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Financial Profile of Dairy Cooperatives, 2007

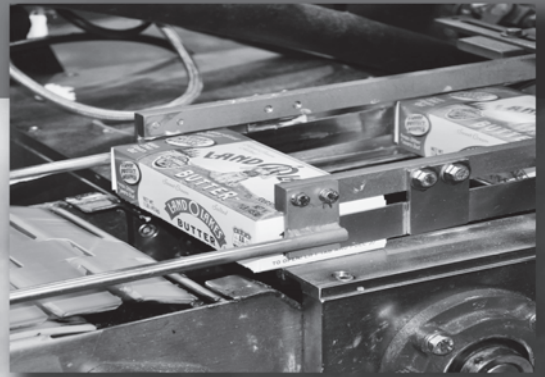
Research Report 219

U.S. Department of Agriculture



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Abstract

Financial statements for U.S. dairy cooperatives in 2007 are presented. The Nation's dairy cooperatives were categorized into groups based on their primary function and according to size (volume of milk handled). Balance sheets and operating statements were presented on per hundredweight (cwt), per cooperative, and common-size basis for U.S. dairy cooperatives by operating type and by size category. Financial ratios are also presented for each type and size group. Dairy cooperatives employed \$12 billion of assets to market member milk in 2007. Member equity made up 27.6 percent of dairy cooperative assets. Net margins before tax were \$0.25 per cwt of total milk handled, which represented a 0.9-percent return on total sales.

Key words: Cooperatives, financial statements, financial structure, milk dairy.

Financial Profile of Dairy Cooperatives, 2007

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USDA Rural Development
Rural Business and Cooperative Programs

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On the Cover (clockwise, from upper left): A new whey dryer at AMPI's plant in Paynesville, Minn.; a Land O'Lakes butter-packaging line; the Duprey family, members of Our Family Farms of Western Massachusetts; packaging shredded cheese at a Dairy Farmers of America plant. Photos courtesy pictured co-ops. Brown Swiss cow photo (center) by Nate Lemire, courtesy Lemire and Accelerated Genetics a livestock-

Preface

Information for this report came from a 2008 survey of all U.S. dairy cooperatives that gathered financial and marketing data for cooperatives' fiscal years ending in calendar 2007. About 61 percent of the dairy cooperatives provided sufficient financial information that could be used in this study. However, those cooperatives represent 98.5 percent of the assets held and 93.6 percent of the net milk volume handled by all dairy cooperatives.

This report presents consolidated balance sheets, operating statements, and standard financial ratios for U.S. dairy cooperatives. Dairy cooperatives vary in size and functions performed in marketing members' milk. Thus, financial profiles according to functional type and size (based on net volume of milk handled) are also presented.

The consolidated financial statements are both "common sized" and calculated on a per cwt of milk and per cooperative basis. This may make it easier for an individual dairy cooperative to compare its financial structure with the profiled cooperatives and to facilitate comparisons between cooperatives of different size and scope. Relationships between various items in the balance sheet and operating statement are also used to analyze comparative dairy cooperative performance.

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Functional Types of Dairy Cooperatives

Bargaining only

- The largest group of dairy cooperatives (representing 70 percent of the nation’s 155 dairy co-ops);
- Operate at the first-handler level, and (in most cases) do not own plants;
- Relatively few assets because they (generally) own few, or no, facilities;
- Few of these co-ops handled 1 billion pounds of milk or more;
- Handled nearly one-fourth of U.S. cooperative milk volume.

Niche marketing

- This group represents 12 percent of all U.S. dairy co-ops and handles just 1 percent of the net volume of co-op milk;
- Most (84.2 percent) handled less than 50 million pounds each;
- Typically, they process all of their members’ milk in the cooperative’s plants;
- Manufacture specialty or branded dairy products in their own plants, or by arrangement with others.

Fluid processing

- The smallest group, representing 3 percent of U.S. dairy coops and 1 percent of co-op milk volume;
- Typically process all of their members’ milk in their plants, primarily as bottled fluid milk;
- May also make products such as ice cream, sour cream, cottage cheese, yogurt and/or butter.

Diversified

- Perform all, or most, of the functions that other types of dairy cooperatives perform;
- Manufacture a variety of products in their own large plants from member milk;
- Some may sell a large portion of their raw milk supply to other handlers;
- Second largest group (15 percent of all U.S. dairy cooperatives);
- Handled 75 percent of the net cooperative milk volume;
- Three out of four of these co-ops handled 1 billion or more pounds of milk; none handled less than 50 million pounds

Highlights

More than 90 percent of the assets held and milk handled by U.S. dairy cooperatives were accounted for by the 94 cooperatives for which there was complete financial information, and thus are included in this report. They were categorized according to the type of operations in which they engaged to market a majority of their members' milk: bargaining-only, niche-marketing, fluid-processing, and diversified.

The cooperatives were also categorized according to the volume of milk they handled into small-, medium-, and large-size groups.

Overall, dairy cooperatives employed \$8.41 of assets per hundredweight (cwt) to market their members' milk in 2007. Current assets and property, plant, and equipment came to \$5.08 and \$3.23 per cwt of member milk, respectively. Total liabilities were \$6.09 per cwt, of which \$4.40 were current liabilities—which may include pending payments to members for their milk. Member equity amounted to \$2.32 per cwt of milk.

Bargaining-only cooperatives used the least assets to market a cwt of milk, while niche-marketing cooperatives used the most. Likewise, bargaining-only cooperatives had the fewest liabilities per cwt. Niche-marketing and diversified and fluid-processing cooperatives had much larger total liabilities.

Niche-marketing cooperative members had the highest equity per cwt of their milk—more than 1.5 times the equity per cwt of diversified and fluid-processing cooperatives. Bargaining-only cooperative members had a relatively small amount of equity in their cooperatives, one-tenth that of niche-marketing cooperatives' members.

Total assets per cwt of member milk were highest for the large cooperatives and lowest for the medium-size group. Total liabilities per cwt likewise were highest for the large group, but smallest for the small group. Accordingly, equity per cwt was lowest for the large group and highest for the small group. The range in the amount of equity per cwt of member milk was much narrower between the size groups than that for assets or liabilities.

Milk and dairy product sales was the largest single sales and income item, at \$23.68 per cwt of milk handled, in 2007. Supply and other sales was the next largest item at \$3.13 per cwt. Total sales and income was \$27.03 per cwt, while net margins before tax came to 25 cents per cwt of total milk handled by the 94 cooperatives.

Niche-marketing cooperatives generated the largest milk and dairy product sales per cwt of total milk handled, while bargaining-only cooperatives yielded the least. Diversified and fluid-processing cooperatives' supply sales were quite a bit larger than those of the other two types, but niche marketing cooperatives still had the largest total sales and income per cwt for 2007.

Niche-marketing cooperatives' net margins-before-tax were \$0.66 per cwt. Diversified and fluid-processing cooperatives' net margins averaged \$0.05 per cwt, less than one-half those of the niche marketing and bargaining only cooperatives.

Small cooperatives reported the highest total sales and income—\$29.77 per cwt of milk handled—and also the highest expenses: \$29.36 per cwt. In contrast, medium-size cooperatives reported the lowest total sales and income, \$26.30 per cwt, and lowest expenses, \$25.87 per cwt. However, net margins for these two size groups of

cooperatives were within \$0.01 of each other, \$0.42 and \$0.43 per cwt, respectively—both well above those of the large cooperatives: \$0.24 per cwt.

Most of the cooperatives used allocated equity, while a little more than one-half also reported retained earnings in 2007. Allocated equity made up the bulk of member equity—82.1 percent of total equity—while retained earnings represented 10.8 percent. Common stock was issued by 37.2 percent of the cooperatives. Even fewer, 13.8 percent, issued preferred stock.

A majority of niche-marketing cooperatives had common stock. In contrast, less than one-half of the bargaining only and diversified and fluid processing cooperatives reported common stock. Niche-marketing cooperatives were also more likely to have preferred stock than the other types, though it was a small proportion for all three types. Bargaining-only cooperatives were less likely to have unallocated equity than the other two types, where more than three-fourths reported retained earnings or unallocated equity.

Various ratios were calculated to measure dairy cooperative operations. Dairy cooperatives averaged \$1.15 in current assets for each \$1 of current debt in 2007. Current liabilities represented just over one-half of total dairy cooperative assets. (Current liabilities may include milk payments owed to members).

Long-term debt averaged 73 percent of total equity in 2007. Diversified and fluid-processing cooperatives had the highest level of long-term debt compared with member equity, while bargaining-only and niche-marketing cooperatives had sharply lower long-term debt-to-equity ratios.

The proportion of assets financed by long-term and total debt capital was successively larger from the small to the large size groups.

Return on equity before taxes was 12.2 percent for dairy cooperatives in 2007. The rate of return to equity ranged from 12.1 for diversified and fluid processing cooperatives to 13.8 for niche-marketing cooperatives.

Return on assets employed in marketing milk was 3.4 percent for all dairy cooperatives. Niche-marketing cooperatives had the highest return-to-total-assets compared to bargaining-only or diversified and fluid-processing cooperatives. There was somewhat greater variation in returns among different size groups than among different types. The medium-size group achieved the highest level of return both to equity and to assets. Conversely, small cooperatives had the lowest return on equity while large cooperatives had the lowest return on assets.

Financial Profile of Dairy Cooperatives, 2007

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Introduction

Farmer cooperative statistics are collected annually by the U.S. Department of Agriculture (USDA) Rural Development to provide information on the growth and development of cooperatives. In 2008, dairy cooperatives were surveyed by mail for details about their marketing operations during 2007. This data was used to develop financial statistics specific to dairy cooperatives for this report. The 2007 marketing operations of all U.S. dairy marketing cooperatives were discussed in Research Report 218.

In 2007, the United States had 155 cooperatives predominantly engaged in marketing milk from dairy cows. A majority (60.6 percent) provided financial information in sufficient detail to be included in this report. However, these 94 cooperatives represent 98.5 percent of the combined total assets of all dairy cooperatives and handled 93.6 percent of the net milk volume handled by all U.S. dairy cooperatives (table 1).

Functional Types—Dairy cooperatives perform a variety of functions for their members and have taken different approaches to ensure a market for their members' milk. Each cooperative's operations are unique, due to the characteristics of its member-owners and the marketing environment in which it operates. That said, there are similarities among dairy cooperative operations. Broadly, they focus on marketing milk at the first-handler level, while some also own and operate plants to make at least a portion of their members' milk into various products.

For this report, dairy cooperatives were broadly classified into four groups: *bargaining-only*, *niche-marketing*, *fluid-processing*, and *diversified* dairy cooperatives (see box on Page iv). Those cooperatives that

operate at the first-handler level only are known as "bargaining-only" cooperatives. They assist members in the marketplace by negotiating prices, facilitating arrangements between milk buyer and seller, ensuring accurate milk weights and tests, and so forth. They may or may not take title to the milk. Most do not own plants, however, some operate milk shipping and receiving stations. A few operate plants for processing small volumes of raw milk for balancing purposes or to facilitate shipping by removing some of the water from raw milk via ultra filtration or reverse osmosis.

Dairy cooperatives that operate plants to further process their members' milk have been grouped according to the type(s) of products they make or market.

Cooperatives that typically use most or all of their members' milk to make specialty dairy products are called, for lack of a better term, "niche-marketing" cooperatives. Included in this category are cooperatives that make artisan or branded cheese. It also includes those few that market organic or specialty products on the basis of how the milk was produced. In a few cases, rather than owning and operating production facilities the cooperatives contract with milk plants to have the niche products made from the members' uniquely produced milk.

Cooperatives that focus operations on the fluid beverage market are classified as "fluid-processing" cooperatives. This category is reserved for the few cooperatives that typically package most or all member milk into fluid milk products. In some cases they may also make "soft" products (such as yogurt, sour cream, ice cream/ice cream mix) and butter.

The "diversified" cooperatives own and operate plants to make a variety of commodity and/or differentiated products, while also selling a portion as bulk raw milk. They typically make some hard products

Table 1—Comparison of cooperatives in the financial profile study and all U.S. dairy cooperatives, 2007

Item	Financial profile cooperatives	U.S. dairy cooperatives ^{1/}	Profile cooperatives as a percent of all U.S. cooperatives
		---- Number ----	- Percent -
Cooperatives	94	155	60.6
		---- Million dollars ----	- Percent -
Total assets	12,021	12,205	98.5
		---- Billion pounds ----	- Percent -
Net milk volume handled ^{2/}	145.9	155.8	93.6

^{1/} Cooperatives with more than 50 percent of net sales from milk and dairy products; excludes goat dairy cooperatives. Total assets from *Cooperative Statistics 2007*, Service Report 68, USDA Rural Development, November 2008.

^{2/} Total milk handled by cooperatives less inter-cooperative transfers.

such as butter, dried dairy products, and/or cheese, and some also make packaged fluid milk and soft products like sour cream, dips, yogurt, cottage cheese, and ice cream.

The cooperatives in this study well represent each of the four types (table 2). Sufficient data was obtained from a majority (55.6 percent) of the bargaining-only dairy cooperatives in the United States, while 47.4 percent of the niche-marketing cooperatives were represented. However, cooperatives in those two categories represent four-fifths of milk handled by each of the two types of cooperatives in 2007.

Three fourths of the fluid-processing cooperatives provided data and represented 99.0 percent of all U.S. fluid-processing cooperatives. Likewise, 91.7 percent of the diversified cooperatives participated, representing 98.0 percent of the net milk volume handled by all such cooperatives in the United States.

Appendix table 1 shows the 2007 consolidated financial statements for all dairy cooperatives, by type of cooperative, with fluid processing and diversified cooperatives combined. The fluid-processing cooperatives and diversified cooperatives are combined for the financial results because there were too few fluid processing cooperatives to show their results separately. Also, fluid processing cooperatives are more similar to diversified cooperatives in their complexities than to niche or bargaining-only cooperatives.

Size Categories—The data were also categorized into three size groups according to the volume of milk handle—*small* (less than 50 million pounds of milk), *medium* (50 to 999 million pounds), and *large* (1 billion pounds or more). The cooperatives

in this study represented 89.7 percent of the large U.S. dairy cooperatives in 2007, and 63.3 percent of the medium-size dairy cooperatives. Less than one-half (45.5 percent) of the small cooperatives were represented.

More than three-fourths (76.7 percent) of the small cooperatives functioned as bargaining-only cooperatives, and the remaining small cooperatives were niche marketers (table 3 and figure 1). Similarly, 76.3 percent of the medium-size cooperatives functioned as bargaining-only cooperatives. However, 18.4 percent of the medium-size cooperatives were diversified or fluid-processing cooperatives, and just a handful were niche marketers (5.3 percent).

The large cooperatives were diversified or fluid-processing (69.2 percent) and bargaining-only (30.8 percent) cooperatives. Because each size group contains differing proportions of the four operating types, some of the differences in the financial structure between size groups may be due in part to variances related to the type of operation.

See Appendix Table 2 for the consolidated financial statements by size of dairy cooperative.

Financial Profile—Per Cwt Basis

The consolidated financial statements were expressed in terms of dollars per cwt of milk. This presentation may be familiar to dairy farmers and cooperative managers because milk prices are typically expressed in terms of dollars per cwt. It is also a form of common sizing—allowing comparison across different-sized organizations.

Table 2—Cooperatives in the study compared with all U.S. dairy cooperatives, by type and by size, 2007

Primary function	Financial profile	U.S. Cooperatives	Share of U.S. represented
<i>Number of cooperatives</i>			
<i>Type</i>	<i>--- Number ---</i>		<i>Percent</i>
Bargaining-only	60	108	55.6
Niche-marketing	9	19	47.4
Fluid-processing	3	4	75.0
Diversified	22	24	91.7
<i>Net milk volume^{1/}</i>			
	<i>--- Million pounds ---</i>		<i>Percent</i>
Bargaining-only	29,139	36,341	80.2
Niche-marketing	1,039	1,293	80.4
Fluid-processing	1,857	1,875	99.0
Diversified	113,901	116,276	98.0
<i>Number of cooperatives</i>			
<i>Size category</i>	<i>--- Number ---</i>		<i>Percent</i>
Small ^{2/}	30	66	45.5
Medium ^{3/}	38	60	63.3
Large ^{4/}	26	29	89.7
<i>Net milk volume^{1/}</i>			
	<i>--- Million pounds ---</i>		<i>Percent</i>
Small	587	1,271	46.2
Medium	9,225	13,448	68.6
Large	136,124	141,066	96.5

^{1/} Total milk handled by cooperatives less intercooperative transfers

Table 3—Cooperatives in the study, by type and by size, 2007

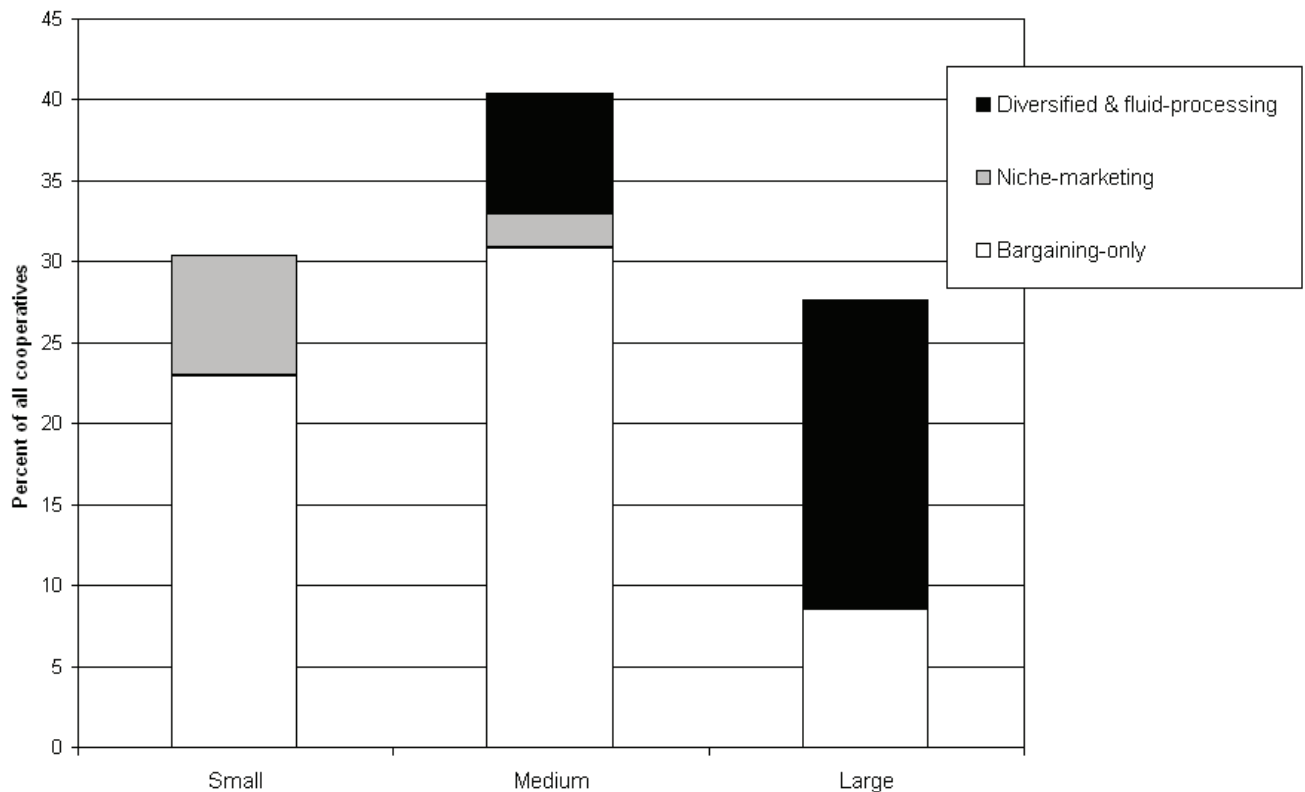
Primary function	Size category			
	Small ^{1/}	Medium ^{2/}	Large ^{3/}	Total
<i>Percent</i>				
Bargaining-only	76.7	76.3	30.8	63.8
Niche-marketing	23.3	5.3	0.0	9.6
Diversified and fluid-processing	<u>0.0</u>	<u>18.4</u>	<u>69.2</u>	<u>26.6</u>
	100.0	100.0	100.0	100.0

^{1/} Cooperatives that handled less than 50 million pounds of milk

^{2/} Cooperatives that handled 50 to 1 billion pounds of milk

^{3/} Cooperatives that handled 1 billion pounds of milk or more

Fig. 1--Operating types of U.S. dairy cooperatives, by size, 2007



Balance Sheet—Balance sheet items were calculated on a per cwt of member milk basis to show the capital required to market members' milk (table 4 and figure 2). Overall, dairy cooperatives had \$8.41 in assets for each cwt of milk that members sold through them in 2007.

Dairy cooperatives held \$5.08 in current assets, \$3.23 in fixed assets (net of investments in other cooperatives), and just \$0.11 per cwt of member milk in investments in other cooperatives in 2007.

On the other side of the ledger, total liabilities came to \$6.09 per cwt in 2007. The bulk were current liabilities, \$4.40 per cwt, which may include pending payments to members for their delivered milk. Total member equity amounted to \$2.32 for each cwt of milk they marketed through their cooperatives.

Balance Sheet by Type—The structure of the balance sheet varied according to the operational type of dairy cooperative. Among the three groups of cooperatives, bargaining-only cooperatives have relatively low capital requirements because they, for the most part, do not own plants. Niche-marketing cooperatives, on

the other hand, have relatively high capital requirements. In contrast, diversified and fluid-processing cooperatives often operate extensive manufacturing facilities and are able to capture some economies of size. Both niche-marketing and diversified and fluid-processing cooperatives use additional capital to support their sales of supplies and other products.

Thus, bargaining-only cooperatives required the fewest assets to market milk, \$1.74 per cwt of member milk. Niche-marketing cooperatives required the most assets, \$12.54 per cwt, while diversified and fluid-processing cooperatives used about \$2.50 fewer in assets—\$10.09 per cwt of member milk.

Current assets per cwt of member milk showed the widest range between operating types—ranging from just \$1.41 for bargaining-only cooperatives to \$8.84 for niche-marketing cooperatives. Property, plant, and equipment and other assets totaled \$0.22 per cwt for bargaining-only cooperatives, while niche- and diversified and fluid-processing cooperatives used \$3.60 and \$3.99, respectively. Investment in other cooperatives was similar among the three groups of operating

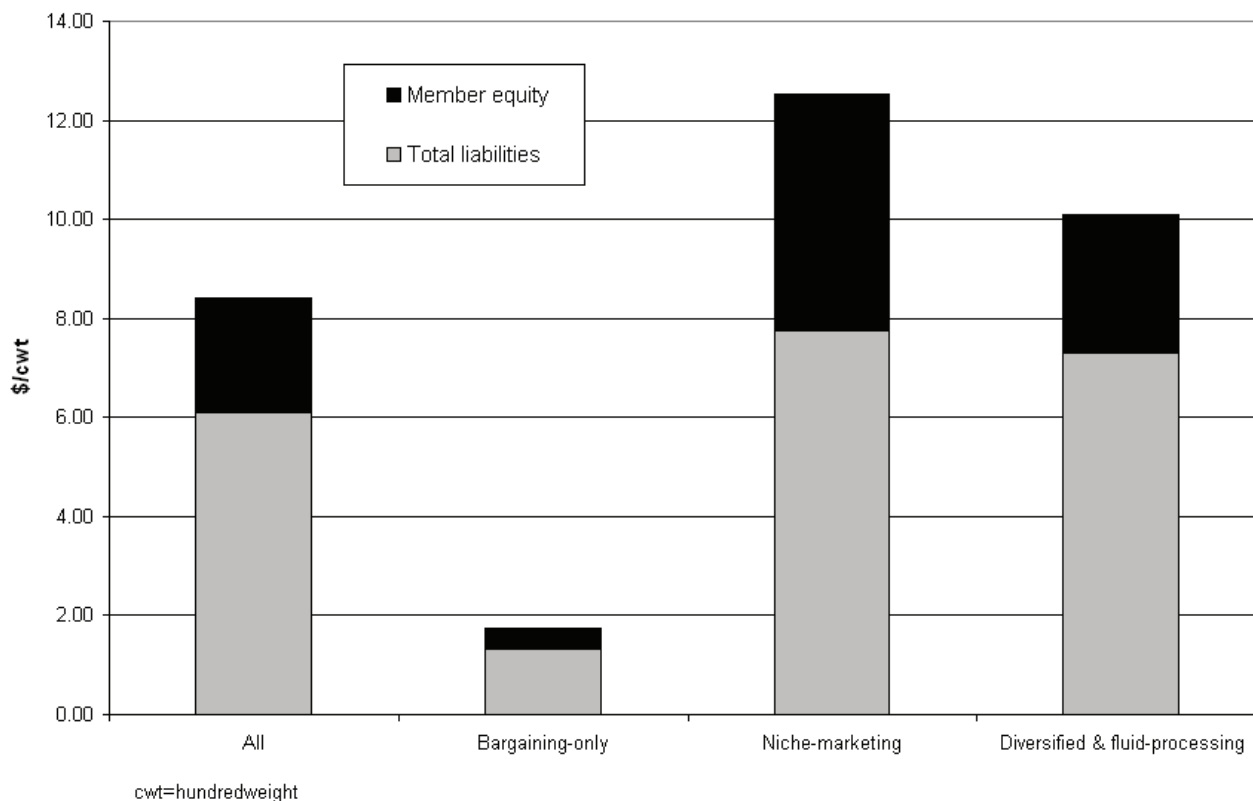
Table 4—Consolidated balance sheet per cwt of member milk, overall and by type of dairy cooperative, 2007

Item	Type of cooperative			
	All	Bargaining-only	Niche-marketing	Diversified & fluid-processing
<i>Dollars per cwt of member milk</i>				
Current assets	5.08	1.41	8.84	5.98
Net PP&E ^{1/} and other assets	3.23	0.22	3.60	3.99
Investments in other co-ops	<u>0.11</u>	<u>0.10</u>	<u>.10</u>	<u>.11</u>
Total assets	8.41	1.74	12.54	10.09
Current liabilities	4.40	1.25	5.95	5.20
Long-term liabilities	1.69	0.06	1.74	2.10
Liabilities not categorized	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
Total liabilities	6.09	1.31	7.76	7.30
Total equity	2.32	0.42	4.78	2.79
Total liabilities and equity	8.41	1.74	12.54	10.09
Member milk (million pounds)	142,865	28,902	1,034	112,929

Notes: Totals may not add due to rounding. CWT = hundredweight.

^{1/} Property, plant, and equipment.

Fig 2--U.S. dairy cooperative assets per cwt, by type, 2007



types—\$0.10 to \$0.11 per cwt. Investment in other cooperatives may include investment in a cooperative bank as part of a loan requirement.

Niche-marketing cooperatives had the highest *total liabilities per cwt*, \$7.76, followed closely by diversified and fluid processing cooperatives—\$7.30. Bargaining-only cooperatives had relatively low liabilities, \$1.31 per cwt.

Accordingly, *current liabilities* were lowest for bargaining-only cooperatives, \$1.25 per cwt. Niche-marketing cooperatives had \$5.95 in current liabilities per cwt, with diversified and fluid processing cooperatives' a bit lower—\$5.20 per cwt.

Reflecting the nature of their operations, bargaining-only cooperatives had few *long-term liabilities*, \$0.06 per cwt, while niche-marketing and diversified and fluid-processing cooperatives had higher levels of long-term liabilities—\$1.74 and \$2.10 per cwt, respectively.

Members of niche-marketing cooperatives had the highest investment in their cooperatives on a per cwt basis. Members had \$4.78 of *equity* for each cwt of milk they marketed through their cooperatives. In con-

trast, bargaining-only cooperative members had just \$0.42 per cwt in member equity. Diversified and fluid-processing cooperatives' member equity was \$2.79 per cwt.

Balance Sheet by Size—While there was a \$10.80 range in total assets per cwt between the different operating types of cooperatives, the range was much narrower, just \$1.48, between the three size groups (table 5 and figure 3). Total assets employed per cwt of member milk ranged from \$7.03 for medium-size cooperatives to \$8.51 for the large cooperatives, and small cooperatives averaged \$7.40 per cwt. Total liabilities increased as size increased, ranging from \$3.53 for small cooperatives to \$6.21 for the large cooperatives. In contrast, total member equity decreased as size increased, dropping from \$3.86 per cwt of member for the small cooperatives down to \$2.30 per cwt for large cooperatives.

Operating Statement—Operating statements are presented on a basis of per cwt of total milk handled. This shows the revenues, expenses, and margins generated by the total volume of milk going

Table 5—Balance sheet per cwt of member milk, by size of cooperative, 2007

Item	Size Group		
	Small ^{1/}	Medium ^{2/}	Large ^{3/}
	<i>Dollars per cwt of member milk</i>		
Current assets	4.33	4.63	5.11
Net PP&E ^{4/} and other assets	1.35	2.21	3.30
Investments in other co-ops	<u>1.72</u>	<u>0.19</u>	<u>0.09</u>
Total assets	7.40	7.03	8.51
Current liabilities	3.06	2.89	4.51
Long-term liabilities	0.36	1.54	1.70
Liabilities not categorized	<u>0.11</u>	<u>0.00</u>	<u>0.00</u>
Total liabilities	3.53	4.43	6.21
Total equity	3.86	2.60	2.30
Total liabilities and equity	7.40	7.03	8.51
Member milk (million pounds)	582	8,661	133,621

Notes: Totals may not add due to rounding. CWT = hundredweight.

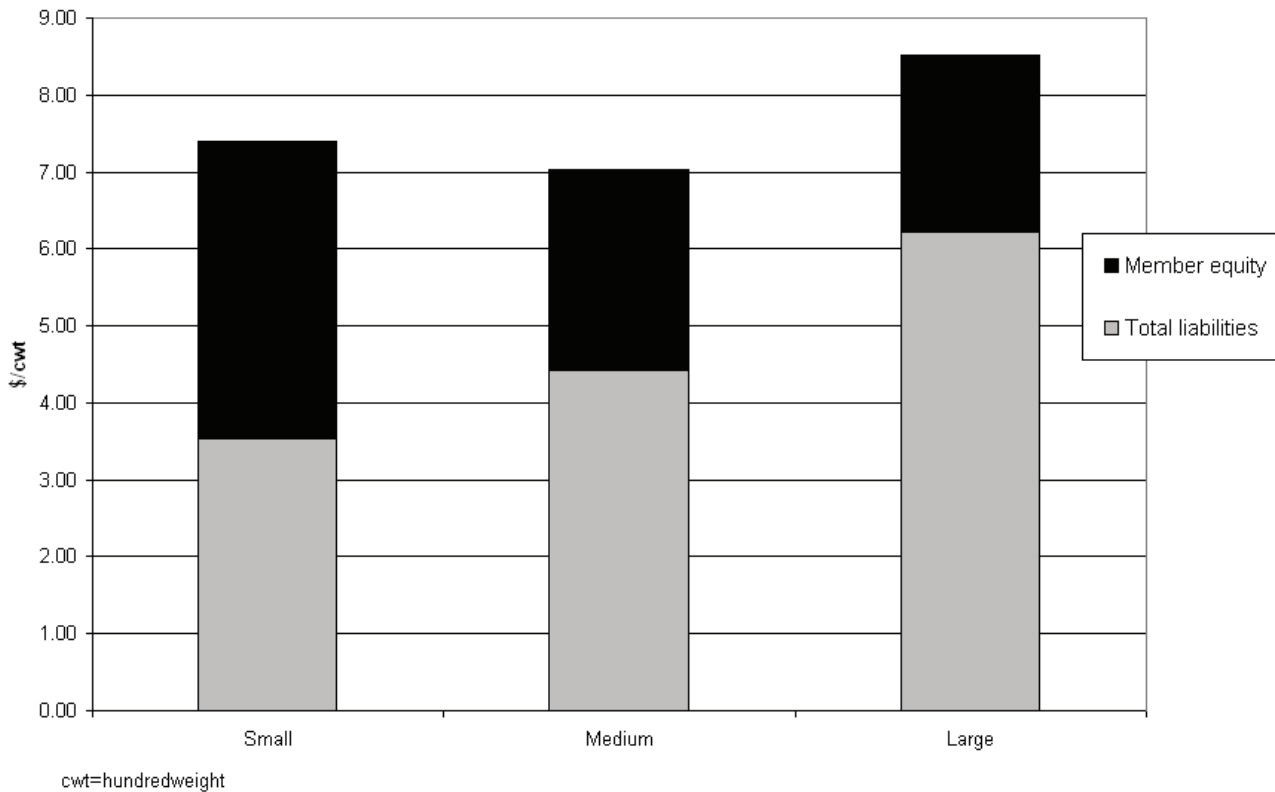
^{1/} Cooperatives that handled less than 50 million pounds of total milk

^{2/} Cooperatives that handled 50 million to 1 billion pounds of total milk

^{3/} Cooperatives that handled 1 billion pounds of total milk or more

^{4/} Property, plant, and equipment.

Fig. 3--U.S. dairy cooperative assets, by size, 2007



through the cooperatives.

Dairy cooperatives included in this study generated \$23.68 in *milk- and dairy-product sales* per cwt of milk handled in 2007 (table 6). *Supply and other sales* were the next largest item, \$3.13 per cwt. *Total sales and income* was \$27.03 per cwt handled by the cooperatives. After expenses of \$26.78 per cwt, dairy cooperatives realized *net margins before tax* of \$0.25 per cwt.

Operating Statement by Type—Milk- and dairy-product sales per cwt of total milk handled were lowest for bargaining-only cooperatives, \$18.40, and highest for niche-marketing cooperatives, \$48.22 (table 6). This may reflect the “value-added” focus of the niche-marketing cooperatives—where they aim to command higher prices by the uniqueness of their products. Conversely, bargaining-only cooperatives add little “value” to members' milk, focusing primarily on finding markets for it. Diversified and fluid-processing cooperatives, which sell a substantial portion of their milk at the first-handler level while also making some bulk and value-added products, had the second-highest dairy product sales, \$24.71 per cwt.

Diversified and fluid-processing cooperatives had markedly higher supply and other sales, \$3.70 per cwt, than the bargaining-only or niche-marketing cooperatives which had \$0.79 and \$0.00, respectively.

Similarly, *service receipts and other income* per cwt were highest for diversified and fluid-processing cooperatives—\$0.23, and much lower for the bargaining-only and niche-marketing cooperatives: \$0.08 and \$0.07, respectively. *Patronage refunds received* were \$0.01 for bargaining-only cooperatives and amounted to less than \$0.01 per cwt for niche-marketing and diversified and fluid-processing cooperatives.

Total sales and income varied by \$29.03 per cwt between the different types of cooperatives. Niche-marketing cooperatives had the highest total sales and income per cwt, \$48.30, followed by diversified and fluid-processing cooperatives at \$28.65. Bargaining-only cooperatives had the lowest total sales and income, \$19.27 per cwt.

Net margins before tax followed the same pattern—bargaining-only cooperatives had the smallest, \$0.05

Table 6—Dairy cooperatives' consolidated operating statement, per cwt of total milk handled, overall and by type, 2007

Item	All	Type of cooperative		
		Bargaining-only	Niche-marketing	Diversified & fluid-processing
<i>Dollars per cwt</i>				
Milk and dairy product sales	23.68	18.40	48.22	24.71
Supply and other sales	3.13	0.79	0.00	3.70
Service receipts and other income	0.20	0.08	0.07	0.23
Patronage refunds received	<u>0.01</u>	<u>0.01</u>	<u>0.00</u>	<u>0.00</u>
Total sales and income	27.03	19.27	48.30	28.65
Total cost and expenses ^{1/}	26.78	19.22	47.64	28.36
Net margins before tax	0.25	0.05	0.66	0.29
Milk volume (million pounds)	163,683	30,507	1,039	132,137

Notes: Totals may not add due to rounding. CWT = hundredweight.

^{1/} Includes non-recurring losses, cost of goods sold

per cwt, and niche-marketing cooperatives the largest, \$0.66 per cwt. Diversified and fluid-processing cooperatives had net margins of \$0.29 per cwt.

Operating Statement by Size—As seen with the balance sheets by type and by size, the structure of the operating statement varied among the different size groups (table 7). Milk and dairy product sales per cwt of total milk handled were lowest for the small cooper-

atives, \$21.08, and highest for the medium-size cooperatives, \$25.34. Small cooperatives also had the highest supply and other sales, \$7.54 per cwt, far exceeding those of medium-size cooperatives with the lowest, \$0.68 per cwt. Small cooperatives also showed the highest *service receipts and other income*, \$0.94 per cwt, and patronage refunds received, \$0.21 per cwt. As a result, small cooperatives had the highest total sales

Table 7—Consolidated operating statement per cwt of total milk handled, by size of cooperative, 2007

Item	Size Group		
	Small ^{1/}	Medium ^{2/}	Large ^{3/}
<i>Dollars per cwt</i>			
Milk and dairy product sales	21.08	25.34	23.59
Supply and other sales	7.54	0.68	3.26
Service receipts and other income	0.94	0.25	0.20
Patronage refunds received	<u>0.21</u>	<u>0.03</u>	<u>0.00</u>
Total sales and income	29.77	26.30	27.06
Total costs and expenses ^{4/}	29.36	25.87	26.82
Net margins before tax	0.42	0.43	0.24
Total milk handled (million pounds)	587	9,289	153,807

Notes: Totals may not add due to rounding. CWT = hundredweight.

^{1/} Cooperatives that handled less than 50 million pounds of milk

^{2/} Cooperatives that handled 50 million to 1 billion pounds of milk

^{3/} Cooperatives that handled 1 billion pounds of milk or more

^{4/} Includes non-recurring losses, cost of goods sold

and income, \$29.36 per cwt, and medium-size cooperatives, the lowest—\$25.87. The large cooperatives' milk and dairy product sales, \$23.59 per cwt, were between the small and medium-size cooperatives', as were the large cooperatives' supply and other sales, \$3.26 per cwt, and total sales and income, \$27.06.

Net margins before tax per cwt were similar for the small and medium-size cooperatives, \$0.42 and \$0.43, respectively. The large cooperatives' net margins before taxes of \$0.24 per cwt were the lowest.

Common-Sized Financial Profile

In the previous section, consolidated financial statements were common-sized on a per cwt basis by dividing the balance sheet and operating statement items by the volume of milk handled. This part follows the more conventional approach in using *total assets* (balance sheet) or *total sales and income* (operating statement) as the common denominator. This method facilitates comparison of different types and sizes of cooperatives, providing an additional means for an individual dairy cooperative to compare its financial structure with the profiled cooperatives.

Balance Sheet—The balance sheet elements are expressed as a percentage of total assets in table 8. Overall, *current assets* made up more than 60.4 percent of dairy cooperatives' total assets. *Net property, plant,*

and equipment (PPE) and other fixed assets constituted 38.4 percent. *Investments in other cooperatives* came to 1.3 percent of total assets. On the debt side, *total liabilities* came to 72.4 percent of total assets. *Current liabilities* were 52.3 percent of total assets, while *long-term liabilities* made up 20.0 percent. *Member equity* represented 27.6 percent of the total assets used by cooperatives to market member milk.

Balance Sheet by Type—There were differences in the financial structure of the dairy cooperatives depending upon their operating type. Bargaining-only cooperatives had the largest proportion of total assets represented by current assets, 81.5 percent, among the three types. Current assets made up 59.3 percent of the diversified and fluid processing assets, and 70.5 percent of total assets for the niche-marketing cooperatives. And accordingly, bargaining-only cooperatives had a lower rate of investment in PP&E and fixed assets—12.9 percent—than did the other types, reflecting their lack of facilities. In contrast, 39.6 percent of the diversified and fluid processing cooperatives' assets and 28.7 percent of the niche-marketing cooperatives' assets were made up of PP&E and fixed assets.

Investment in other cooperatives was just 5.6 percent of total assets for bargaining-only cooperatives, and around 1 percent of total assets for the niche marketing cooperatives (0.8 percent) and diversified and fluid processing cooperatives (1.1 percent). A dozen small and medium-size bargaining-only cooperatives reported that more than 25 percent of their assets were

Table 8—Common-sized balance sheet, overall and by type of dairy cooperative, 2007

Item	All	Bargaining-only	Niche-marketing	Diversified & fluid-proc.
		<i>Percent of total assets</i>		
Current assets	60.4	81.5	70.5	59.3
Net PP&E ^{1/} and other assets	38.4	12.9	28.7	39.6
Investment in other co-ops	<u>1.3</u>	<u>5.6</u>	<u>0.8</u>	<u>1.1</u>
Total assets	100.0	100.0	100.0	100.0
Current liabilities	52.3	72.1	47.5	51.5
Long-term liabilities	20.0	3.6	13.9	20.8
Liabilities not categorized	0.0	0.0	0.0	0.0
Total liabilities	72.4	75.6	61.9	72.4
Equity	27.6	24.4	38.1	27.6
Liabilities and equity	100.0	100.0	100.0	100.0

Note: Totals may not add due to rounding.

^{1/} Property, plant, and equipment.

investments in other cooperatives, while 75 percent of the bargaining only cooperatives had no investments in other cooperatives. The six diversified cooperatives that reported investments in other cooperatives all had less than 6 percent of total assets invested.

Similarly, current liabilities came to 72.1 percent of total assets for bargaining-only cooperatives. In contrast, current liabilities were 47.5 and 51.5 percent of total assets for niche-marketing and diversified and fluid processing cooperatives, respectively. Long-term liabilities (debt) were 3.6 percent of total assets for bargaining-only cooperatives. Long-term liabilities made up a larger portion of total assets for the diversified and fluid-processing and niche marketing cooperatives, 13.9 and 20.8 percent, respectively, reflecting their greater investment in plants and facilities and reliance on borrowed capital.

Total liabilities represented a majority of total assets—from 61.9 percent for niche-marketing cooperatives to 75.6 percent for bargaining-only cooperatives. Niche-marketing cooperatives had the largest portion of total assets supported by member equity—38.1 percent. For bargaining only cooperatives, member equity amounted to 24.4 percent, while member equity was 27.6 percent of total assets for diversified and fluid-processing cooperatives. It should be noted, however, that to the extent that most of the bargaining-only cooperatives' current liabilities are for payments for members' milk, bargaining-only members' claims on assets may be higher than what the equity-to-assets ratio indicates.

Balance Sheet by Size—Balance sheet items expressed as a percentage of total assets are shown by size of dairy cooperative in table 9. The structure of the balance sheet varied less among the different size groups than among the different types. Current assets made up a similar proportion of total assets for small and large cooperatives at 58.5 and 60.1 percent, respectively. They made up 65.9 percent of the medium-size cooperatives' total assets. However, the proportions of property, plant, and equipment, and other assets were more similar for medium-size and large cooperatives—31.5 and 38.8 percent, respectively—than for the small cooperatives, where they made up just 18.2 percent. Small cooperatives reported the highest level of investments in other cooperatives, 23.3 percent, while investments came to just 2.7 percent of total assets for medium-size cooperatives and 1.1 percent for large cooperatives.

Total liabilities made up a larger proportion of total assets as the size group increased. They were a majority of the total assets for medium-size and large

cooperatives—63.0 and 73.0 percent, respectively—but were 47.8 percent of the small cooperatives' total assets. The opposite pattern was seen for total member equity, ranging from 27.0 percent of total assets for the large cooperatives to 52.2 percent for the small ones.

Operating Statement—The operating statement items for all dairy cooperatives by type are expressed as a percent of total sales and income in table 10. As might be expected, milk and dairy product sales accounted for the bulk of total sales and income at 87.6 percent overall. Net margins to income, which reflect profit margins before paying income taxes, came to 0.9 percent in 2007.

Operating Statement by Type—Just about all—99.8 percent—of the niche-marketing cooperatives' income came from milk and dairy product sales. Diversified and fluid-processing cooperatives' amounted to less: 86.3 percent. Milk and dairy product sales were a smaller proportion of total sales and income for diversified and fluid-processing cooperatives because their supply and other sales came to 12.9 percent of total sales and income, whereas supply and other sales were just 4.1 percent of total sales for bargaining-only cooperatives and almost nonexistent for niche-marketing cooperatives.

Niche-marketing cooperatives realized the largest net margins-to-sales ratio: 1.4 percent of total sales and income. Diversified and fluid-processing cooperatives' net margins came to 1.0 percent of total sales, while bargaining-only cooperatives generated the lowest net margins-to-sales ratio: 0.3 percent of total sales and income.

Operating Statement by Size—Operating statements expressed as a percent of total sales and income according to size of cooperative are shown in table 11. Milk and dairy product sales made up 96.4 percent of total sales and income for medium-size cooperatives. Small cooperatives' milk and dairy product sales accounted for just 70.8 percent of total sales and income, while supply sales made up 25.3 percent. Large cooperatives' milk and dairy product sales amounted to 87.2 percent, with supply and other sales representing 12.1 percent of total sales and income.

Medium-size cooperatives had the largest net margins-to-sales ratio—1.6 percent—followed closely by the small cooperatives, which had 1.4 percent for 2007. Large cooperatives' net margins before taxes came to 0.9 percent of total sales and income, a bit lower than the smaller size groups' returns.

Table 9—Common-sized balance sheet, by size of dairy cooperative, 2007

Item	Size Group		
	Small ^{1/}	Medium ^{2/}	Large ^{3/}
	<i>Percent of total assets</i>		
Current assets	58.5	65.9	60.1
Net PP&E ^{4/} and other assets	18.2	31.5	38.8
Investments in other co-ops	<u>23.3</u>	<u>2.7</u>	<u>1.1</u>
Total assets	100.0	100.0	100.0
Current liabilities	41.4	41.1	53.0
Long-term liabilities	4.9	22.0	20.0
Liabilities not categorized	<u>1.4</u>	<u>0.0</u>	<u>0.0</u>
Total liabilities	47.8	63.0	73.0
Equity	52.2	37.0	27.0
Liabilities and equity	100.0	100.0	100.0

Note: Totals may not add due to rounding.

^{1/} Cooperatives that handled less than 50 million pounds of milk

^{2/} Cooperatives that handled 50 million to 1 billion pounds of milk

^{3/} Cooperatives that handled 1 billion pounds of milk or more

^{4/} Property, plant, and equipment. Includes assets not categorized.

Table 10—Common-sized operating statement, overall and by type of dairy cooperative, 2007

Item	All	Type of Dairy Cooperative		
		Bargaining-only	Niche-marketing	Diversified & fluid-proc.
	<i>Percent of total sales and income</i>			
Milk and dairy product sales	87.6	95.5	99.8	86.3
Supply and other sales	11.6	4.1	0.0	12.9
Service receipts and other income ^{1/}	0.7	0.4	0.2	0.8
Patronage refunds received	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total sales and income	100.0	100.0	100.0	100.0
Total costs and expenses ^{2/}	99.1	99.7	98.6	99.0
Net margins before tax	0.9	0.3	1.4	1.0

Note: Totals may not add due to rounding.

^{1/} Includes non-recurring gains

^{2/} Includes non-recurring losses, cost of good sold

Equity

Table 12 shows different forms of equity used by dairy cooperatives. Equity represents the members' ownership interest in the total assets of their cooperative. Equities can be grouped into four categories: common stock, preferred stock, allocated equities, and retained earnings. Common stock is usually issued for

witnessing membership and carries minimal nominal value. Preferred stock can be issued to raise capital (but some cooperatives issue it to members for witnessing retained patronage refunds or for witnessing members' additional investment in the cooperative). Allocated equities are retained patronage refunds and capital retains. Retained earnings are earnings largely

Table 11—Common-sized operating statement, by size of dairy cooperative, 2007

Item	Size Group		
	Small ^{1/}	Medium ^{2/}	Large ^{3/}
	<i>Percent of total sales and income</i>		
Milk and dairy product sales	70.8	96.4	87.2
Supply and other sales	25.3	2.6	12.1
Service receipts and other income ^{4/}	3.2	0.9	0.7
Patronage refunds received	<u>0.7</u>	<u>0.1</u>	<u>0.0</u>
Total sales and income	100.0	100.0	100.0
Total costs and expenses ^{5/}	98.6	98.4	99.1
Net margins before tax	1.4	1.6	0.9

Note: Totals may not add due to rounding.

^{1/} Cooperatives that handled less than 50 million pounds of milk

^{2/} Cooperatives that handled 50 million to 1 billion pounds of milk

^{3/} Cooperatives that handled 1 billion pounds of milk or more

^{4/} Includes non-recurring gains

^{5/} Includes non-recurring losses, cost of good sold

Table 12—Forms of equity used by dairy cooperatives, by type and by size, 2007

Item	All	Bargaining- only	Niche- marketing	Diversified & fluid	Small	Medium	Large
Common stock	37.2	31.7	55.6	44.0	40.0	42.1	26.9
Preferred stock	13.8	13.3	22.2	12.0	20.0	10.5	11.5
Allocated equity	89.4	85.0	88.9	100.0	90.0	86.8	92.3
Retained earnings	53.2	38.3	77.8	80.0	46.7	50.0	65.4

^{1/} Percent is the number of cooperatives having the form of equity divided by number of cooperatives for each type and size of cooperative

derived from non-member businesses and generally are unallocated (not unassigned) to individual member equity accounts.

Most—89.4 percent—of the cooperatives reported having allocated equity, while 53.2 percent reported holding retained earnings in 2007. Those not reporting allocated member equity were typically bargaining-only cooperatives, where for the most part all of the cooperatives' assets likely represented payments owed for milk sold or to be paid for member milk. Common stock was issued by 37.2 percent of the cooperatives, and even fewer—13.8 percent—had preferred stock.

All of the diversified and fluid-processing cooperatives had allocated equity, and 80.0 percent reported retained earnings in 2007. Similarly, most of the niche-marketing cooperatives used allocated equity (88.9 percent) and nearly as many (77.8 percent) had retained earnings. Niche-marketing cooperatives were

more likely to have common stock—55.6 percent—compared to bargaining-only and diversified and fluid-processing cooperatives: 31.7 and 44.0 percent, respectively. Niche-marketing cooperatives were also more likely to have preferred stock than other types; even so, it was a small proportion: 22.2 percent. While most bargaining-only cooperatives—85.0 percent—had allocated equity, just 38.3 percent had retained earnings. Of the three types of dairy cooperatives, bargaining-only cooperatives were least likely to have retained earnings.

Common stock is generally issued by dairy cooperatives to designate voting rights and only carries a token value. Thus, it represented only 0.1 percent of total equity in 2007 (table 13). In contrast, preferred stock typically carries no voting rights, but often has a set dividend, priority over common stock, and may even be held by non-members. Preferred stock

Table 13—Dairy cooperative equity and proportion, 2007

Item	Total (\$1,000)	Percent of total equity
Common stock	1,857	0.1
Preferred stock	232,595	7.0
Allocated equity	2,727,249	82.1
Retained earnings	358,473	10.8
Total equity	3,320,174	100.0

amounted to 7.0 percent of total cooperative equity in 2007. Allocated equity made up the bulk of member equity—82.1 percent of total equity—while retained earnings represented 10.8 percent in 2007.

Ratios

The relationships between various items in the balance sheet and operating statement can be used to analyze comparative dairy cooperative performance. The ratios are shown overall and by type in table 14. Those calculated according to size are presented in table 15.

Liquidity—The ability to meet current obligations can be evaluated by calculating the cooperatives' current ratio—current assets divided by current liabilities. Overall, dairy cooperatives had

\$1.15 in current assets for each \$1 of current liabilities. Diversified and fluid-processing cooperatives also showed a current ratio of 1.15. Bargaining-only cooperatives had \$1.13 to meet each \$1 of current obligations. In contrast, niche-marketing cooperatives had \$1.48 in current assets for every \$1 of current liabilities. Liquidity according to cooperative size was more variable—ranging from 1.13 for the large cooperatives to 1.60 for the medium-size cooperatives.

Another measure of short-term solvency is current liabilities divided by total assets. For all cooperatives, the ratio was 0.52, indicating that cooperatives had 52 cents of current liabilities for each \$1 of assets held. Diversified and fluid processing cooperatives had that same level of current liabilities in relation to total assets. Bargaining-only cooperatives had a larger ratio of current liabilities to total assets: 0.72. However, niche-marketing cooperatives had only \$0.47 in current liabilities for each \$1 of assets. Current liabilities

Table 14—Financial ratios, overall and by type of dairy cooperative, 2007

Item	All	Bargaining- only	Niche- marketing	Diversified & fluid-processing
<i>Ratio</i>				
Capitalization				
Current ratio (working capital)	1.15	1.13	1.48	1.15
Current liabilities to total assets	.52	.72	.47	.52
Long-term liabilities to equity	.73	.15	.36	.75
Total liabilities to total assets	.72	.76	.62	.72
Equity to total assets	.28	.24	.38	.28
Equity to fixed assets and investments	.70	1.31	1.29	.68
<i>Ratio</i>				
Return on investment				
Return ^{1/} on equity	12.2	12.8	13.8	12.1
Return ^{1/} on total assets	3.4	3.1	5.3	3.4

^{1/} Net margins before taxes used in calculation.

Table 15—Financial ratios, by size of dairy cooperative, 2007

Item	Size Group		
	Small ^{1/}	Medium ^{2/}	Large ^{3/}
	<i>Ratio</i>		
Capitalization			
Current ratio (working capital)	1.41	1.60	1.13
Current liabilities to total assets	.41	.41	.53
Long-term liabilities to equity	.09	.59	.74
Total liabilities to total assets	.48	.63	.73
Equity to total assets	.52	.37	.27
Equity to fixed assets and investments	1.26	1.08	.68
	<i>Percent</i>		
Return on investment			
Return ^{4/} on equity	10.9	17.6	11.8
Return ^{4/} on total assets	5.7	6.5	3.2

^{1/} Cooperatives that handled less than 50 million pounds of milk
^{2/} Cooperatives that handled 50 million to 1 billion pounds of milk
^{3/} Cooperatives that handled 1 billion pounds of milk or more
^{4/} Net margins before taxes used in calculation.

ranged from \$0.41 per \$1.00 of total assets for small and medium-size cooperatives to \$0.53 for the large cooperatives.

Long-Term Solvency—Longer term measures of financial health compare obligations with assets or equity. *Total long-term liabilities divided by member equity* shows the level at which members are providing the cooperative's risk capital. Overall, long-term liabilities came to 73 percent of total equity in 2007. Relative to the other types, diversified and fluid-processing cooperatives had a markedly higher level of long-term liabilities (\$0.75 of long-term liabilities for each \$1 of member equity). Bargaining-only cooperatives reported the lowest ratio: \$0.15 of long-term liabilities for each \$1 of equity. Niche-marketing cooperatives' long-term liabilities-to-equity ratio was 0.36, between the other two types. The ratio improved as the size group decreased—ranging from 0.74 for the large cooperatives to 0.09 for the small cooperatives.

Total liabilities divided by total assets indicates the portion of total assets financed by long- and short-term creditors. Overall, dairy cooperatives had 72 cents of total liabilities (which may include milk payments owed to members) for each \$1 of total assets. In other words, members supplied 28 cents of each \$1 of capital employed by the cooperatives. This ratio was similar for the diversified and fluid-processing and the

bargaining-only cooperatives: 0.72 and 0.76, respectively. Niche-marketing cooperatives had \$0.62 of total liabilities and \$0.38 of equity per \$1 of assets.

The level of liabilities in relation to assets showed greater variation according to size than according to type. Small cooperatives used the most member equity in relation to total assets: 52 cents per \$1 in assets. In contrast, large cooperatives were financed by just 27 cents of member equity for each \$1 they had in assets.

Fixed assets and investments are the most permanent assets owned by cooperatives. The ratio of member equity to fixed assets and investments indicates the degree to which these permanent assets are financed by the most permanent capital, member's equity. Overall, cooperatives had 70 cents in equity for each \$1 invested in fixed assets and investments. Bargaining-only and niche-marketing cooperatives had ratios of 1.31 and 1.29, respectively, indicating an ability to finance all of their fixed assets and investments with member capital. For diversified and fluid-processing cooperatives, fixed assets and investments were supported by capital from outside sources, as these cooperatives had just \$0.68 in member equity for each \$1 of fixed assets and investments.

The ratio of equity to fixed assets and investments dropped markedly as size category increased. The ratio ranged from 1.26 for small cooperatives to 0.68 for large cooperatives. Medium-size cooperatives had a ratio of 1.08.

Return on Investment—Return to members', lenders', or other's investment in a cooperative can be measured in several ways. The ratios calculated here indicate a cooperative's success in providing a financial return on member investment. In a dairy cooperative, "profit" may be an elusive term, and depends largely on the cooperative's pricing policy. Profits may be lower if a cooperative's board decides to pay higher milk prices, premiums, etc., but in that case, the membership may benefit from the relatively higher prices received for their milk.

Return on equity measures profitability relative to member investment after all claims on those returns are accounted for. Net margin divided by total member equity was 12.2 percent for dairy cooperatives overall in 2007. Ideally, return to member equity (or in other words, the opportunity cost of investing in the cooperative) should equal or exceed what members could earn if the capital were invested elsewhere. (Insufficient data was obtained to calculate the net margin after taxes.) Return on equity ranged from 12.1 percent for the diversified and fluid-processing cooperatives to 13.8 percent for niche-marketing cooperatives in 2007.

By size, return on equity ranged from 10.9 percent for small cooperatives to 17.6 percent for the medium-size cooperatives. Large cooperatives averaged 11.8 percent return on member equity invested in the cooperative for 2007.

Return on total assets (net margins before taxes divided by total assets) measures the effectiveness of the cooperative in employing its assets to generate profits. It averaged 3.4 percent for all dairy coopera-

tives. Niche-marketing cooperatives generated the highest return on assets—5.3 percent—followed by diversified and fluid-processing cooperatives: 3.4 percent. Bargaining-only cooperatives showed a 3.1-percent return on the assets employed in marketing milk. Medium-size cooperatives showed the highest return, 6.5 percent of total assets. Small cooperatives averaged the next-largest return on total assets—5.7 percent—while the large cooperatives' net margins were just 3.2 percent of total assets in 2007.

Average

Computing the average (per cooperative) financial statement for each type of cooperative highlights the differences in magnitude between the various types (table 16 and appendix table 3). It is readily apparent that diversified and fluid-processing cooperatives were the largest cooperatives on average, in terms of total assets, milk and dairy product sales, net margins, and volume of milk handled. On average, a diversified and fluid-processing cooperative employed \$455.6 million in assets in 2007. That is more than 50 times the assets of bargaining-only cooperatives on average, which were \$8.3 million per cooperative—the lowest of the operating types. Niche-marketing cooperatives were also relatively small in terms of assets—\$14.4 million per cooperative. However, they handled the smallest net volume of milk, 115 million pounds.

Diversified and fluid-processing cooperatives' milk and dairy product sales averaged \$1.3 billion per cooperative in 2007, far exceeding those of the other

Table 16—Average financial profile of dairy cooperatives, overall and by type, 2007

Item	All	Bargaining-only	Niche-marketing	Diversified & fluid-processing
<i>Million dollars per cooperative</i>				
Total assets	127.9	8.3	14.4	455.6
Total liabilities	92.6	6.3	8.9	329.6
Total equity	35.3	2.0	5.5	125.9
Milk and dairy-product sales	412.4	93.5	55.7	1,306.1
Net margins before tax	4.3	0.3	0.8	15.3
<i>(million pounds)</i>				
Milk handled per cooperative	1,741	508	115	5,285

Note: Totals may not add due to rounding.

types. Accordingly, they handled the largest volume of milk, averaging 5.2 billion pounds per cooperative. Bargaining-only cooperatives had the next largest milk and dairy product sales, \$93.5 million per cooperative. Niche-marketing cooperatives had the lowest average milk and dairy product sales: \$55.7 million per cooperative.

Diversified and fluid-processing cooperatives had the highest average net margins at \$15.3 million per cooperative. Niche-marketing and bargaining-only cooperatives had far lower net margins before tax on a per cooperative basis: \$300,000 and \$800,000 per cooperative, respectively.

Comparison to 1997 and 2002

Comparison can be made with the results from the 2002 report (table 17 and appendix tables 4 and 5). However, the categories have changed because the manufacturing/processing cooperatives' operations have changed over time and cooperatives have consolidated. In 2002 there was a category identified as "commodity manufacturing," which included those cooperatives that made bulk dairy products such as butter, powder, and cheese. Some cooperatives that were categorized as "niche" have expanded their operations and now fall in the "diversified" group. Finally, it must be kept in mind that there were differences in the sets of cooperatives included in each study. For example, twice as many niche-marketing cooperatives (called "branded cheese" in 1997) provided financial data in 2007 and 1997 than in 2002. And, there was a fourth group of cooperatives, "commodity manufacturing," in 2002 and 1997. To the extent that existing cooperatives' operating practices changed between survey years, they would have been reclassified accordingly.

Total assets per cwt of member milk was higher in each successive survey year, from \$5.25 in 1997 to \$8.41 in 2007 (figure 4). Total liabilities increased similarly: from \$3.18 in 1997 to \$6.09 in 2007. Member equity per cwt was fairly similar between the 3 years, ranging from \$2.07 in 1997 to \$2.32 in 2007. As a result, total liabilities made up successively larger proportions of total assets from 1997 to 2007.

Milk and dairy product sales at \$23.68 per cwt of total milk handled were considerably higher in 2007 as compared to 2002 and 1997—\$15.73 and \$18.75, respectively—a result of record-high milk prices in 2007 relative to 2002 and 1997 (fig. 5). Total sales and income followed the same pattern. Net margins before tax,

however, remained fairly consistent between the 3 survey years, ranging from \$0.21 per cwt in 2002 to \$0.28 per cwt in 1997.

Comparisons between the 3 survey years by operating type of cooperative are also shown in table 17. All three types used more assets per cwt of member milk in 2007 than in 1997 or 2002. The same pattern was seen for total liabilities. However, in contrast to bargaining-only cooperatives, niche-marketing cooperatives used less equity per cwt of member milk in 2007 than in 2002. Diversified and fluid processing cooperatives used about the same amount of equity per cwt all 3 years: ranging from \$2.78 in 1997 to \$2.80 in 2002.

For all three types of cooperatives, milk and dairy product sales and total sales and income were highest in 2007, compared to 2002 and 1997. However, net margins per cwt of milk handled were highest in 1997 and lowest in 2002 for all the operating types.

Table 17—Comparison of financial profile dairy cooperatives per cwt, overall and by type, 1997, 2002, 2007

Item	All	Bargaining- only	Niche- marketing ^{1/}	Diversified & fluid-processing
<i>\$ per cwt of member milk</i>				
<u>Total assets</u>				
2007	8.41	1.74	12.54	10.09
2002	6.22	1.02	10.03	8.44
1997	5.25	1.21	10.07	6.96
<u>Total liabilities</u>				
2007	6.09	1.31	7.76	7.30
2002	4.13	0.76	4.23	5.64
1997	3.18	0.84	5.60	4.18
<u>Equity</u>				
2007	2.32	0.42	4.78	2.79
2002	2.10	0.27	5.80	2.80
1997	2.07	0.37	4.48	2.78
<u>Member milk (million pounds)</u>				
2007	142,865	28,902	1,034	112,929
2002	134,451	31,772	344	89,800
1997	112,228	19,538	1,263	70,093
<i>\$ per cwt of total milk handled</i>				
<u>Milk & dairy-product sales</u>				
2007	23.68	18.40	48.22	24.71
2002	15.73	12.84	18.30	16.69
1997	18.75	14.63	23.16	21.09
<u>Total sales and income</u>				
2007	27.03	19.27	48.30	28.65
2002	18.27	13.75	21.94	19.96
1997	21.25	16.71	24.04	24.36
<u>Net margins before tax</u>				
2007	0.25	0.05	0.66	0.29
2002	0.21	0.04	0.32	0.27
1997	0.28	0.06	0.87	0.34
<u>Number of cooperatives</u>				
2007	94	60	9	25
2002	80	50	4	16
1997	88	45	9	20
<u>Total milk handled (million pounds)</u>				
2007	163,683	30,507	1,039	132,137
2002	154,806	33,856	344	106,748
1997	121,157	21,443	1,420	75,495

Note: Totals may not add due to rounding. Not shown: commodity manufacturing cooperatives' 1997 and 2002 data.

^{1/} In 1997 "niche-marketing" cooperatives were identified as "branded cheese" cooperatives.

Fig. 4--U.S. dairy cooperative assets per cwt, 1997, 2002 and 2007

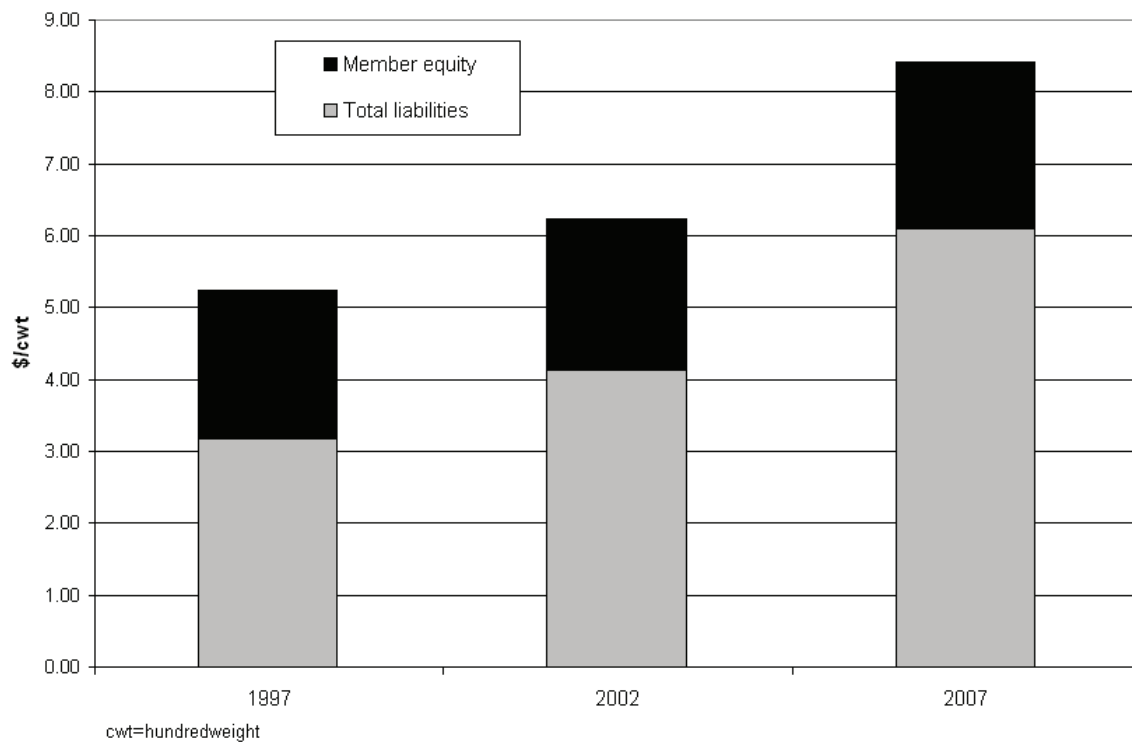
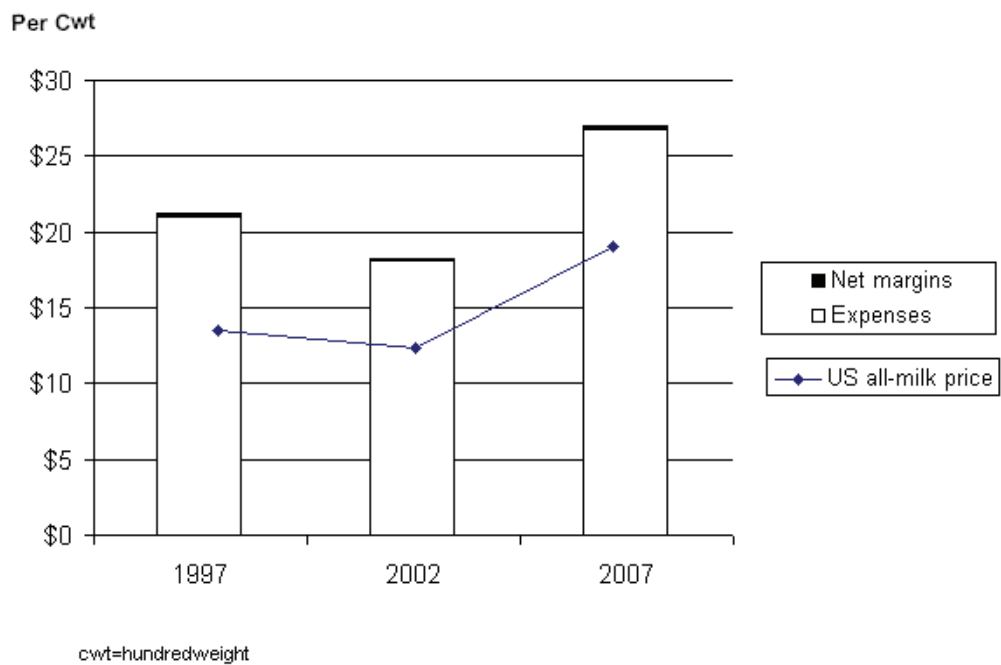


Fig. 5--US dairy cooperative total sales per cwt, 1997, 2002 and 2007



Appendix table 1—Consolidated financial statements overall and by type of dairy cooperative, 2007

Item	Type of cooperative			
	All financial profile dairy cooperatives	Bargaining-only	Niche-marketing	Diversified & fluid-processing
Balance sheet			\$1,000	
Current assets	7,258,423	408,550	91,383	6,758,489
Net PP&E ^{1/} and other assets	4,610,329	64,700	37,248	4,508,382
Investment in other co-ops	<u>152,067</u>	<u>28,288</u>	<u>1,021</u>	<u>122,757</u>
Total assets	12,020,819	501,538	129,653	11,389,628
Current liabilities	6,290,839	361,499	61,568	5,867,772
Long-term liabilities	2,409,129	17,814	18,033	2,373,282
Liabilities not categorized	<u>677</u>	<u>55</u>	<u>622</u>	<u>0</u>
Total liabilities	8,700,645	379,368	80,223	8,241,054
Equity	3,320,174	122,170	49,430	3,148,574
Liabilities and equity	12,020,819	501,538	129,653	11,389,628
Sales and Income				
Milk & dairy-product sales	38,765,715	5,612,560	501,020	32,652,135
Supply and other sales	5,128,272	240,741	2	4,887,529
Service receipts & other income ^{2/}	334,613	24,211	757	309,645
Patronage refunds received	<u>8,377</u>	<u>2,460</u>	<u>10</u>	<u>5,907</u>
Total sales and income	44,236,977	5,879,972	501,789	37,855,216
Total costs and expenses ^{4/}	43,832,687	5,864,282	494,967	37,473,439
Net margins before tax	404,290	15,690	6,822	381,777
Number of cooperatives	94	60	9	25
Milk handled (million pounds) ^{3/}	145,936	29,139	1,039	115,758

Note: Totals may not add due to rounding.

^{1/} Property, plant, and equipment.

^{2/} Includes non-recurring gains.

^{3/} Total milk volume handled by cooperatives, net of intercooperative transfers.

^{4/} Includes non-recurring losses, cost of goods sold.

Appendix table 2—Consolidated financial statements, by size of dairy cooperative, 2007

Item	Size Group		
	Small ^{1/}	Medium ^{2/}	Large ^{3/}
Balance sheet		\$1,000	
Current assets	25,192	401,100	6,832,131
Net PP&E ^{4/} and other assets	7,835	191,603	4,410,891
Investment in other co-ops	<u>10,031</u>	<u>16,201</u>	<u>125,835</u>
Total assets	43,058	608,904	11,368,857
Current liabilities	17,822	250,012	6,023,005
Long-term liabilities	<u>2,121</u>	<u>133,665</u>	<u>2,273,343</u>
Total liabilities	20,565	383,677	8,296,403
Total equity	22,493	225,226	3,072,454
Liabilities and equity	43,058	608,904	11,368,857
Sales and Income			
Milk and dairy-product sales	123,755	2,353,959	36,288,001
Supply and other sales	44,255	63,474	5,020,543
Service receipts and other income	5,507	23,022	306,084
Patronage refunds	<u>1,261</u>	<u>2,532</u>	<u>4,584</u>
Total sales and income	174,778	2,442,987	41,619,212
Total costs and expenses	172,332	2,403,281	41,257,075
Net margins after tax	2,446	39,706	362,137
Number of cooperatives	30	38	26
Milk handled (million lbs) ^{5/}	587	9,225	136,124

Note: Totals may not add due to rounding.

^{1/} Cooperatives that handled less than 50 million pounds of milk

^{2/} Cooperatives that handled 50 million to 1 billion pounds of milk

^{3/} Cooperatives that handled 1 billion pounds of milk or more

^{4/} Property, plant, and equipment.

^{5/} Volume of milk handled by cooperative, net of intercooperative transfers.

Appendix table 3—Average financial statements of dairy cooperatives, by type, 2007

Item	Type of cooperative			
	All financial profile dairy cooperatives	Bargaining- only	Niche- marketing	Diversified & fluid-processing
<i>\$1,000 per cooperative</i>				
Balance sheet				
Current assets	77,217	6,809	10,154	270,340
Net PP&E ^{1/} and other assets	49,046	1,078	4,139	180,335
Investment in other co-ops	<u>1,618</u>	<u>471</u>	<u>113</u>	<u>4,910</u>
Total assets	127,881	8,359	14,406	455,585
Current liabilities	66,924	6,025	6,841	234,711
Long-term liabilities	25,629	297	2,004	94,931
Liabilities not categorized	<u>7</u>	<u>1</u>	<u>69</u>	<u>0</u>
Total liabilities	92,560	6,323	8,914	329,642
Total equity	35,321	2,036	5,492	125,943
Liabilities and equity	127,881	8,359	14,406	455,585
Sales and Income				
Milk and dairy-product sales	412,401	93,543	55,669	1,306,085
Supply and other sales	54,556	4,012	0	195,501
Service receipts and other income	3,560	404	84	12,386
Patronage refunds received	<u>89</u>	<u>41</u>	<u>1</u>	<u>236</u>
Total sales and income	470,606	98,000	55,754	1,514,209
Total costs and expenses	466,305	97,738	54,996	1,498,938
Net margins before tax	4,301	262	758	15,271
Milk handled per cooperative (million pounds) ^{2/}	1,741	508	115	5,285

Note: Totals may not add due to rounding.

^{1/} Property, plant, and equipment.

^{2/} Average milk volume handled per cooperative.

Appendix table 4—Consolidated financial statements by type of dairy cooperative, 2002

Item	Type of cooperative				
	All financial profile dairy cooperatives	Bargaining-only	Commodity-manufacturing	Niche-marketing	Diversified & fluid-processing
Balance sheet			\$1,000		
Current assets	3,778,832	242,467	225,550	8,605	3,302,211
Net PP&E ^{1/} and other assets	3,903,003	64,153	193,275	23,033	3,622,543
Investment in other co-ops	<u>683,622</u>	<u>18,402</u>	<u>8,252</u>	<u>2,858</u>	<u>654,109</u>
Total assets	8,365,457	325,022	427,077	34,496	7,578,863
Current liabilities	3,210,600	220,658	173,629	6,257	2,810,056
Long-term liabilities	<u>2,335,951</u>	<u>19,366</u>	<u>52,878</u>	<u>8,278</u>	<u>2,255,429</u>
Total liabilities	5,546,551	240,024	226,507	14,535	5,065,485
Equity	2,818,906	84,998	200,570	19,961	2,513,378
Liabilities and equity	8,365,457	325,022	427,077	34,496	7,578,863
Sales and Income					
Milk & dairy-product sales	24,358,409	4,347,010	2,128,958	62,956	17,819,484
Supply and other sales	3,397,319	229,490	86,090	11,827	3,069,915
Service receipts & other income	475,269	76,631	33,046	449	365,142
Patronage refunds received	<u>53,881</u>	<u>1,983</u>	<u>3,065</u>	<u>234</u>	<u>48,598</u>
Total sales and income	28,284,878	4,655,114	2,251,159	75,466	21,303,139
Total costs and expenses	27,954,774	4,640,474	2,230,012	74,376	21,009,912
Net margins before tax	330,104	14,640	21,147	1,090	293,227
Number of cooperatives	80	50	10	4	16
Milk handled (million pounds) ^{2/}	139,595	32,200	12,855	344	94,196

Note: Totals may not add due to rounding.

^{1/} Property, plant, and equipment.

^{2/} Total milk volume handled by cooperatives, net of intercooperative transfers.

Appendix table 5—Consolidated financial statements by type of dairy cooperative, 1997

Item	Type of cooperative				
	All financial profile dairy cooperatives	Bargaining-only	Commodity-manufacturing	Branded-cheese	Diversified & fluid-processing
	<i>\$1,000</i>				
Balance sheet					
Current assets	3,245,673	178,222	392,410	83,735	2,591,306
Net PP&E ^{1/}	2,012,928	33,014	236,090	38,631	1,705,193
Invest. in other co-ops	636,507	25,055	24,355	4,843	582,254
Total assets	5,895,107	236,291	652,855	127,209	4,878,753
Current liabilities	2,536,557	156,075	323,281	59,251	1,997,950
Long-term liabilities	1,029,960	7,231	76,093	11,432	935,204
Total liabilities	3,566,517	163,306	399,374	70,683	2,933,154
Equity	2,328,590	72,985	253,481	56,526	1,945,599
Liabilities and equity	5,895,107	236,291	652,855	127,209	4,878,753
	<i>Million dollars</i>				
Sales and Income					
Milk & dairy-product sales	22,718.9	3,137.7	3,367.6	292.9	15,920.6
Supply and other sales	2,716.2	387.5	35.3	9.8	2,283.5
Service receipts & other inc.	232.7	56.3	56.1	0.9	119.5
Patronage refunds received	<u>74.2</u>	<u>2.2</u>	<u>5.8</u>	<u>0.4</u>	<u>65.8</u>
Total sales and income	25,741.9	3,583.7	3,464.8	304.0	18,389.4
Total costs and expenses	25,398.6	3,571.3	3,404.9	291.6	18,130.9
Net margins before tax	343.3	12.4	59.9	12.4	258.5
Number of cooperatives	88	45	14	9	20
Milk handled (million pounds) ^{2/}	114,432	19,632	21,909	1,265	71,627

Note: Totals may not add due to rounding.

^{1/} Property, plant, and equipment.

^{2/} Total milk volume handled by cooperatives, net of intercooperative transfers.



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