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Top 100 Cooperatives 1997 Financial Profile

Reprinted from *Rural Cooperatives* magazine, September—December 1998

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Largest Co-ops Suffer First Sales Decline Since '92 but Consolidations Add a Bright Note

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Editor's note: Parts II and III of Chesnick's report will run in the November/December issue of *Rural Cooperatives.*

Checked by lower grain prices, total revenues for the largest 100 agricultural cooperatives fell 1.8 percent to $72.7 billion in 1997 (Table 1)—marking the first drop in total operating revenues since 1992.

Figure 1 illustrates this reversing of the upward trend. However, this decline is somewhat misleading.

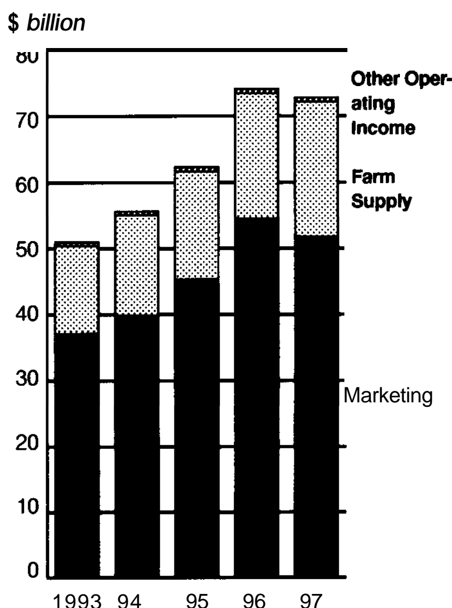
Unlike the prior year, two of the largest cooperatives showed significant declines in their total operating revenues. Their share of the total operating revenues dropped **from** 24 percent in 1996 **to** 22 percent in 1997. Excluding these two cooperatives, **total** revenues for the other 98 cooperatives actually show a slight increase of 0.7 percent.

Another indication that the overall decline in operating revenues should not be a cause for great concern is the number of cooperativea reporting net losses this past year. In 1997, there were seven cooperatives that ended the year with losses, compared to 10 in 1996.

Marketing sales illustrate the volatility of commodity prices. While marketing revenue in 1996 posted a **20-percent** gain over 1995, these revenues were down 5 percent, or $2.7 billion, in 1997. This compared to a record high of $54 **billion** in 1996. Much of the decline was due to lower grain prices throughout most of the United States. Two-thirds of the drop in marketing revenues is attributed to grain cooperatives, while 24 percent of the decline stemmed from the diversified cooperatives.

Several joint ventures were established between grain cooperatives and **investor-**owned firms **(IOFs).** One such venture was established **to** market member products. This had the effect of lowering sales for

Figure 1—Sources of Total Revenue



Prior years restated

Table 1—Consolidated Statement of Operations, 199697, Top 100 Cooperatives

Operating statement	1997	1996	Difference	Percent Change
	---- Thousand	Dollars ----		
Change Revenues				
Marketing	**51,750,940**	**54,497,245**	**(2,746,305)**	-5.0
Farm Supply	**20,317,373**	**18,929,726**	**1,387,647**	7.3
Total Sales	**72,068,313**	**73,426,971**	**(1,358,658)**	-1.9
Other Operating Revenues	679,490	683,008	(3,518)	-0.5
Total Operating Revenues	**72,747,803**	**74,109,979**	**(1,362,176)**	-1.8
Cost of Goods Sold	**66,194,980**	**67,450,361**	**(1,255,381)**	-1.9
Gross Margin	**6,552,823**	**6,659,618**	(106,795)	-1.6
Expenses				
Operating Expenses	**5,310,757**	**5,303,224**	7,533	0.1
Net Operating Margins	**1,242,066**	**1,356,394**	(114,328)	-8.4
Other Revenues (Expenses)				
Interest Expense	**(598,550)**	(586,001)	(12,549)	2.1
Interest Revenue	121,018	101,016	20,002	19.8
Other Income	152,360	180,111	(27,751)	-15.4
Other Expenses	(43,621)	(30,141)	(13,480)	44.7
Patronage Revenue	339,418	296,982	42,436	14.3
Net Margins from Operations	**1,212,691**	**1,318,361**	(105,670)	-8.0
Non-Operating Revenue (Expenses)	8,466	5,450	3,016	55.3
Net Margins	**1,221,157**	**1,323,811**	(102,654)	-7.8
Distribution of Net Margins				
Cash Patronage Dividends	415,504	348,497	67,007	19.2
Retain Patronage Dividends	482,764	619,753	(136,989)	-22.1
Nonqualified **Noncash** Patronage	57,473	52,332	5,141	9.8
Dividends	27,986	31,439	(3,453)	-11.0
Unallocated Equity	99,703	158,428	(58,725)	-37.1
Income Tax	137,727	113,362	24,365	21.5
Total Distribution	**1,221,157**	**1,323,811**	(102,654)	-7.8

the cooperatives because sales were transferred from the cooperative to the venture. In other words, the cooperative recorded the margins distributed from the venture but not the sales of the product itself. Therefore, the drop in marketing revenues, while noticeable, is not critical.

Farm supply sales continued to show improvements, although not as large as the prior year's 14percent increase. Farm supply sales jumped 7.3 percent in 1997 to reach $20 billion. The largest increase in farm supply sales appeared in petroleum products, up 16 percent. This was followed by crop protectants (11 percent), feed (10 percent), general farm supply merchandise (8 percent), and seed (5 percent). Fertilizer was the only major product group that had a decline in sales, dropping 2 percent.

Other operating income fell 0.5 percent in 1997 to $679 million. Other operating income usually reflects services associated with, but not limited to, storage, hauling and handling of members' produce, spreading, spraying, and field scouting. Those reporting other operating revenues obtain an average 3 percent of their total operating revenue from these services. In one instance, however, due to historical significance, a cooperative considered a side business as other operating income, which generated 32 percent of its total revenue. Figure 1 illustrates the importance of each source of revenue.

Cost of goods sold dropped $1.6 billion to $66 billion, a 1.9- percent decline from 1996. Most of this decline can be attributed to lower grain prices paid to members for their products. Regardless, the $1.4 billion drop in total revenues was greater than the decline of $1.3 billion in cost of goods sold, resulting in lower gross margins from operations. Gross margins fell $107 million, or 1.9 percent.

On a bright note, many of the mergers and ventures helped curb operating expenses. Wages rose 8 percent over 1996. Since total labor cost averages about half of total operating expenses, one would expect to see a similar increase in total expenses. However, total operating expenses are up only $7 million, a 0. l-percent increase. This further points to the efficiency cooperatives are pursuing. However, this increase in total operating expenses further exasperates the drop in gross margins. The result is a decline in operating margins of $114 million an B-percent drop.

Other income and Expenses

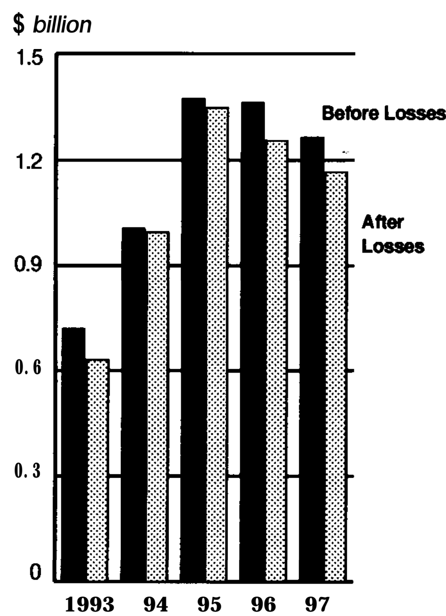
Income and expenses indirectly related to the day-to-day operations fall into the category of other income and expenses. These include patronage refunds received from other cooperatives, interest income and expense, gain/loss on the sale of equipment, and any other income/expense not related directly to operations. These expenses often relate to financing and investing activities of the cooperative.

Increased debt levels again pushed up interest expense. The amount of debt held by the largest cooperatives was up 2.2 percent from 1996. Interest expense increased 2.1 percent to $599 million in 1997. Cooperatives transferred some of their short-term debt to long-term. Although long-term interest rates dropped while short-term interest rates increased in 1997, long-term rates were still higher than short-term.

After declining 3 percent in 1996, interest income jumped a dramatic 20 percent to reach a record amount of $121 million in 1997. Interest income comes from several different sources and represents 12 percent of net margins. Some interest income comes from short-term investments of excess cash, while others come from long-term notes receivable and overdue accounts receivable.

With net margins averaging less than 2 percent, patronage refunds can play a large part in determining whether a cooperative shows a positive balance or a net loss. To put this in some perspective, eight cooperatives would have had a loss without patronage refunds from other cooperatives. Patronage refunds increased 14 percent from 1996 to reach a record of $340 million. Twenty-eight percent of patronage refunds received was in cash, with the rest being in allocated equity

Figure 2— Net Margins/Losses



Prior years restated

Net operating margins

Net operating margins before taxes took a hit again in 1997. After posting record net operating margins in 1995, both fiscal years 1996 and 1997 saw a decline of 7 and 8 percent, respectively, in each year. In 1997, net margins stood at $1.2 billion The leading cause for the decline is that expense- cost of goods sold and operating expenses- did not fall as much as total revenue. On a lighter note, the number of cooperatives reporting a net loss declined, from 10 in 1996 to seven in 1997. The amount of the losses was also down 8 percent, to $99 million in 1997 (Figure 2).

Non-operating Revenue

Non-operating revenue includes **gains/losses** from discontinuing operations, accounting changes and other extraordinary revenue/expenses not associated with operations. In 1997, these revenue sources reached $8.5 million, up 55 percent from 1996.

Distribution of net margins

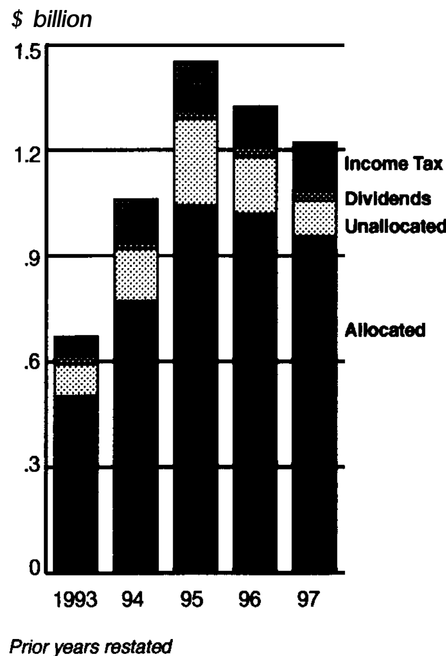
Net margins were down in 1997 along with total allocated patronage refunds. However, cooperatives allocated a higher percentage of their net margins in 1997 (81 percent) than in 1996 (79 percent). Not only did cooperatives allocate a higher percentage of net margins, but they also paid out more in cash than in 1996. Cooperatives returned to members $416 million in cash patronage **refunds** in 1997, a $67 million increase from 1996 (Figures 3 and 4). In 1997, cooperatives paid out 42 percent of their total allocated equity in cash, compared to 33 percent in 1996.

The amount of retained patronage refunds declined from $620 million in 1996 to $482 million in 1997, a **22-percent** drop. As a percent of total distributions, retained patronage refunds accounted for 40 percent, down from 47 percent in 1996.

Nonqualified patronage **refunds** jumped 10 percent to $57 million. Nonqualified allocations are margins allocated to members without the tax liability and minimum 20 percent cash payments. The cooperative retains the full amount and pays the tax on the allocation. When the **non**-qualified allocations are redeemed, the member will then have to pay the income tax on that amount and the cooperative will get a **tax** credit for the taxes originally paid. Although only seven cooperatives used nonqualified patronage refunds, it accounted for an average of 53 percent of their total distribution.

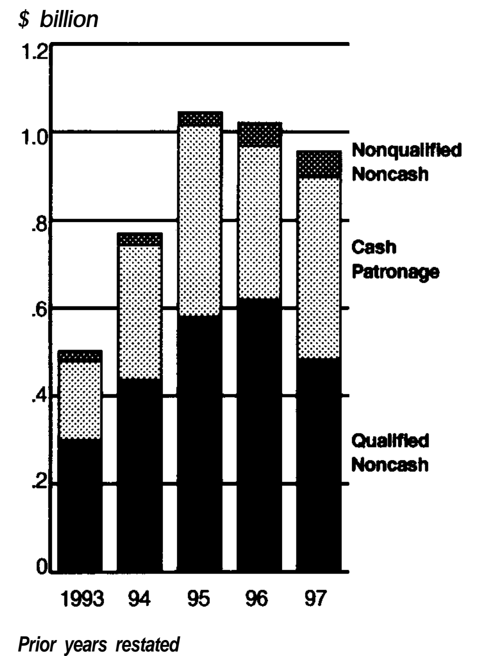
Dividends paid on securities held by members are generally limited by regulation or by cooperative policy. Dividends make up about 2 percent of total distribution. In 1997, the amount of dividends paid out dropped by 11 percent to $28 million, down from a record amount of $3 1 million in 1996.

Figure 3— **Distribution of Net Income**



Prior years restated

Figure 4 -Allocated **Patronage Refunds**



Prior years restated

Unallocated equity or retained earnings are usually the accumulation of **revenues** from non-member business. In some instances, a cooperative will place undistributed earnings in the unallocated equity account in the current year and allocate those margins within the next 8 months. Cooperatives also use these unallocated equities to buffer members' investment during adverse times. In 1997, the amount of unallocated equity dropped 37 percent.

Throughout most of the **1990s,** cooperatives gradually were increasing their distribution of net margins into the unallocated account. However, in 1996, as net margins began to fall, cooperatives began to decrease the percentage of net margins going into unallocated equity. In 1995, cooperatives retained 17 percent of their net margins while, in 1996 and 1997, that percentage dropped to 12 and 8 percent, respectively

Despite the lower amount of **unallocat**-ed earning, income taxes paid by cooperatives rose 21 percent to $138 million in 1997. The largest cooperatives paid an average 11 percent of their total net margins towards income taxes, compared to 9 percent in 1996.

Operations by Commodity Group

While **five** out of the nine commodity groups showed an increase in their total operating revenues, they were not enough to overcome the huge decline in grain revenues (Table 2). The biggest gainers were farm supply, cotton and rice cooperatives. With the exception of the fruit and vegetable cooperatives, however, those commodity groups with higher sales revenues were the ones with lower net margins (Table 3).

Table 2— Total Operating Revenue by Commodity Group, 199697, Top 100 Cooperatives

Total revenue	1997	1996		
	---- *Thousand*	*Dollars* - - - -	*Difference*	*Percent Change*
cotton	2,570,431	2,389,064	181,367	7.6
dairy	17,415,887	17,494,796	(78,909)	-0.5
diversified	17,574,639	17,739,215	(164,576)	-0.9
fruit & vegetable	7,546,387	7,462,998	83,389	1.1
farm supply	9,747,314	9,176,183	571,131	6.2
grain	14,460,867	16,556,942	(2,096,075)	-12.7
poultry & livestock	1,106,474	1,122,000	(15,526)	-1.4
rice	1,229,844	1,108,776	121,068	10.9
sugar	1,095,960	1,060,005	35,955	3.4

Table 3— Net Margins by Commodity Group, 199697, Top 100 Cooperatives

Net margins	1996	1995		
	---- *Thousand*	*Dollars* - - - -	*Difference*	*Percent Change*
cotton	57,105	72,562	(15,457)	-21.3
dairy	217,255	207,980	9,275	4.5
diversified	293,502	372,861	(79,359)	-21.3
fruit & vegetable	124,843	18,782	106,061	564.7
farm supply	426,015	556,497	(130,482)	-23.4
grain	105,173	80,101	25,072	31.3
poultry & livestock	1,886	1,187	699	58.9
rice	7,076	11,029	(3,953)	-35.8
sugar	(11,698)	2,812	(14,510)	-516.0

Grain- Grain cooperatives had the largest decline in revenues, down 13 percent to $14.5 billion. The average prices forii all grains in 1997 were down substantially from near-record levels in 1996. However, not all the decline was due to lower prices. As mentioned earlier, one cooperative accounted for nearly two-thirds of the total drop, due to transferring its sales from the cooperative to a joint venture.

Payments to members in the form of cost of goods sold was also down because of lower grain prices. The net effect caused gross margins to increase 1 percent to $664 million. Operating expenses decreased 3 percent to $464 million, despite the 13-percent increase in labor costs. Interest expense was 18 percent lower and interest income was 16 percent higher. Consequently, net margins of $105 million were 31 percent greater than what they were in 1996.

Dairy and poultry and livestock cooperatives were the other two commodity groups with lower revenues and higher net margins.

Poultry and livestock- Poultry and livestock cooperatives, like the grain cooperatives, had a higher corresponding drop in cost of goods sold (payments to members) in relation to their drop in revenues, cuhninating in higher gross margins. However, wages, which contribute to a substantial portion of their operating expenses, increased an average of more than 40 percent. This pushed up total operating expenses by 5 percent.

Poultry and livestock cooperatives continue to have operating losses. In 1997, they lost $6 million, 6 percent less than the prior year. Fortunately, the gains in other income (interest income, other income and patronage refunds) were enough to offset the operating losses and interest expense. The bottom line for poultry and livestock is a 59-percent increase in net margins, to $1.9 million.

Dairy- Milk prices fell in 1997 while the volume of milk increased. The overall effect was a dip of $87 million, or 0.4 percent, in operating revenues for dairy coop eratives. An increase in member payments and higher processing costs increased cost of goods sold to $16.4 billion, a 0. l-percent increase. The combination of lower sales and higher cost of goods sold resulted in gross margins falling by 8 percent for dairy cooperatives in 1997.

With the consolidation of dairy cooperative over the past few years, operations are running more efficiently. Operating expenses dropped 9 percent. However, the increased efficiency was not enough to overcome lower gross margins. Operating margins were down 6 percent from 1996, to $186 million. Other operating income and expenses were up $17 million, mostly due to the $55 million patronage refunds they received. The bottom line for dairy cooperatives- a 4-percent increase in net margins.

Fruits and vegetables- Fruit and vegetable cooperatives were the only commodity group that showed increases in both revenues and net margins. A combination of modest improvements in revenues and cost cutting produced huge benefits for members. A l-percent increase in total operating revenues, without the corresponding increase in cost of goods sold, resulted in an increase in gross margins of 6 percent, to $1.8 billion. A l-percent increase in operating expenses, absorbed by the increase in gross margins, produced a 57-percent increase in operating margins. Add in a drop in interest expense, and an increase in other income, and fruit and vegetable cooperatives increased their

bottom line by 565 percent, to $125 million.

Farm supply- Farm supply sales were up again in 1997. Total revenues for farm supply cooperatives rose 6 percent, or $607 million, to $9.7 billion. Cost of goods sold increased by 8 percent, driving down gross margins by 10 percent, to $903 million. Cost of goods sold consumed 91 percent of total revenues, up from 89 percent in 1996. Operating expenses increased 8 percent, to $607 million.

Part of this increase was due to a B-percent increase in labor expenses. The higher expenses pushed down net operating margins by 33 percent, to $296 million. The increase in interest income of $12 million more than offset the $7 million increase in interest expense. Patronage refunds were also up 10 percent, to $162 million. Farm supply cooperatives ended 1997 with net margins of $426 million, down 23 percent from 1996. Despite this decline in margins, farm supply cooperatives had the highest net margins of any commodity group.

Cotton- With high early demand for cotton and value-added opportunity for cotton cooperatives, revenues improved by 8 percent to $2.6 billion in 1997. However, higher payments for member cotton translated into higher cost of goods sold for the cotton cooperatives' milling and manufacturing operations. Cost of goods sold jumped $193 million or 9 percent, dropping gross margins to $167 million, a 7-percent slide. Reported average labor expenses are down 3 percent, but that didn't carry over to their overall operating expenses, which ended the fiscal year at $92 million, a B-percent increase. The net effect on cotton cooperatives' bottom line is a 2 l-percent decrease in net margins to $57 million- the lowest total in the last five years.

Rice- Revenues for rice cooperatives hit a record of $1.2 billion in 1997, an increase of 11 percent from 1996. Along with the higher sales, rice cooperatives paid member producers more for their product. This is reflected in the E-percent increase in cost of goods sold.

Cost of goods sold consumed 74 percent of total revenue in 1997, compared to an average of 71 percent between 1993 and 1996. Heavy investment in fixed assets over the past few years has made operations more efficient. This shows up in the declining operating cost over the same period. In 1996, operating expenses fell by 6 percent, followed by a 3-percent drop in 1997. The increased efficiency was able to offset the higher payments to members, culminating in higher net operating margins. Net operating margins were up 6 percent, to $25 million in 1997. However, the investments in fixed assets came with a price. Higher borrowing pushed up interest expense 24 percent, to $18 million. The higher interest payments cut into net margins and lowered them by 36 percent. Net margins of $7 million in 1997 were the lowest for rice cooperatives in the last five years.

Sugar- Sugar cooperatives ended the year with one of their highest revenues to date. Sales were up 3 percent, to $1.1 billion. Cost of goods sold increased 4 percent from 1996, to $846 million This represents 77 percent of total revenues, the same percent as in 1996. Gross margins increased $5 million, or 2 percent. One cooperative was able to cut its operating expenses tremendously, which helped pull down total operating expenses for all that commodity group by 3 percent.

The cumulative effect of higher gross margins and lower operating expenses produced an increase in net operating margins of 90 percent, to $27 million- the highest margins in five years. However, interest and other expenses took their toll on net margins. Net margins fell from a $3-million gain in 1996 to a $12-million loss in 1997.

The diversified cooperatives had the highest total revenues of any commodity group, at $17.6 billion. Their revenues, cost of goods sold and gross margins were down slightly from 1996, less than 1 percent. However, operating expense increased 5 percent to $1.1 billion, driving down net operating margins by 18 percent.

An increase in interest expense and a decline in other revenues and patronage refunds further suppressed net margins. The net effect is a drop in net margins of 21 percent. Despite lower net margins, diversified cooperatives achieved the second highest net margins of any commodity group. ■

Financial Position of Nation's Largest Co-ops Stronger Despite Lower Sales

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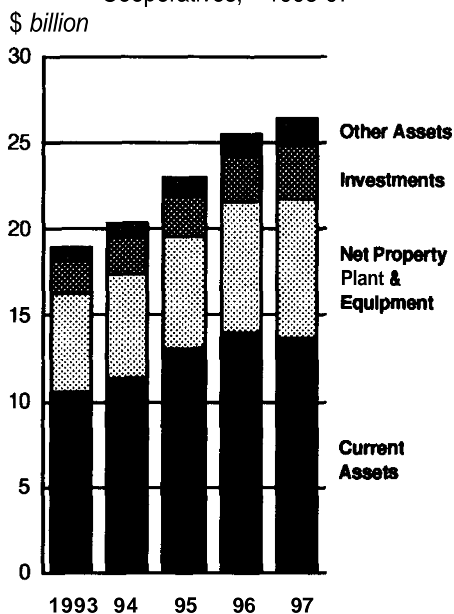
Agricultural Economist

Editor's Note: This is Part II of Chesnick's report on the 1997 financial performance of the nation's 100 largest agricultural cooperatives. How do these results compare with your own coop's financial operations? Part I ran in the September/October 1998 issue of *Rural Cooperatives*. Part III begins on page 18 of this issue.

Fmm joint ventures to assets growth, from member payables to long-term debt, USDA studied the 1997 financial results of the nations largest 100 agricultural cooperatives. Final figures reveal that the top 100 coops (based on financial reports) improved their financial position in 1997, despite declining revenues. Assets continued to post record amounts and the percent of equity financing improved for the first time since 1990.

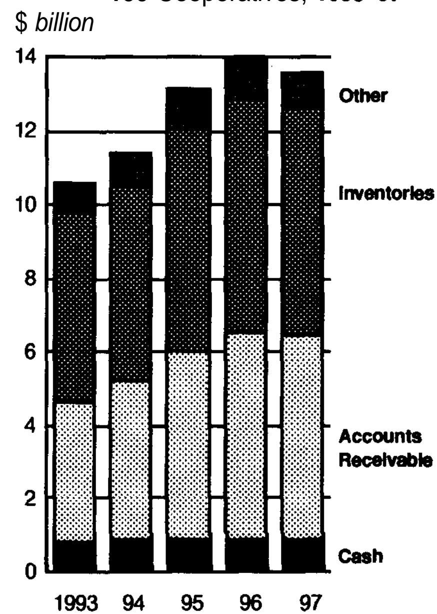
The tremendous increase in sales and opportunities in the mid-1990s caused the cooperatives' asset base to swell. However, as margins and then sales began to slide, so too did the growth in assets. Figure 1 illustrates the growth and composition of the Top 100's combined assets. Table 1 shows the combined balance sheet for the top 100 cooperatives for 1996 and 1997.

Figure 1 -Asset **Composition,** Top **100** Cooperatives, 1993-97



Prior years restated

Figure 2 -Combined Current **Assets, Top 100** Cooperatives, **1993-97**



Prior years restated

Current assets decline

Current assets declined for the first time in five years. Total current assets fell 2 percent to $13.6 billion (Figure 2). heading the declines were grain cooperatives with a hefty **24-percent** drop in current assets. Farm supply (down 7 percent) and cotton cooperatives (down 3 percent) were the only other commodity groups with lower current assets. All other commodity groups showed increases in their current assets. However, they were not enough to offset the **$554-** million drop in the grain cooperative's current assets.

Cash and cash equivalent were the only current asset accounts that showed an increase. Cash balances increased by 2 percent to end the year at $871 million. The dairy and grain cooperatives increased their cash flow mostly through operations. Poultry/livestock, rice and sugar cooperatives relied on financing to increase their cash balances. Even though cotton, farm supply and fruit/vegetable cooperatives had positive cash flows through their operations, they were not enough to offset the outflow of cash from their financing and investing activities.

Accounts receivable and inventory made up 85 percent of total current assets. Accounts receivable fell 1 percent to $6.6 billion while inventory dropped 3 percent to $6.2 billion.

Gram and dairy cooperatives were the only commodity groups with lower accounts receivable, represented by a **$156-** million and a **$21-million** decline, respectively The other seven commodity groups combined for a **$109-million** increase in accounts receivable.

Sugar, rice, fruit/vegetable and diversified cooperatives increased their inventories by $281 million. However, they were not enough to offset the decline in grain inventories of $388 million. Cotton, dairy and farm supply also had declining inventories although they were not as dramatic as gram cooperatives.

Other assets include but are not limited to short-term investments and prepaid expenses. Except for one large farm supply cooperative, most cooperatives had little change in their other current asset account. The one farm supply cooperative seems to have cashed in its short-term investments to the tune of $136 million to help fund their expansion of fixed assets, thereby pushing down other assets 9 percent to $970 million.

Investments expand

The biggest area of assets growth was attributed to investments. Total investments increased 19 percent to $3.2 billion, up from $2.7 billion in 1996 (Table 2). Given the changing environment in agriculture, cooperatives are finding benefits in cooperating with others. This is evident in the number of mergers and joint ventures pursued by cooperatives. Nearly 40 percent of all top 100 cooperatives indicated they invested in some form of merger or joint ventures over the past two years.

Investment in other cooperatives jumped 22 percent to $1.9 billion. Leading the increase were dairy, farm supply, diversified and grain cooperatives. Dairy cooperatives had $154 million more invested in 1997, a 63-percent increase. However, most of this increase was due to the continued changing structure and consolidation within the dairy industry, Farm supply cooperatives had an 18-percent increase to end the year with $625 million invested in other cooperatives, the highest total of all commodity groups. Diversified cooperatives, which have the second highest value of equity in other cooperatives, increased their equity position in other cooperatives by $65 million, a 15-percent increase. Sugar cooperatives were the only commodity group with a lower investment in other cooperatives, dropping 65 percent to $11 million.

Investment in non-cooperatives jumped $118 million to finish 1997 at $847 million. The largest contributors to non-cooperative investment were grain cooperatives with a 105-percent increase to $164 million. However, most of that increase came from two cooperatives' joint ventures. Similar to grain cooperatives, two dairy cooperatives pushed non-cooperative investments for the whole dairy commodity group up 49 percent to $99 million. Farm supply cooperatives also increased their investments by 22 percent to $86 million, mostly through the effort of two cooperatives.

Investment in cooperative banks

Table 1— **Combined balance sheet-Top 100, 1996-97**

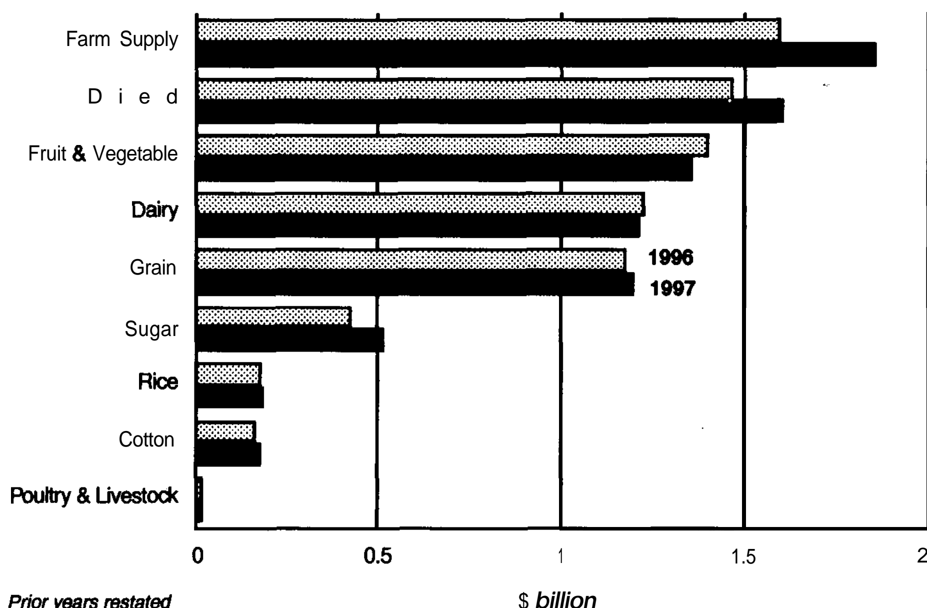
Assets	1997	1996	Difference	% Chanae
		thousand $		
CURRENT ASSETS				
Cash	871,159	852,259	18,900	2
Accounts Receivable	5,596,253	5,664,132	(67,879)	-1
Inventory	6,159,222	6,332,260	(173,038)	-3
Other Current Assets	970,002	1,065,524	(95,522)	-9
Total Current Assets	13,596,636	13,914,175	(317,539)	-2
Investments				
Cooperative Banks	489,377	435,686	53,691	12
Other Cooperatives	1,862,951	1,524,852	338,099	22
Other Investments	847,102	729,255	117,847	16
Total Investments	3,199,430	2,689,793	509,637	19
Net PP&E	8,118,892	7,647,571	471,321	6
Other Assets	1,499,947	1,292,162	207,785	16
Total Assets	26,414,905	25,543,701	871,204	3
CURRENT LIABILITIES				
Short-term Debt				
Current Portion of Long-term Debt	605,965	947,745	(34 1,780)	-36
Cooperative Banks	1,518,084	1,752,115	(234,031)	-13
Commercial Banks	678,977	721,864	(42,887)	-6
Notes Issued by Cooperatives	257,674	319,492	(61,818)	-19
Other Nonfinancial Entities	20,990	13,985	7,005	50
Commercial Paper	134,063	108,699	25,364	23
Government Sources	3,144	45,677	(42,533)	-93
Other Sources	5,870	1,374	4,496	327
Total Short-term Debt	3,224,767	3,910,951	(686,184)	-18
Accounts Payable	3,491,086	3,561,729	(70,643)	-2
Member Payables	475,083	426,613	48,470	11
Patron and Pool Liabilities	1,317,814	1,390,514	(72,700)	-5
Other Current Liabilities	1,627,877	1,610,641	17,236	1
Total Current Liabilities	10,136,627	10,900,448	(763,821)	-7
Long-term Debt				
Bank for Cooperatives	2,736,377	2,759,827	(23,450)	-1
Bond Issued by Cooperative	1,706,776	1,298,594	408,182	31
Commercial Banks	600,971	683,703	(82,732)	-12
Insurance Companies	599,137	403,165	195,972	49
Industrial Development Bonds	189,312	200,040	(10,728)	-5
Capital Lease	63,169	57,754	5,415	9
Other Nonfinancial Entities	39,850	4,988	34,862	699
Government Source	1,020	1,064	(44)	-4
Other Sources	165,548	157,840	7,708	5
Total Long Term Debt	6,102,160	5,566,975	535,185	10
Less Current Portion	5,496,195	4,619,230	876,965	19
Other Liabilities and Deferred Credits	797,855	726,288	71,567	10
Total Noncurrent Liabilities	6,294,050	5,345,518	948,532	18
Total Liabilities	16,430,677	16,245,966	184,711	1
Minority Interest	379,940	227,034	152,906	67
Member Equity				
Preferred Stock	1,912,382	1,749,214	163,168	9
Common Stock	646,697	601,018	45,679	8
Equity Certificates and Credits	5,297,520	5,038,957	258,563	5
Unallocated Capital	1,747,689	1,681,512	66,177	4
Total Equity	9,604,288	9,070,701	533,587	6
Total Liabilities and Equity	26,414,905	25,543,701	871,204	3

increased 12 percent to $489 million. However, the amount of borrowed funds from these cooperative banks fell 6 percent. Dairy cooperatives were the main cause for the increase in investment in cooperative banks. They increased their investment 67 percent to $116 million. Their amount of seasonal loans from cooperative banks increased 42 percent in 1997. Grain cooperatives were the exception and not the rule. Nearly every grain cooperative had less net borrowing from cooperative banks, yet their investment increased by $8 million. AU other commodity groups had minor changes in the amount invested in cooperative banks.

Table 2— **Co-op investment from 1993-1997, Top 100 agricultural cooperatives**

	1993	94	95	96	97
			thousand $		
Bank for Cooperatives	365,601	374,595	403,096	435,686	489,377
Other Cooperatives					
20 percent or less	772,647	784,859	910,489	1,159,009	1,344,932
More than 20 percent	181,383	229,211	278,577	365,843	518,019
Other Businesses					
20 Percent or less	39,190	39,192	157,433	127,860	161,024
More than 20 percent	176,674	166,720	61,900	101,913	154,345
Other Investments	389,543	564,727	479,484	499,482	531,733
Total Investment	**1,925,038**	**2,159,304**	**2,290,981**	**2,689,793**	**3,199,430**

Figure 3— *Net* **Property, Plant, & Equipment, by Commodity Group**



Fixed assets continue to grow

Net property plant and equipment increased by 6 percent to $8.1 billion in 1997 (Figure 3). However, more than 40 percent of the aggregate increase was attributed to a single cooperative, and the largest five cooperatives investing in fixed assets accounted for nearly 85 percent of the total increase. Grain and fruit/vegetable cooperatives both had declining values for fixed assets.

Other assets jumped $208 million to $1.5 billion in 1997. Other assets include such things as goodwill, patent rights and long-term receivables. Diversified, farm supply and grain cooperatives accounted for nearly all of the increase.

Current liabilities decline

Current liabilities fell for the first time since 1992 (Figure 4). Current liabilities dropped $764 million in 1997, a 7-percent decline from a record high of $11 billion in 1996. On the other hand, diversified ($260 million), rice ($22 million) and sugar ($119 million) cooperatives all increased the amount of current liabilities on their books. However, the huge $958 million, 40-percent drop from the grain cooperatives was the driving force behind the overall decline in current liabilities.

After doubledigit increases since 1993, the largest cooperatives showed a decline in accounts payable in 1997. Accounts payable fell 2 percent to end the year at $3.6 billion. With the exception of diversified cooperatives, all commodity groups had lower accounts payables.

Member payables are cash payments owed to members for patronage refunds, dividends and revolving patronage retains. The balance of member payables in 1997 jumped 11 percent to end the year at $475 million. The only commodity group to have a decrease in member payables is the diversified group. The main cause for the diversified cooperatives' decrease in member payables is due to one cooperative.

That cooperative appears to have increased the amount of debt and used some of that cash inflow to pay down the members' payable account.

Patron and pool liabilities reflect member liability, carried on the balance sheets of cooperatives operating on a pooling basis, and other significant member obligations arising from the cooperative form of business, such as member prepayments. This liability account fell $73 million, a 5-percent drop. Grain, rice and sugar were the only commodity groups showing an increase.

Lower short-term debt

Short-term borrowing was down $686 million, an l&percent drop from 1996. Figure 5 compares the amount of various sources of short-term debt. **Dairy,** diversified, poultry/livestock, rice and sugar all had higher amounts of short-term debt. However, almost every grain cooperative used less short-term debt. **One** grain cooperative in particular accounted for 44 percent of the $958 million decline in **short-**term borrowing for grain cooperatives.

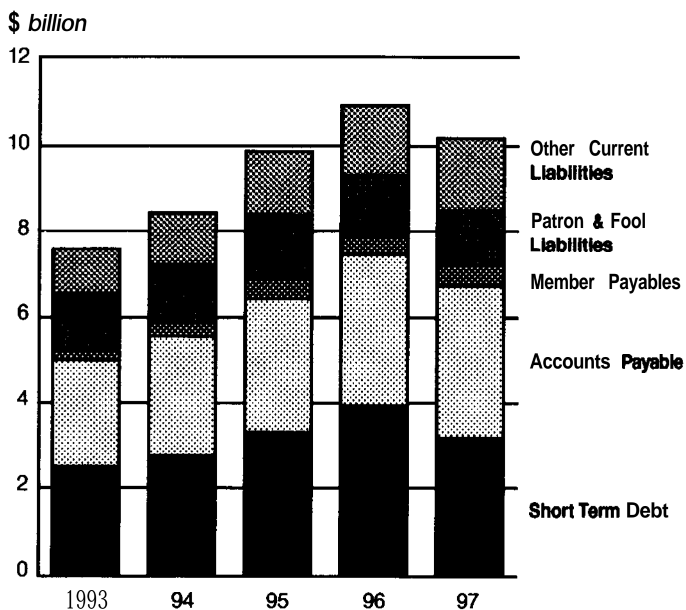
Current portion of long-term debt had the largest drop of all short-term borrowed funds, declining from $948 million in 1996 to $606 million in 1997. However, this decline is misleading. Usually lower current portions of long-term debt means either lower interest rates or less long-term borrowing. However, the amount of **long-**term debt actually increased by 19 percent. Upon further examination of the data, the main cause for the decline was due to one cooperative that was able to reclassify and refinance its debt currently due to long-term.

Operating loans from cooperative banks showed the second highest decline, dropping $234 million to $1.5 billion. However, of the nine commodity groups, only grain and fruit/vegetable had net declines in operating loans from cooperative banks. All but one grain cooperative and one half of the fruit/vegetable cooperatives decreased the amount of short-term debt from cooperative banks. The other seven commodity groups combined for a **$300-**million increase in short-term borrowed funds from cooperative banks.

Twenty-one of the largest 100 cooperatives had **short-term** debt **outstanding** with commercial banks and only eight of those increased their holdings of debt. The main users of commercial banks continue to be the larger diversified cooperatives. These diversified cooperatives accounted for 68 percent of the $679 million in borrowed funds from this source in 1997, an increase of $22 million from 1996. The other cooperatives using commercial banks were spread throughout the other commodity groups and combined for $2 17 million, $65 million less than in 1996.

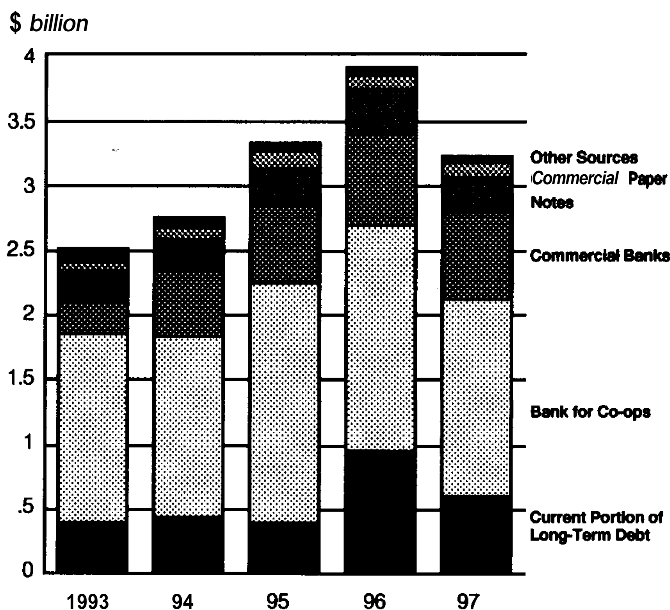
Twenty-four of the top 100 cooperatives issued their own notes for short-term financing. Total amount of debt issued by these cooperatives fell 19 percent to end

Figure 4 — Current Liabilities, Top 100 Cooperatives, 199337



Prior years restated

Figure 5 — Sources of Short-Term Debt, Top 100, 1993-97



Prior years restated

the year at $258 million. Dairy, **diversified** and grain increased the amount of **short-**term notes by $29 million, a **30-** percent increase. The amount of notes issued by **fruit/vegetable** and farm supply cooperatives declined by $91 million (40 percent) from 1996 to 1997. However, most of that $91 million decline can be attributed to one farm supply cooperative, which switched from issuing notes to financing with cooperative banks for funding its operations.

Only four cooperatives use commercial paper for short-term financing in the past two years. Cut of those four, the only one to increase the amount of commercial paper was a lone sugar cooperative that did not use commercial paper for the previous five years. Cut of the other three cooperatives, one decided not to issue commercial paper in 1997, and two cut their use by nearly one-third. The increase by the sugar cooperative caused the overall usage of commercial paper to increase by 23 percent to $134 million.

Long-term debt increases

Total long-term debt jumped 10 percent to end fiscal year 1997 with a record high of $6.1 billion. Figure 6 illustrates the amount and source of long-term debt for the largest agricultural cooperatives from 1993 to 1997.

By far, the top 100 largest agricultural cooperatives continue to have the majority of their debt held by cooperative banks. In 1997, cooperative banks held **45** percent of total long-term debt outstanding down from 50 percent in 1996. Total borrowing from cooperative banks stood at $2.7 billion, a l-percent drop from 1996. Most of the decline can be traced to a single grain cooperative which paid off its cooperative bank loan and replaced those funds with its own issuance of bonds.

One of the largest growth areas in cooperative long-term financing is through issuance of bonds. In 1996, $1.3 billion worth of bonds **were** outstanding. By 1997, the amount had jumped 3 1 percent to end the year at $1.7 billion. Twenty-eight percent of total outstanding debt came from bonds issued by cooperatives in 1997. **Dairy,** diversified, fruit/vegetable and gram accounted for 96 percent of total bonds issued, with grain having the largest increase. However, 94 percent of increase in grain cooperatives' issuance was caused by one cooperative that decided to issue its own bonds instead of using cooperative banks for debt financing.

Commercial banks hold $601 million worth of the top 100's total long-term debt, down **12** percent from 1996. This source of funds accounts for 10 percent of the total outstanding long-term debt. The main users of commercial banks continue to be the diversified cooperatives, which account for 63 percent of the total amount borrowed from that source. The diversified cooperatives increased the amount borrowed from commercial bank by $55 million, a **17-percent** increase. However, one farm supply cooperative switched its source from commercial banks to cooperative banks, and one grain cooperative went through a capital restructuring and decreased its total amount of long-term debt. These two cooperatives accounted for a **$161-million** drop in commercial bank funding.

Even though only eight cooperatives use insurance companies for debt financing, these sources expanded their portfolio of cooperative loans, increasing from $403 million in 1996 to $599 million in 1997. Eighty-five percent of their loans are made to **diversified** and farm supply **coop-**eratives. Most cooperatives using insurance companies for loans are using them as additional sources, and the amount comprises around 35 percent of their total debt outstanding. Insurance companies constitute 10 percent of total long-term debt outstanding.

Industrial revenue bonds continue to decline as a source of long-term debt. In **1997, 25** cooperatives used this source for debt funding. However, 21 of those cooperatives decreased their use of funds from this source. The amount of loans from industrial revenue bonds fell 5 percent to $189 million, the lowest amount in the 18 years of tracking the top 100. Industrial revenue bonds make up 3 percent of total long-term debt outstanding.

Other sources of long-term debt include leases, government loan programs and other nonfinancial institutions. These sources represent 4 percent ($270 million) of total long-term debt outstanding in 1997. The top 100 cooperatives increased the **amount** of funding from these other sources by 22 percent ($48 million) from 1996. Most of this increase is attributed to a grain cooperative that reclassified a current liability to a long-term debt.

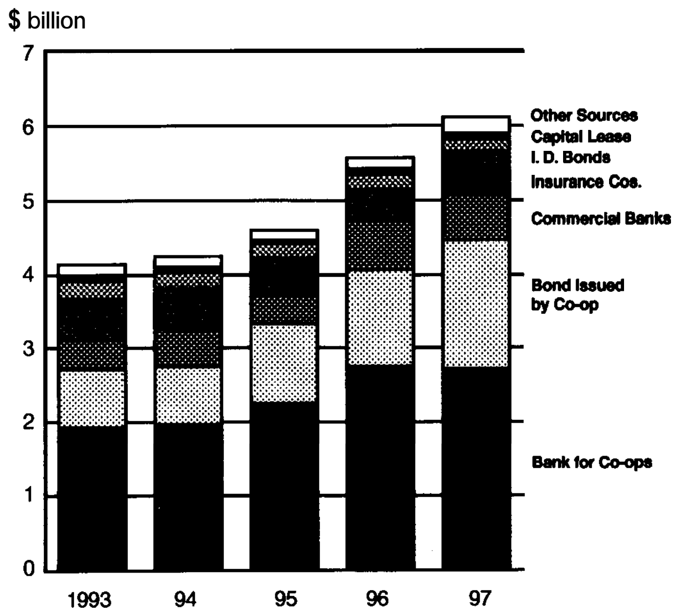
Minority interest is generated when an outside investor has a stake in a consolidated subsidiary of a cooperative. For instance, a cooperative owning more than 50 percent of a business must consolidate it as if it were a wholly-owned subsidiary The remaining outside ownership still has claims to that business and this is what is considered minority interest. In 1997, the amount of minority interest jumped 67 percent to $380 million. **Almost** the entire increase can be ascribed to a dairy cooperative that was involved with several joint ventures in 1997.

Equity growth fuels asset expansion

While total assets grew at **3** percent in 1997, member equity expanded at two times that rate, with a **6-percent** increase. This marks the first time since **1993** that the percentage of member ownership increased. Member ownership as a percent of total assets reached 36.4 percent in 1997, compared to 35.5 percent in 1996. Figure 7 illustrates the largest cooperatives' equity composition for the last 5 years.

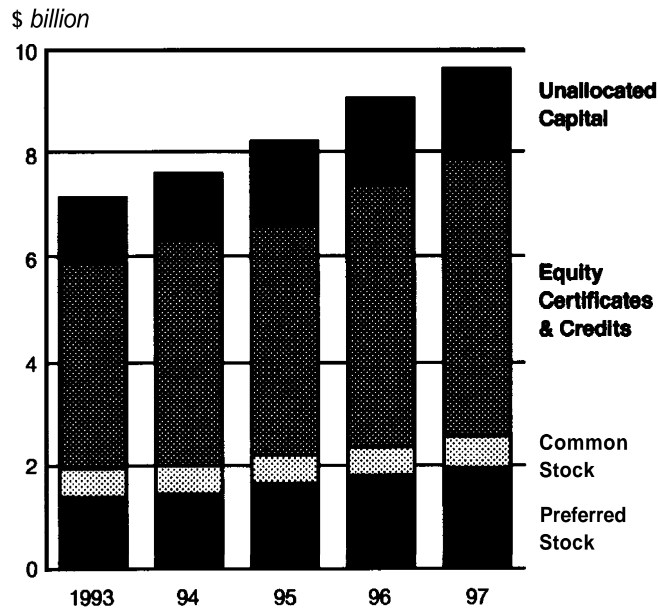
The fastest growing equity is preferred stock. Preferred stock is usually used for member investment and patronage issues.

Figure 6 — **Sources of Long-Term Debt, Top 100, 1993-97**



Prior years restated

Figure 7 — **Sources of Equity, Top 100, 1993-97**



Prior years restated

This equity instrument increased 9 percent to $1.9 billion in 1997. Farm supply cooperatives issued the largest amount of preferred stock, with 76 percent of the total.

Most cooperatives continue to use equity certificates and credits as a way to allocate equity to members. This form of equity represents 55 percent of total equity and had the largest increase in dollar amount of all types of equity Equity certificates and credits increased $259 million to end the year at $5.3 billion. Grain cooperatives had the largest increase in equity certificates at $215 million, a 23-percent increase.

Common stock represents 7 percent of the total outstanding equity and usually represents voting rights. However, some cooperatives issue common stock as notices of allocation. In 1997, common stock increased 8 percent to $647 million. Most of this increase was due to a diversified cooperative that used common stock for allocation of patronage refunds to patrons who do not meet membership criteria.

Unallocated equity is usually generated from net margins of non-member business. This form of equity can be used to protect member equity during adverse times. Totaling $1.7 billion, unallocated equity attained record levels in 1997; up 4 percent from 1996. Cotton, grain and sugar cooperatives combined had $78 million less of unallocated equity. All the other commodity groups had increases. ■

Proactive Approach to Financial Health Pays Off for Nation's Major Ag Co-ops

David S. Chesnick

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Editor's **Note:** This **third and final segment of Chesnick's report on the 1997 financial performance of the nation's largest ag cooperatives shows that their capital structure, ability to meet fixed obligations and operating performances has improved.** Part **II can be found on page 12.**

Despite falling revenues, the nation's largest agricultural cooperatives strengthened their financial position in 1997. However, this doesn't really show how productive or efficient these cooperatives were. So the question remains-were the cooperatives in a better position in 1997 than in 1996? Are they better prepared to meet future challenges? For the most part, these questions are difficult to answer in a combined format. However, using certain performance measurements, we can get a good idea of how these large cooperatives are performing. Table 1 lists the ratios by commodity type for 1997.

The tools developed to analyze the cooperative's financial information include four types of performance measurements:

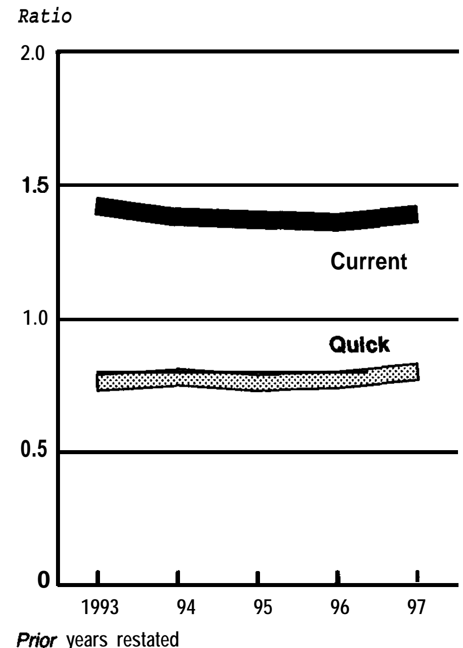
- Liquidity shows the cooperative's ability to meet short-run obligations.
- Leverage shows the risk associated with financing and the cooperative's ability to meet its long-term and short-term obligations.
- Activity shows the efficiency with which the cooperative uses its assets.
- Profitability shows the net return on the cooperative's operations.

Liquidity

The most common liquidity ratios used today are the current and quick ratios. Both evaluate the cooperative's short-term liquidity by measuring the degree to which it can meet its short-term obligations. Liquidity implies the ability to convert assets into cash in the current period. Liquid assets include cash, marketable securities, accounts receivable, inventories and other debt that is to be paid to the cooperative within the current fiscal year. Figure 1 illustrates both current and quick ratios from 1993 to 1997.

The current ratio is calculated by dividing total current assets by total current liabilities. The higher the ratio, the more liquid the cooperative is. However, a note of caution is warranted here. Interpreting these ratios beyond the conclusion that it represents current resources over current obligations at a given point in time requires a more in-depth look at the trends of the individual parts that make up the ratio. For example, during a business contraction, current liabilities may be paid off while there may be a concurrent involuntary accumulation of inventories and

Figure 1 — **Liquidity Ratios**

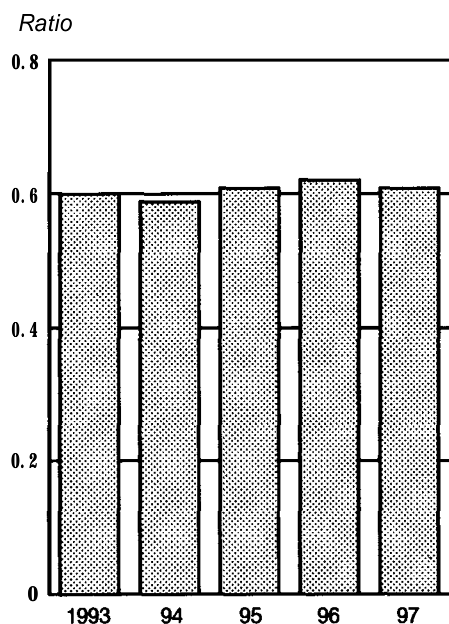


Prior years restated

Table 1— **Ratios by commodity type for 1997**

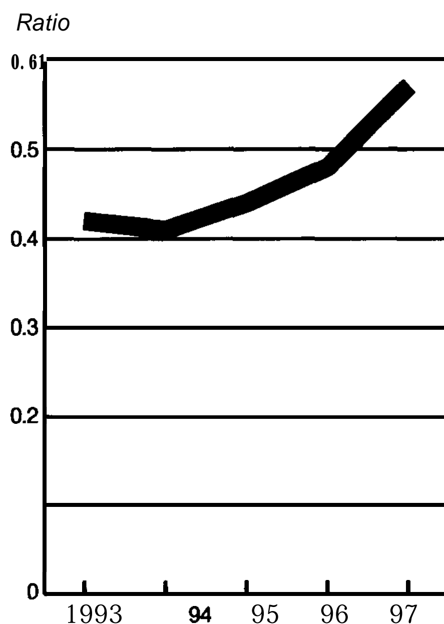
	Current Ratio	Quick Ratio	Debt To Assets	Long-Term Debt To Equity	Times Interest Earned	Total Assets Turnover	Fixed Assets Turnover	Gross Profit Margin	Net Operating Margin	Return On Total Assets BIE	Return On Members Equity
	Ratio				Times			Percent			
Cotton	2.06	1.32	0.50	0.31	7.77	4.84	29.88	11.62	4.34	12.44	15.12
Dairy	1.27	0.89	0.81	0.35	9.38	5.25	23.74	8.29	1.70	8.47	18.83
Diversified	1.77	1.11	0.89	1.38	3.17	2.43	10.47	10.53	1.54	5.84	10.12
Fruit & Vegetable	1.41	0.82	0.67	0.69	1.87	2.21	12.86	23.48	2.80	4.86	6.29
Farm Supply	1.50	0.83	0.57	0.49	5.78	2.86	13.11	12.55	3.15	8.18	8.67
Grain	1.27	0.67	0.57	0.42	4.16	4.17	12.95	8.53	1.17	7.77	12.49
Poultry a Livestock	1.23	1.22	0.85	2.18	2.35	5.58	67.85	2.42	-0.55	4.28	5.86
Rice	1.25	0.42	0.61	0.30	1.34	2.30	6.88	27.51	2.33	4.73	1.61
Sugar	1.18	0.44	0.60	0.84	1.08	1.15	2.01	22.33	2.88	3.20	(1.26)

Figure 2 — Debt-To-Asset Ratio



Prior years restated

Figure 3 — Long-term Debt-To-Equity



Prior years restated

uncollected receivables causing the ratio to rise.

The average current ratio for all the largest 100 agricultural cooperatives reversed the declining trend of the past few years. The current ratio **improved from** 1.36 to 1.39 in 1997. While both current assets and liabilities declined, current liabilities fell by a higher percentage, causing the value of the ratio to increase. The decline in inventories and account receivables is more a reaction **to** lower **sales.** The increase in the cooperatives' cash position helped strengthened their liquidity.

However, the biggest influence was the lower amount of current debt. Cooperatives moved their debt stance from short term to long term. Therefore, the results seem to support that cooperatives are strengthening their current position as a result of the downturn in sales.

Poultry/livestock were the most improved **sector,** moving from a position of averaging mom current liabilities than current assets (**.97** ratio) in 1996 to a more liquid position (1.23 ratio). Other commodity groups that improved their current position include cotton, fruit&getable and grain. Even though the diversified and farm supply cooperatives had a decline in their current position, they still maintained a higher liquid position then the overall average. Dairy, rice and sugar cooperatives did not follow the general trend of lowering the amount of **short-term** debt, resulting in a relatively less liquid position.

The quick ratio is calculated the same way as the current ratio, but inventories are excluded from current assets. The theory behind this suggests that inventories cannot be converted to cash as quickly as the other current assets during liquidation. Also, if the inventory needs to be liquidated, the cash value will, in all likelihood, be much less than the book value. Therefore, it can be argued that the quick ratio is a better measure of liquidity,

The average quick ratio for all cooperatives followed that of the current ratio and improved from **.77** to **.80** in 1997. Cotton, diversified, and poultry/livestock cooperatives had strong liquid position, with each of the commodity groups having an averaging quick ratio above one. Although the average ratio declined for cooperatives, they still held a strong liquid position with a quick ratio of over 1.

Grain and farm supply cooperatives improved their quick ratio. Sugar and rice cooperatives, on the other hand, had a relatively larger build-up of inventories to match an increase in **short-term** debt, thus dropping their average quick ratios from **.65** to **.44,** and **.51** to **.42,** respectively. Dairy and fruit/vegetable both had slightly lower liquidity with a **drop** in their quick ratio of **.01.**

Leverage

Leverage relates to the capital structure of a business. Equity is the basic risk capital put up by members of the cooperative. Them must be some equity within the capital structure to bear the risk associated with the cooperative's business. Debt is the use of external funds at a **fixed** cost. Thus, if the **fixed** cost of the debt is lower than the returns those funds generate, the excess returns will accrue to the members. However, **if the** revenues are less than the **fixed** cost of the debt, member equity would have to make up the **difference.** This is the concept of leverage.

The **first** leverage ratio, debt-to-asset, is calculated by dividing total liabilities by total assets. This represents the claims by outside interests on the cooperative's assets. Figure 2 shows how this ratio has been moving during the past five years. After creeping up each year since 1994, the average debt-to-asset ratio inched downward in 1997. The debt-to-asset ratio fell from **.62** in 1996 to **.61** in 1997.

The driving force behind this decline came from the grain commodity group. This sector had several cooperatives that

saw significant **shifts** in their capital structure. The overall average ratio for the grain cooperatives fell from **.63** to **.57.** All other connnodity **groups** either had a slight increase or had no change in their average debt-to-asset ratio.

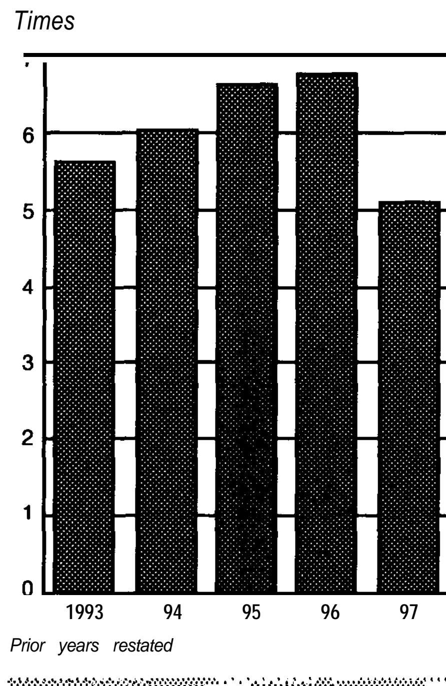
The second leverage ratio is long-term debt-to-equity Since both equity and **long-**term debt take a long-run view of financing, it should be a natural comparison between the two. Unlike the total debt-to-equity ratio discussed earlier, the **long-**term **debt-to-equity** ratio illustrated a dramatic change in cooperative capital structure. The average long-term debt-to-equity ratio jumped from **.46** to **.57** in 1997 (Figure **3).**

The largest changes occurred in the poultry/livestock and grain cooperatives. The poultry/livestock cooperatives on average are heavily leveraged. In 1997, they more than doubled the amount of **long-**term debt in relation to equity as illustrated by the increase in their average ratio from **.97** to 2.18. Grain cooperatives, while carrying less overall debt, transferred their short-term debt to long term, resulting in an increase in their average ratio from **.28** to **.42.**

The last leverage ratio is the times interest earned (TIE). This mainly looks at how well net revenue covers interest expense. It is calculated by dividing earnings before interest and taxes by interest payments. A note of caution is needed here. This ratio looks at the minimum expenditures needed to cover debt payments. It does not include other **fixed** payments such as principle and lease payments.

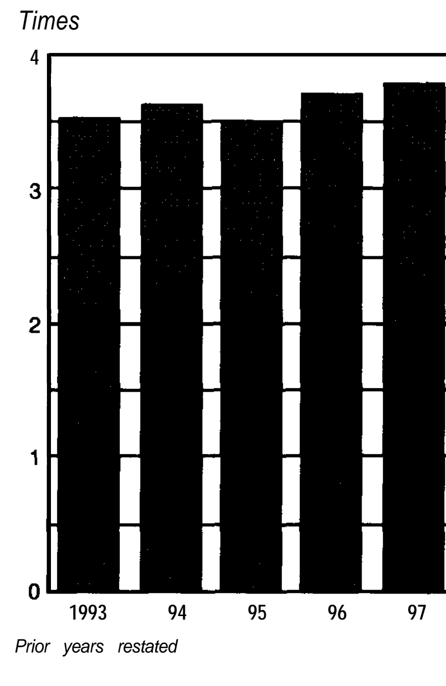
The average TIE ratio for the largest cooperatives fell from 6.7 to 5.0 in 1997 (Figure 4). While interest expense increased slightly (2 percent), the drop in net income before interest and taxes (5 percent) was the larger influence in pushing down the TIE ratio. With the exception of the grain commodity group, all groups experienced a lower TIE ratio. Even though the average cooperative had five

Figure 4 -Times-Interest-Earned



Prior years restated

Figure 5 — **Local Asset Turnover**



Prior years restated

times the earnings to cover interest expense, a few commodity groups-rice, sugar and fruit/vegetable-had average TIE ratios between 1 and 2.

However, this does not necessarily mean further stress on these sectors would be a grave cause for concern for these cooperatives. Many of these cooperatives operate on a pooling basis and **after** all expenses, the final payment to members leaves little margin left to be distributed. Thus, these cooperatives generally have low TIE ratios.

Activity

Where the first two types of ratios examined the cooperative's capital structure and its ability to meet its fixed obligations, the next two look at the operating performances. Activity ratios reveal how much revenue is generated by each dollar invested in the cooperative's assets. Higher ratios here generally mean higher efficiencies within the cooperative.

The first activity ratio, local asset turnover, is calculated by taking the total revenues divided by local assets. Local assets are total assets less investments in other cooperatives. Investment in other cooperatives is generally not considered a revenue-producing asset. Therefore, it makes sense to leave it out of the calculation when looking at the local asset turnover ratio.

The average local asset turnover ratio again improved over the prior **year,** setting a new **record** (Figure 5). The average ratio improved from 3.7 to 3.8, despite the combined lower sales and higher local assets of all top 100 cooperatives in 1997. As mentioned in Part II of this report, most of the decline in sales was attributed to a few of the largest cooperatives. However, most of the other cooperatives had higher sales. This points out the influence that some of the largest cooperatives can have on the combined statements of the 100 largest agricultural cooperatives.

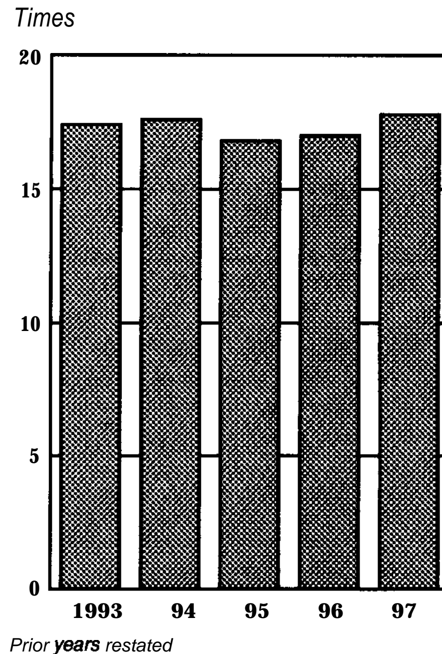
Cotton, dairy, grain and poultry/livestock cooperatives needed less assets to generate income than the other cooperatives. These commodity groups had an average ratio of over 4. Cotton and dairy cooperatives' ratio remained fairly constant from the prior year However, grain cooperatives improved their ratio with a smaller decline in revenues verses the decrease in local assets.

Poultry/livestock cooperatives, on the other hand, saw an increase in local assets with a corresponding decrease in revenues pushing down their ratio. Most of the other groups' local asset turnover ratio averaged between 2 and 3, with the exception of sugar cooperatives. These cooperatives generally had proportional increases in both local assets and revenues, so there was little movement in their average ratio. Sugar cooperatives are capital intensive and require a higher amount of assets to generate a given level of sales. Their local asset turnover ratio was 1.2, down slightly due to a larger increase in local assets compared to the increase in revenue.

The second activity ratio, **fixed** asset turnover, looks at how efficiently the coop erative uses its **fixed** assets. This ratio is calculated by dividing total operating revenues by net fixed assets. It must be noted that this ratio could be misleading. A cooperative with fully depreciated assets could have a high ratio due to the low value of its fixed assets. On the other hand, a cooperative that is expanding its operations could have a temporarily depressed ratio because the new capacity is not fully used at this time. Therefore, other information, such as the average age left on the fixed assets and how much new equipment is purchased, will be needed to help interpret the fixed asset turnover ratio.

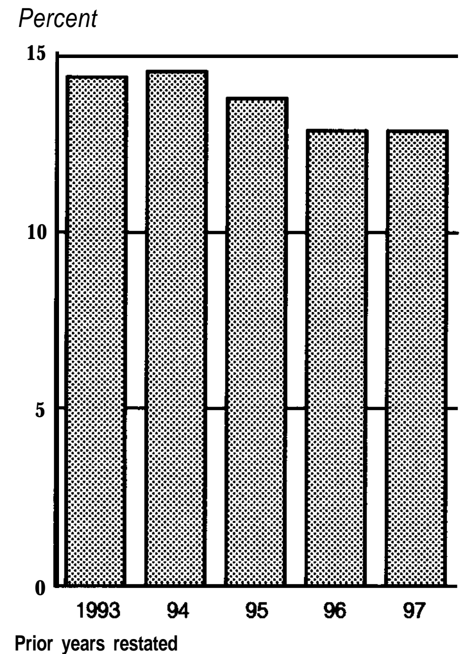
The average top 100 agricultural cooperatives purchased $17.4 million in fixed assets in 1997, nearly $2 million more than in 1996. **Total** net **fixed** assets hit a record amount of $8.1 billion. The average age of fixed assets, estimated by dividing net

Figure 6 — **Fixed Asset Turnover**



Prior years restated

Figure 7 — Gross **Profit Margin**



Prior years restated

fixed assets by depreciation expense, was similar between 1996 and 1997, at 9.2 years. These **figures** together would suggest that, while cooperatives are expanding their **fixed** asset base, the industry as a whole didn't build excess **capacity**— although a few cooperatives had substantial investments and appeared to have built excess capacity for future growth.

Figure 6 illustrates the cooperatives' increased efficiency in their use of **fixed** assets. The average fixed asset turnover ratio increased from 17.0 to 17.7 in 1997, the highest in the **5-year period.** This again points out that, while the combined revenues for all top 100 cooperatives were down most of them showed increasing **efficiency** with the fixed assets they employ Grain, diversified and sugar cooperatives had a drop in their average fixed asset turnover. Lower sales were the main cause for the decline in the grain and diversified cooperatives, while building excess capacity in a heavily capitalized Industry caused the sugar cooperatives' ratio to fall.

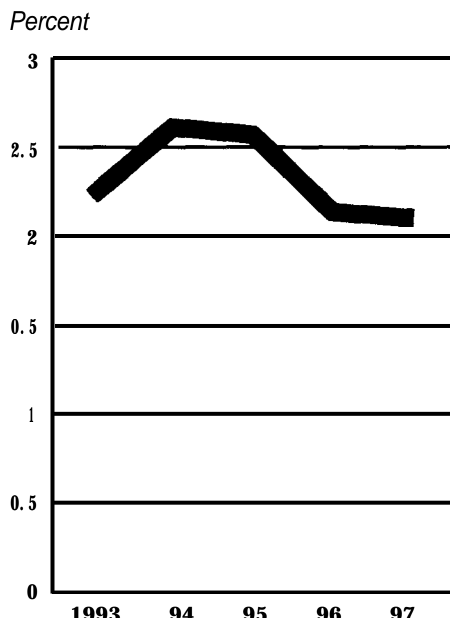
Profitability

Profitability ratios measure the power of the cooperative's earnings. With, poor earnings, the cooperative may soon **find** that it cannot meet its obligations and be forced out of business. However, cooperatives can have other objectives than to accumulate high returns. The nature of a cooperative is to **fill** a market need of **its** members. Therefore, profitability ratios can and usually are lower than **investor-**owned firms. However, comparisons of the same cooperative or group of cooperatives, over time, can be very informative. The four profitability ratios used in this report include gross margin percent, net operating margins, return on total assets, and return on member equity

Gross margins are the excess of revenues above the cost of goods sold. All operating and nonoperating expenses plus ■

Figure 8 — **Net Operating Margin**

Percent



Prior years restated

ment of patronage refunds, dividends and income taxes must be covered by the gross margins. Gross margins also indicate the pricing policy of the cooperative. In other words, is the cooperative charging enough for the products sold or paying too much for member products to cover its expenses?

Figure 7 depicts the **5-year** trend for the average gross margin percentage for the top 100 agricultural cooperatives. Following a gradual decline since 1994, gross profit margins leveled off to 12.9 percent in 1997.

Although cotton, farm supplies and rice cooperatives had higher revenues, they also had higher costs for those revenues, resulting in lower gross margins. Cotton cooperatives had declining margins every year during the B-year period, from a high of 18.4 percent in 1993 to 11.6 percent in 1997. Gross margins for farm supply cooperatives fell from 13.4 percent in 1996 to 12.5 percent in 1997. Rice cooperatives dropped from 30.2 percent to 27.5 percent during the same period. Sugar cooperatives had higher sales and gross margins but as a percent of **total** revenues, gross margins fell from 22.8 percent to 22.3 percent.

The increases in the gross margin percentage of the **dairy,** grain poultry/livestock, and fruit/vegetable cooperatives helped keep the overall average percentage from dropping. Grain had the highest average **increase,** moving **from** 7.5 percent in **1996** to 8.5 percent in 1997. The other three commodity groups had small increases.

Net operating margin looks at the amount of margins generated by operations, expressed as a percent of total revenue. It is calculated by taking the gross **margin,** less **operating** expenses, and dividing that by **total** revenue. Indirect expense items (patronage refunds, interest income/expense, gains/losses on the sale of assets, and any other extraordinary **revenues** or expenses not directly related to operations) are not included in the **calculation.** Figure 8 shows net operating margins for the past 5 years.

Despite overall lower revenues and higher expenses in 1997, cooperatives were able to keep their average net operating margins at 2.1 percent of total revenues, the same as in 1996. With the exception of rice and sugar cooperatives, the movement in the net operating margins pretty much followed the same path as that of gross margins. This would indicate that, on average, cooperatives were able to keep their costs in line with their revenues. Rice and sugar cooperatives, on the other hand, were able to lower their costs while increasing their revenues.

Return on total assets is calculated by taking net income before taxes and interest, divided by total assets. This ratio looks at the return on total investment in the cooperative. **After** a brief drop in 1996, the average return on total assets inched up from 7.2 percent to 7.3 percent in 1997. What is interesting about this ratio is that most of the increase in assets during 1997 occurred in investments. These included joint ventures with cooperatives and **non-**cooperatives alike. It would seem the alliances that the largest cooperatives **are** involved with are increasing the returns **to** the cooperatives.

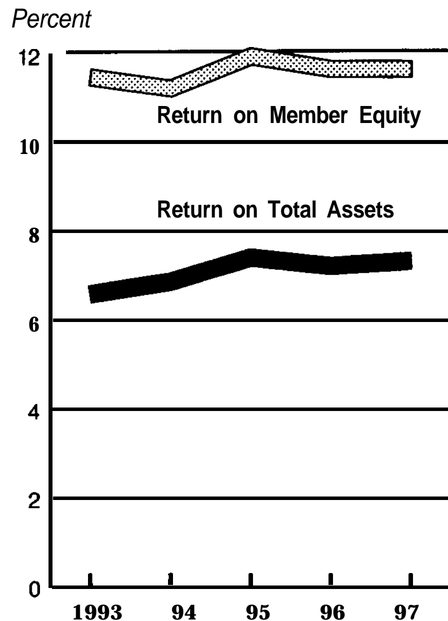
Pushing the increase were the dairy, grain, fruit/vegetable, poultry/livestock and sugar cooperatives. Grain cooperatives, coupled with a smaller asset base and higher **margins,** pushed their average ratio fram 6.4 to 7.8 in 1997, the highest increase of any commodity group. Dairy and sugar cooperatives showed a larger increase in revenues compared to assets for most of those cooperatives involved, thus pushing up their ratio.

Diversified cooperatives had the **largest** decline, dropping from 8.5 to 5.8 in 1997. This commodity group had a tremendous increase in its asset base. Unfortunately, it was met with decreased margins. Cotton cooperatives also had a substantial decline in their average return on total assets. However, their decline was due mostly to lower margins. The drop in farm supply cooperatives' average ratio was due **to a larger increase in their asset base than** their revenues.

The last ratio compared in this report is the return on member equity It is **calculated** by dividing the net margins after interest and taxes by total member equity, Interest is a return **to** creditors and taxes are a return to government, so interest and taxes should be excluded **to** arrive at the true return on equity. What is interesting about this ratio is that, despite the wide fluctuations between the different years for each cooperative, the average return on member equity for all top 100 cooperatives has remained steady at between 11 percent and 12 percent (Figure **9).**

Cotton, diversified and farm supply cooperatives had substantial declines in their average return on member equity ratios. Much of this decline is attributed to higher leverage coupled with declining margins. Sugar cooperatives ended the

Figure 9 — **Returns on Operations**



Prior years restated

year with a net loss, due mostly to higher interest payments. Fruit/vegetable, grain and poultry/livestock cooperatives all averaged a higher return on member equity Fruit/vegetable and grain cooperatives had tremendous increases in their net revenue along with lower debt and interest payments that pushed up their returns on member equity

Poultry/livestock cooperatives, on the other hand, show where leverage pays off. Despite the higher amount of debt, the cooperatives were able to get a higher return from their operations, compared to the cost of the added debt. Dairy and rice cooperatives had relatively small declines in their return on member equity ratio.

Last year, the big question facing the largest cooperatives was whether they were leveraging their future. Higher amounts of debt coupled with expansion could prove to be disastrous during a downturn in the agricultural economy However, 1997 proved that cooperatives are proactive. While there was a drop in overall business, cooperatives moved to strengthen their position through mergers, acquisitions and strategic alliances. Several cooperatives underwent a capital restructuring that increased their liquidity However, cooperatives are still carrying substantial amounts of debt. This can prove to be dangerous and is still a point of concern, especially given the state of the agricultural economy in 1998. ■

U.S. Department of Agriculture

Rural Business-Cooperative Service

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Rural Business-Cooperative Service **(RBS)** provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The cooperative segment of RBS (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs. RBS also publishes research and educational materials and issues ***Rural Cooperatives*** magazine.

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