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Local Farm Supply, Marketing Cooperatives Financial Trends: Changes in the 1990s



Abstract

This report analyzes the balance sheets and income statements of 208 local farm supply and marketing cooperatives, comparing information from 1991 through 1997. The data represent four cooperative sizes and types. Common-size income statements and balance sheets are used to compare and contrast these cooperatives. Charts are used to look for trends in major balance sheet and income statement items and financial ratios.

Key words: Cooperatives, balance sheet, income statement, farm supply, marketing, sales, and financial ratios.

Local Farm Supply, Marketing Cooperatives Financial Trends: Changes in the 1990s

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Preface

This report studied the financial statements of 208 local cooperatives, comparing 1991 through **1997**. Trends of major balance sheet and income statement items as well as financial ratios are presented for four cooperative sizes and types. The information helps cooperative managers and boards of directors compare their cooperatives' historical performance with representative cooperative data.

The author thanks the cooperatives that provided their financial statements to Rural Business-Cooperative Service (RBS) and made this report possible. Special thanks to staffers Beverly L. **Rotan** and Roger A. Wissman for reviewing the initial draft.

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Highlights

Financial statements of 208 local farm supply and marketing cooperatives were used to compare trends from 1991 through 1997. Cooperatives were divided into four groups based on their mix of net sales between supplies sold and farm products marketed. They were also divided into four size categories, based on their total sales volume.

Average net income increased 8 percent per year. In 1997, average net sales for all cooperatives studied was \$12.5 million, slightly less than the \$12.6 million of 1996. Forty percent were small-sized cooperatives with sales of less than \$2.5 million.

Cooperatives were not only important to their member/patrons, but also were an important asset to the rural communities in which they operate. They were often one of the community's larger employers, averaging 22 full-time and 12 part-time employees and an average annual payroll of nearly \$800,000.

Petroleum products and fertilizer were the primary farm supplies sold. Farm supply sales provided about 57 percent of the operating income for these cooperatives. Average total assets grew about 9 percent per year, much of it was fueled by large increases in grains and **oilseeds** inventories, mainly in 1995 and 1996. Asset growth was funded by liabilities that grew more than 12 percent per year and an equity level of 7 percent per year. Borrowings increased 18 percent per year.

Increased borrowing drove up interest expenses 15 percent per year. But decreased inventories and borrowing curbed interest costs and helped boost local savings to 14 percent between 1997 and 1996, versus the average increase of 3 percent per year. Patronage refunds rose an average 13 percent, allowing net income for these cooperatives to increase 8 percent per year.

Financial ratio analysis was used to look at trends for the past 7 years:

- the current ratio declined from 1.6 in 1991 to 1.4 in 1997;
- total debt ratio increased as debt financing was substituted for equity; and
- with more debt usage, return on equity increased slightly from 10 in 1991 to 11 percent in 1997.

Among other changes, many cooperatives were reaching out to more customers by operating convenience stores. Fifteen of the cooperatives had joint ventures or limited liability companies that could allow them to combine resources with other cooperatives to provide expanded goods and services. Six cooperatives had entered into the hog industry either by providing feeder pigs or owning confinement hog operations.

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Farm payments from the Government's Freedom to Farm program will end in 2002, and agricultural cooperatives will be asked to play an increasingly important role for farmers to help themselves. Farmer-owned local cooperatives are on the forefront of developing ways for farmers to add value to crops they have grown and providing a source of quality supplies at a reasonable cost. This analysis of financial trends of local agricultural cooperatives is aimed at managers, directors, and members. Ratio analysis will be discussed. Other changes in the 1990s will also be presented.

The 208 local cooperatives had farm supply sales (petroleum, fertilizer, feed, etc.) that averaged \$7.1 million in 1997 and have been growing 8 percent per year. Marketing sales (corn, wheat, soybeans, etc.) were growing 12 percent per year and averaged \$5.4 million in 1997. Income from services (product delivery, fertilizer application, grains and oilseeds hauling, storage, etc.) averaged \$0.4 million per year, while growing about 7 percent.

These cooperatives were an important asset to both their member/patrons and their rural communities. The cooperatives paid an average of \$34,000 in annual property taxes. They were also a large employer in their communities, averaging 22 full-time and 12 part-time employees. The average annual payroll of nearly \$800,000 is growing 8 percent per year.

Because cooperatives are owned by their member users, when farm income declines, so do cooperatives sales. The early 1990s were good for farmers, but by 1997 exports were falling and declining farm income was becoming an issue.

While the number of farm operations declines, those remaining are becoming larger, even though overall rural populations are decreasing. The cooperatives in this study have been growing, changing to

meet the needs of their members, and operating branches in other towns to increase their market territories. Grain and oilseed cooperatives are expanding to increase their grain-handling capacity to accommodate unit trains of 110 or more cars. The need for contracting for speciality crops like high oil and waxy corn is also changing.

Farm supply cooperative members are asking for more global positioning system (GPS) /geographic information system (GIS) guided equipment and detailed recordkeeping and analysis services to substantiate fertilizer and crop protectants the cooperative applied to improve crop yields. Members are also interested in adding value to farm crops as a means to boost farm income.

Profile of Respondent Cooperatives

USDA's Rural Business-Cooperative Service annually surveys farmer cooperatives. Data from the survey were used in this study. Participating cooperatives had to sell farm supplies and provide a detailed financial statement.

There are about 500 cooperatives in the RBS Farm Supply and Services database. This report focuses on the 208 that provided information each year from 1991 through 1997. This report is divided into a cross section of four sizes and four types to provide a more complete understanding of the local cooperatives' business.

Cooperative Size

Cooperatives were grouped into four sizes by sales volume (table 1). Many cooperatives grew in size over the time period. For example, there were 116 small cooperatives in 1991 but only 83 in 1997 (table 2).

In other words, 33 cooperatives that had nearly \$5 million in sales in 1991 exceeded that mark by 1997 and became medium-size cooperatives.

There was a gradual shift over the 7 years with more cooperatives attaining large- and super- size status. The number of small cooperatives fell from more than half of the respondents to 40 percent, while those in the large- and super-size classes each increased to 20 percent.

Cooperative Type

To account for differences in operations and orientation based on product mix, cooperatives were grouped into one of four descriptive categories: 1) farm supply; 2) mixed farm supply; 3) mixed marketing; and 4) marketing. These descriptions closely represented business operations of these cooperatives (table 1).

Table 1—Size and type definitions used for respondent cooperatives

Size	Sales
Small	up to \$5 million in total sales
Medium	\$5 million up to \$10 million
Large	\$10 million up to \$20 million
Super	\$20 million and more

Type	Farm supply sales
Farm supply	total net sales from farm supplies
Mixed farm supply	from 50 to 99 percent
Mixed marketing	from 25 to 49 percent
Marketing	less than 25 percent

This report focuses on cooperatives handling farm supplies—59 percent in 1997 sold only farm supplies; 15 percent were mixed; 15 percent were mixed marketing; and 11 percent were marketing (table 2). There was not much movement between types of cooperatives, except in 1996 when the dollar value of grain sales increased dramatically and caused a surge in the number of marketing cooperatives. Both types of marketing cooperatives tended to be larger while the farm supply cooperatives were most often small. Most respondents were small farm supply cooperatives.

The information in this report also goes beyond 208 cooperatives and rural communities. These cooperatives operated 281 branches and thus had a business impact on 489 rural communities in terms of taxes and employment. From 1992 through 1997, the number of branches operated increased almost 20 percent per year (table 3). Super cooperatives by far operated the most branches, usually between 3 and 4.

An increase in branches was often due to mergers and consolidations. Thus, after a merger or consolidation, a rural community lost an independent cooperative when it ceased operations but may have gained a branch operated by a larger cooperative. This follows the continuing trend in agriculture toward fewer and larger farms and the fewer but larger cooperatives.

By type, branches also increased. Mixed farm supply cooperatives had the largest increase. Both types of marketing cooperatives had more branches than farm supply cooperatives except in 1997 when mixed farm supply cooperatives had the most with 2.3.

Sales Mix

The respondent cooperatives had five major farm supply and one marketing categories (table 4). Petroleum was the dominant production supply item

Table 2— Number of cooperative respondents by year, size, and type

	1997	1996	1995	1994	1993	1992	1991
	<i>Number of cooperatives</i>						
Small	83	90	98	102	106	110	116
Medium	44	41	45	45	46	47	45
Large	41	40	38	33	31	30	26
Super	40	37	27	28	25	21	21
Farm supply	124	123	122	122	122	122	123
Mixed farm supply	32	34	36	39	37	33	36
Mixed marketing	31	26	36	35	33	36	32
Marketing	22	25	14	12	16	17	17

Table 3— Number of branches operated by cooperative size and type

	1997	1996	1995	1994	1993	1992
	<i>Number</i>					
Small	0.19	0.21	0.26	0.24	0.26	0.13
Medium	.95	1.10	.98	.87	.51	.26
Large	1.68	1.38	1.55	1.42	1.23	1.07
Super	3.85	4.11	4.48	3.82	3.28	2.86
Farm supply	.85	.78	.74	.69	.50	.26
Mixed farm supply	2.34	1.91	1.72	1.08	.92	.27
Mixed marketing	1.71	1.92	1.83	1.71	1.48	1.33
Marketing	2.27	2.40	2.21	2.58	1.69	1.82
All	1.35	1.30	1.20	1.04	.83	.57

Table 4— Average farm supplies sold and products marketed as a percent of net sales

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Farm supplies sold:							
Feed	10.99	10.09	11.72	13.31	13.45	12.80	12.65
Seed	1.26	1.19	1.34	1.33	1.33	1.27	1.20
Fertilizer	11.06	10.47	11.98	11.74	10.71	10.78	10.59
Crop protectants	7.98	7.41	8.57	8.50	7.55	7.55	7.16
Petroleum products	18.38	16.45	18.89	19.50	20.05	18.54	20.25
Other	7.01	6.69	8.05	8.89	8.87	7.73	7.82
Total	56.68	52.30	60.55	63.27	61.96	58.67	59.67
Farm products marketed:							
Grain, oilseeds & other	43.32	47.70	39.45	36.73	38.04	41.33	40.33
Total sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Based on net sales of:	\$12,549,721	\$12,578,213	\$9,468,046	\$8,846,022	\$8,104,723	\$7,913,753	\$7,502,430

sold by small and medium cooperatives. Sales of small cooperatives, the most numerous, averaged **\$2.5** million in **1997**. Farm production supplies represented the bulk (90 percent) of their sales. As cooperatives grew in size, the importance of farm supplies declined relative to marketing sales (84 percent farm supply sales for medium-sized cooperatives, 68 percent for large, and 43 percent for super).

Sales of cooperatives in the mixed farm supply category averaged **\$18** million with **\$13** million in farm supply sales. Feed was the most important farm supply item sold followed closely by petroleum.

Average sales of marketing and mixed marketing cooperatives were \$28 million and \$22 million, respec-

tively, and much larger than both categories of farm supply cooperatives. As defined, marketing made up the majority of their sales. Feed, fertilizer, and crop protectants were the most important farm supplies sold for both types of marketing cooperatives.

Balance Sheet Definitions

Balance sheet assets represent what the cooperative owns and are usually listed in decreasing order of their liquidity—the time it would take to convert them to cash. Liabilities (what the cooperative owes to others) are usually presented in a similar decreasing order. Equity represents members' investment in their cooperative. An abbreviated balance sheet is used in

this report because some account information was not available for the 1991 and 1992 data (cash and cash equivalents, prepaid expenses, patron credit balances, accrued taxes and expenses, and cash patronage refunds).

Current assets-are the most liquid assets on the cooperative balance sheet. *Accounts receivable* is money due the cooperative (i.e., a credit sale payment due from the customer in 90 days). Inventories are products the cooperative has purchased from patrons to market and supplies the cooperative hopes to sell to patrons. *Other* current assets in this abbreviated balance sheet include cash and cash equivalents, prepaid expenses, and other.

Investments *in other* cooperatives-represent equity held in regional cooperatives through which local cooperatives market products or purchase supplies and equity in the Bank for Cooperatives and CoBank, their primary lending sources. These investments are mainly patronage paid back to the cooperative based on use. The more sales through or purchases from the regional cooperative or borrowing from the banks, the larger the investment. Other assets include past due accounts receivable and other.

Property, plant, and equipment (PP&E)—are the fixed assets of the cooperative (i.e., grain bins, office equipment, warehouse, and gas station). This is net **PP&E**, the book value of the fixed assets-their cost minus accumulated depreciation.

Total assets-are what the cooperative owns-current assets plus investments plus net fixed assets equal total assets.

Current liabilities-are obligations the cooperative must pay within the next year. Accounts payable is money owed, usually to suppliers (sometimes classified as trade accounts payable). Other liabilities in this abbreviated balance sheet are accrued expenses and taxes, grains, and **oilseeds** accounts payable, retired equity, cash patronage refunds, and other.

Current portion of long-term debt and notes *payable-seasonal* are the final current liabilities. They are money owed (principal) for borrowing money and for leases.

Long-term debt-includes notes, bonds, mortgages, and leases not due within the current year.

Member equities-are member and patron investments in the cooperative. *Allocated equity* is assigned to members. In most cases, cooperative stock or ownership certificates are not generally traded between members and, if sold, require board approval.

Unallocated equity is the retained earnings of the coop-

erative and often thought of as **nonmember-nonpatronage** business but can also be based on member business.

Analysis of the Balance Sheet

Table 5 presents a common-size balance sheet for all respondents. Appendix tables 1-8 show **common-size** balance sheets by size and type. Each account is listed as a percentage of total assets. The dollar amount of total assets the balance sheets represent is listed at the bottom of the table. Because the cooperatives in this study were allowed to change their size classification as they grew, there was little change in total assets over the years for all sizes except super cooperatives. Asset growth did occur by type because there were few cooperatives that changed type while assets overall grew 8 percent (figure 1). Total assets averaged \$1.3 million for small cooperatives to \$13.7 million for super-size cooperatives. By cooperative type, total assets averaged \$2.5 million for farm supply, \$6.4 million for mixed farm supply, \$7 million for mixed marketing, and \$7.4 million for marketing.

Current Assets

From 1994 to 1996, there was a tremendous increase in current assets, fueled by increased inventories (figure 2). Most of this growth occurred principally in grains and **oilseeds** inventories. Some of it was from increased volumes held, but much of it was from the overall increase in grain and **oilseed** prices. Much of this inventory buildup was paid for by increased long- and short-term debt.

All three of the major current assets accounts presented in table 5 increased about 9 percent over the time period, causing current assets to also increase similarly.

The age of accounts receivable refers to how long ago the sale that started this receivable was made. Most cooperatives have credit sales with discounts offered to promote prompt payment. Terms might be 2 percent-10 days, net 30 days (no discount). Discounts might be offered on all farm supply sales or on certain products. The terms and what products had discounts were not known, but about 40 cooperatives each year listed their discount on sales. The discount only varied 0.4 points from its high and low over the years-1.11 percent in 1997, 1.09 in 1996; 0.98 in 1995; 1.38 in 1994; 1.06 in 1993; 1.12 in 1992; and 1.07 in 1991.

The age of accounts receivable was known for 22 cooperatives for 1995 through 1997 (table 6). About 50 percent were current. Another 13 to 15 percent were from 31 to 60 days old. Accounts written off increased

Table 5—**Common-size** balance sheet **for all cooperatives**

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Current assets							
Accounts receivable	13.04	12.86	12.44	13.13	12.78	13.04	13.06
Inventories							
*rain	8.58	11.72	14.60	9.89	10.24	9.28	9.14
-farm supplies	16.11	15.96	16.22	16.47	16.50	15.65	16.58
Other current assets	<u>11.35</u>	<u>12.16</u>	<u>10.62</u>	<u>12.40</u>	<u>12.15</u>	<u>12.38</u>	<u>11.21</u>
Total current assets	49.08	52.70	53.88	51.89	51.67	50.35	49.99
Investments and other assets							
Investments							
-other cooperatives	20.82	19.19	19.22	20.05	19.89	20.04	19.54
-Bank for Co-ops	<u>1.30</u>	<u>1.21</u>	<u>1.23</u>	<u>1.34</u>	<u>1.37</u>	<u>1.43</u>	<u>1.50</u>
-total	22.12	20.40	20.45	21.39	21.26	21.47	21.04
Other assets	<u>2.32</u>	<u>2.06</u>	<u>1.20</u>	<u>1.03</u>	<u>1.03</u>	<u>1.07</u>	<u>1.28</u>
Total, invest. & other assets	24.44	22.46	21.65	22.42	22.29	22.54	22.32
Net, PP&E	<u>26.48</u>	<u>24.84</u>	<u>24.47</u>	<u>25.69</u>	<u>26.04</u>	<u>27.11</u>	<u>27.69</u>
Total assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities and owner equities							
Current liabilities							
Cur. portion of long-term debt	1.69	1.73	1.82	1.76	1.51	1.66	1.59
Notes payable-seasonal	11.19	14.68	15.54	11.56	10.11	9.88	7.66
Accounts payable	6.40	6.15	6.19	6.27	6.54	6.16	6.17
Other liabilities	<u>16.14</u>	<u>15.80</u>	<u>14.27</u>	<u>14.37</u>	<u>15.07</u>	<u>13.82</u>	<u>16.01</u>
Total current liabilities	35.42	38.36	37.82	33.96	33.23	31.52	31.43
Long-term debt	<u>9.73</u>	<u>8.95</u>	<u>7.14</u>	<u>6.49</u>	<u>6.47</u>	<u>6.73</u>	<u>6.73</u>
Total liabilities	45.15	47.31	44.96	40.45	39.70	38.25	38.16
Owner equities							
Allocated equity	42.34	41.05	43.15	46.96	47.99	49.55	50.00
Unallocated equity	<u>12.51</u>	<u>11.64</u>	<u>11.89</u>	<u>12.59</u>	<u>12.31</u>	<u>12.20</u>	<u>11.84</u>
Total owner equities	<u>54.85</u>	<u>52.69</u>	<u>55.04</u>	<u>59.55</u>	<u>60.30</u>	<u>61.75</u>	<u>61.84</u>
Total lia. & owner equities	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Based on total assets of:	\$5,446,539	\$5,292,772	\$4,721,692	\$4,103,143	\$3,804,243	\$3,480,693	\$3,295,402

Figure 1- **Total Assets**

Million dollars

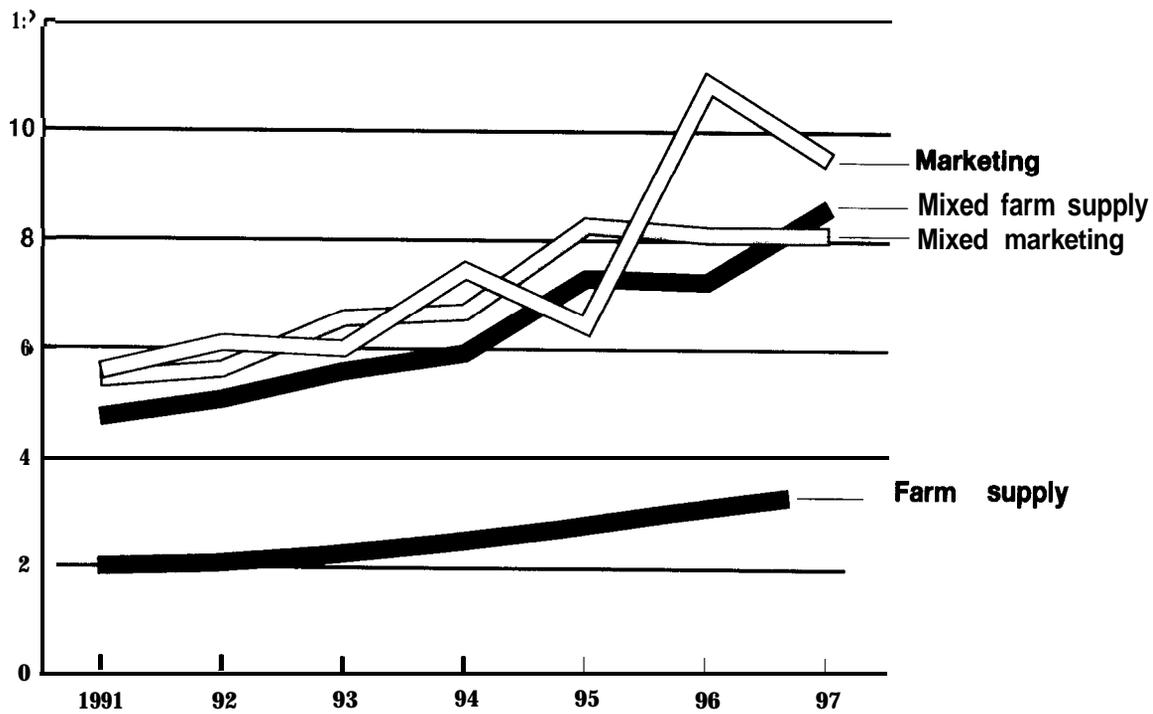


Figure 2- **Inventory and Debt**

Million dollars

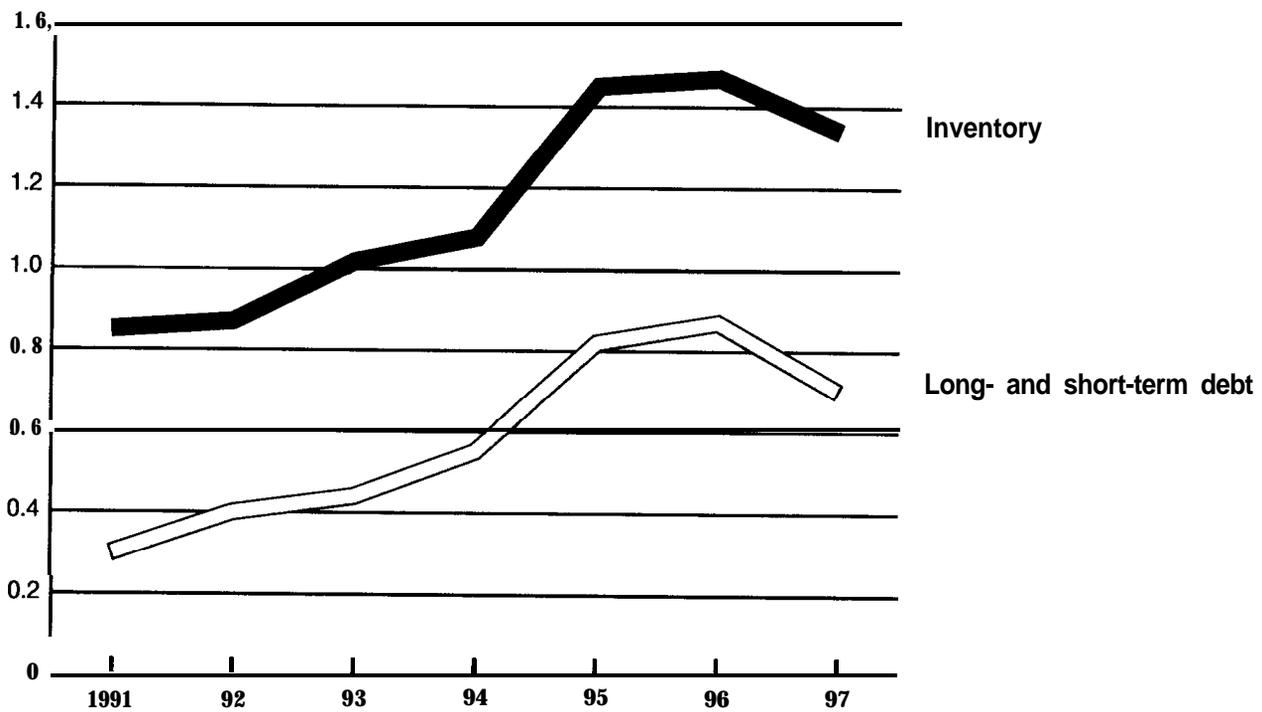


Table 6— Age of accounts receivable, 1995 through 1997

Age	1997	1996	1995
		<i>Percent</i>	
Current, 0 to 30 days	50.57	51.32	49.77
31 to 60 days	13.34	15.42	14.64
61 to 90 days	6.52	7.64	10.16
91 to 120 days	.65	.57	.80
121 to 180 days	11.71	9.17	9.25
Greater than 6 months	15.21	15.88	15.38
Accounts written off this period	7.05	6.32	4.21
Based on accounts receivable of:	\$16,857,731	\$17,318,101	\$16,808,770

percent were current. Another 13 to 15 percent were from 31 to 60 days old. Accounts written off increased from 4 percent in 1995 to 7 percent in 1997.

Investments and Other Assets

About 1.3 percent of cooperative's total assets was invested in the Bank for Cooperatives and CoBank. Larger cooperatives and both types of marketing cooperatives had comparable investments. Meanwhile, investments in other cooperatives dropped from a high of 29 percent for small cooperatives to 14 percent for super cooperatives. Across types, marketing cooperatives had less invested than farm supply cooperatives. The other assets category in this study includes overdue accounts receivable and other.

Property, Plant, and Equipment

Net property, plant, and equipment (PP&E) as a percent of total assets ranged broadly across cooperative sizes, averaging between 20 and 30 percent. Net PP&E increased 8 percent per year from 1991. Both farm supply cooperative types had growth in net PP&E of at least 10 percent per year while mixed marketing cooperatives averaged 4 percent growth and marketing cooperatives 7 percent.

Current Liabilities

Current liabilities grew 11 percent per year between 1991 and 1997. The largest increase was in notes payable-seasonal used to finance current operations, and usually used for inventories. They grew from 8 percent of total assets in 1991 to a high of 16 percent in 1995 and leveled at 11 percent in 1997. By

then, all sizes and types of cooperatives had lowered their inventories and were using seasonal debt at lowered, historical levels.

Long-term Debt

Long-term debt increased by 16 percent per year from 1991 to 1997 and was at its highest level in 1997. As a percent of total assets, it generally increased with cooperative size, but interestingly, tended to be higher for both types of farm supply cooperatives. By type as a percent of total assets, long-term debt ranged from 7 percent to 14 percent in 1997 with the farm supply cooperatives at the high end, about 2 percentage points higher than the marketing cooperatives.

Thirty percent of the cooperatives had no long-term debt. More than half of them were small farm supply cooperatives.

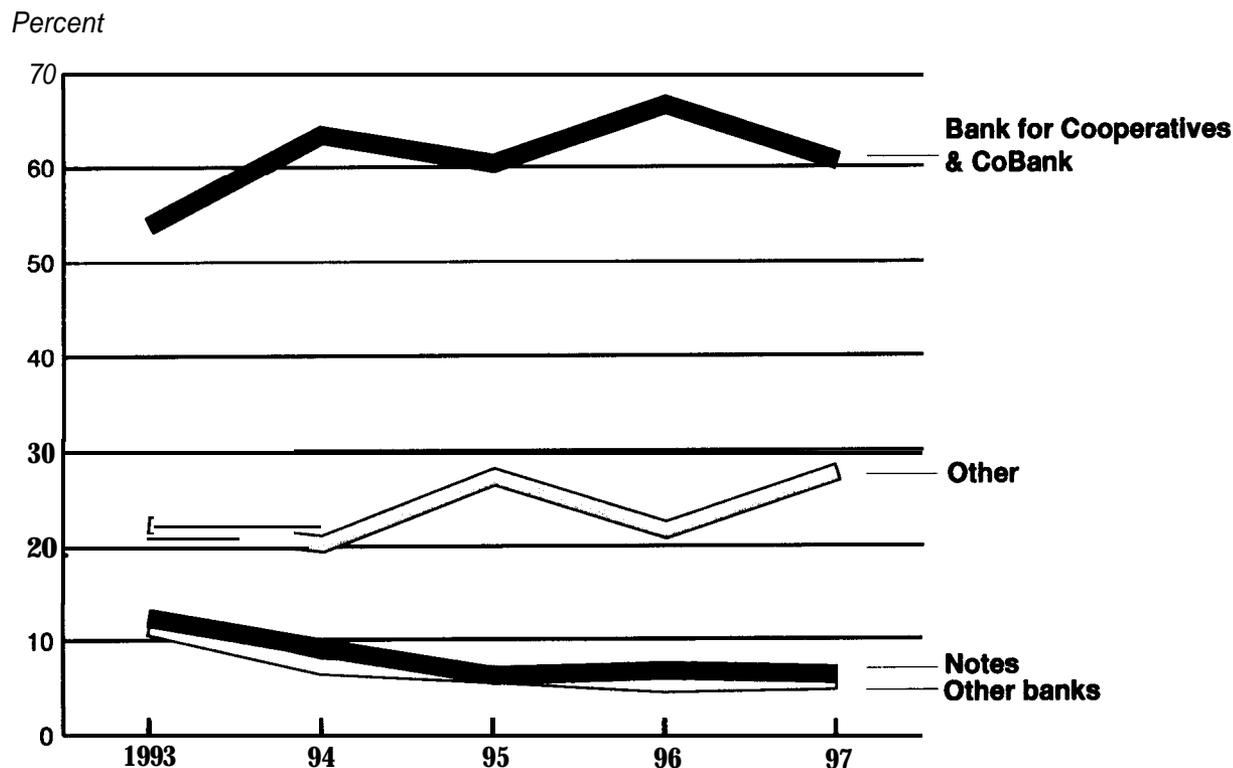
Eighty-seven cooperatives provided information that broke out the four main sources of their \$110 million total debt (yearly average of short- and long-term combined)—Bank for Cooperatives and CoBank, commercial banks, debentures or notes, and other for 1993 through 1997 (figure 3).

A regional cooperative was most often the source in the "other" category. The local cooperative often purchased its farm supplies and marketed its grains and oilseeds through a regional cooperative. It, then, becomes the source of debt capital.

The Bank for Cooperatives and CoBank provided the most debt capital over the years, peaking at 66 percent in 1996 and averaging 62 percent over the time period. Large and super cooperatives used the Bank for Cooperatives and CoBank more often.

Small, and especially small farm supply cooperatives, got their debt from "other" sources—most often the regional cooperative with which they were affiliat-

Figure 3—Source Of Debt



ed (average of 24 percent for all cooperatives). The regional may be popular as a credit and supply source for small cooperatives because most of their debt is for seasonal loans used to pay for products purchased. Interestingly in figure 3, when the use of “other” as a source of debt increases, use of the Bank for Cooperatives and CoBank declines.

Debentures or notes and commercial banks both averaged about 7 percent of the cooperative source of debt. Both of these sources were above 11 percent in 1993, but fell to about 6 percent by 1997.

Member *Equities*

Member equities to total assets represent the percent of the cooperative’s assets owned by the members, with creditors claiming the rest. Overall sizes and types of cooperatives, members averaged 58 percent ownership of their cooperative (figure 4). Member ownership was highest in 1991 and 1992 and fell to its lowest point in 1996 before rebounding slightly in 1997.

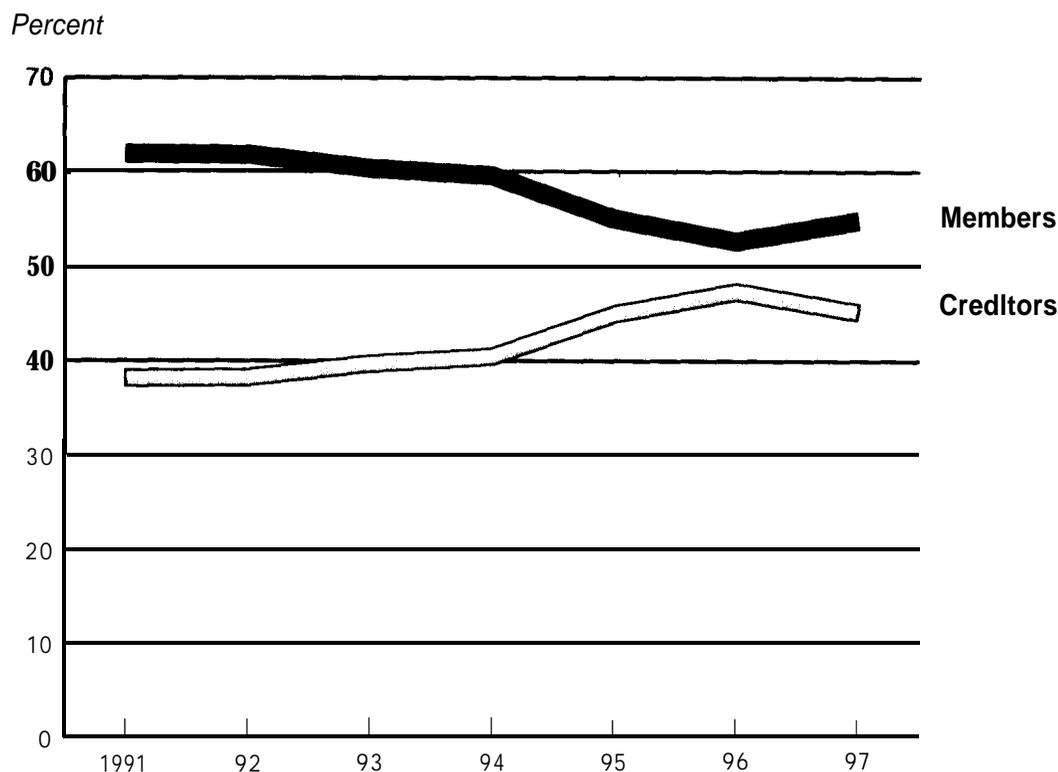
Members of small cooperatives had the highest percentage of ownership over the time period (75 per-

cent) while members of super-size cooperatives had the lowest (49 percent). By cooperative type, farm supply cooperatives’ members owned 69 percent of their cooperatives’ assets while members of mixed farm supply cooperatives owned at least 61 percent. Both types of marketing cooperatives had lower member ownership—49 percent for mixed marketing and 44 percent for marketing cooperatives.

Member equities consisted of both allocated (preferred, common, and other kinds of ownership certificates) and unallocated equity. Allocated equity as a percentage of total assets was highest for small cooperatives at 59 percent and more than 49 percent for both farm supply cooperatives. For all cooperatives, allocated equity fell from a high of 50 percent in 1991 to 42 percent in 1997.

Unallocated equity averaged 12 percent of total assets for all sizes and types. By type, unallocated equity was around 14 percent of total assets for farm supply cooperatives and around 11 percent for the other three types.

Figure 4— Cooperative Ownership



Description of Income Statement

The income statement shows the results of operations for the past year and usually includes both the current and prior year. It lists all sources of revenue and expenses. The statement measures the profitability of the cooperative for a given period of time. Although it does not show timing of cash-flows, the statement best describes the status of the business.

In the analysis of income statements, net sales were set at 100 percent to find out the proportion that a single item represented in a total group or subgroup. Because the income statement variables were expressed as a percent of net sales, comparisons were possible between different sizes and types of operations. Thus, the statement used in this report became known as a “common-size” income statement. An abbreviated income statement was used in this report because some minor expense information items (such as office supplies, rent, meetings and travel, and rent and lease) were not broken out in the years 1991 and 1992.

Analysis of the Income Statement

This displays the net results of cooperative operations. Because most managers’ performance is judged

by net income, members attach great importance to the income statement. In the following sections, the underlying values of the income statement are studied. Table 7 presents a common-size income statement for 208 cooperatives while appendix tables 9 to 16 show these income statements by size and type.

Net Sales

The first item of the income statement analyzed in this report was net sales determined by subtracting sales discounts and returns and allowances from gross sales. The average net sales for the 208 cooperatives in 1997 was \$12.5 million, up \$5 million or 9.4 percent per year from 1991. Net sales of all of these cooperatives grew during the study period. As an operating barometer, if assets are compared with net sales, sales for all types (except marketing) and sizes are about twice the level of assets.

Cost of Goods Sold (COGS)

COGS represented the largest single component of expenses. For this study, COGS includes the beginning inventory plus purchases and freight costs, minus purchase returns and allowances, purchase discounts, and ending inventory. So, for these cooperatives,

Table 7-Abbreviated **Income statement for all cooperatives**

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Cost of goods sold	<u>89.34</u>	<u>89.51</u>	<u>87.56</u>	<u>87.16</u>	<u>87.18</u>	<u>88.01</u>	<u>88.21</u>
Gross margin	10.66	10.49	12.44	12.84	12.82	11.99	11.79
Service and other income	<u>3.60</u>	<u>2.91</u>	<u>3.81</u>	<u>3.57</u>	<u>3.78</u>	<u>3.65</u>	<u>3.84</u>
Gross revenue	14.26	13.40	16.25	16.41	16.60	15.64	15.63
Operating expenses							
Employee ¹	6.35	5.92	7.13	7.11	7.25	6.89	6.81
Administrative ²	.64	.61	.72	.65	.54	.35	.30
General ³	3.47	3.21	3.94	4.16	4.47	4.37	4.60
Depreciation	1.66	1.55	1.84	1.82	1.82	1.70	1.65
Interest	.90	1.10	.94	.71	.62	.67	.62
Bad debts	<u>.22</u>	<u>.12</u>	<u>.15</u>	<u>.14</u>	<u>.14</u>	<u>.15</u>	<u>.14</u>
Total expenses	13.24	12.51	14.72	14.59	14.84	14.13	14.11
Local savings	1.02	.89	1.53	1.82	1.76	1.51	1.51
Patronage refunds received	<u>1.75</u>	<u>1.68</u>	<u>1.71</u>	<u>1.46</u>	<u>1.38</u>	<u>1.40</u>	<u>1.42</u>
Savings before income taxes	2.77	2.57	3.24	3.28	3.14	2.91	2.93
Less income taxes	<u>.19</u>	<u>.17</u>	<u>.21</u>	<u>.19</u>	<u>.17</u>	<u>.17</u>	<u>.19</u>
Net savings	2.58	2.40	3.03	3.09	2.97	2.74	2.74
Based on net sales of:	\$12549,721	\$12,578,213	\$9,468,046	88846,022	\$8,104,723	\$7,913,753	\$7,502,466

¹ Salaries and wages include payroll taxes, employee insurance, unemployment compensation, and pension expense.

² Administrative costs include professional services, office supplies, telephone, meetings and travel, donations, dues and subscriptions, directors' fees and expense, and annual meetings.

³ General expenses include advertising and promotion, delivery (auto and truck), insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies and repairs, repairs and maintenance, utilities, miscellaneous, and other.

COGS was the purchase price of the farm supplies sold or products marketed. Both types of marketing cooperatives had a relatively high COGS when compared with farm supply cooperatives, which was to be expected because they were generally marketing grains and oilseeds for their patrons with only a few cents-per-bushel margin. COGS had the same rate of growth as net sales. There was small decline in 1993 to 1995, but COGS rose to 89 percent in both 1996 and 1997.

Gross Margins

Gross margins were the excess of net sales over the cost of goods sold. The gross margin averaged 12 percent for all cooperatives, but with COGS rising in 1996 and 1997, gross margins declined to a little under 11 percent. The gross margin or gross margin percent-

age is an important operating ratio. A small change in the gross margin has a tremendous impact on local savings. A cooperative manager must maintain a gross margin near industry averages. Thus, least-cost sources of supplies need to be developed and marketing cooperatives must pay producer-members market rates on commodities purchased.

Cooperatives are sometimes characterized as businesses that provide goods and services at cost. However, a cooperative cannot operate at cost on a day-to-day basis. Without an adequate gross margin, a cooperative, like any other business, can neither be profitable nor afford to finance improvements needed for expansion or offering new services.

Gross margin equals net sales less cost of goods sold, so those cooperatives with higher COGS had lower gross margins. COGS were higher for marketing

and larger cooperatives, so gross margins as a percent of net sales were highest for farm supply and small cooperatives. Farm supply cooperatives, averaging 18 percent, had the highest gross margin. Although both types of farm supply cooperatives had less business volume than their marketing counterparts, the supply gross margin percentage was from 7 to 9 points higher. Small cooperatives, mostly selling farm supplies, had the highest gross margin by size (16 percent).

Gross margins vary not only by cooperative, but also by farm supply sold or product marketed. Cooperatives, like other businesses, have different margins for different products. Table 8 shows individual product gross margins for the 34 cooperatives that provided this information for years 1993 through 1997. Of the four major farm supplies sold, gross margins declined over the time period for all but crop protectants (figure 5).

Margins vary due to product type and competition. For instance, fertilizer sold by the truckload has a different margin than a sale of a single bag. The services offered in conjunction with a sale (e.g., fertilizer spread on the field by a cooperative applicator) also impact margins as does competition. The gross margin

discussed earlier in this section is a blended margin derived from all products the cooperative sold, services rendered, and products marketed.

The highest weighted (by volume) gross margin for the five main farm supplies was for **fertilizer**—almost 17 percent in 1997. Petroleum followed closely at 16 percent. Petroleum margins have been fairly steady, while those on feed, seed, and fertilizer have been declining.

Grains and **oilseeds** were the only products marketed where gross margins were known. Those margins were low and have been on the decline from 5 percent in 1993 to 3 percent in 1997.

Service *and Other Income*

Local cooperatives provide many services to their patrons. Those of the surveyed cooperatives include: transporting purchases to patrons and transferring their products to market; custom application of fertilizers and crop protectants, and drying and storing of grains and oilseeds. Service income averaged about 4 percent of net sales from 1991 to 1997.

Other income was derived from non-operating sources such as interest and finance charges. This

Figure 5— **Gross Margins by Product Sold**

Percent

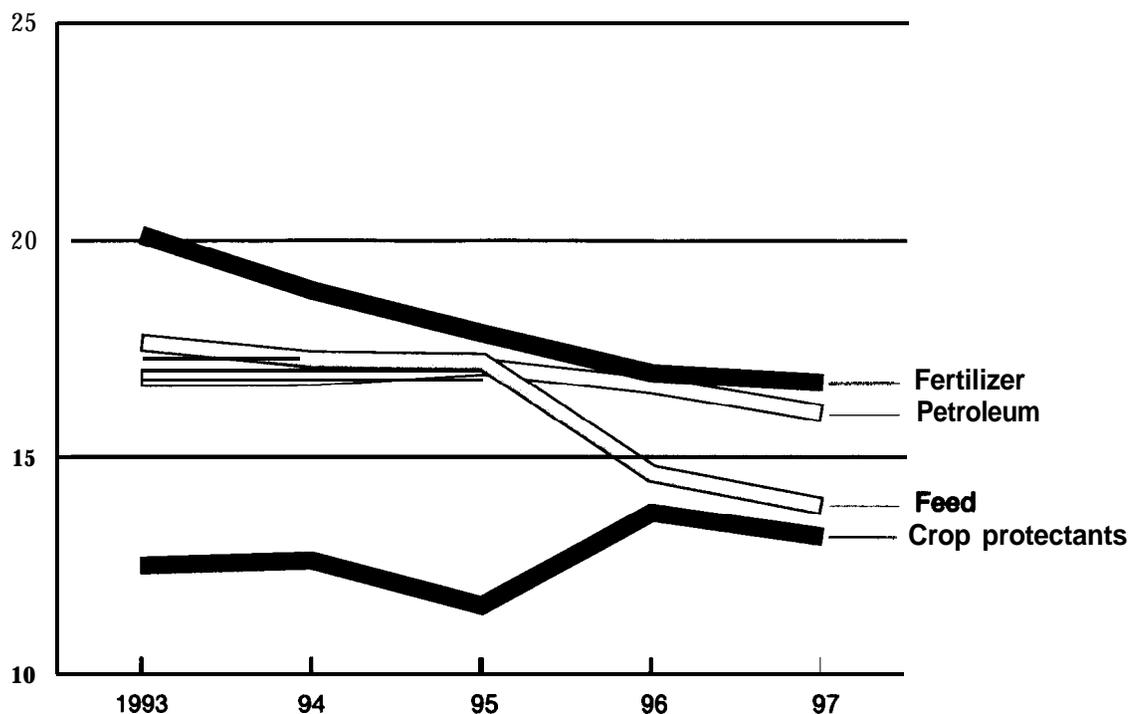


Table 8— Weighted gross margin on farm supplies sold and grains and oilseeds marketed

	1997	1996	1995	1994	1993	Number of observations
	Percent					Number
Feed	13.90	14.63	17.20	17.25	17.63	31
Seed	14.16	13.26	14.46	17.36	15.66	26
Fertilizer	16.72	16.94	17.65	16.63	20.11	30
Crop protectants	13.19	13.74	11.59	12.63	12.51	30
Petroleum	16.01	16.65	17.08	16.83	16.81	24
TBA	18.83	20.68	18.86	18.48	21.03	16
Food	24.92	25.43	23.57	23.85	23.56	7
Other farm supplies	19.41	18.21	18.77	17.85	17.59	31
Grains and oilseeds	2.64	4.09	4.68	4.70	5.12	19

income included interest on cash equivalents and interest charged on credit sales. Other income also came from the sale of property, plant, and equipment, rentals, and extraordinary items. Sometimes property, plant, and equipment were sold to generate income, but usually it was the sale of a fully depreciated asset where the market value was maybe greater or less than the book value. Rental income from unused facilities or equipment provided income flows. Extraordinary items might be either a gain or a loss. A gain could result from a fire loss where the insurance settlement was greater than the book value of the asset. A loss might be from flood damage for which the cooperative had no coverage.

Operating Expenses

Operating expenses were categorized as employee, administrative, general, depreciation, interest, and bad debts. Employee expenses, of course, were related to labor costs. Administrative expenses included a variety of overhead costs associated with a business and indirectly related to revenue production. General expenses were those directly related to revenue production. The majority were in employee, general, and depreciation categories.

Employee Expenses -From 1991 to 1997, employee expenses-salaries, wages, and benefits (payroll taxes, employee insurance, unemployment compensation, and pension expense)-averaged between 5.9 and 7.3 percent of net sales. Employee expenses, the largest category, were up 7.7 percent per year.

As a percent of net sales, employee expenses decreased as cooperative size increased. This expense averaged 9 percent of net sales for small cooperatives

and fell to 5.3 percent for super cooperatives. By type, employee expenses as a percent of net sales averaged about 9.4 percent for farm supply cooperatives and 3.8 percent for marketing cooperatives.

More than 80 percent of the cooperatives provided employee numbers. Collectively, these cooperatives averaged 4,162 full-time employees and 1,849 part-time employees. Full-time employees increased 2.5 percent per year while part-time employees increased 7.6 percent per year.

Small cooperatives averaged 8 full-time employees and 4 part-time; medium, 18 and 8; large, 32 and 15; and super, 53 and 20 respectively (figure 6). Small, medium, and large cooperatives had fewer employees in 1997 than 1991, but this reflected that many changed size classifications due to growth. Super cooperatives increased their average number of employees from 53 in 1991 to 55 in 1997.

Farm supply cooperatives averaged 15 full-time employees and 8 part-time employees; mixed farm supply, 35 and 14; mixed marketing, 24 and 9; and marketing, 20 and 6 respectively. Employment levels generally increased for all but the mixed marketing cooperatives (figure 7). Except for farm supply cooperatives, employee numbers dropped slightly in 1994. Mixed farm supply cooperatives already had the highest employee numbers, but also showed considerable growth from 31 in 1991 to 44 in 1997.

Cooperatives with greater farm supplies sales tended to be more labor intensive. Operating a feed mill or service station, applying crop protection and fertilizers, and selling hardware required the use of several employees. For instance, a small farm supply cooperative had 7 full-time employees while many small marketing cooperatives used only a manager,

Figure 6— Full-Time Employees, by Cooperative Size

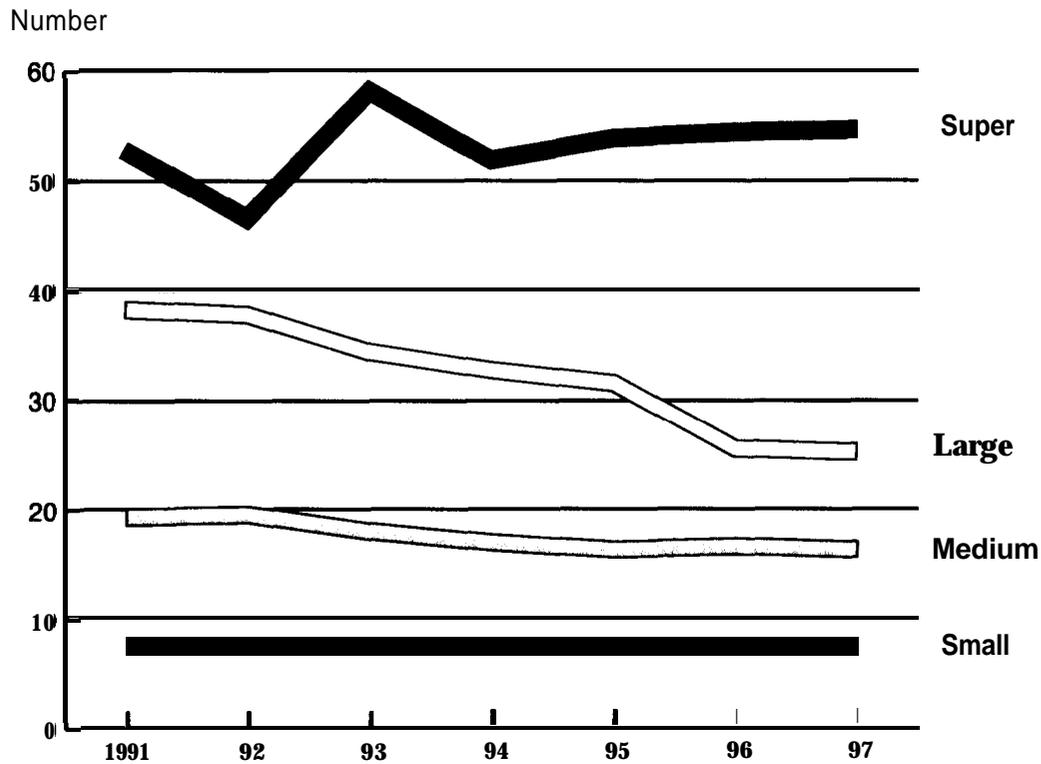
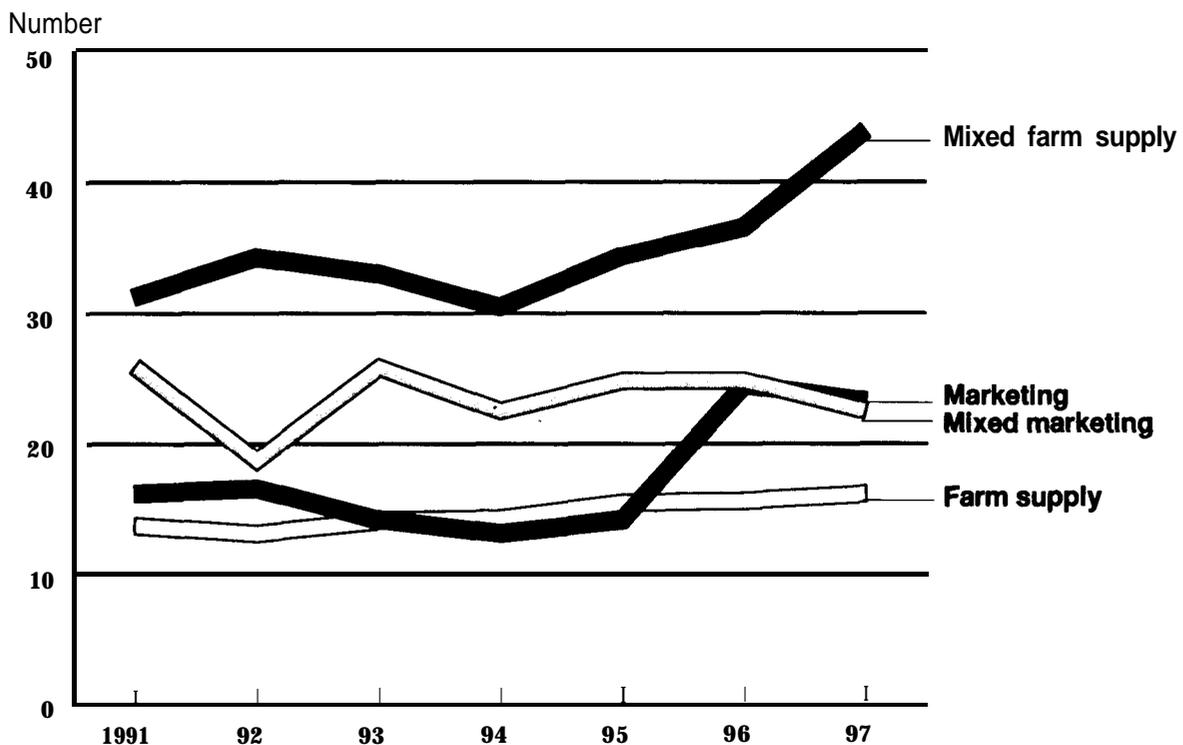


Figure 7— Full-Time Employees, by Cooperative Type



cooperative had 7 full-time employees while many small marketing cooperatives used only a manager, bookkeeper, and two others.

Administrative Expenses -These were indirectly related to generating income. Managers usually had more control over this area than others. In years when revenues were down, managers could reduce expenses in this area more easily than elsewhere. These costs include professional services (such as legal, accounting, and computer), donations, dues and subscriptions, directors' fees and expenses, annual meetings, meetings and travel, office supplies, and telephone and market information. They represented less than 1 percent of net sales and were highest for small and farm supply cooperatives.

General Expenses -These were usually fixed in the short run and associated with income production— advertising and promotion, delivery (auto and truck), general insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies, repairs and maintenance, utilities (including grain dryer expenses), miscellaneous, and other. Most (except advertising and promotion) were not under direct management control.

General expenses averaged about 4 percent of net sales over the time period but differed little by cooperative size—around 5 percent for farm supply cooperatives and around 3 percent for marketing cooperatives.

Depreciation, Interest, and Bad Debts

Depreciation expense averaged around 2 percent of net sales; interest, 1 percent; and bad debts, 0.1 percent. Depreciation expense was about the same for small, medium, and large cooperatives and declined slightly for super cooperatives (1.5 percent). By cooperative type, depreciation expense was 2 percent of net sales for farm supply cooperatives and less than 1.5 percent for marketing cooperatives.

As discussed earlier, interest expenses, especially for short-term borrowing, increased dramatically in 1995 and 1996, but was generally less than 1 percent for all sizes and types of cooperatives.

Bad debts as a percent of net sales fell as cooperative size increased—0.2 for small cooperatives to 0.1 for super cooperatives. By type, bad debts were 0.2 for both farm supply cooperatives and around 0.1 for both marketing cooperatives.

Table 9- Average number of respondent cooperatives with losses in any one year

Type	Size			
	Small	Medium	Large	Super
	<i>Number</i>			
Farm supply	20.57	3.33	2.29	0.00
Mixed farm supply	3.14	3.17	2.40	2.50
Mixed marketing	1.50	2.33	2.75	1.40
Marketing	1.29	1.00	1.50	1.60

Local Savings

Local income was generated from individual cooperative operations (before taxes and patronage refunds from other cooperatives). Local savings as a percent of net sales were highest for medium cooperatives in 1997 (figure 8) and lowest for super cooperatives. Local savings peaked in 1994 but dropped in 1995 or 1996 due to increased inventories and interest expenses.

By type, local savings were the highest for both types of farm supply cooperatives (figure 9) and much lower for marketing cooperatives. Small cooperatives, especially those in farm supply, had higher local savings than larger marketing cooperatives.

About 21 percent of the cooperatives in this study had losses in any year. Over the 7-year period, 14 percent had cumulative losses. Seven had losses in each year and 55 had losses in at least 2 consecutive years. While small cooperatives had higher returns on net sales, 21 small farm supply cooperatives lost money in any year (table 9).

Patronage Refunds Received

Patronage refunds received or income from other cooperatives resulted from locals doing business with other cooperatives, generally regionals, or cooperative banks such as Bank for Cooperatives and CoBank.

The patronage refund from regionals was based on business volume and consisted of equity stock and cash refunds. The equity stock was usually revolved back to the local cooperative on a set schedule. Many respondent cooperatives also borrowed funds from the Bank for Cooperatives and CoBank and received both cash and noncash patronage income. Patronage from the Bank for Cooperatives and CoBank was also based on use, in the amount borrowed.

Figure 8— Local Savings, by Cooperative Size

Percent of net sales

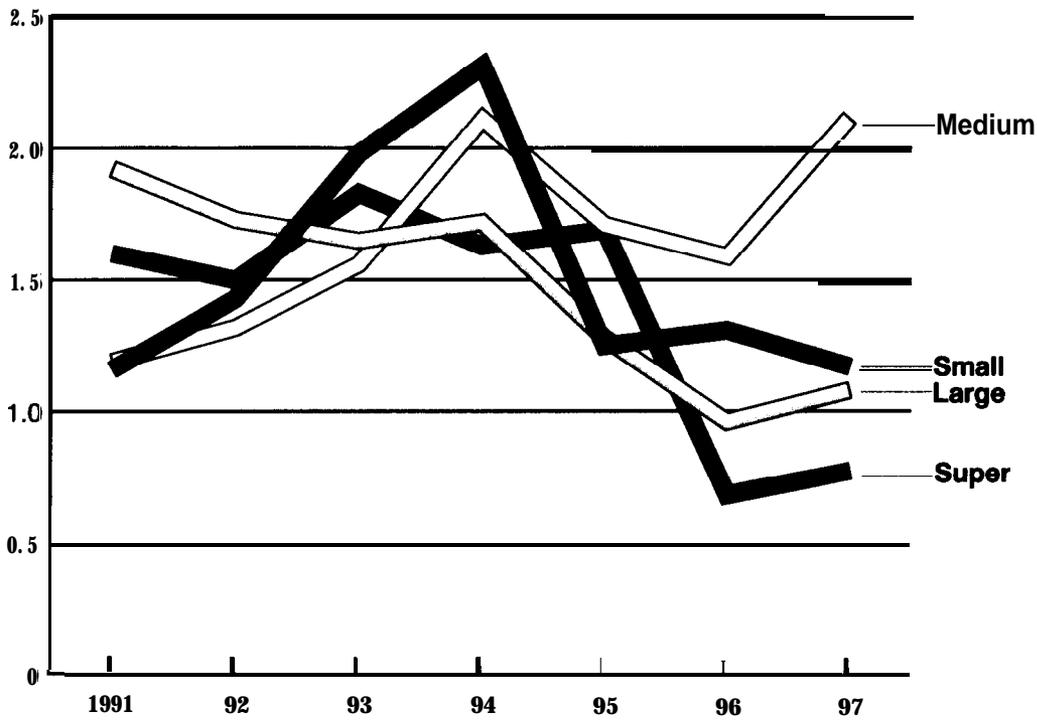
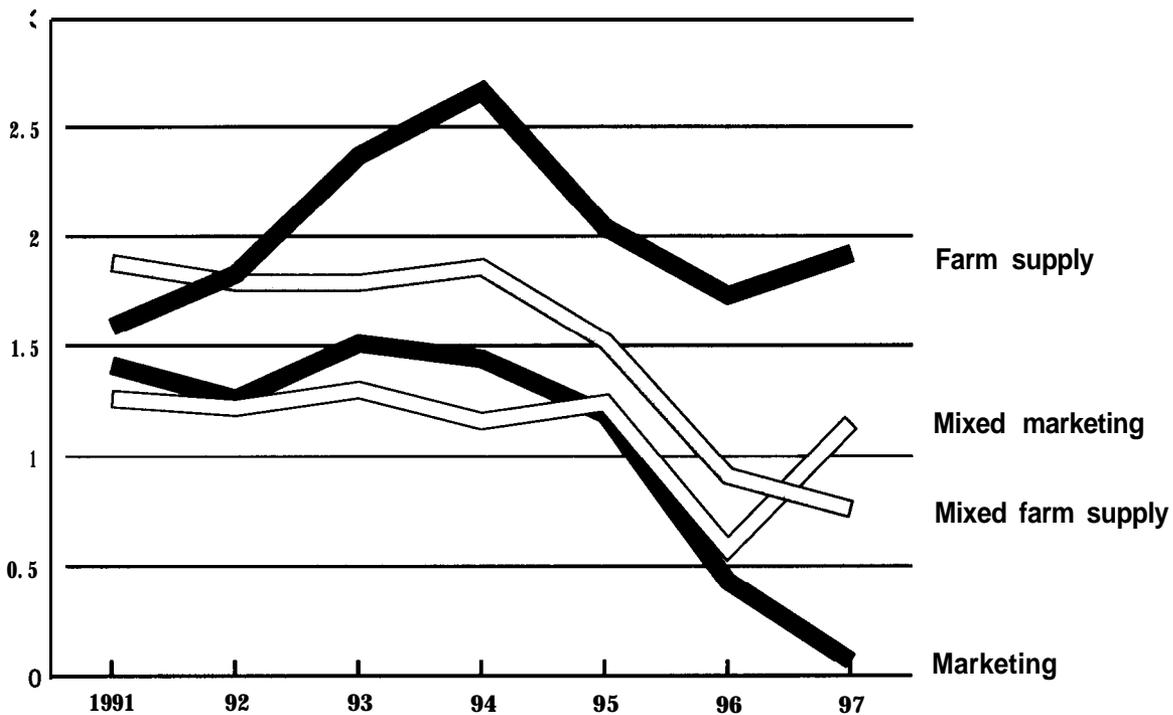


Figure 9— Local Savings, by Cooperative Type

Percent of net sales



Patronage refunds reflect the volume of business with regional cooperatives, the Bank for Cooperatives and CoBank. Refunds between 1991 and 1997 increased 13 percent per year, suggesting that their regional cooperatives or banks either increased their refund level or had increased incomes. Patronage refunds received were 2.1 percent of net sales for small cooperatives to 1.2 percent for super cooperatives. By type, patronage refunds as a percent of net sales were higher for farm supply cooperatives than those in marketing.

Losses in local savings are increasing-53 had them in 1997. Twenty-one reported declining net income that year. Patronage refunds, an important revenue source, allowed 32 of 53 cooperatives to show a net income in 1997 (figure 10). The gap between the two lines in figure 10 represents the number of cooperatives made profitable by patronage refunds averages 29 per year.

Income Taxes

Cooperatives paid income taxes on earnings not allocated to members (retained earnings) and on dividend payments. The board of directors decided what

amounts of income were allocated to retained earnings and to members. In terms of net sales, income tax paid averaged 0.2 percent.

Income tax paid by cooperatives varied little by size and type during the study period.

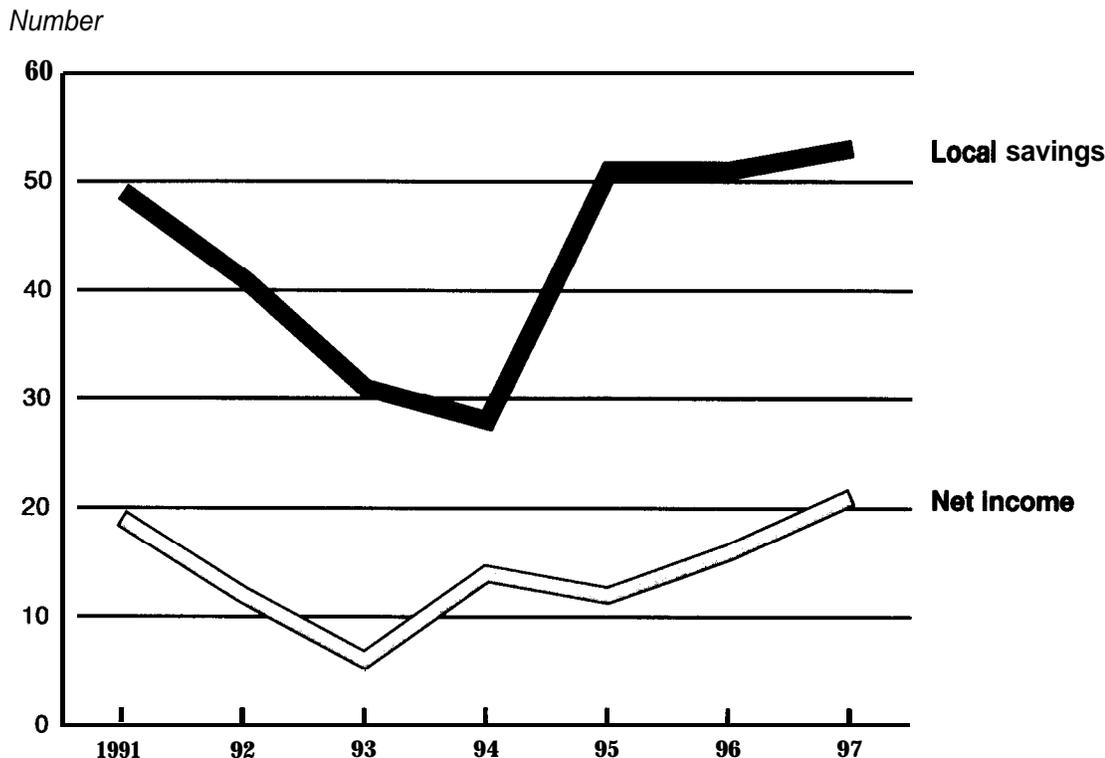
Net Income

Net income refers to profits on cooperative income statements. As a percent of net sales, it decreased by cooperative size. For small and medium cooperatives it was 3.5 percent; large, 3 percent; and super, 2.5 percent. Net income as a percent of net sales was its highest in 1994 (3.1 percent), fell in 1995 and 1996 and then surged to 2.6 percent in 1997.

By cooperative type, farm supply had average returns of 4.2 percent on net sales, mixed farm supply had 2.9 percent, mixed marketing cooperatives, 2.1 percent, and marketing cooperatives, 1.7 percent.

Net income (before taxes) was generally distributed five ways-non-cash patronage allocations, cash patronage refunds, retained earnings, income taxes, and dividends on patron's equity (figure 11). For the 197 cooperatives that provided this information from 1994 through 1997, an average of 56 percent of net income before taxes was held as non-cash patronage allocations. Cash patronage refunds (22 percent), taxes

Figure 10— Cooperatives With Losses-Local Savings or Net Income



(6 percent), and dividends (less than 1 percent) have remained fairly steady. Non-cash patronage allocations were at their highest in 1996, forcing retained earnings to their lowest (13 percent).

Financial Ratio Analysis

Managers and boards of directors can use financial ratios to evaluate their cooperative's performance. Standard ratios allow comparisons between years and different cooperatives. No single financial indicator will provide enough information to determine a cooperative's financial health so it's important to look at a group of them over a period of time for better interpretation. Performance ratios—liquidity, leverage, activity, and profitability (table 10)—measure various levels of cooperative operations and generally have both a financial and operational impact.

Liquidity Ratios

Current and quick liquidity ratios measure the cooperative's ability to meet short-term obligations and focus on its ability to remain solvent. The current ratio is current assets divided by current liabilities. However, this ratio does not consider the degree of liquidity of each of the components of current assets. If

the current assets of a cooperative were mainly cash, they would be much more liquid than if comprised of mainly inventory.

If the ratio is less than 1, current liabilities exceed current assets and the cooperative's liquidity is threatened. A high current ratio is a favorable financial condition. It indicates the ability to pay current liabilities by converting current assets into cash.

The current *ratio* was relatively constant in the early 1990s before falling in 1995 and 1996 due to increased grains and oilseeds and farm supply inventories and the subsequent buildup of seasonal debt to finance these inventories (figure 12). In 1997, the current ratio rebounded, but was still lower than in the early 1990s.

The current ratio fell as cooperative size increased. It was highest for small cooperatives (appendix tables 17-24). The ratio also declined for small cooperatives but rebounded in 1997.

By cooperative type, the ratio was the highest for farm supply cooperatives (figure 13) followed by mixed farm supply cooperatives. Both marketing cooperatives had lower current ratios, always less than 1.4.

Quick ratio is current assets minus inventories, divided by current liabilities. Inventories—the least

Figure 11— Distribution of Net Income Before Taxes

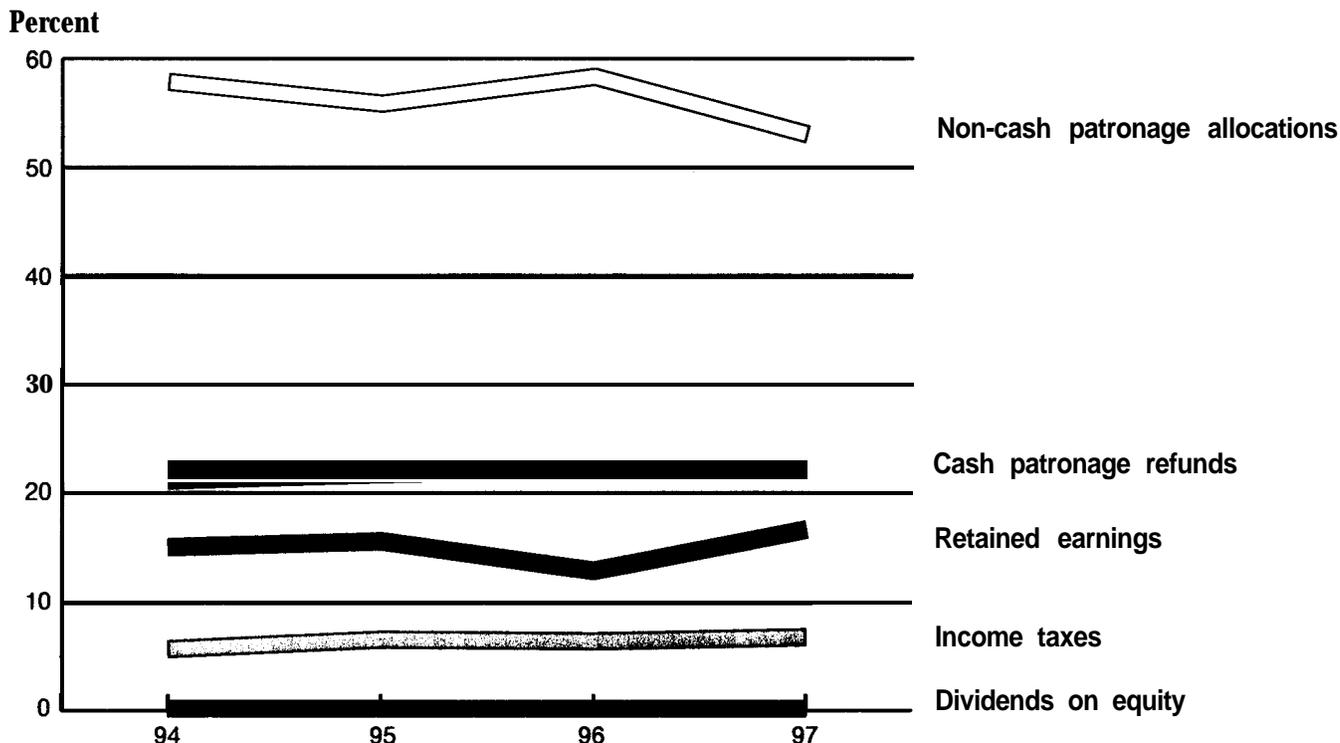
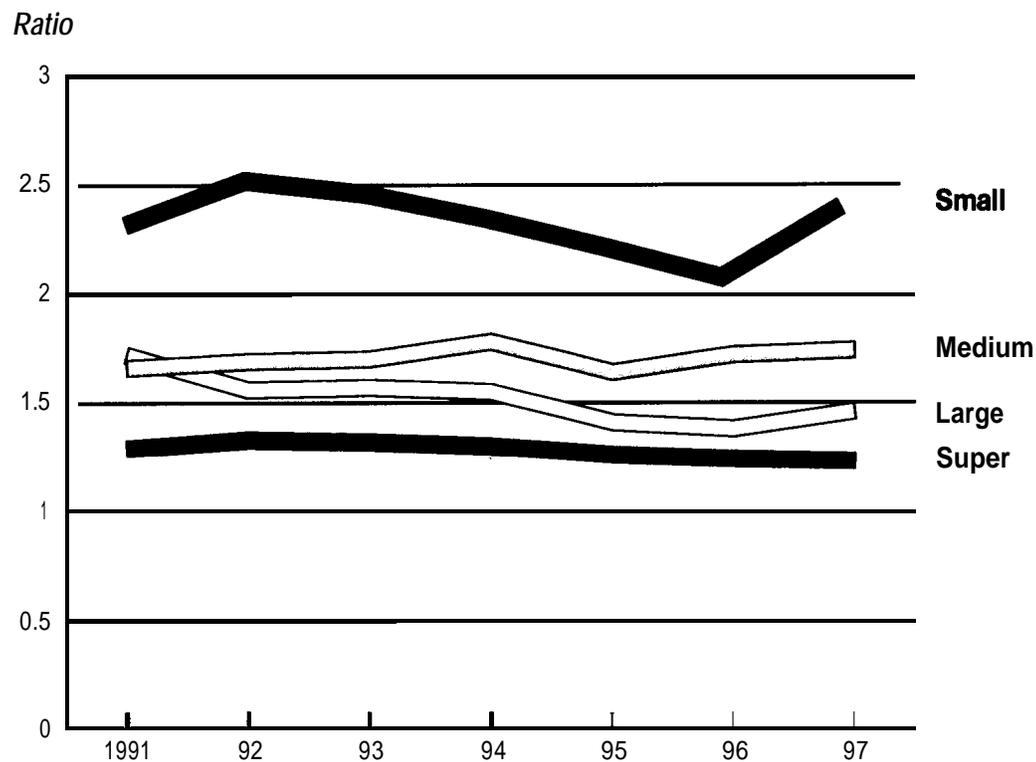


Table 10— Financial ratios for all respondent cooperatives

Ratio	1997	1996	1995	1994	1993	1992	1991
Liquidity							
Current	1.39	1.37	1.42	1.53	1.56	1.60	1.59
Quick	.69	.65	.61	.75	.75	.81	.77
Leverage							
Debt	.45	.47	.45	.40	.40	.38	.38
Debt-to-equity	.82	.90	.82	.68	.66	.62	.62
Times-interest-earned	4.06	3.33	4.43	5.62	6.06	5.02	4.66
Activity							
Total-asset-turnover	2.30	2.36	2.01	2.16	2.13	2.27	2.26
Fixed-asset-turnover	6.70	9.57	6.19	6.39	6.16	6.39	6.22
Profitability							
Gross profit margin	10.66	10.49	12.44	12.64	12.62	11.99	11.79
Return on total assets before interest and taxes	6.46	6.73	8.39	6.60	6.01	6.27	6.41
Return on equity	10.62	10.65	11.05	11.20	10.49	10.07	10.10

Figure 12— Current Ratio, by Size



liquid of all current assets—are excluded. The movement of the quick ratio mirrored the current ratio, although with the exclusion of inventories, at a lower level.

As with the current ratio, small cooperatives had the highest ratio and it decreased as size increased. The quick ratio had been more than 1 for farm supply cooperatives in the early 1990s, but dropped to 0.9 in 1997. Both marketing cooperative types had a ratio of about 0.6 in 1997.

Leverage Ratios

Leverage ratios look at the long-term solvency of the cooperative. They help to analyze the use of debt and the ability to meet obligations in times of crisis. Debt ratio is defined as total liabilities divided by total assets.

Overall, this ratio has been increasing, especially in 1995 and 1996 with the seasonal debt buildup (figure 14). Larger cooperatives used more debt financing. The debt ratio was 0.55 for super cooperatives in 1995 and 1996. In other words, 55 percent of the super cooperatives' assets were financed by debt in those years. In 1997, the ratio declined for all sizes of cooperatives.

Debt usage was highest for marketing and mixed marketing cooperatives, peaking in 1995 and 1996 (figure 15). Both farm supply and mixed farm supply cooperatives increased debt usage, especially in 1997 when the ratios were respectively 0.35 and 0.46.

Debt-to-equity ratio is calculated by dividing the debt ratio by the equity ratio (total equity divided by total assets). This ratio compares debt and equity financing, a higher ratio (greater than 1) indicates more use of debt relative to equity financing and thus higher interest costs. With more debt usage, the debt-to-equity ratio has been climbing for all cooperatives, with the highest ratio mostly in either 1995 or 1996. The highest debt-to-equity ratio was for super cooperatives in 1996 (1.25). They used 1.25 times more debt than equity to finance their assets in 1996. As inventories fell in 1997, less debt was needed to finance them and the debt-to-equity ratio also fell.

This ratio was higher for marketing cooperatives than farm supply, but both types of farm supply cooperatives used more long-term debt in 1993 and 1994 and still were increasing that use through 1997. Given more debt, the debt-to-equity ratio increased greatly—

Figure 13— Current Ratio, by Type

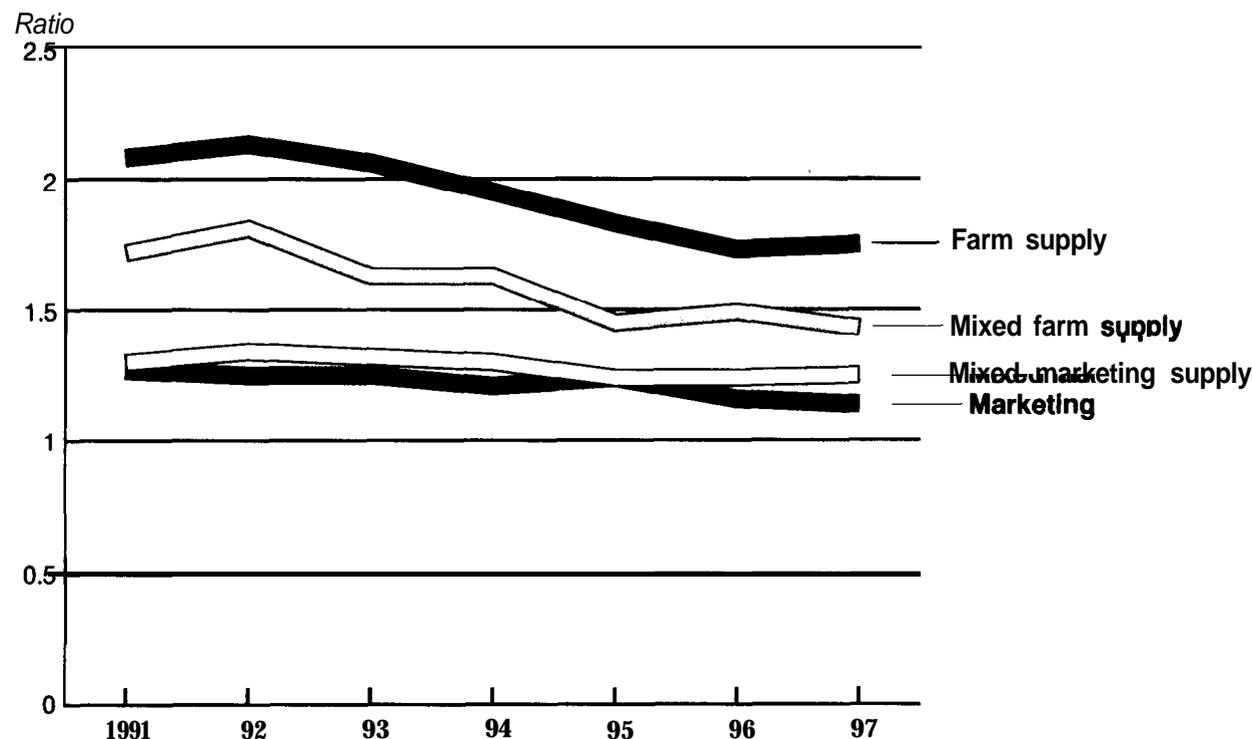


Figure 14— Debt Ratio, by Size

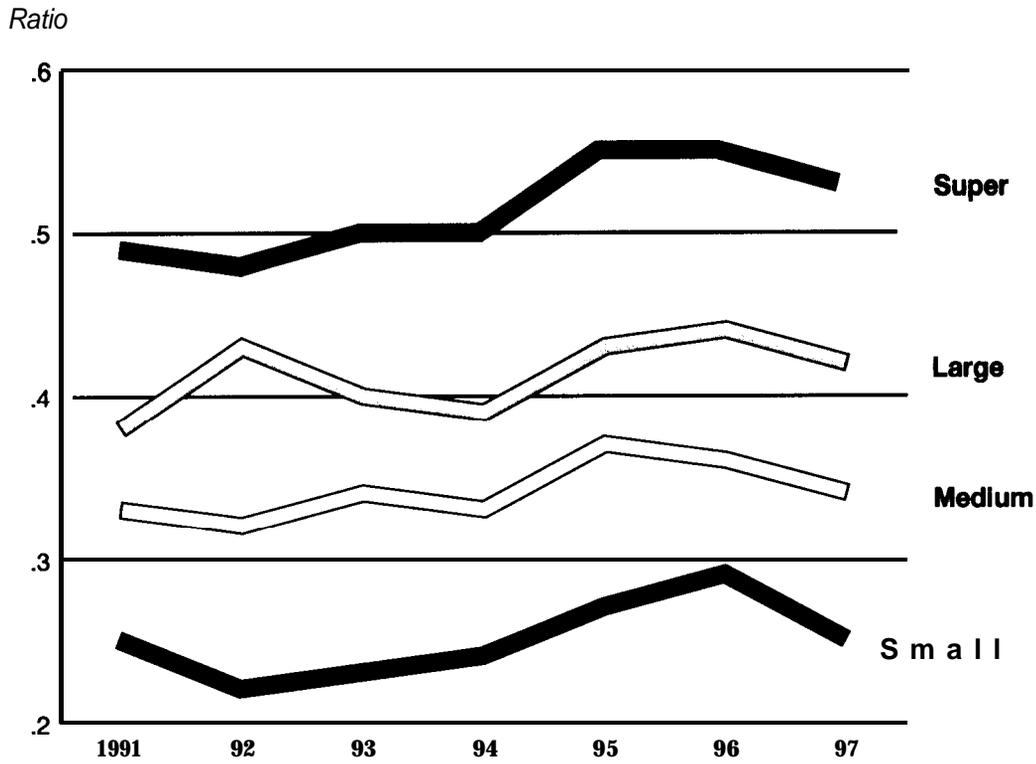
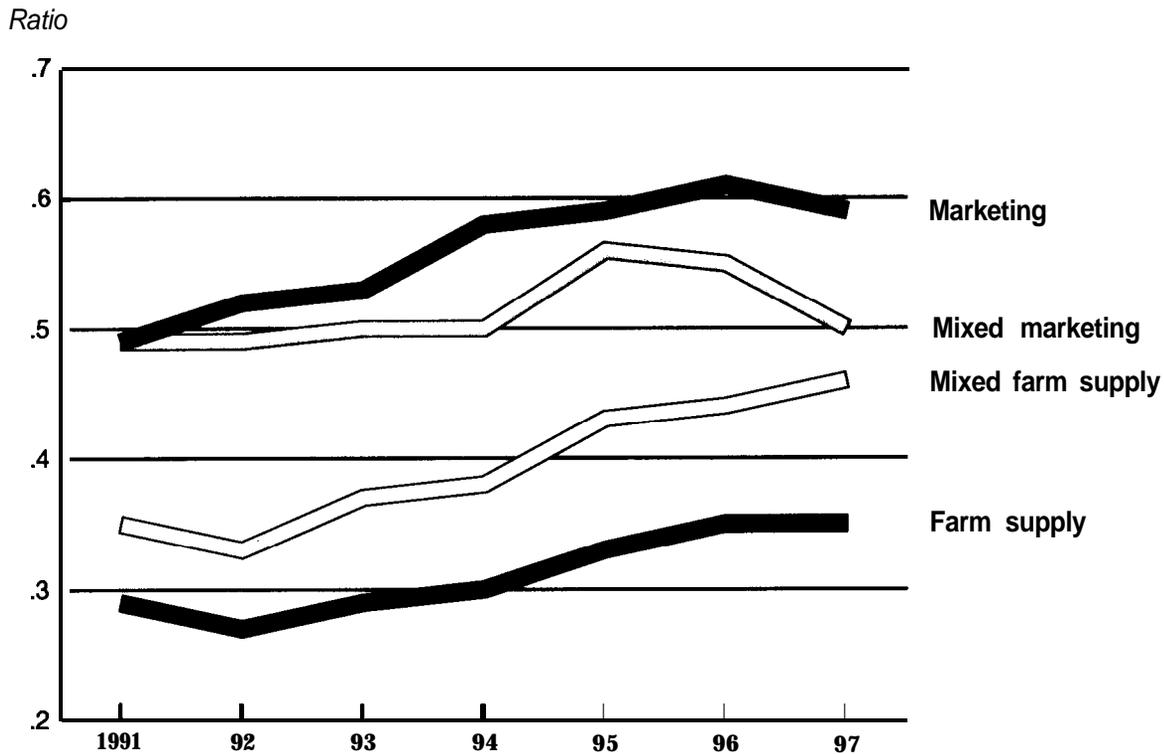


Figure 15— Debt Ratio, by Type



for farm supply cooperatives from 0.4 in 1994 to 0.54 in 1997; and for mixed farm supply cooperatives from 0.6 to 0.84.

Times-interest-earned ratio is the number of times interest expense is covered by earnings. It is calculated by dividing earnings before interest and taxes by interest expense. A ratio of one or more indicates the ability of current earnings to pay current interest expenses. The previous two debt ratios have indicated a general increase in debt, so interest coverage, or **times-interest-earned ratio**, has fallen recently.

Interest coverage was the greatest for small cooperatives and it fell as cooperative size increased. This ratio was the highest for small cooperatives in 1994, and has generally fallen for all cooperatives since then. Small and medium cooperatives had a ratio of about 6 in 1997, while large had 4 and super 3. By cooperative type, the ratio also started to fall in 1994 and fell through 1997 for all but mixed marketing cooperatives, whose ratio jumped from a low of 2.6 in 1996 to 4.9 in 1997.

Activity Ratios

Activity ratios measure how well cooperatives use assets. A low ratio could mean that the cooperative

was carrying too much inventory. A high ratio could be deceptive. A cooperative with fully depreciated older assets could have an artificially high ratio based on the low book value of the assets.

Total-asset-turnover *ratio* was found by dividing net sales by total cooperative assets. This ratio has been fairly steady for small, medium, and large cooperatives, remaining between 1.8 and 2.2 for most of the period (figure 16). Super cooperatives showed a little more variability, with a dip in 1995 due to increased inventories, and an increase in 1996 when most of the buildup in grain and oilseed inventory had been drawn down by both sales and lower prices.

By cooperative type, both marketing cooperatives had a higher level of asset turnover because of their higher sales levels, and higher sales (of grains and oilseeds) relative to total assets owned (figure 17). *Fixed-asset-turnover ratio* represents net sales divided by net PP&E. This ratio is similar to the total asset turnover ratio and shows how well the cooperative is using its fixed assets. This ratio by itself might not give a complete picture of the cooperative's financial health. A cooperative with fully depreciated assets

Figure 16— Total-Asset-Turnover, by Size

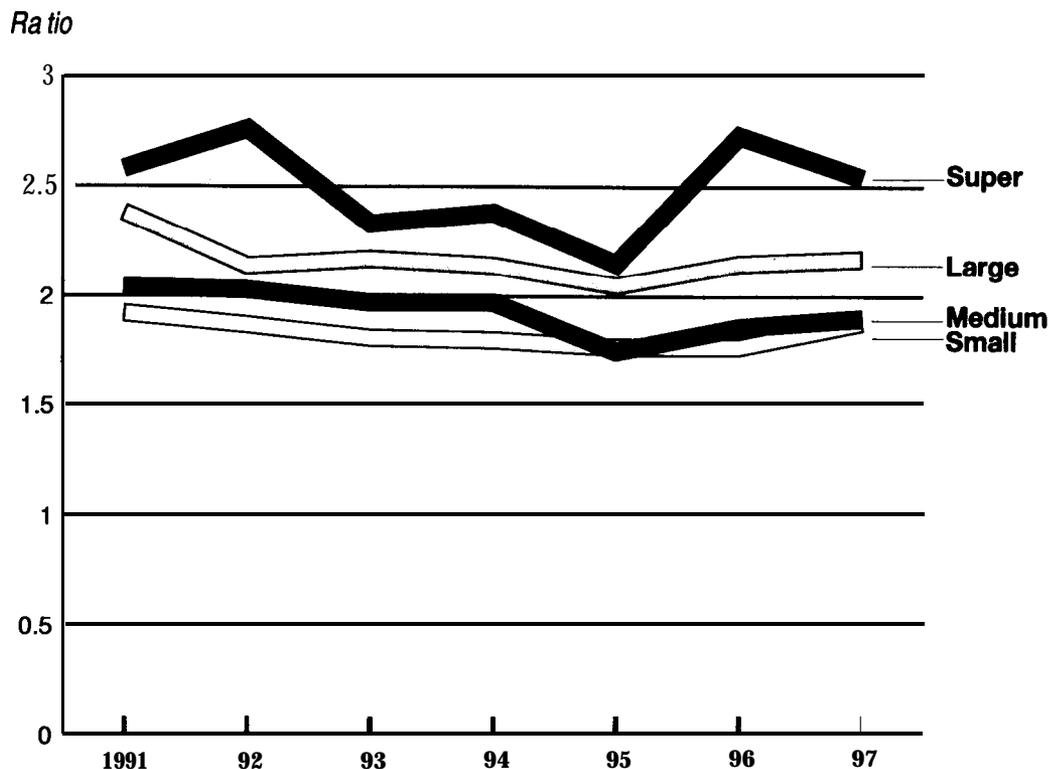
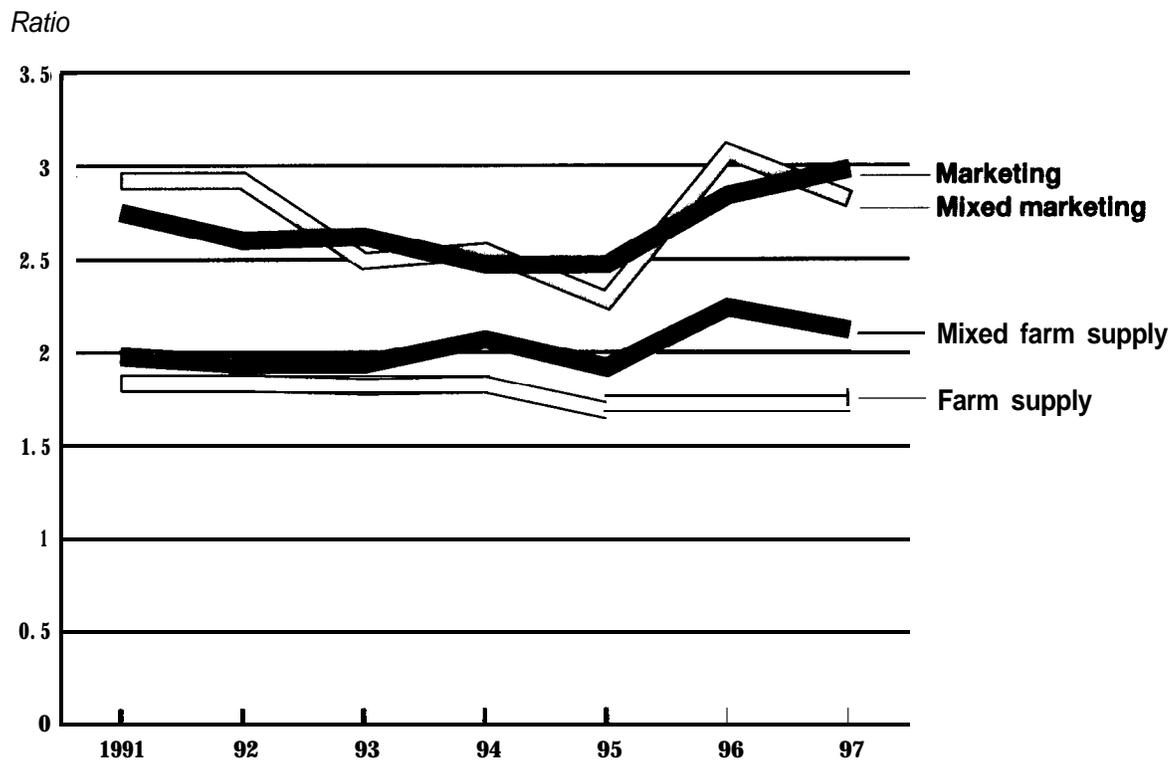


Figure 17-Total-Asset-Turnover, by Type



would have an artificially high ratio, but if invested heavily in PP&E for future expansion, it will have a temporarily low ratio.

By cooperative size, this ratio has been fairly steady, mostly ranging between 6 and 9. Most of the ratios described so far have small cooperatives as the highest or lowest, with medium, large, and super cooperatives following in an orderly fashion. Fixed-asset-turnover ratio is an exception because super cooperatives have the highest ratio around 9 or 9.5; followed by small cooperatives at 8 to 9; large cooperatives, 7 to 8; and medium cooperatives, 6 to 7.

Profitability Ratios

Profitability ratios, such as gross profit margin, indicate the efficiency of the cooperative's operations. *Gross profit margin* is found by subtracting the cost of goods sold from net sales and then dividing this amount (gross margin) by net sales. This margin is an important operating ratio. A small change has a tremendous impact on local savings. It indicates the cooperative's pricing policy and cost of goods offered for sale.

For all cooperatives, this margin averaged around 11 percent in 1997 and held steady between 11

and 13 percent from 1991 through 1997. Gross profit margin was the highest for small cooperatives, averaging almost 16 percent and fell to 9.5 percent for super cooperatives. Both farm supply cooperatives had a much higher gross profit margin than the marketing cooperatives.

Return on total assets measures the rate of return on total investment. It is found by dividing net income by total assets and usually calculated before interest and taxes. This ratio measures performance. It is not sensitive to the leverage position of the cooperative. Super and large cooperatives generally had a higher return on total assets except in 1994 when medium cooperatives had a return of 9.3 and 1997 when they had a return of 9.6 (figure 18). The increase in return on total assets for both small and medium cooperatives seems to correspond to their increased leverage that started in 1994.

The return on total assets was about 8.5 for all types in 1991 and rose slightly by 1997 for farm supply and mixed marketing cooperatives (figure 19). For marketing cooperatives the return dipped below 6 in 1997 and fell to 7.7 for mixed farm supply cooperatives.

Figure 18— Return on Total Assets, by Size

Percent

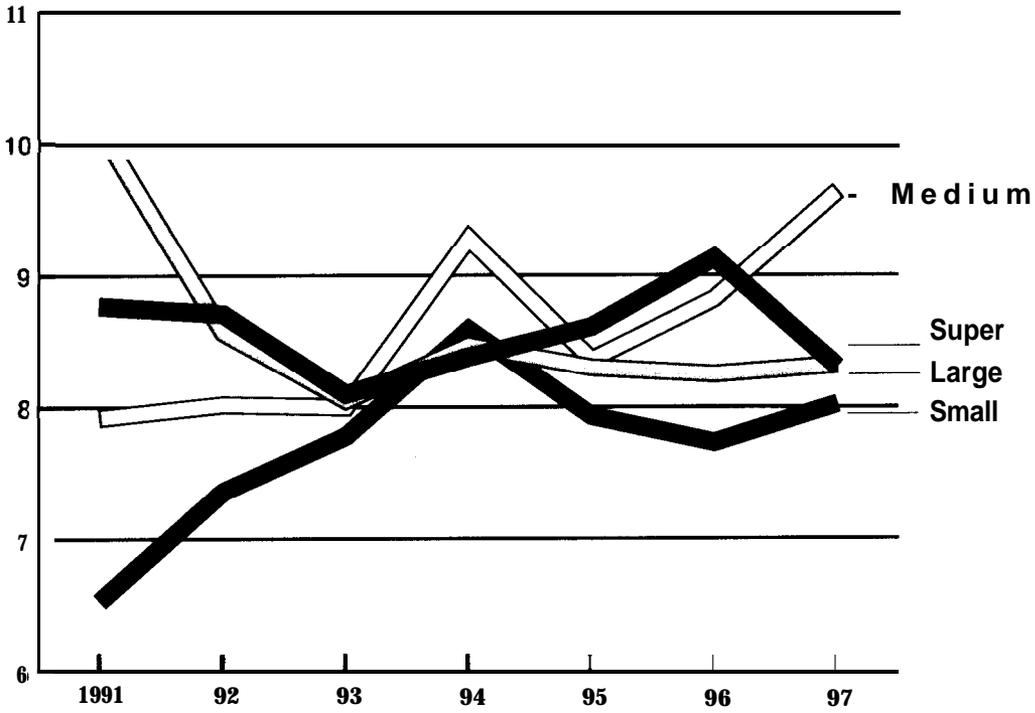
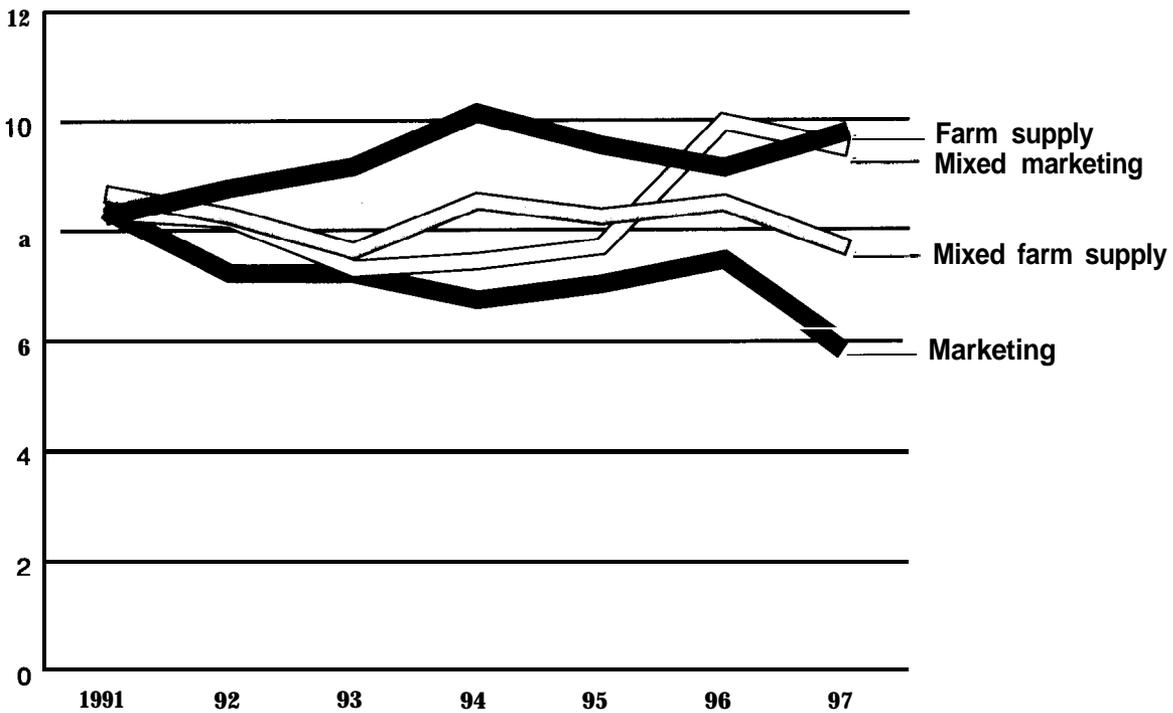


Figure 19— Return on Total Assets, by Type

Percent



Return on equity represents income on member

work together to provide goods and services that they alone might not be able to provide. These efforts also allow the cooperatives to keep their regular assets separate from the venture. Cooperatives were involved in these joint ventures or LLC's:

- energy ventures
-
- GPS/GIS equipment and services, liquid fertilizer facility, crop protection services, feed and agronomy sharing of a grain venture.

The last change noted here is ownership, or contractual growing of livestock. Four cooperatives provided feeder pigs to farmers. Two cooperatives had growout facilities.

With most of the studied cooperatives having feed sales (and feedmills), ownership of hogs and contractual growing of feeder pigs provide an outlet for feed sales. Several regional cooperatives have helped develop breeding stock and financing for hog operations, further strengthening local cooperative participation in the hog industry.

Aside from the standard farm supply and marketing business, some of the studied cooperatives had branded hardware stores, appliance stores, implement dealerships, lumberyards, grocery store, and an auto parts store.

Other Changes

Aside from the changes in their balance sheet and

percent—
much higher than most farm
along major highways, the local cooperative can expand its customer base with a convenience store. The stores can also provide another source of food items in small communities that may not have a grocery store. These cooperatives also operated two fast food restaurants that may or may not be connected to convenience stores.

Another change *was the formation of 11 joint ventures and 4 limited liability companies (LLC's). They allow cooperatives (and investor-owned firms) to

Summary and Conclusions

Local cooperatives remained strong throughout this study, with assets increasing almost 9 percent per year. More than half of the accounts receivable were PP&E grew 8 percent per year. Owner equities grew 7 percent per year and member ownership in the local was about 55 percent in 1997. Net sales grew 9 percent per year while total expenses and net income both grew 8 percent.

Agricultural cooperatives continue to play a vital role by helping farmers help themselves gain access to markets for their produce and a source for production supplies. Some cooperatives are embracing value-

Local cooperatives are also important to the rural communities in which they operate—often one of the largest employers and providing considerable tax revenues. Along with the shift to fewer and larger farms, cooperatives have also undergone changes through extensive consolidation during the past two decades, attempting to maintain an adequate size from which to provide expanded products and markets to their members.

Membership or affiliation with a regional cooperative was important to the studied cooperatives as a source of supplies, marketing opportunities, or needed seasonal capital. Patronage refunds from regional cooperatives equaled almost 2 percent of net sales and provided an important source of income.

Financial ratio analysis showed an increased use of debt by local cooperatives, probably fueled by a strong growth in the national economy and low interest rates. Cash patronage refunds from the locals to farmers remains at historic levels, providing income to members when crop prices were low.

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Appendix table t- **Common-size balance sheet for small cooperatives**

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Assets							
Current assets							
Accounts receivable	15.54	15.07	13.80	13.49	13.72	13.74	13.98
Inventories							
-grain	1.09	1.20	.88	2.55	1.20	1.45	1.62
-farm supplies	18.82	19.65	20.48	19.49	20.36	19.26	19.88
Other current assets	12.55	12.38	12.94	13.41	14.10	14.45	14.22
Total current assets	48.00	48.30	48.10	48.94	49.38	48.90	49.70
Investments and other assets							
Investments							
-other cooperatives	30.38	28.67	28.67	28.59	29.44	28.66	28.65
-Bank for Co-ops	.40	.32	.38	.43	.41	.51	.64
-total	30.78	28.99	29.05	29.02	29.85	29.17	27.29
Other assets	.44	.64	.76	.62	.75	.68	.91
Total invest. & other assets	31.22	29.63	29.81	29.64	30.60	29.85	28.20
Net property, plant & equip.	20.78	22.07	22.09	21.42	20.02	21.25	22.10
Total assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities and owner equities							
Current liabilities							
Cur. portion of long-term debt	1.39	1.49	1.21	1.04	.87	.85	.85
Notes payable-seasonal	5.34	4.91	6.02	4.99	4.59	4.88	5.77
Accounts payable	5.43	7.58	6.20	5.59	6.52	5.82	6.07
Other liabilities	7.83	9.27	8.19	9.21	8.12	7.85	8.75
Total current liabilities	19.99	23.25	21.62	20.83	20.10	19.40	21.44
Long-term debt	5.21	5.70	5.11	3.61	2.62	3.02	3.15
Total liabilities	25.20	28.95	26.73	24.44	22.72	22.42	24.59
Owner equities							
Allocated equity	57.95	55.42	56.69	59.04	60.78	61.22	59.43
Unallocated equity	18.85	15.63	16.58	16.52	16.50	16.36	15.98
Total owner equities	74.80	71.05	73.27	75.56	77.28	77.58	75.41
Total lia. & owner equities	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Based on assets of:	\$1,331,516	\$1,407,947	\$1,390,114	\$1,361,718	\$1,316,897	\$1,232,517	\$1,226,910

Appendix table 3— Common-size balance sheet for large cooperatives

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Assets							
Current assets							
Accounts receivable	13.30	13.84	13.60	13.72	14.35	14.18	13.48
Inventories							
-grain	4.87	7.37	11.38	7.25	9.20	8.38	a.23
-farm supplies	17.06	16.85	17.20	1a.13	16.62	20.22	17.40
Other current assets	<u>9.21</u>	<u>9.67</u>	<u>7.80</u>	<u>9.03</u>	<u>9.07</u>	<u>9.24</u>	<u>1o.87</u>
Total current assets	44.44	47.73	49.98	48.13	49.24	52.02	49.98
Investments and other assets							
Investments							
-other cooperatives	22.80	21.77	20.79	21.53	18.87	17.72	18.69
-Bank for Co-ops	<u>1.36</u>	<u>1.27</u>	<u>1.18</u>	<u>1.27</u>	<u>1.35</u>	<u>1.48</u>	<u>1.41</u>
-total	24.16	23.04	21.97	22.80	20.22	19.20	20.10
Other assets	<u>3.08</u>	<u>2.47</u>	<u>1.43</u>	<u>1.12</u>	<u>.80</u>	<u>.75</u>	<u>.60</u>
Total invest. & other assets	27.24	25.51	23.40	23.92	21.02	19.95	20.70
Net property, plant & equip.	<u>28.32</u>	<u>26.76</u>	<u>26.62</u>	<u>27.95</u>	<u>29.74</u>	<u>28.03</u>	<u>29.32</u>
Total assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities and owner equities							
Current liabilities							
Cur. portion of long-term debt	1.91	2.35	1.88	1.76	1.40	1.86	1.53
Notes payable-seasonal	7.64	10.70	12.97	9.67	9.15	10.41	6.83
Accounts payable	6.80	5.89	6.10	5.92	6.40	7.84	5.57
Other liabilities	<u>14.02</u>	<u>15.57</u>	<u>14.38</u>	<u>13.62</u>	<u>14.50</u>	<u>13.19</u>	<u>15.14</u>
Total current liabilities	30.37	34.51	35.33	30.97	31.45	33.30	29.07
Long-term debt	<u>12.03</u>	<u>9.89</u>	<u>7.86</u>	<u>a.33</u>	<u>a.49</u>	<u>9.29</u>	<u>8.64</u>
Total liabilities	42.40	44.40	43.19	39.30	39.94	42.59	37.71
Owner equities							
Allocated equity	44.34	43.80	44.60	48.61	47.80	44.42	47.28
Unallocated equity	<u>13.26</u>	<u>11.80</u>	<u>12.21</u>	<u>12.09</u>	<u>12.26</u>	<u>12.99</u>	<u>15.01</u>
Total owner equities	<u>57.60</u>	<u>55.60</u>	<u>56.81</u>	<u>60.70</u>	<u>60.06</u>	<u>57.41</u>	<u>62.29</u>
Total lia. & owner equities	100.00	~100.00	100.00	100.00	100.00	100.00	100.00
Based on assets of:	\$6,121,611	\$6,191,288	\$6,502,874	\$5,917,812	\$5,897,026	\$6,258,121	\$5,714,966

Appendix table 4—Common-size balance sheet for super cooperatives

	1997	1996	1995	1994	1993	1992	1991
	Percent						
Assets							
Current assets							
Accounts receivable	12.40	11.55	10.88	12.01	10.92	11.43	11.82
Inventories							
-grain	12.49	17.51	23.85	15.53	16.05	15.86	16.39
-farm supplies	15.38	14.54	13.67	14.33	15.40	10.02	13.91
Other current assets	<u>12.59</u>	<u>13.88</u>	<u>12.07</u>	<u>14.85</u>	<u>14.72</u>	<u>16.47</u>	<u>11.09</u>
Total current assets	52.86	57.48	60.47	56.72	57.09	53.78	53.21
Investments and other assets							
Investments							
-other cooperatives	17.08	14.62	13.54	14.05	13.88	13.65	12.83
-Bank for Co-ops	<u>1.59</u>	<u>1.51</u>	<u>1.69</u>	<u>1.93</u>	<u>1.86</u>	<u>2.12</u>	<u>2.24</u>
-total	18.67	16.13	15.23	15.97	15.74	15.78	15.06
Other assets	<u>2.40</u>	<u>2.30</u>	<u>.99</u>	<u>1.22</u>	<u>1.50</u>	<u>1.83</u>	<u>2.22</u>
Total invest. & other assets	21.07	18.43	16.22	17.19	17.24	17.61	17.28
Net property, plant & equip.	<u>26.07</u>	<u>24.09</u>	<u>23.31</u>	<u>26.09</u>	<u>25.67</u>	<u>28.63</u>	<u>29.51</u>
Total assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities and owner equities							
Current liabilities							
Cur. portion of long-term debt	1.59	1.47	2.24	2.25	1.84	2.07	2.10
Notes payableseasonal	14.96	20.00	22.85	16.81	14.64	14.58	10.18
Accounts payable	6.47	5.85	5.87	8.51	6.79	4.97	6.19
Other liabilities	<u>20.01</u>	<u>18.93</u>	<u>16.95</u>	<u>17.94</u>	<u>19.89</u>	<u>18.72</u>	<u>22.92</u>
Total current liabilities	43.03	46.25	47.91	43.51	43.16	40.34	41.39
Long-term debt	<u>9.58</u>	<u>9.21</u>	<u>7.17</u>	<u>6.70</u>	<u>6.74</u>	<u>7.48</u>	<u>8.03</u>
Total liabilities	52.61	55.46	55.08	50.21	49.90	47.82	49.42
Owner equities							
Allocated equity	38.68	34.83	35.45	39.21	40.08	43.33	42.70
Unallocated equity	<u>10.71</u>	<u>9.71</u>	<u>9.47</u>	<u>10.58</u>	<u>10.02</u>	<u>8.85</u>	<u>7.88</u>
Total owner equities	<u>47.39</u>	<u>44.54</u>	<u>44.92</u>	49.79	<u>50.10</u>	<u>52.18</u>	<u>50.58</u>
Total lia. & owner equities	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Based on assets of:	\$15,381,106	\$15,649,616	\$15,867,328	\$13,047,234	\$12,632,540	\$11,533,937	\$11,582,318

Appendix table 5—Common-size balance sheet for farm supply cooperatives

	1997	1996	1995	1994	1993	1992	1991
	Percent						
Assets							
Current assets							
Accounts receivable	14.42	14.10	13.66	14.21	13.96	14.11	13.98
Inventories-farm supplies	20.47	22.00	22.58	22.93	22.38	21.49	21.72
Other current assets	<u>8.87</u>	<u>9.85</u>	<u>10.21</u>	<u>10.19</u>	<u>11.07</u>	<u>10.70</u>	<u>11.65</u>
Total current assets	43.78	45.75	46.45	47.33	47.41	46.30	47.33
Investments and other assets							
Investments							
-other cooperatives	28.99	26.58	27.08	27.41	27.70	28.20	28.98
-Bank for Co-ops	<u>.94</u>	<u>.81</u>	<u>.78</u>	<u>.79</u>	<u>.84</u>	<u>.88</u>	<u>1.00</u>
-total	27.93	27.39	27.86	28.20	28.54	29.08	27.98
Other assets	<u>2.24</u>	<u>1.76</u>	<u>1.74</u>	<u>1.17</u>	<u>1.03</u>	<u>.91</u>	<u>.91</u>
Total invest. & other assets	30.17	29.15	29.60	29.37	29.57	29.99	28.89
Net property, plant & equip.	<u>28.07</u>	<u>25.10</u>	23.95	<u>23.30</u>	<u>23.02</u>	<u>23.71</u>	<u>23.78</u>
Total assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities and owner equities							
Current liabilities							
Cur. portion of long-term debt	1.98	2.07	1.39	1.26	1.29	1.35	1.43
Notes payable-seasonal	7.20	7.91	7.43	7.23	5.24	4.78	5.57
Accounts payable	8.72	6.39	7.19	6.53	6.79	6.28	6.58
Other liabilities	<u>9.19</u>	<u>10.01</u>	<u>9.38</u>	<u>9.27</u>	<u>9.70</u>	<u>9.33</u>	<u>9.15</u>
Total current liabilities	25.07	26.38	25.39	24.29	23.02	21.74	22.73
Long-term debt	<u>10.19</u>	<u>8.83</u>	<u>7.20</u>	<u>5.69</u>	<u>5.77</u>	<u>5.67</u>	<u>6.12</u>
Total liabilities	35.26	35.21	32.59	29.98	28.79	27.41	28.85
Owner equities							
Allocated equity	50.22	51.01	52.94	55.89	57.18	58.23	57.63
Unallocated equity	<u>14.52</u>	<u>13.78</u>	<u>14.47</u>	<u>14.13</u>	<u>14.03</u>	<u>14.36</u>	<u>13.52</u>
Total owner equities	<u>64.74</u>	64.79	<u>67.41</u>	<u>70.02</u>	<u>71.21</u>	<u>72.59</u>	<u>71.15</u>
Total lia. & owner equities	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Based on assets of:	\$3,303,118	\$3,021,526	\$2,714,714	\$2,454,349	\$2,232,341	\$2,058,812	\$2,000,235

Appendix table 6— **Common-size balance sheet for mixed farm supply cooperatives**

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Assets							
Current assets							
Accounts receivable	16.36	16.21	15.67	16.06	15.84	16.16	15.60
Inventories							
-grain	3.90	4.72	10.15	3.55	3.74	1.85	1.14
-farm supplies	19.36	19.13	18.12	20.01	20.35	19.96	24.18
Other current assets	<u>5.48</u>	<u>6.49</u>	<u>6.73</u>	<u>9.69</u>	<u>7.54</u>	<u>8.43</u>	<u>7.20</u>
Total current assets	45.12	46.55	50.67	49.31	47.48	46.40	48.12
Investments and other assets							
Investments							
-other cooperatives	19.10	19.17	17.56	18.72	18.51	19.11	18.64
-Bank for Co-ops	<u>1.64</u>	<u>1.59</u>	<u>1.57</u>	<u>1.74</u>	<u>1.78</u>	<u>1.70</u>	<u>1.65</u>
-total	20.74	20.76	19.13	20.46	20.29	20.81	20.29
Other assets	<u>2.54</u>	<u>2.40</u>	<u>1.19</u>	<u>.55</u>	<u>.56</u>	<u>.39</u>	<u>.28</u>
Total invest. & other assets	23.28	23.16	20.32	21.01	20.85	21.20	20.57
Net property, plant & equip.	<u>31.60</u>	<u>30.29</u>	<u>29.01</u>	<u>29.68</u>	<u>31.67</u>	<u>32.40</u>	<u>31.31</u>
Total assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities and owner equities							
Current liabilities							
Cur. portion of long-term debt	1.81	1.64	2.95	2.47	2.63	1.70	1.42
Notes payable-seasonal	11.03	10.48	14.50	10.19	8.12	6.96	6.66
Accounts payable	9.71	9.46	7.81	7.48	a.37	7.76	7.95
Other liabilities	<u>9.11</u>	<u>9.60</u>	<u>9.64</u>	<u>10.08</u>	<u>9.98</u>	<u>9.25</u>	<u>12.02</u>
Total current liabilities	31.66	31.18	34.90	30.22	29.10	25.67	28.05
Long-term debt	<u>13.90</u>	<u>12.51</u>	<u>8.53</u>	<u>7.32</u>	<u>7.54</u>	<u>7.64</u>	<u>6.83</u>
Total liabilities	45.56	43.69	43.43	37.54	36.64	33.31	34.88
Owner equities							
Allocated equity	43.70	45.24	46.05	50.55	51.38	54.90	54.03
Unallocated equity	<u>10.74</u>	<u>11.07</u>	<u>10.52</u>	<u>11.91</u>	<u>11.98</u>	<u>11.79</u>	<u>11.09</u>
Total owner equities	<u>54.44</u>	<u>56.31</u>	<u>56.57</u>	<u>62.46</u>	<u>63.36</u>	<u>66.69</u>	<u>65.12</u>
Total lia. & owner equities	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Based on assets of:	\$8,601,424	\$7,245,973	\$7,305,652	\$5,918,238	\$5,583,503	\$5,063,405	\$4,744,506

Appendix table 7— Common-size balance sheet for mixed marketing cooperatives

	1997	1995	1995	1994	1993	1992	1991
	Percent						
Assets							
Current assets							
Accounts receivable	12.78	14.69	10.69	12.20	11.51	13.12	12.69
Inventories							
-grain	14.28	15.48	27.81	18.99	19.58	18.86	21.19
-farm supplies	13.93	14.84	12.67	12.24	13.61	12.06	12.07
Other current assets	13.80	14.48	10.84	13.04	12.71	11.73	9.53
Total current assets	54.57	59.49	62.01	56.47	57.41	55.77	55.48
Investments and other assets							
Investments							
-other cooperatives	18.32	14.66	14.83	16.55	15.98	15.15	13.99
-Bank for Co-ops	1.50	1.50	1.27	1.50	1.48	1.69	1.74
-total	19.82	16.16	16.10	18.05	17.46	16.84	15.73
Other assets	1.80	1.24	.53	.87	.55	.46	.85
Total invest. & other assets	21.42	17.40	16.63	18.92	18.01	17.30	16.58
Net property, plant & equip.	24.01	23.11	21.36	24.61	24.58	26.93	27.94
Total assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities and owner equities							
Current liabilities							
Cur. portion of long-term debt	1.51	1.64	1.14	1.44	.99	1.85	1.76
Notes payableseasonal	12.25	19.31	25.49	16.71	15.08	14.86	11.35
Accounts payable	4.55	5.05	4.58	6.01	5.88	6.32	5.54
Other liabilities	25.18	21.96	18.86	19.26	21.56	18.68	24.02
Total current liabilities	43.49	47.96	50.07	43.42	43.51	41.71	42.67
Long-term debt	8.50	6.92	5.71	6.68	6.77	7.30	6.13
Total liabilities	49.99	54.88	55.78	50.10	50.28	49.01	48.80
Owner equities							
Allocated equity	37.67	33.83	33.68	37.46	39.05	40.31	40.02
Unallocated equity	12.34	11.29	10.54	12.44	10.67	10.68	11.18
Total owner equities	50.01	45.12	44.22	49.90	49.72	50.99	51.20
Total lia. & owner equities	100.00	100.08	100.00	100.00	100.00	100.00	100.00
Based on assets of:	\$8,105,372	\$8,112,691	\$8,266,573	\$6,681,318	\$6,558,143	\$5,609,760	\$5,428,296

Appendix table 8— Common-size balance sheet for marketing cooperatives

	1997	1996	1995	1994	1993	1992	1991
	Percent						
Assets							
Current assets							
Accounts receivable	6.95	6.70	4.29	4.31	5.66	5.29	6.80
Inventories							
-grain	23.34	30.20	32.54	28.59	25.02	21.63	16.67
-farm supplies	6.59	6.67	4.05	3.80	5.19	5.02	6.32
Other current assets	<u>20.69</u>	<u>18.94</u>	<u>22.79</u>	<u>25.17</u>	<u>23.99</u>	<u>24.02</u>	<u>20.41</u>
Total current assets	57.57	62.51	63.67	61.87	59.86	55.96	50.20
Investments and other assets							
Investments							
-other cooperatives	13.92	12.60	9.72	7.99	9.54	11.33	12.02
-Bank for Coops	<u>1.49</u>	<u>1.20</u>	<u>1.75</u>	<u>1.72</u>	<u>1.69</u>	<u>1.79</u>	<u>2.09</u>
-total	15.41	13.80	11.47	9.71	11.23	13.12	14.11
Other assets	<u>3.14</u>	<u>2.81</u>	<u>1.41</u>	<u>2.25</u>	<u>3.14</u>	<u>3.73</u>	<u>4.88</u>
Total invest. & other assets	16.55	16.61	12.88	11.96	14.37	16.85	18.99
Net property, plant & equip.	<u>23.88</u>	<u>20.88</u>	<u>23.45</u>	<u>26.17</u>	<u>25.77</u>	<u>27.19</u>	<u>30.81</u>
Total assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities and owner equities							
Current liabilities							
Cur. portion of long-term debt	1.47	1.40	2.37	2.43	.90	1.99	1.97
Notes payable-seasonal	17.80	24.13	15.58	16.15	17.03	17.25	8.12
Accounts payable	3.62	3.67	3.16	2.79	3.36	2.98	3.00
Other liabilities	<u>27.49</u>	<u>24.58</u>	<u>30.44</u>	<u>29.93</u>	<u>26.59</u>	<u>22.60</u>	<u>26.42</u>
Total current liabilities	50.38	53.78	51.55	51.30	47.88	44.82	39.51
Long-term debt	<u>8.25</u>	<u>7.45</u>	<u>7.53</u>	<u>6.47</u>	<u>5.53</u>	<u>6.69</u>	<u>9.24</u>
Total liabilities	58.63	61.23	59.08	57.77	53.41	51.51	48.75
Owner equities							
Allocated equity	29.94	29.28	30.11	32.71	34.77	37.95	41.23
Unallocated equity	<u>11.43</u>	<u>9.49</u>	<u>10.81</u>	<u>9.52</u>	<u>11.82</u>	<u>10.54</u>	<u>10.02</u>
Total owner equities	41.37	38.77	40.92	42.23	46.59	48.49	51.25
Total lia. & owner equities	<u>100.00</u>	<u>100.00</u>	<u>100.00</u>	<u>100.00</u>	<u>100.00</u>	<u>100.00</u>	<u>100.00</u>
Based on assets of:	\$9,501,982	\$10,878,233	\$6,451,198	\$7,447,146	\$5,995,537	\$6,103,842	\$5,582,767

Appendix table 9— Abbreviated income statement for small cooperatives

	1997	1996	1995	1994	1993	1992	1991
				Percent			
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Cost of goods sold	<u>85.55</u>	<u>84.44</u>	<u>83.73</u>	<u>83.90</u>	<u>83.81</u>	<u>84.24</u>	<u>85.13</u>
Gross margin	14.45	15.56	18.27	16.10	16.19	15.76	14.87
Service and other income	<u>3.23</u>	<u>3.28</u>	<u>3.00</u>	<u>3.21</u>	<u>3.30</u>	<u>3.23</u>	<u>3.28</u>
Gross revenue	17.88	18.84	19.27	19.31	19.49	18.99	18.15
Expenses							
Employee ¹	8.84	8.93	9.28	8.88	9.28	9.20	8.76
Administrative ²	1.10	1.22	1.20	0.98	0.92	0.55	0.50
General ³	3.90	4.25	4.43	4.53	4.73	5.21	5.33
Depreciation	1.90	2.13	2.15	1.99	1.98	1.93	1.79
Interest	.73	.72	.67	.42	.43	.50	.43
Bad debts	<u>.24</u>	<u>.28</u>	<u>.30</u>	<u>.20</u>	<u>.17</u>	<u>.17</u>	<u>.16</u>
Total expenses	16.51	17.53	18.03	17.00	17.51	17.56	16.97
Local savings	1.17	1.31	1.24	2.31	1.98	1.43	1.18
Patronage refunds received	<u>2.37</u>	<u>2.32</u>	<u>2.56</u>	<u>2.03</u>	<u>1.90</u>	<u>1.97</u>	<u>1.64</u>
Savings before income taxes	3.54	3.63	3.80	4.34	3.88	3.40	2.82
Less income taxes	<u>.17</u>	<u>.16</u>	<u>.20</u>	<u>.17</u>	<u>.15</u>	<u>.16</u>	<u>.14</u>
Net income	3.37	3.47	3.60	4.17	3.73	3.24	2.68
Based on net sales of:	\$2,501,248	\$2,498,854	\$2,461,876	\$2,455,263	\$2,377,478	\$2,305,765	\$2,351,265

¹ Salaries and wages include payroll taxes, employee insurance, unemployment compensation, and pension expense.

² Administrative costs include professional services, office supplies, telephone, meetings and travel, donations, dues and subscriptions, directors' fees and expense, and annual meetings.

³ General expenses include advertising and promotion, delivery (auto and truck), insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies and repairs, repairs and maintenance, utilities, miscellaneous, and other.

Appendix table to- **Abbreviated income statement for medium cooperatives**

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Cost of goods sold	<u>84.70</u>	<u>85.40</u>	<u>88.12</u>	<u>88.05</u>	<u>86.28</u>	<u>85.97</u>	<u>86.39</u>
Gross margin	15.30	14.80	13.88	13.95	13.74	14.03	13.61
Service and other income	<u>3.88</u>	<u>3.59</u>	<u>4.24</u>	<u>3.58</u>	<u>3.52</u>	<u>3.18</u>	<u>3.09</u>
Gross revenue	19.18	18.19	18.12	17.53	17.28	17.21	16.70
Expenses							
Employee ¹	8.48	8.21	8.01	7.82	7.88	7.97	7.60
Administrative ²	.95	.99	.94	.73	.59	.43	.40
General ³	4.25	4.07	4.18	4.23	4.58	4.78	4.89
Depreciation	2.29	2.12	2.17	2.03	2.07	1.98	1.85
Interest	.89	.97	.86	.61	.61	.56	.59
Bad debts	<u>.20</u>	<u>.24</u>	<u>.27</u>	<u>.20</u>	<u>.21</u>	<u>.19</u>	<u>.18</u>
Total expenses	17.04	18.80	18.41	15.42	15.70	15.89	15.51
Local savings	2.12	1.59	1.71	2.11	1.56	1.32	1.19
Patronage refunds received	<u>2.07</u>	<u>2.17</u>	<u>2.20</u>	<u>1.98</u>	<u>1.88</u>	<u>1.96</u>	<u>1.93</u>
Savings before income taxes	4.19	3.76	3.91	4.09	3.44	3.28	3.12
Less income taxes	<u>.27</u>	<u>.26</u>	<u>.19</u>	<u>.20</u>	<u>.16</u>	<u>.19</u>	<u>.18</u>
Net income	3.92	3.50	3.72	3.89	3.28	3.09	2.94
Based on net sales of:	\$6,733,538	\$6,708,885	\$6,643,151	\$6,753,615	\$6,570,556	\$6,856,237	\$6,845,418

¹ Salaries and wages include payroll taxes, employee insurance, unemployment compensation, and pension expense.

² Administrative costs include professional services, office supplies, telephone, meetings and travel, donations, dues and subscriptions, directors' fees and expense, and annual meetings.

³ General expenses include advertising and promotion, delivery (auto and truck), insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies and repairs, repairs and maintenance, utilities, miscellaneous, and other.

Appendix table 11— Abbreviated income statement for large cooperatives

	1997	1996	1995	1994	1993	1992	1991
				Percent			
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Cost of goods sold	<u>88.17</u>	<u>87.75</u>	<u>86.68</u>	<u>85.23</u>	<u>86.16</u>	<u>86.44</u>	<u>86.48</u>
Gross margin	11.83	12.25	13.32	14.77	13.84	13.56	13.52
Service and other income	<u>3.78</u>	<u>3.04</u>	<u>3.88</u>	<u>3.12</u>	<u>3.74</u>	<u>3.98</u>	<u>4.17</u>
Gross revenue	15.61	15.29	17.20	17.89	17.58	17.54	17.69
Expenses							
Employee ¹	7.20	7.18	8.07	8.32	8.08	8.16	8.14
Administrative ²	.76	.71	.68	.68	.56	.30	.25
General ³	3.73	3.64	4.19	4.36	4.61	4.72	4.77
Depreciation	1.76	1.76	1.87	1.92	1.87	1.81	1.79
Interest	.89	.89	.98	.75	.67	.69	.70
Bad debts	<u>.18</u>	<u>.15</u>	<u>.13</u>	<u>.14</u>	<u>.14</u>	<u>.13</u>	<u>.12</u>
Total expenses	14.52	14.33	15.92	16.17	15.93	15.81	15.77
Local savings	1.09	.96	1.28	1.72	1.65	1.73	1.92
Patronage refunds received	<u>1.86</u>	<u>1.98</u>	<u>1.78</u>	<u>1.49</u>	<u>1.39</u>	<u>1.47</u>	<u>1.51</u>
Savings before income taxes	2.95	2.94	3.06	3.21	3.04	3.20	3.43
Less income taxes	<u>.22</u>	<u>.18</u>	<u>.18</u>	<u>.17</u>	<u>.17</u>	<u>.24</u>	<u>.26</u>
Net income	2.73	2.76	2.88	3.04	2.87	2.96	3.17
Based on net sales of:	\$13,287,037	\$13,336,842	\$13,356,966	\$12,657,719	\$12,807,345	\$13,412,710	\$13,579,176

¹ Salaries and wages include payroll taxes, employee insurance, unemployment compensation, and pension expense.

² Administrative costs include professional services, office supplies, telephone, meetings and travel, donations, dues and subscriptions, directors' fees and expense, and annual meetings.

³ General expenses include advertising and promotion, delivery (auto and truck), insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies and repairs, repairs and maintenance, utilities, miscellaneous, and other.

Appendix table 12-Abbreviated **income statement for super cooperatives**

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Cost of goods sold	<u>91.13</u>	<u>91.54</u>	<u>89.52</u>	<u>89.43</u>	<u>89.28</u>	<u>91.37</u>	<u>91.43</u>
Gross margin	8.87	8.46	10.48	10.57	10.72	8.83	8.57
Service and other income	<u>3.54</u>	<u>2.69</u>	<u>3.85</u>	<u>3.91</u>	<u>4.08</u>	<u>3.83</u>	<u>4.27</u>
Gross revenue	12.41	11.15	14.33	14.48	14.80	12.46	12.84
Expenses							
Employee ¹	5.35	4.67	5.76	5.83	5.93	4.73	4.83
Administrative ²	.48	.43	.54	.51	.37	.26	.20
General ³	3.15	2.75	3.61	3.93	4.27	3.65	3.99
Depreciation	1.48	1.30	1.63	1.66	1.64	1.42	1.43
interest	.94	1.25	1.02	.81	.66	.78	.68
Bad debts	<u>.24</u>	<u>.07</u>	<u>.08</u>	<u>.11</u>	<u>.10</u>	<u>.12</u>	<u>.11</u>
Total expenses	11.64	10.47	12.64	12.85	12.97	10.96	11.24
Local savings	.77	0.68	1.69	1.63	1.83	1.50	1.60
Patronage refunds received	<u>1.56</u>	<u>1.41</u>	<u>1.29</u>	<u>1.09</u>	<u>.99</u>	<u>.88</u>	<u>1.01</u>
Savings before income taxes	2.33	2.09	2.98	2.72	2.82	2.38	2.61
Less income taxes	<u>.17</u>	<u>.14</u>	<u>.24</u>	<u>.19</u>	<u>.19</u>	<u>.14</u>	<u>.17</u>
Net income	2.16	1.95	2.74	2.53	2.63	2.24	2.44
Based on net sales of:	\$39,042,353	\$42,779,282	\$34,132,710	\$30,997,079	\$29,379,856	\$31,800,104	\$29,841,133

¹ Salaries and wages include payroll taxes, employee insurance, unemployment compensation, and pension expense.

² Administrative costs include professional services, office supplies, telephone, meetings and travel, donations, dues and subscriptions, directors' fees and expense, and annual meetings.

³ General expenses include advertising and promotion, delivery (auto and truck), insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies and repairs, repairs and maintenance, utilities, miscellaneous, and other.

Appendix table 13— **Abbreviated Income statement for farm supply cooperatives**

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00
cost of goods sold	<u>83.04</u>	<u>82.85</u>	<u>82.12</u>	<u>82.08</u>	<u>81.88</u>	<u>82.29</u>	<u>82.45</u>
Gross margin	18.96	17.15	17.88	17.92	18.14	17.71	17.55
Service and other income	<u>3.49</u>	<u>3.04</u>	<u>3.48</u>	<u>3.15</u>	<u>2.81</u>	<u>3.18</u>	<u>3.04</u>
Gross revenue	20.45	20.19	21.36	21.07	20.95	20.89	20.59
Expenses							
Employee ¹	9.64	9.62	10.22	9.82	10.00	10.24	10.09
Administrative ²	1.01	1.04	1.08	.89	.76	.43	.34
General ³	4.46	4.46	4.70	4.83	5.05	5.62	5.83
Depreciation	2.21	2.20	2.23	2.06	2.02	1.99	1.92
Interest	1.00	.94	.89	.62	.57	.59	.65
Bad debts	<u>.21</u>	<u>.20</u>	<u>.20</u>	<u>.19</u>	<u>.18</u>	<u>.19</u>	<u>.17</u>
Total expenses	18.53	18.46	19.32	18.41	18.58	19.06	19.00
Local savings	1.92	1.73	2.04	2.66	2.37	1.83	1.59
Patronage refunds received	<u>2.63</u>	<u>2.58</u>	<u>2.71</u>	<u>2.26</u>	<u>2.10</u>	<u>2.26</u>	<u>2.08</u>
Savings before income taxes	4.55	4.31	4.75	4.92	4.47	4.09	3.67
Less income taxes	<u>.27</u>	<u>.24</u>	<u>.25</u>	<u>.27</u>	<u>.24</u>	<u>.24</u>	<u>.23</u>
Net income	4.28	4.07	4.50	4.65	4.23	3.85	3.44
Based on net sales of:	\$5,822,989	\$5,254,056	\$4,591,042	\$4,488,527	\$4,061,057	\$3,782,900	\$3,685,319

¹ Salaries and wages include payroll taxes, employee insurance, unemployment compensation, and pension expense.

² Administrative costs include professional services, office supplies, telephone, meetings and travel, donations, **dues and subscriptions, directors' fees and expense, and annual meetings.**

³ General expenses include advertising and promotion, delivery (auto and truck), insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies and repairs, repairs and maintenance, utilities, miscellaneous, and other.

Appendix table 14— Abbreviated income statement for mixed farm supply cooperatives

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00
cost of goods sold	<u>85.67</u>	<u>65.73</u>	<u>84.62</u>	<u>83.99</u>	<u>83.24</u>	<u>84.28</u>	<u>85.44</u>
Gross margin	14.33	14.27	15.38	16.01	16.76	15.72	14.56
Service and other income	<u>4.32</u>	<u>3.61</u>	<u>4.36</u>	<u>3.72</u>	<u>4.13</u>	<u>4.47</u>	<u>4.92</u>
Gross revenue	16.65	17.88	19.74	19.73	20.89	20.19	19.48
Expenses							
Employee ¹	6.63	8.40	6.95	8.70	9.34	9.33	8.86
Administrative ²	.84	.81	.85	.77	.65	.22	.15
General ³	4.53	4.31	4.85	5.08	5.69	5.69	5.58
Depreciation	2.16	2.01	2.24	2.25	2.41	2.31	2.16
Interest	1.21	1.20	1.10	.82	.78	.65	.67
Bad debts	<u>.32</u>	<u>.24</u>	<u>.23</u>	<u>.25</u>	<u>.23</u>	<u>.23</u>	<u>.18</u>
Total expenses	17.69	16.97	18.22	17.87	19.10	18.40	17.60
Local savings	.76	.91	1.52	1.86	1.79	1.79	1.88
Patronage refunds received	<u>1.64</u>	<u>1.68</u>	<u>1.66</u>	<u>1.44</u>	<u>1.36</u>	<u>1.65</u>	<u>1.64</u>
Savings before income taxes	2.40	2.59	3.18	3.30	3.15	3.44	3.52
Less income taxes	<u>.12</u>	<u>.19</u>	<u>.16</u>	<u>.15</u>	<u>.17</u>	<u>.18</u>	<u>.18</u>
Net income	2.26	2.40	3.02	3.15	2.98	3.26	3.34
Based on net sales of:	\$18,208,446	\$16,231,029	\$14,062,212	\$12,254,937	\$10,841,637	\$9,824,309	\$9,412,459

¹ Salaries and wages include payroll taxes, employee insurance, unemployment compensation, and pension expense.

² Administrative costs include professional services, office supplies, telephone, meetings and travel, donations, dues and subscriptions, directors' fees and expense, and annual meetings.

³ General expenses include advertising and promotion, delivery (auto and truck), insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies and repairs, repairs and maintenance, utilities, miscellaneous, and other.

Appendix table 15— Abbreviated **income** statement for mixed marketing **cooperatives**

	1997	1996	1995	1994	1993	1992	1991
				<i>Percent</i>			
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Cost of goods sold	<u>93.11</u>	<u>93.22</u>	<u>92.14</u>	<u>92.10</u>	<u>92.11</u>	<u>91.85</u>	<u>92.22</u>
Gross margin	8.89	8.78	7.86	7.90	7.89	8.15	7.78
Service and other income	<u>3.44</u>	<u>2.84</u>	<u>3.80</u>	<u>3.88</u>	<u>4.28</u>	<u>3.51</u>	<u>3.81</u>
Gross revenue	10.33	9.62	11.88	11.78	12.17	11.88	11.59
Expenses							
Employee ¹	4.09	3.82	4.64	4.85	4.97	4.61	4.41
Administrative ²	.42	.38	.45	.47	.38	.37	.33
General ³	2.80	2.32	2.93	3.09	3.44	3.30	3.82
Depreciation	1.32	1.22	1.41	1.49	1.45	1.34	1.32
Interest	.69	1.25	.92	.66	.56	.68	.55
Bad debts	<u>.06</u>	<u>.05</u>	<u>.07</u>	<u>.06</u>	<u>.07</u>	<u>.14</u>	<u>.10</u>
Total expenses	9.18	9.04	10.42	10.82	10.87	10.44	10.33
Local savings	1.15	.58	1.24	1.18	1.30	1.22	1.28
Patronage refunds received	<u>1.51</u>	<u>1.42</u>	<u>1.20</u>	<u>1.10</u>	<u>1.07</u>	<u>.91</u>	<u>.95</u>
Savings before income taxes	2.66	2.00	2.44	2.28	2.37	2.13	2.21
Less income taxes	<u>.22</u>	<u>.15</u>	<u>.22</u>	<u>.16</u>	<u>.13</u>	<u>.14</u>	<u>.17</u>
Net income	2.44	1.85	2.22	2.10	2.24	1.99	2.04
Based on net sales of:	\$22,895,704	\$24,879,783	\$18,885,017	\$16,954,793	\$16,299,521	\$16,392,477	\$15,841,969

¹ Salaries and wages include payroll taxes, employee insurance, unemployment compensation, and pension expense.

² Administrative costs include professional services, office supplies, telephone, meetings and travel, donations, dues and subscriptions, directors' fees and expense, and annual meetings.

³ General expenses include advertising and promotion, delivery (auto and truck), insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies and repairs, repairs and maintenance, utilities, miscellaneous, and other.

Appendix table 16— Abbreviated income statement for marketing cooperatives

	1997	1996	1995	1994	1993	1992	1991
	<i>Percent</i>						
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Cost of goods sold	<u>95.45</u>	<u>94.67</u>	<u>93.92</u>	<u>93.36</u>	<u>93.43</u>	<u>93.66</u>	<u>94.02</u>
Gross margin	4.55	5.33	6.06	6.64	6.57	6.14	5.96
Service and other income	<u>3.31</u>	<u>2.34</u>	<u>3.43</u>	<u>3.53</u>	<u>4.06</u>	<u>3.76</u>	<u>3.66</u>
Gross revenue	7.66	7.67	9.51	10.17	10.63	9.92	9.86
Expenses							
Employee ¹	3.00	2.61	2.83	3.01	3.33	3.23	3.13
Administrative ²	.29	.29	.32	.30	.26	.30	.33
General ³	2.40	2.12	3.04	3.39	3.56	3.06	3.04
Depreciation	.98	0.95	1.24	1.21	1.29	1.23	1.20
interest	.79	1.04	.80	.81	.59	.80	.71
Bad debts	.33	.03	.09	.01	.07	.04	.04
Total expenses	7.79	7.24	6.32	6.73	9.12	6.66	6.45
Local savings	.07	.43	1.19	1.44	1.51	1.26	1.41
Patronage refunds received	<u>1.10</u>	<u>1.15</u>	<u>.84</u>	<u>.47</u>	<u>.65</u>	<u>.71</u>	<u>.88</u>
Savings before income taxes	1.17	1.56	2.03	1.91	2.16	1.97	2.29
Less income taxes	<u>.13</u>	<u>.11</u>	<u>.17</u>	<u>.12</u>	<u>.13</u>	<u>.13</u>	<u>.16</u>
Net income	1.04	1.47	1.86	1.79	2.03	1.84	2.13

Based on net sales of: **\$28,339,367** **\$30,851,603** **\$15,939,010** **\$18,417,662** **\$15,706,787** **\$15,895,032** **\$15,378,071**

¹ Salaries and wages include payroll taxes, employee insurance, unemployment compensation, and pension expense.

² Administrative costs include professional services, office supplies, telephone, meetings and travel, donations, dues and subscriptions, directors' fees and expense, and annual meetings.

³ General expenses include advertising and promotion, delivery (auto and truck), insurance, property, business and other taxes and licenses, rent and lease expenses, plant supplies and repairs, repairs and maintenance, utilities, miscellaneous, and other.

Appendix table 17— Financial ratios for small cooperatives

Ratio	1997	1996	1995	1994	1993	1992	1991
Liquidity							
Current	2.40	2.08	2.22	2.35	2.46	2.52	2.32
Quick	1.41	1.18	1.24	1.29	1.36	1.45	1.32
Leverage							
Debt	.25	.29	.27	.24	.23	.22	.25
Debt-to-equity	.34	.41	.36	.32	.29	.29	.33
Times-interest-earned	5.66	6.01	6.66	11.34	10.05	7.36	5.79
Activity							
Total-asset-turnover	1.68	1.77	1.77	1.80	1.81	1.87	1.92
Fixed-asset-turnover	9.04	8.04	8.02	8.42	9.02	8.81	8.67
Profitability							
Gross profit margin	14.45	15.56	16.27	16.10	16.19	15.76	14.87
Return on total assets before interest & taxes	8.02	7.73	7.93	8.59	7.78	7.36	6.53
Return on equity	8.46	8.67	8.71	9.96	8.70	7.82	6.81

Appendix table 18— Financial ratios for medium cooperatives

Ratio	1997	1996	1995	1994	1993	1992	1991
Liquidity							
Current	1.74	1.72	1.64	1.78	1.70	1.69	1.66
Quick	.92	.89	.79	.91	.85	.82	.84
Leverage							
Debt	.34	.36	.37	.33	.34	.32	.33
Debt-to-equity	.52	.56	.58	.50	.51	.47	.50
Times-interest-earned	5.71	4.68	5.56	7.76	6.61	5.92	5.03
Activity							
Total-asset-turnover	1.90	1.86	1.75	1.97	1.97	2.03	2.04
Fixed-asset-turnover	6.52	6.93	6.70	7.68	7.09	7.07	7.16
Profitability							
Gross profit margin	15.30	14.60	13.66	13.95	13.74	14.03	13.61
Return on total assets before interest & taxes	9.63	6.82	8.36	9.28	8.00	8.02	7.92
Return on equity	11.31	10.19	10.31	11.50	9.81	9.26	8.97

Appendix table 19— Financial ratios for large cooperatives

Ratio	1997	1996	1995	1994	1993	1992	1991
Liquidity							
Current	1.46	1.36	1.41	1.55	1.57	1.56	1.72
Quick	.74	.68	.61	.73	.74	.70	.84
Leverage							
Debt	.42	.44	.43	.39	.40	.43	.38
Debt-to-equity	.74	.80	.76	.65	.66	.74	.61
Times-interest-earned	4.33	4.32	4.11	5.31	5.54	4.98	5.16
Activity							
Total-asset-turnover	2.17	2.15	2.05	2.14	2.17	2.14	2.38
Fixed-asset-turnover	7.66	8.05	7.72	7.65	7.30	7.65	8.11
Profitability							
Gross profit margin	11.83	12.25	13.32	14.77	13.84	13.56	13.52
Return on total assets							
before interest & taxes	8.32	8.25	8.30	8.47	8.05	8.57	10.11
Return on equity	10.29	10.68	10.42	10.71	10.39	11.05	12.11

Appendix table 20— Financial ratios for super cooperatives

Ratio	1997	1996	1995	1994	1993	1992	1991
Liquidity							
Current	1.23	1.24	1.26	1.30	1.32	1.33	1.29
Quick	.58	.55	.48	.62	.59	.69	.55
Leverage							
Debt	.53	.55	.55	.50	.50	.48	.49
Debt-to-equity	1.11	1.25	1.23	1.01	1.00	.92	.98
Times-interest-earned	3.49	2.67	3.91	4.35	5.29	4.06	4.30
Activity							
Total-asset-turnover	2.54	2.73	2.15	2.38	2.33	2.76	2.58
Fixed-asset-turnover	9.73	11.35	9.23	9.11	9.06	9.63	8.73
Profitability							
Gross profit margin	8.87	8.46	10.48	10.57	10.72	8.63	8.57
Return on total assets							
before interest & taxes	8.31	9.13	8.61	8.38	8.10	8.71	8.77
Return on equity	11.58	11.94	13.14	12.06	12.22	11.82	12.40

Appendix table 21— **Financial ratios for farm supply cooperatives**

Ratio	1997	1996	1995	1994	1993	1992	1991
Liquidity							
Current	1.75	1.73	1.83	1.95	2.06	2.13	2.08
Quick	.93	.90	.94	1.00	1.09	1.14	1.13
Leverage							
Debt	.35	.35	.33	.30	.29	.27	.29
Debt-to-equity	.54	.54	.48	.43	.40	.38	.41
Times-interest-earned	5.55	5.60	6.35	8.89	8.85	7.05	5.46
Activity							
Total-asset-turnover	1.76	1.74	1.69	1.83	1.82	1.84	1.84
Fixed-asset-turnover	6.76	6.93	7.06	7.85	7.90	7.75	7.75
Profitability							
Gross profit margin	16.96	17.15	17.88	17.92	18.14	17.71	17.55
Return on total assets before interest & taxes	9.78	9.13	9.54	10.13	9.16	8.77	8.27
Return on equity	11.65	10.93	11.29	12.14	10.81	9.74	8.91

Appendix table 22— **Financial ratios for mixed farm supply cooperatives**

Ratio	1997	1996	1995	1994	1993	1992	1991
Liquidity							
Current	1.43	1.49	1.45	1.63	1.83	1.81	1.72
Quick	.69	.73	.64	.85	.80	.96	.81
Leverage							
Debt	.46	.44	.43	.38	.37	.33	.35
Debt-to-equity	.84	.78	.77	.60	.58	.50	.54
Times-interest-earned	2.98	3.15	3.89	5.02	5.06	5.18	5.13
Activity							
Total-asset-turnover	2.12	2.24	1.92	2.07	1.94	1.94	1.98
Fixed-asset-turnover	6.70	7.40	6.63	6.97	6.13	5.99	6.34
Profitability							
Gross profit margin	14.33	14.27	15.38	16.01	16.76	15.72	14.56
Return on total assets before interest & taxes	7.65	8.49	8.24	8.53	7.62	8.27	8.68
Return on equity	8.86	9.56	10.26	10.44	9.14	9.47	10.16

Appendix table 23— **Financial ratios for mixed marketing cooperatives**

Ratio	1997	1996	1995	1994	1993	1992	1991
Liquidity							
Current	1.25	1.24	1.24	1.30	1.32	1.34	1.30
Quick	.61	.61	.43	.58	.56	.60	.52
Leverage							
Debt	.50	.55	.56	.50	.50	.49	.49
Debt-to-equity	1.00	1.22	1.26	1.00	1.01	.96	.95
Times-interest-earned	4.65	2.60	3.64	4.40	5.23	4.16	4.41
Activity							
Total-asset-turnover	2.62	3.07	2.26	2.54	2.49	2.92	2.92
Fixed-asset-turnover	11.77	13.27	10.70	10.31	10.11	10.65	10.44
Profitability							
Gross profit margin	6.89	6.76	7.66	7.90	7.89	6.15	7.76
Return on total assets before interest & taxes	9.47	9.96	7.66	7.42	7.29	6.20	6.34
Return on equity	13.79	12.61	11.46	10.66	11.19	11.42	11.63

Appendix table 24— **Financial ratios for marketing cooperatives**

Ratio	1997	1996	1995	1994	1993	1992	1991
Liquidity							
Current	1.14	1.16	1.24	1.21	1.25	1.25	1.27
Quick	.55	.48	.53	.57	.62	.65	.69
Leverage							
Debt	.59	.61	.59	.58	.53	.52	.49
Debt-to-equity	1.42	1.56	1.44	1.37	1.15	1.06	.95
Times-intdrest-earned	2.47	2.51	3.54	3.36	4.68	3.46	4.05
Activity							
Total-asset-turnover	2.96	2.64	2.47	2.47	2.62	2.60	2.75
Fixed-asset-turnover	12.49	13.59	10.54	9.45	10.16	9.56	6.94
Profitability							
Gross profit margin	4.55	5.33	6.06	6.64	6.57	6.14	5.96
Return on total assets before interest a taxes	5.65	7.44	7.00	6.72	7.20	7.21	6.37
Return on equity	7.46	10.77	11.22	10.46	11.40	9.66	11.47