan ^k	National	H	M	L	M	H
Labatt ^{l,m,n}	Regional	H	M	L	H	H
Dairymen, Inc. ^{o,p}	Regional Cooperative	M	M	M	H	L
Land O'Lakes ^{q,r}	Regional Cooperative	H	H	M	M	M
Mid-America Dairymen ^{s,t}	Regional Cooperative	H	H	H	M	H
Prairie Farms ^{u,v}	Regional Cooperative	L	M	H	H	M

- ^aKey: H = High; M = Medium, and L = Low. Sources of information on strategies are identified in footnotes associated with name of firm.
- ^bBorden, *Annual Reports*, 1985, 1988, and 1989.
- ^cA. Otto, J. Umhoefer, and A. Levitt, "Movers and Shakers, An Exclusive Round Up of Leading Dairy Companies," *Dairy Foods*, April 1988.
- ^dA. Meyer, C. Stube, P. Rogers, A. Levitt, and J. Dryer, "Movers and Shakers, A Celebration of Dairy Companies Driving the Industry," *Dairy Foods*, April 1989.
- ^eA. Levitt, "Solving the Puzzle of International Trade," *Dairy Foods*, June 1989.
- ^fDean Foods Company, *Annual Reports* 1987, 1988 and 1989.
- ^gW. Kimbrell, A. Levitt, P. Rogers, C. Stube, and E. Dexheimer, "Movers and Shakers," *Dairy Foods*, April 1990.
- ^hKroger Company, *Annual Report*, 1986.
- ⁱ*Dairy Foods*, "Mergers and Acquisitions, A Star is Born," June 1988.
- ^j*Dairy Foods*, "Who's Behind the Acquisition Activity," September 1988.
- ^kW. Kimbrell, "Wessanen: Poised for U.S. Growth," *Dairy Foods*, November 1989.
- ^lJohn Labatt, Ltd., *Annual Reports*, 1988 and 1989.
- ^mA. Otto and J. Dryer, "Movers and Shakers; Companies That are Making Things Happen in the Dairy Industry," *Dairy Foods*, April 1987.
- ⁿJ.P. Hicks, "A Test for Labatt's U.S. Expansion," *The New York Times*, August 3, 1988.
- ^oDairymen Inc., *Dairymen News*, 1988 Annual Report Issue and January/February 1990 issue.
- ^pT. Hallman, "Dairymen, Borden Start Firm to Market Milk in 11 States," *Atlanta Constitution*, December 19, 1987.
- ^qLand O'Lakes, *Annual Reports*, 1988 and 1989.
- ^rLand O'Lakes, "Land O'Lakes, Formula for Success," *Dairy Foods*, December 1989.
- ^sMid-America Dairymen, Inc., *Annual Reports*, 1980-1989.
- ^tM.E. Lieb, "Mid-America Dairymen: From the Cow to the Consumer," *Dairy Foods*, October 1988.
- ^uH.L. Cook, R.P. Combs, and G.C. Tucker, "Prairie Farms Dairy, Inc.: Economic Impact of a Dairy Cooperative." ACS Res. Rep. 12. US Department of Agriculture, July 1982.

STRATEGIES OF THE FIRMS

Strategies of the case firms that could shape the restructuring of the fluid milk industry and for which information was available were selected for analysis. The strategies analyzed consisted of product differentiation, new product development, use of joint ventures, reducing processing and marketing costs, and acquisition of fluid milk plants. By emphasizing one or more of these strategies, the case firms could attempt to reduce risks, expand market share, reduce excess capacity, share management expertise, reduce costs, increase profits, and achieve other objectives. The article focuses partly on how emphasis on the different strategies affected the competitiveness of the case firms.

Information used to assess how much emphasis the firms placed on the strategies during the 1980s was obtained from annual reports, trade journals, other publications, federal milk order hearings, interviews of employees of case firms, and interviews of US Department of Agriculture officials. In general, comments made by company officials relating to strategic emphasis that were corroborated by actions of the firms were used for assigning preliminary H (high), M (medium), and L (low) ratings. The preliminary ratings assigned by the author then were revised to reflect comments received from US Department of Agriculture reviewers to produce the ratings appearing in Table II.

Strategic Emphasis

Product diversification may reflect product portfolio management and risk management decisions of firms. The emphasis placed on product diversification varied substantially among the case firms. Borden, Royal Wessanen, and Labatt are conglomerates which generally maintained or increased the diversity of their product offerings during the 1980s. Kroger was judged to place only medium emphasis on product differentiation since the firm spun off its SuperRex and Hook's, Inc., drug store line in 1986 and 1987, leaving the firm more heavily focussed on food items marketed through the firm's supermarkets and convenience stores.¹² Mid-America Cooperative, Dairymen, Inc., and Land O'Lakes were assigned medium or high diversification ratings reflecting the substantial diversity of their product lines. MorningStar Foods, Dean Foods, and Prairie Farms Dairy exhibited the lower diversification associated with management decisions to remain primarily in the fluid milk and soft dairy product businesses.

Almost all firms in the group placed strong (medium or high) emphasis on development of new dairy products. New products introduced by the firms in recent years include lowfat yogurt (Labatt and Wessanen), lactose-reduced milk, lowfat sour cream dip, protein concentrates, and lactose permeate made from whey (Dean Foods); aspartame sweetened yogurt (Kroger), chocolate milk sweetened with aspartame, and ultra-high temperature (UHT)-processed gourmet whipping cream (Land O'Lakes); and new dairy-based food ingredients and specialty mozzarella cheeses (Mid-America Dairymen). Predictably, new product development was strongly correlated with R&D investments. Borden, Dean Foods, Land O'Lakes, and Mid-America Dairymen appear to be positioned to be leaders in new product development.

The emphasis on new product development is noteworthy because continuous innovation probably will be necessary for survival in a fluid milk processing

industry that is placing heavier emphasis on product differentiation. New products also shift the basis of competition from strictly a cost basis to a differentiation focus, which may permit higher margins. The firms were fully aware of this point but were concerned about the high cost of introducing and launching new products, partly because of slotting allowances charged by supermarkets. They also complained about exit allowances (payments that must be made to supermarkets when a product is withdrawn from the shelves) which increase the cost of new product failures.

The commodity roots of fluid milk remained powerful as a strategy-shaping force. Thus, reducing fluid milk processing and marketing costs received strong emphasis by all 10 firms (Table II). However, Borden, Dean Foods, Kroger, Labatt, Dairymen, Inc., and Prairie Farms Dairy appeared to place more emphasis on the strategy than other firms in the group. The comments about cost cutting made by executives of these firms were corroborated by actions they had taken such as closing old plants, building larger plants to take advantage of economies of scale, installing state-of-the-art processing equipment, consolidating distribution areas, and slashing of work forces. While the remaining case firms did some of these things, they emphasized product differentiation more heavily than cost reduction.

Among the investor-owned firms, Borden was designated as placing the highest (medium) emphasis on strategies involving joint ventures. It received this designation because of the firm's major, planned joint venture with Dairymen, Inc., which was abandoned in 1988. This planned joint venture was heralded as "the restructuring of marketing in the Southwest."¹³⁻¹⁵ The terms of the joint venture called for Borden to place 22 of its then 78 milk processing plants into the joint venture together with Dairymen, Inc.'s 15 Flav-O-Rich processing plants. As managing partner of the \$1 billion firm, Borden would have received a management fee for operating the plants and remaining profits would have been split evenly by the two firms. The joint venture was abandoned after the Justice Department objected to it on the grounds that the two firms would dominate sales of milk for certain local school lunch programs.

Among cooperatives, Mid-America Dairymen, Inc., made the heaviest use of joint ventures, but all four regional cooperatives were judged to place strong (medium or high) emphasis on employing joint ventures as a strategic management tool during the 1980s. Firms entering joint ventures often want access to a valuable resource—access to a specific distribution channel, use of a certain patent, access to employees with unique capabilities, use of a brand name, a process—which they cannot develop themselves. Harrigan found that firms frequently employ joint ventures for the purposes (internal uses, competitive uses, and strategic uses) indicated in Table III.¹⁶ Factors noted in Table III that motivated the case dairy cooperatives to enter joint ventures were identified using information obtained from trade publications and interviews.

Predictably, all four cooperatives were motivated to enter joint ventures by cost- and risk-sharing objectives (Table III). All used joint ventures to expand capacity or vertically integrate into processing. The cooperatives also used joint ventures to exploit synergies which they explained as concentrating on what they do best, for example, supplying milk or managing fluid milk plants. In addition, Mid-America Dairymen pointed out that joint ventures are valuable for reducing conflicts that arise if a cooperative serves as a supplier of milk to a processor

Table III. Motivations for Joint Ventures Entered into by Selected US Dairy Cooperatives.^a

Motivation	Mid-America Dairymen ^b	Land O'Lakes ^c	Prairie Farms ^{d,e}	Dairymen, Inc. ^f
I. Internal Uses				
A. Cost and Risk Sharing	X	X	X	X
B. Reduce Problems Associated with Being Both a Supplier and Competitor	X			
C. Obtain Financing to Supplement Firm's Debt-Carrying Capacity				X
D. Share Output of Large, Minimum Efficient Scale Plants	X	X		
E. Secure Innovative Managerial Services	X			X
II. Competitive Uses				
A. Influence Evolution of Industry Structure	X	X		X
1. Reduce Competitive Volatility	X	X		X
2. Rationalize Mature Industries	X	X		X
B. Preempt Competitors				
1. Gain "First Mover" Advantage	X	X	X	X
2. Expand Capacity or Vertically Integrate	X	X	X	X
III. Strategic Uses				
A. Create and Exploit Synergies	X		X	X
B. Diversification: Rationalization or Divestiture of Investment	X	X		X

^aTable adopted from K.R. Harrigan, *Managing for Joint Venture Success*, Lexington Books, D.C. Heath and Company, Lexington, MA, 1986, p. 16. Sources of information on motivation for entering into joint ventures are identified in footnotes associated with names of cooperatives.

^bMid-America Dairymen, Inc., *Annual Reports*, 1980–1989, and interview of former executive of Mid-America Dairymen, Inc.

^cLand O'Lakes, Inc., *Annual Reports*, 1987, 1988, and 1989, and interview of executive of Land O'Lakes, Inc.

^dPrairie Farms Dairy, Inc., *Annual Reports*, 1988 and 1989.

^eH.L. Cook, R.P. Combs, and G.C. Tucker, "Prairie Farms Dairy, Inc., Economic Impact of a Dairy Cooperative," *ACS Research Report No. 12*, US Department of Agriculture, July 1982.

^fDairymen, Inc., *Annual Reports*, 1980–1989.

while competing with the processor for packaged milk sales. According to the firm, processors believe their raw product cost disadvantage is less when competing with a semi-autonomous joint venture owned by Mid-America Dairymen and Prairie Farms Dairy than against a fluid milk plant operated by one of the cooperatives. Ben Morgan, former CEO of Dairymen, Inc., argued that joint ventures are needed to reduce farmers' capital outlays, as follows: "... it's getting tougher and tougher for farmers to finance their own capital intensive operations plus the growing capital outlays needed to keep high-tech plants efficiently competing with their public counterparts."¹⁷

Brand acquisition and management received strong emphasis by all 10 firms. The acquisition strategies of several firms involved obtaining strong regional brands from acquired firms. If the brand of an acquired firm was crippled, the company had the option of replacing it with the company's own brand. Consumer brand preferences, of course, translated into price premiums. Borden officials reported price premiums for gallons of Borden milk as compared to other brands and private label milk that ranged from \$.10 per gallon in Detroit to \$.50 per gallon in Houston in 1987.¹⁸

Plant and brand acquisition strategies had an important impact on the competitiveness of certain case firms. As part of asset redeployment, several case firms (Borden, MorningStar Foods, Royal Wessanen, Labatt, and Mid-America Dairymen) acquired groups of fluid milk plants during the 1980s. Dean Foods and Prairie Farms Dairy also placed strong emphasis on fluid milk plant acquisitions during the 1980s. Because of the importance of the item, the impact of plant acquisition strategies on the profits and competitiveness of most of these case firms will be analyzed more fully later. The rationale for emphasizing the impact of plant acquisition strategies on profits and competitiveness is suggested by strategies of Dean Foods and Prairie Farms Dairy, two firms that emerged from the 1980s as strong and successful organizations.

Strategies of Two Strong and Successful Firms

The successes of Dean Foods and Prairie Farms Dairy during the 1980s manifest themselves in ways traceable to a few important traits and practices, including their plant acquisition strategies. Dean Foods recorded profits every year of the 1980s and was the third most profitable firm in the Fortune 500 list of US industrial corporations during the decade.¹⁹ For fiscal 1986-1989, Dean's average dairy operating margin (5.95%) exceeded that of Borden (5.45%) by one-half percentage point.²⁰ Prairie Farms' sales increased by nearly 2.5 times from \$230 million in 1980 to \$570 million in 1989, reflecting both internal growth and an aggressive acquisition policy. Moreover, the cooperative's earnings generally were sufficient to finance its acquisitions. Hence, the cooperative did not employ a capital retention program to obtain financial capital from farmer members. Prairie Farms also provided total management for four processing joint ventures entered into with Mid-America Dairymen and Dairymen, Inc.

Except for different philosophies on expenditures for fluid milk advertising, the management strategies of the two firms appear similar (Table IV). Although Dean Foods has diversified into canned and frozen vegetables, both firms have largely "stuck to their knitting," choosing to emphasize fluid milk and soft dairy products. Both management teams appear to follow orthodox recipes for running

Table IV. Factors Contributing to the Success of Dean Foods Company and Prairie Farms Dairy, Inc., during the 1980s.

Firm	Success Factors
Dean Foods ^{a,b,c,d}	<ul style="list-style-type: none"> • The firm's lean management team is regarded as one of the strongest in any industry. • Acquired financially strong companies and a family of strong regional brands. • Customer care was emphasized. • Emphasized high margin, differentiated dairy products rather than commodities. • Made relatively high expenditures for advertising fluid milk products. • Plants were systematically modernized. Installed technologically advanced equipment to produce whey by-products and new food ingredients. • Added products such as orange juice to line of products processed to use excess plant capacity.
Prairie Farms ^{a,d,e}	<ul style="list-style-type: none"> • Strong management team which exhibited continuity. • Employee loyalty was demanded, observed and rewarded. • Acquired several financially strong dairy companies in the late 1980s; early acquisitions included financially troubled firms. • Acquired strong regional brands. • Used joint ventures successfully. • Placed heavy emphasis on cost control. • Operated fluid milk plants at near 100% of capacity. • Processing plants specialized in one product or a small number of closely related products. • Made relatively low expenditures for advertising fluid milk products.

^aA. Meyer, C. Stube, P. Rogers, A. Levitt, and J. Dryer, "Movers and Shakers—A Celebration of Dairy Companies Driving the Industry," *Dairy Foods*, April 1989.

^bDean Foods Company, *Annual Reports*, 1987–1989.

^cJ.C. Bierbusse, "Dean Foods Company," A.G. Edwards & Sons, Inc., *Securities Research*, April 11, 1990.

^dH.L. Cook, R.P. Combs, and G.C. Tucker, "Prairie Farms Dairy, Inc., Economic Impact of a Dairy Cooperative," ACS Research Report 12, July 1982.

^ePrairie Farms Dairy, Inc., *Annual Reports*, 1988–1989.

fluid milk plants and marketing fluid milk products. For example, both try to run their plants at near capacity levels.

Of course, other case firms claimed to follow similar management practices but were less successful. What accounts for the difference? Two factors appear to differentiate Dean Foods and Prairie Farms from other case firms. First, interviews and industry publications suggest that both have exceptionally strong management teams. Second, both concentrated on acquiring financially strong plants with valuable regional brands during the 1980s. The importance of acquiring financially healthy companies was suggested by executives of Beatrice's Dairy Division (now part of Borden) when they described Beatrice's successful acquisition policy: "Only profitable companies were considered (for acquisition). Turn around situations were never considered. Beatrice had losing plants of its own and didn't need to take on any more . . . The acquired plants had to be

growing faster than the general company and be located in markets with excellent growth potential."²¹

IMPLICATIONS FOR RESTRUCTURING OF FLUID MILK PROCESSING

What inferences can be drawn about the restructuring of the fluid milk business from strategies of the case firms? This question is first addressed using strategic group analysis to classify the case firms by size, identify the plant acquisition practices that helped them achieve the size they enjoyed at the end of the 1980s, and speculate on their prospects for moving into different strategic groups. Second, plant acquisition and divestiture strategies of selected case firms are analyzed in detail to gain insights regarding prospects for changes in the structure of the fluid milk industry during the 1990s.

Strategic Groups

Strategic group analysis, which provides an intermediate frame of reference between looking at the industry as a whole and considering firms separately, yields summary insights regarding the restructuring question. In their simplest form, strategic groups are firms that cluster together when graphed according to defined characteristics on two axes. Porter suggests the best strategic variables to use as axes are those that determine key mobility barriers in the industry.²² He notes that like entry barriers, mobility barriers can change; and as they do firms often abandon one strategic group and jump into new ones, changing the pattern of strategic groups.

Figure 1 arrays the 10 case firms into strategic groups existing at the end of the 1980s. "Emphasis on Acquisition of Fluid Milk Plants during the 1980s" was used as one axis because this item represents an important strategic variable. The vertical axis uses "Number of States where Firm Operates Plants" as a proxy for size (national, smaller national, and regional). It admittedly would have been preferable to use "Number of States Served by Firms" to better reflect the size of plants and milk distribution areas of the firms. Unfortunately, this information was not available. Plants offered for sale by Borden and Kroger in 1989 were excluded before determining the number of states in which these firms operated plants. The strategic groups that resulted were defined as follows:

- Group I. National firms that placed high emphasis on acquiring fluid milk plants in the 1980s.
- Group II. Regional and smaller national firms that placed high emphasis on acquiring fluid milk plants in the 1980s.
- Group III. Regional Cooperatives that placed medium emphasis on acquiring fluid milk plants in the 1980s.
- Group IV. Regional firm and national integrated supermarket that placed low emphasis on acquiring fluid milk plants in the 1980s.

The strategic group map identifies Borden and Dean Foods (Group I) as large national players in the fluid milk business who placed high emphasis on acquiring fluid milk plants in the 1980s. The possibly arbitrary decision to place Dean Foods in Group I (rather than Group II) reflects an effort to reflect the average

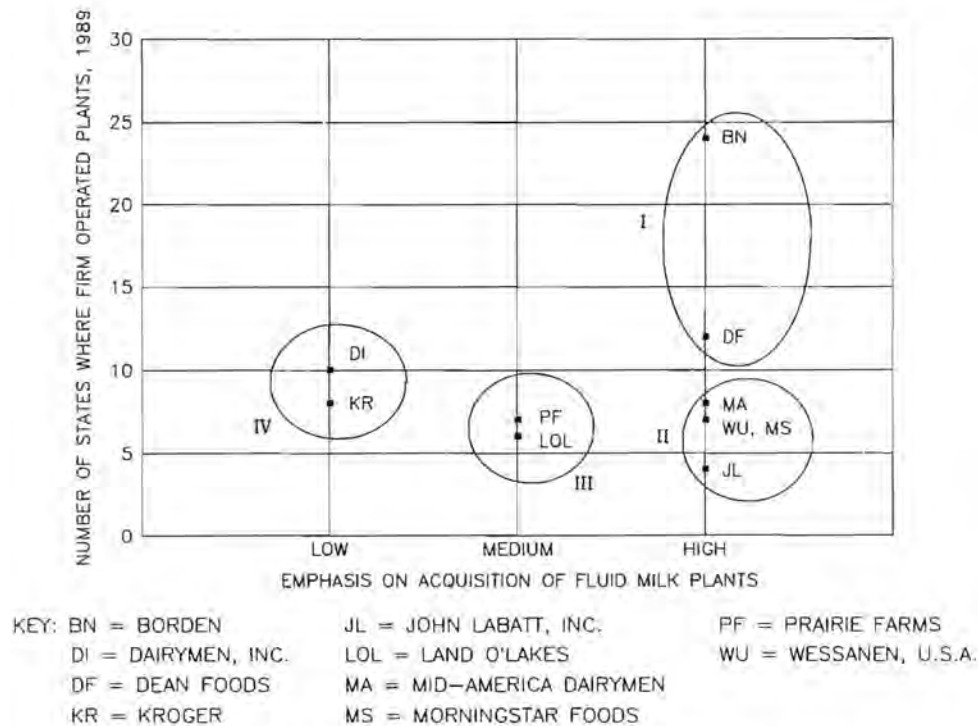


Figure 1. Strategic Groups in Case Fluid Milk Processing Firms.

size of its plants and milk distribution areas, both of which increased in the 1980s. The four firms in Group II aggressively acquired fluid milk plants in the 1980s but remained smaller than Borden and Dean Foods. Prairie Farms and Land O'Lakes (Group III) are regional cooperatives that placed medium emphasis on acquiring fluid milk plants during the decade. The Group IV firms, Kroger and Dairymen, Inc., are regional firms that either divested themselves of fluid milk plants or did not aggressively acquire fluid milk plants in the 1980s.

Mobility barriers probably will discourage the Group II case firms from moving into Group I. Problems of one or more firms in Group II include difficulties in assimilating milk plants acquired in the 1980s, limited experience in running fluid milk plants, and limited financial and R&D resources. Indeed, as of early 1991 MorningStar Foods already had divested itself of several fluid milk plants as part of a debt-restructuring effort.²³ John Labatt, Ltd., possesses the resources to become a national player in the US fluid milk business, but the firm's losses in the New York City packaged milk market, discussed in greater detail later, probably will discourage the firm from making this strategic move.

The Group III firms (Prairie Farms and Land O'Lakes) appear to have greater capacity to become national players than most firms in Group II. Resources possessed by the Group III firms that would permit substantial expansion include experienced managers, substantial financial resources, and, in the case of Land O'Lakes, strong R&D resources. History suggests Prairie Farms Dairy could expand through internal growth, acquisitions, and joint ventures. However, it is

beyond the scope of this study to predict whether these cooperatives will choose to become national players in the fluid milk business.

Thus, structural change involving entry and exit from Groups II, III, and IV will be more common than entry of firms into Group I. Also, if asset redeployment strategies of the 1980s continue, expect sales of blocks of fluid milk plants to insert new companies into strategic groups II, III, and IV.

Plant Acquisition and Divestiture Strategies

The plant acquisition and divestiture strategies of Borden, Dean Foods, Mid-America Dairymen, Inc., Dairymen, Inc., John Labatt, and Royal Wessanen illustrate recent structural changes in fluid milk processing and offer insights regarding how the industry is likely to restructure during the remainder of the 1990s. This material also has management implications.

Borden

In 1989, Borden put up for sale 16 fluid milk plants located in the Midwest and South where competition was intense and the firm's market share was low.²⁴ By divesting itself of most of these plants, Borden reduced its dairy sales by 17.2% from 1989 to 1990, but the firm's operating income for dairy products fell by only 3.4% during this period.²⁵ These results suggest the divestitures increased the firm's profits. Borden plans to expand fluid milk sales during the 1990s in the West and Southwest.

Hyperplants, which a Borden executive described as follows in 1988, will be one vehicle used in the expansion effort: "Borden engineers have plant designs in hand—using proven equipment and technology—that can process three times as much raw milk as our largest plant today. One hyperplant would replace perhaps five or six of our smaller, less efficient dairies. The savings are substantial even with higher costs for transporting milk greater distances. Just a penny less per quart of milk quickly becomes millions of dollars because Borden processes more than three billion quarts a year."²⁶ The executive also pointed out that they can build large, economic plants even for specialty products. For example, half-and-half, whipping cream, and other extended shelf life items are now produced for all of Borden's Dairy Division customers at a single new unit in Illinois.²⁶ If Borden's actions are based on correct assumptions, they have obvious implications for trends in the size of fluid milk plants. Questions can be raised about the correctness of those assessments since Borden opened a hyperplant in Woodstock, Illinois, in 1964, which the firm closed in 1975 and sold after it failed to produce expected profits.²⁷ The new owner used it as a pickle plant. Borden believes conditions and the firm's capabilities have changed enough to prevent a repeat of the Woodstock experience with new hyperplants.

Dean Foods

This profit leader is likely to continue acquisition strategies similar to those pursued in the 1980s. Thus, companies acquired will be financially sound businesses possessing valuable regional brands. As evidence, Dean acquired in 1990–1991 Cream O'Weber Dairy that operates in Utah and Nevada, Ready Food

Products Inc., a UHT processor in Philadelphia, and Meadow Brook Dairy of Erie, Pennsylvania, companies similar to earlier acquisitions.⁵ Dean's success during the 1980s suggests that high profits can be obtained without the hyperplants planned by Borden. However, one industry executive predicted that only well-managed businesses will compete successfully against Borden because the firm has skilled managers to operate its planned hyperplants. Many skilled managers came to Borden when the firm acquired Meadow Gold Dairies from Beatrice Foods in 1986.

Mid-America Dairymen

Operating counter to many cooperatives, Mid-American Dairymen embarked on an aggressive fluid milk plant acquisition program in the 1980s to become the dominant fluid milk processor for Kansas City, Omaha, and Wichita. The cooperative used joint ventures and management contracts—several involving Prairie Farms Dairy—to operate acquired firms. The cooperative's acquisitions—some of which consisted of financially troubled companies—were made partly to preserve markets for members' milk and reduce excess capacity in fluid milk processing in its sales areas.

Mid-America Dairymen's experience with fluid milk processing has been mixed, as indicated by the following statement extracted from the Cooperative's annual report for 1989: "In 1987, we made \$12.5 million; in 1988, \$14.0 million; in 1989, our net earnings totaled only \$1 million. This decline was primarily the result of our bottling operations. Mid-Am's manufacturing plant operations and marketing efforts continued to be quite strong in 1989."⁹ After sustaining losses in manufacturing in 1990, Mid-Am repeated its strong financial performance in dairy product manufacturing in 1991.^{28,29} Moreover, the cooperative's fluid milk plants became more profitable in 1990 and 1991. But marginally profitable fluid milk plants doubtless were a problem for the cooperative in 1990 when it lost money on cheese, butter, and nonfat dry milk.

Mid-Am's generally profitable manufacturing operations may permit cross subsidization of its fluid milk plants. Thus, if necessary to preserve markets for members' milk, Mid-American Dairymen probably will acquire additional fluid milk plants in the 1990s. The number acquired will be influenced by how successful the firm is in returning plants it now owns to sustained profitability. It is unclear whether other cooperatives will pursue aggressive fluid milk plant acquisition strategies. Prairie Farms Dairy and Land O'Lakes (through Country Lake Foods) have been successful fluid milk processors. But Mid-America's checkered experience suggests why many dairy cooperatives have backed away from fluid milk processing, causing the proportion of fluid milk processing carried out by cooperatives to decline. During 1980 to 1987, the percentage of US fluid milk processed by cooperatives declined from 16% to 14% of the total.³⁰

Dairymen, Inc.

This regional cooperative has struggled to stem losses incurred in the competitive fluid milk markets of the southeastern US. As an alternative to acquiring the services of Borden's managers under a joint venture, Dairymen, Inc., has

launched a vigorous cost-cutting program to increase the efficiency of its marketing and processing operations. This effort, which included the closing of several unprofitable plants in fiscal 1990, probably will continue for the next several years.³¹

Dairymen, Inc., reports its difficulties stem partly from the low margins it receives on fluid milk products sold to supermarkets, the intensely competitive environment created by integrated supermarkets in the southeastern United States, and losses sustained on its milk manufacturing plants. The cooperative's manufacturing plants lose money because they operate during part of the year at low capacity, handling mostly seasonal fluid milk surpluses. The cooperative has retained strength in its balance sheet partly by reducing payouts to producer members, which has caused some members to leave the organization. The loss of members has contributed to fragmentation of cooperatives in the southern United States and further reduced throughput for Dairymen, Inc.'s manufacturing plants. Cooperatives' losses of market power were most pronounced in the Southeastern United States. But Dairymen, Inc.'s problems are symptomatic of more widespread losses of market power by dairy cooperatives relative to integrated supermarkets and other large investor-owned milk processors during the 1980s.

John Labatt, Ltd.

In statements accompanying the purchase of fluid milk plants in the northeastern United States beginning in 1985, the company said the acquisitions reflected the firm's desire to become a major force in the food business of North America. The nine fluid milk plants acquired in New York, New Jersey, Maryland, and Pennsylvania enabled the firm to become the dominant milk seller in Philadelphia and New Jersey and to obtain a 20 to 40% share in New York City.^{14,32} Because of deregulation in the late 1980s that opened the New York City market to additional distributors, the market became extremely competitive. Competitors' price cuts and Labatt's responses produced sustained losses for Labatt in that market. In a cost-cutting measure taken in fiscal 1990, the firm closed two New York City plants and began serving those distribution areas from other plants owned by the firm.²

Labatt believes its financial resources and efficiency will enable it to be a survivor in the competitive New York City market. However, it is unclear how long the firm will cross subsidize unprofitable parts of its fluid milk business in the United States. In 1989, Labatt sold its Catelli (food processing unit operating mainly in Canada) and its Canadian wine operations, noting the units lacked "strategic relevance."³³ While such actions don't reveal when subsidies of unprofitable US dairy operations will stop, they indicate that Labatt, like other companies concerned with maintaining a competitive return on stockholders' equity, will redeploy assets as necessary to increase earnings.

Royal Wessanen

The Netherlands-based Royal Wessanen acquired Marigold Foods in 1978 and Crowley Foods in 1983, firms which are part of Wessanen USA. At the end of the 1980s, Crowley operated 10 dairy plants in the Northeast; Marigold operated six plants, mostly in the Midwest. Wessanen USA placed heavy emphasis on em-

ployee training to reduce costs and increase sales. Plant acquisitions made by Wessanen USA have been assimilated, preparing the company for additional acquisitions during the 1990s. Executives of the firm report that dairy companies with complementary product lines, a cheese company, and nondairy food companies are potential targets.³⁴

The entry into the US market of John Labatt, Inc., and Royal Wessanen contributed to globalization of the US fluid milk business. Such firms promise to be sources of capital, new technology, and, possibly, instability that results from asset redeployment. Instability may result if groups of plants sold by these firms and domestic firms end up in financially weak hands. For example, fluid milk plants sold to cooperatives wishing to maintain markets for members' milk or to employees wishing to maintain jobs at a plant could exhibit financial weakness. So could firms acquired in leveraged buyouts. Producers supplying firms that gravitate to financially weak hands will find their milk checks less secure.

The major structural changes identified above include accelerated trends toward larger fluid milk plants, globalization of US fluid milk markets, weakening of market power of cooperatives in fluid milk markets relative to integrated supermarkets and other large investor-owned firms, and transformation of markets through sales of blocks of fluid milk plants; a practice which, if continued, could add to instability in fluid milk markets. Surprisingly, government anti-trust action which was largely dormant in the 1980s, prevented the Borden-Dairymen, Inc. joint venture that could have lessened competition in fluid milk markets in the southeastern United States.

STRATEGIES FOR THE 1990s

Which strategies will help fluid milk processors compete successfully in the 1990s in the environment created by trends noted above?

Management

The financial performance of Dean Foods Company and Prairie Farms Dairy underscores how important strong management teams will be to success in fluid milk processing. At the risk of noting the obvious, firms wishing to compete successfully against Dean Foods, Prairie Farms Dairy, and Borden during the 1990s will need to retain, develop, or buy strong management teams. Firms going head-to-head against Borden in areas served by hyperplants will face particularly difficult challenges. The firms's skilled managers and continued low energy prices that provide incentives for operation of plants with large distribution areas are likely to make Borden a formidable competitor in the fluid milk business in the 1990s.

Plant Acquisitions

Milk plant acquisition strategies of Beatrice Foods Company (no turnarounds attempted) appear to work well. In any event, Dean Foods, Prairie Farms Dairy, and Borden have profited by following acquisition strategies broadly similar to the Beatrice model. Mid-America Dairymen, Inc., on the other hand, incurred losses on financially troubled fluid milk plants acquired to maintain markets for

members' milk. Moreover, its financial problems would have been more severe if Prairie Farms Dairy had not operated plants acquired by Mid-America Dairymen under joint ventures or management contracts. While financially strong plants will carry premium prices, experience of the case firms suggests that the Beatrice model will be a sound acquisition model for the 1990s.

Joint Ventures

Joint ventures will continue to be valuable management tools for cooperatives during the 1990s, but they should not be regarded as durable instruments. Harrigan discusses developments that cause joint ventures to disintegrate, including (a) changing needs of partners, (b) lack of complementarity of contributions by partners, (c) flaws in legal agreements undergirding the joint venture, (d) lack of support for the joint venture by operating managers of partners, and (e) the perception a partner is falsely representing cost and revenue items.¹⁶ These factors seem to apply in most business, including fluid milk processing, thus, they suggest that joint ventures entered into by cooperatives will be transitory measures. Indeed, several joint ventures entered into by cooperatives in the 1980s have already terminated. For example, one joint venture involving Mid-American Dairymen terminated because the other partner found it more profitable to put milk it contributed to the venture through its own plants.

Cooperatives will be challenged to develop successful replacements for the devices. The steps involved in the successful metamorphosis of Country Lake Foods illustrates how complex such assignments can be. Country Lake Foods traces back to 1983 when Land O'Lakes, Inc., purchased a partnership interest in the St. Paul, Minnesota-based Norris Creameries, which was initially operated as a joint venture with Land O'Lakes. In 1987, Land O'Lakes purchased Norris Creameries and combined the firm with two of its other milk and ice cream businesses to form Country Lake Foods, which is partly publicly held.³⁵ This firm, as noted earlier, was used as a vehicle for acquiring additional processors for stock rather than cash. In 1991, Land O'Lakes purchased the stock held by the public in Country Lake Foods to convert the firm into a wholly owned unit of Land O'Lakes.

Cooperative Mergers

Mergers of dairy cooperatives slowed during the 1980s. While fringe cooperatives continued to join larger dairy cooperatives, there were no mergers of the size that formed Associated Milk Producers, Inc., Mid-American Dairymen, and Dairymen Inc., during the 1960s and 1970s. Moreover, fragmentation of dairy cooperatives in the southeastern United States, in particular, increased during the decade. Such developments could increase incentives for mergers to reduce fragmentation and countervail the market power gained by investor-owned processors and integrated supermarkets during the 1980s. Certain large dairy cooperatives have examined the feasibility of merging. But, according to industry officials, deep and significant cultural differences must be reconciled before such mergers will occur. These cultural differences partly explain the increased use by cooperatives of joint ventures and marketing agencies in common, devices employed to promote joint efforts among cooperatives unable to merge.

Measures to Combat Financial Instability

As the fluid milk business restructures, asset redeployment could put additional fluid milk plants in financially weak hands. Producers fear a repeat of losses like those sustained after Knutson Foods' purchase of eight Foremost plants in the southwestern United States in a leveraged buyout in 1985. The Knutson Foods–Foremost bankruptcy that followed in 1986 caused Associated Milk Producers to lose about \$5.5 million in payments for milk.³⁶ Firms in the industry might use a sequential process to deal with this problem. Milk suppliers could step up monitoring of the financial condition of financially troubled processors as a first step. If financial problems become widespread during industry restructuring, milk suppliers could seek new legislation to require financially weak processors to post surety bonds, obtain letters of credit, or establish cash escrow accounts to give producers preferred positions in bankruptcy proceedings. The House version of the 1990 Farm Bill called for amendments of the Packers and Stockyards Act to establish trusts for milk producers and processors. Under this legislation, milk producers and other processors would be paid from the firm's assets (held in trust) before others if the firm filed for bankruptcy or failed to pay its debts. This legislation was omitted from the Farm Bill signed into law in 1990. However, a similar plan was re-introduced in dairy legislation considered in 1991, suggesting that efforts to safeguard producers' milk checks have a persistent constituency. In the absence of other legislation, the Agricultural Marketing Agreement Act of 1937 could be revised to expand the functions of federal milk orders to include responsibility for monitoring the financial condition of fluid milk processors.

SUMMARY AND IMPLICATIONS

The 10 case firms placed strong emphasis on new product development, brand acquisition and management, and on reducing milk processing and marketing costs. The first two points reflect their efforts to shift the basis of competition from strictly a cost basis to a differentiation focus. The last is evidence that the commodity roots of fluid milk processing remained powerful as a strategy shaping force. Plant acquisition strategies influenced the financial performance and prospects of the firms. Firms that pursued the Beatrice Model and confined acquisitions to financially healthy firms appeared to do best. Mid-America Dairymen, which acquired financially troubled fluid milk plants to maintain markets for members' milk and reduce excess capacity in the cooperative's sales areas, sustained losses as a result of this strategic decision.

Two case firms, Dean Foods and Prairie Farms Dairy, emerged from the 1980s as strong and successful firms. Borden's performance was weaker than that recorded by Dean Foods during the 1980s. But Borden's decisions to acquire the Meadow Gold Dairy plants (formerly owned by Beatrice Foods), close plants in low profit areas, and build or purchase hyperplants in the West and Southwest promise to make Borden a formidable opponent for those engaging in head-to-head competition with the firm in the 1990s. Few, if any, case firms appear likely to move into the strategic group occupied by Dean Foods and Borden. But, Prairie Farms Dairy and Land O'Lakes are perhaps best equipped to expand sufficiently to enter that strategic group.

Firms wishing to compete successfully against Dean Foods, Prairie Farms Dairy, and Borden will need to retain, develop, or acquire strong management teams in the 1990s. Joint ventures, widely used by the case cooperative firms, will be a valuable management tool for cooperatives in the 1990s. But they will be transitory measures, and cooperative will be challenged to develop successful mechanisms to replace them. Incentives will exist for mergers of large dairy cooperatives to countervail the market power gained by integrated supermarkets and other investor-owned processors during the 1980s. But cultural differences among the cooperatives must be reconciled before those mergers will occur.

Federal milk orders need revisions to accommodate expanded fluid milk sales areas and new products and deal with instability stemming from asset redeployment. Mainly, this means merging additional milk orders, making classification provisions more uniform and flexible enough to more readily accommodate new products, and possibly adding measures to safeguard producers' milk checks from bankruptcies that will accompany restructuring of the fluid milk industry.

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