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Service Report 64

FARMER COOPERATIVE STATISTICS, 2003



Abstract

A survey of 3,086 U.S. farmer-owned cooperatives ending their business year during calendar year 2003 showed a net business volume of \$100.6 billion with a net income of \$1.1 billion. These cooperatives had assets totaling \$47 billion, about \$27 billion of liabilities, and \$20 billion in equity. Cooperatives continued to be a major employer in rural areas, with 165,000 full-time workers. Business volume by commodity is reported for all cooperatives. Number of cooperatives, cooperative memberships, and number of employees are classified according to whether the business is a marketing, farm supply, or service cooperative. Trends in cooperative numbers, memberships, employees, business size, sales volume, net income, assets, liabilities, and net worth are reported.

Keywords: cooperatives, statistics, business volume, employees, memberships, balance sheet, net income, financial ratios.

FARMER COOPERATIVE STATISTICS, 2003

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Service Report 64

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This report is dedicated to Celestine C. Adams, an agricultural statistician who retired this year with 33 years of service, 25 of which were spent making reports in this series possible.

Cover photos provided courtesy of CHS Inc.

Preface

Farmer cooperative statistics are collected annually to provide information on the progress and trends among the Nation's farmer-owned cooperatives. These statistics are used for research, technical assistance, education, planning, and public policy. The collection, analysis, and dissemination of farmer cooperative statistics by USDA are authorized by the Cooperative Marketing Act of 1926.

This report provides aggregate information on the number, membership, business volume, net income, basic balance sheet items, and full-time and part-time and seasonal employees of farmer cooperatives for business years ending in calendar year 2003. Cooperatives are classified by principal product marketed and major function. Fishery and ethanol cooperatives are included as "other product marketing" cooperatives. Both gross (includes inter-cooperative business) and net (excludes inter-cooperative business) dollar volumes are reported.

Statistics for 2003 were compiled on a State and national basis. The information was collected from individual farmer and fishery cooperatives by a mail survey of all organizations identified by USDA's Rural Development-Cooperative programs (RD) as farmer or aquacultural cooperatives. Information was requested for the cooperatives' 2003 business year.

RD conducts an annual census to gain accurate information for assistance purposes. Information obtained from individual cooperatives is combined with data from other cooperatives to maintain confidentiality.

Statistics for all cooperatives were derived by estimating data for non-respondents and combining this information with respondent data. Data from respondents and other sources accounted for 88.5 percent of the total gross sales of farmer cooperatives in 2003. RD depends on the cooperative community's response to its annual survey to develop a detailed and comprehensive set of statistics on farmer cooperatives. The time and effort taken to provide information and the timeliness with which it is furnished are greatly appreciated.

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Highlights

There are 3,086 U.S. farmer-owned cooperatives, according to the 2003 survey of marketing, farm supply, and related-service cooperatives by USDA's Rural Development-Cooperative programs.

- o Total gross business volume (includes inter-cooperative business) handled by cooperatives was \$116.9 billion; net business (excludes inter-cooperative business) was \$100.6 billion.
- o Total net income was \$1.1 billion, which includes inter-cooperative dividends and refunds of \$92.1 million.
- o Grain and farm supply cooperatives operated over 3,000 branches.
- o Cooperative memberships were 2.8 million, down 1 percent from 2002.
- o Cooperatives employed 165,000 full-time and almost 62,000 part-time and seasonal employees.
- o Gross value of farm products marketed by cooperatives was \$77 billion, with a net value (after eliminating duplication from inter-cooperative business) of \$71 billion.
- o Gross value of farm supplies handled by farmer cooperatives was \$35.5 billion, with a net value of \$25.5 billion.
- o Receipts for services related to marketing farm products and handling farm supplies, plus other income totaled \$4.1 billion.
- o Farmer cooperatives had \$46.9 billion in combined assets. Net assets, after eliminating inter-cooperative investments, was \$42.9 billion. Inter-cooperative investments included those in CoBank.
- o Total liabilities totaled \$26.5 billion.
- o Net worth, or member and patron equity, was \$20.4 billion. Member and patron equity financed 43.5 percent of total assets.

2003 HIGHLIGHTS

Change	2003	2002	
Number of cooperatives	3,086	3,140	<i>Number</i> -54
Memberships (million)	2.8	2.8	-0.04
Gross business volume (\$ billion)	116.9	111.6	5.3
Net business volume (\$ billion)	100.6	96.8	3.8
Net income (\$ billion)	1.1	1.2	-0.1
Total assets (\$ billion)	46.9	48.5	-1.5
Net worth (\$ billion)	20.4	19.6	0.8
Full-time employees (thousand)	165.1	166.1	-1.0
Part-time and seasonal employees (thousand)	61.6	54.3	7.3

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Rural Development

I -- DEFINITION OF A FARMER COOPERATIVE

USDA's Rural Development-Cooperative's program mission area considers four major criteria in identifying an organization as a farmer-owned cooperative:

- (1) Membership is limited to persons producing agricultural and aquacultural products and to associations of such producers;
- (2) Cooperative members are limited to one vote regardless of the amount of stock or membership capital owned; or the cooperative does not pay dividends on stock or membership capital in excess of 8 percent a year or the legal rate in the State, whichever is higher;
- (3) Business conducted with nonmembers may not exceed the value of business conducted with members;
- (4) The cooperative operates for the mutual interest of members by providing member benefits on the basis of patronage.

These criteria may result in larger or smaller numbers of farmer cooperatives than found in lists or directories of State agencies or cooperative councils. Year-to-year comparisons with specific commodity groups reflect any differences in lists and classifications in State and Federal data.

Classification of Cooperatives

RD classifies each cooperative under one of the following major functions: marketing, farm supply, or related-service. Fishery and ethanol cooperatives are classified as other product marketing cooperatives; wool pools as marketing cooperatives; livestock shipping associations

and rice drying cooperatives as service cooperatives.

Marketing cooperatives derive most of their total dollar volume from the sale of members' farm products. These cooperatives are further classified into one of 13 commodities or commodity groups, depending upon which accounts for most of its business volume. RD may reclassify a cooperative into a different commodity category if its primary business volume changes significantly.

Farm supply cooperatives derive most of their business volume from the sale of farm production supplies, farm machinery and equipment, and building materials. Many also handle farm and home items, such as heating oil, lawn and garden supplies and equipment, and food.

Service cooperatives provide specialized services related to the agricultural business operations of farmers, ranchers, or cooperatives, such as cotton ginning, trucking, storing, drying, and artificial insemination. Livestock shipping associations and rice drying cooperatives are also classified as service.

Many cooperatives handle multiple commodities and provide both marketing and farm supply services, as well as the facilities and equipment used to perform these services. These associations are classified according to the predominant commodity or function, as indicated by their business volume.

Organizational Membership Structures *Centralized*

Of the 3,086 farmer cooperatives in 2003, 3,008 were centralized organizations, mostly locals with individual farmer-members. Centralized cooperatives usually serve a local

area or community, county, or several counties. Most usually perform a limited number of initial marketing functions. Most farm supply sales are at the retail level. A few centralized cooperatives, principally regionals, operate over multi-state areas and provide more vertically integrated services, such as processing farm products or manufacturing feed and fertilizer.

Bargaining associations also have centralized organizational structures. They derive all or most of their business volume from negotiating with distributors, processors, and other buyers and sellers over price, quantity, grade, terms of sale, and other factors involved in marketing farm products. Only a few bargain to purchase farm supplies. While the primary function of such an association is to bring buyers and sellers together to contract for the sale of members' products, many bargaining associations now perform additional functions.

For example, dairy bargaining associations at one time only negotiated price. Now, many perform additional functions, such as physically handling part of the milk for spot sales. They, like other dairy marketing cooperatives, represent their members at Federal or State milk marketing order hearings.

Federated

The 54 federated cooperatives—two or more member associations organized to market farm products, purchase production supplies, or perform bargaining functions—often operate at points quite distant from their headquarters. Members are usually local cooperatives, although some are interregional associations with regional cooperative members.

Mixed

The 20 mixed cooperatives have individual farmer-members and autonomous cooperative members, a combination of

centralized and federated structures. They serve large geographic areas, with members in many States, and provide a variety of integrated services.

II-2003 STATISTICS

Cooperatives' total net business volume was \$100.6 billion in 2003, while net income was \$1.1 billion. There were 3,086 agricultural cooperatives in 2003, and they had 2.8 million members. Together they had \$47 billion in assets with \$20.4 billion in equity. Cooperatives remained a major employer in rural areas, using 165,000 full-time workers.

Number of Cooperatives

The 2003 survey counted 3,086 marketing, farm supply, and related-service¹ cooperatives, compared with 3,140 in 2002. Of the 3,086 cooperatives, 1,551 primarily marketed farm products, 1,156 primarily handled farm production supplies, and 379 provided services related to marketing or purchasing activities (table 1, appendix figure 1). The proportion of marketing, farm supply, and service cooperatives to the total number of cooperatives remained virtually unchanged from 2002. Marketing cooperatives comprise about 50 percent of all cooperatives, farm supply, 38 percent, and service, 12 percent of the total (figure 1 and appendix table 1).

There was a net decrease of 54 associations (1.7 percent) from 2002 to 2003, largely reflecting a continuing trend involving merger, acquisition, or dissolution. The largest decrease was in farm supply cooperatives (45), followed by grain and oilseed, and service cooperatives, losing 8

¹ Services include trucking, cotton ginning, storage, crop drying, artificial insemination, livestock shipping, and similar services affecting the form, quality, or location of farm products and supplies. They do not include credit, electric, telephone, or other such services not directly related to marketing or purchasing activities.

Table 1—Number of cooperatives and memberships, by major business activity, 2003

Major business activity	Cooperatives	Memberships
	<i>Number</i>	<i>Thousands</i>
Bean and pea, dry edible	8	2.1
Cotton	14	43.4
Dairy	197	80.8
Fruit and vegetable	207	32.7
Grain and oilseed ¹	772	555.3
Livestock	67	91.9
Nuts	17	33.8
Poultry ²	19	26.3
Rice	15	12.5
Sugar ³	48	13.9
Tobacco	21	127.4
Wool and mohair	76	10.9
Other products	<u>90</u>	<u>23.3</u>
Total marketing	1,551	1,054.2
Farm supply	1,156	1,590.4
Service	<u>379</u>	<u>113.3</u>
Total	3,086	2,758.0

¹ Cooperatives primarily handling grains and oilseeds, excluding cottonseed.

² Cooperatives primarily handling eggs, turkeys, ratite, squab, and related products.

³ Cooperatives primarily handling sugar beets, sugarcane, honey, and related products.

Figure 1—Farmer Cooperatives in the United States, 1994-2003

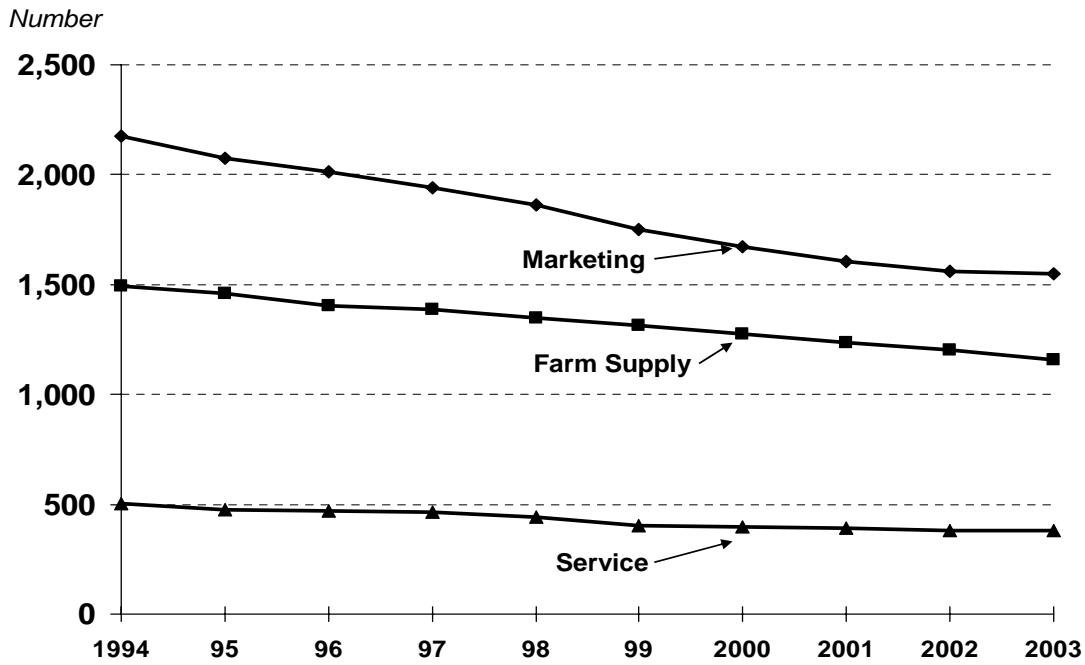
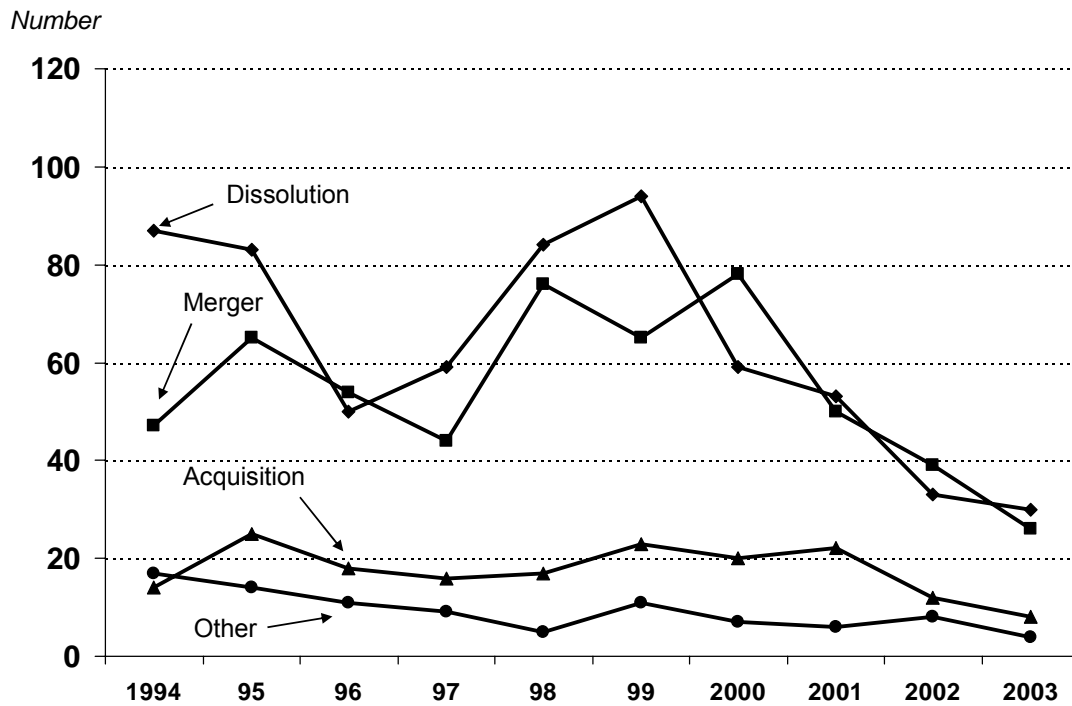


Figure 2—Cooperatives Removed from RD's List, 1994-2003



Based on an RD list of U.S. farmer cooperatives. Mergers also include consolidations. "Other" includes cooperatives dropped due to inactivity and unknown and miscellaneous reasons.

Table 2—Number of cooperatives¹, by major function and State, 2003²

State	Major function		Total
	Marketing	Farm supply and service	
		<i>Number</i>	
Alabama	8	53	61
Arizona	5	4	9
Arkansas	10	41	51
California	97	65	162
Colorado	23	20	43
Florida	32	7	39
Georgia	9	8	17
Hawaii	13	7	20
Idaho	24	13	37
Illinois	113	47	160
Indiana	16	27	43
Iowa	102	46	148
Kansas	94	35	129
Kentucky	15	27	42
Louisiana	16	30	46
Maryland	3	13	16
Massachusetts	8	4	12
Michigan	33	27	60
Minnesota	137	146	283
Mississippi	12	58	70
Missouri	18	44	62
Montana	34	29	63
Nebraska	52	34	86
New Jersey	12	1	13
New Mexico	3	6	9
New York	76	11	87
North Carolina	14	5	19
North Dakota	129	99	228
Ohio	47	22	69
Oklahoma	35	43	78
Oregon	19	13	32
Pennsylvania	38	13	51
South Dakota	60	58	118
Tennessee	8	71	79
Texas	57	174	231
Utah	9	6	15
Virginia	19	39	58
Washington	44	33	77
West Virginia	13	13	26
Wisconsin	41	130	171
Wyoming	7	5	12
Other States ³	46	8	54
United States	1,551	1,535	3,086

¹ Centralized and federated cooperatives and those with mixed organizational structures.

² Data covering operations of cooperatives for fiscal years that ended in 2003.

³ Includes States with fewer than three cooperatives for any function. States with at least three cooperatives were: Alaska, 7; Connecticut, 4; Delaware, 3; Maine, 27; South Carolina, 5; and Vermont, 4.

and 1, respectively (figure 2).

Cooperative numbers by marketing, farm supply, and service functions by State are shown in table 2. Minnesota had the most marketing cooperatives (137), followed closely by North Dakota (129). Texas had the most farm supply and service cooperatives (174).

The 10 leading States in terms of number of cooperatives by function are shown in figure 3. Minnesota had about the same number each of marketing and farm supply cooperatives, while Texas had the most service cooperatives, mainly cotton gins. North Dakota had the second highest number of cooperatives, with 30 more marketing cooperatives than farm supply.

Grain and Farm Supply Branches

Many cooperatives operate branches to better serve their members. Most branches are owned, others are leased. A number of the branches are formerly independent cooperatives that served a local community. For economic or other reasons, many were

acquired by or merged with other cooperatives and operated as branches from which to serve members and patrons at outlying locations.

Grain and oilseed and farm supply cooperatives operated over 5,000 branches—2,000 and 3,000, respectively (table 3). Grain and oilseed cooperatives averaged 2.7 branches, while farm supply cooperatives averaged 2.6 branches per cooperative.

In 1996, 2,469 grain and oilseed and farm supply cooperatives had an estimated 5,355 branches: 2,326 owned by grain and oilseed cooperatives and 3,029 by farm supply cooperatives. In 2003, grain and oilseed and farm supply cooperative numbers had dropped to 1,919, and branches to 5,146 (figure 4). It is not clear if the cooperatives are now contracting the number of outlets they operate as they have consolidated in total or if data have been misinterpreted.

Figure 5 shows that less than 200 of the largest cooperatives (mainly regional) had about the same number of branches that all the smaller (local) cooperatives had

Figure 3—Number of Cooperatives by Function, Leading States, 2003

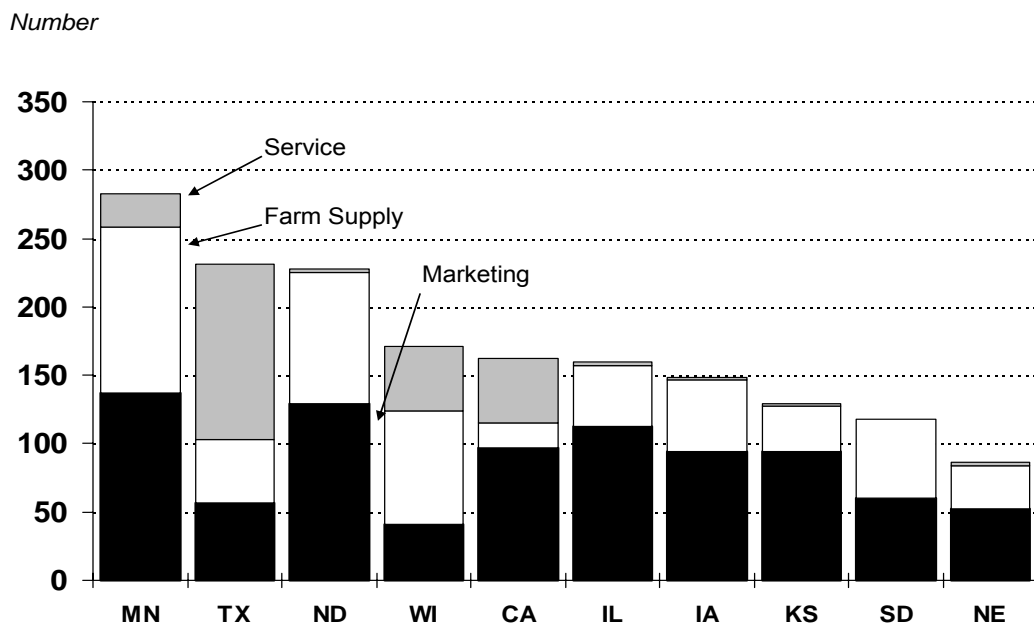


Figure 4—Grain and Farm Supply Cooperatives and Branches, 1994-2003

1,000

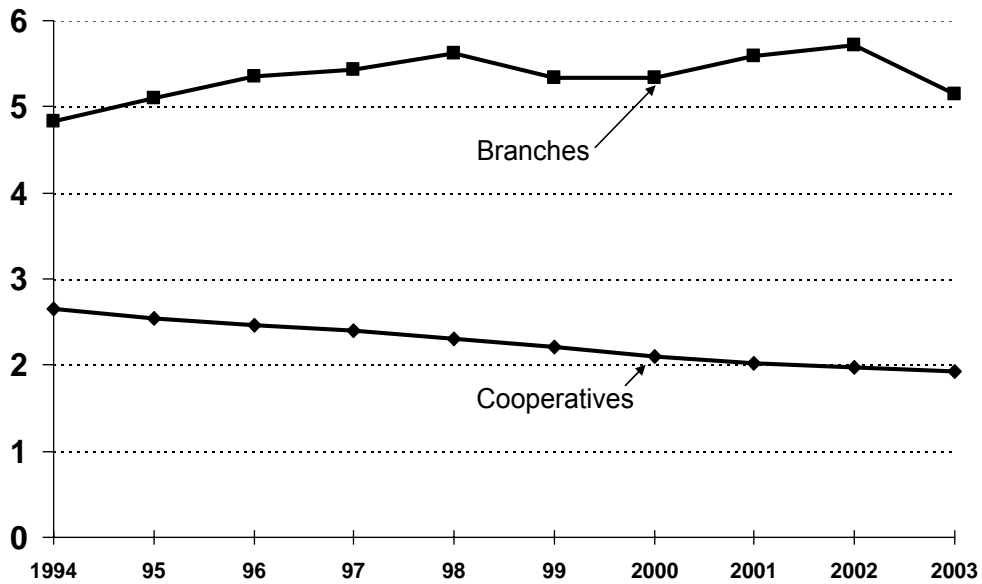


Figure 5—Branches of Grain and Farm Supply Cooperatives, by Size, 2003

1,000 Cooperatives or Branches

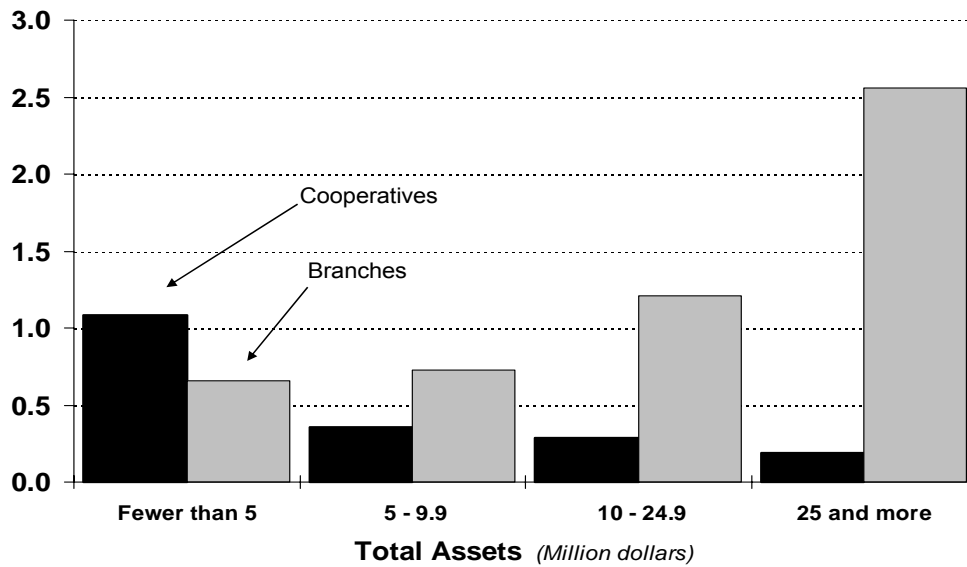


Table 3—Estimated number of branches operated by grain and oilseed and farm supply cooperatives, 1996-2003

Year	Asset Group (Million \$)				Total
	Less than 5	5 - 9.9	10 - 24.9	25 or more	
Grain and Oilseed Cooperatives					
1996	618	229	176	43	1,066
1997	616	196	155	47	1,014
1998	550	216	150	48	964
1999	512	187	147	50	896
2000	435	183	149	59	826
2001	406	184	135	64	789
2002	379	173	141	76	769
2003	367	157	142	73	739
Branches					
1996	387	505	743	691	2,326
1997	364	463	717	706	2,250
1998	292	517	774	716	2,299
1999	295	422	685	761	2,163
2000	280	428	690	517	1,915
2001	252	414	672	708	2,046
2002	244	340	637	901	2,122
2003	221	299	579	821	1,921
Farm Supply Cooperatives					
1996	1,064	213	109	17	1,403
1997	1,022	232	109	23	1,386
1998	928	277	112	30	1,347
1999	933	223	121	36	1,313
2000	886	208	139	44	1,277
2001	780	205	146	103	1,234
2002	740	203	152	106	1,201
2003	719	199	148	114	1,180
Branches					
1996	542	523	526	1,438	3,029
1997	481	579	576	1,576	3,183
1998	528	548	570	1,672	3,318
1999	423	547	534	1,663	3,167
2000	518	493	723	1,663	3,412
2001	482	494	705	1,856	3,537
2002	436	432	840	1,884	3,592
2003	434	426	630	1,735	3,224

combined. The 73 largest grain and oilseed cooperatives (assets in excess of \$25 million)—or about 10 percent of all grain and oilseed cooperatives—accounted for 43 percent of the total number of branches operated by grain and oilseed cooperatives. The 114 largest farm supply cooperatives—10 percent of all farm supply cooperatives—had 1,735 branches, or 54 percent.

Memberships

Memberships in marketing, farm supply, and related-service cooperatives totaled an estimated 2.8 million in 2003, down 1.3 percent from 2002 (table 4). By major business activity, 58 percent and 20 percent were memberships of farm supply and grain cooperatives, respectively (appendix table 2, figure 6). Dairy cooperative memberships were only 3 percent of the total, but accounted for 23 percent, or \$23 billion, of cooperatives' net business volume in 2003.

Memberships in farmer cooperatives dropped from 4 million in 1994 to 2.8 million in 2003 (figure 7). The long-term decline largely reflects the decreasing number of farms, farmers, and ranchers in the United States (appendix figure 2). Many farmers are members of more than one cooperative and each membership is counted. Consequently, the number of memberships exceeds the number of farmers. Duplication in membership cannot be eliminated with current reporting methods.

Member classification depends on the type of cooperative used and may not be related to the member's product(s) marketed or supplies purchased. For example, a member may market only one of the farm products handled by the cooperative; another may use a cooperative classified in the marketing group to purchase one or more production items. A member's business with the cooperative, therefore, may not be in the group that represents the cooperative's major business volume (the criterion for classifying cooperatives in this report). The membership, however, will be included arbitrarily in that classification.

During the past decade, memberships in related-service and marketing cooperatives decreased at more than twice the rate of memberships in farm supply cooperatives. Memberships in marketing cooperatives dropped 751,000 (42 percent) and service cooperatives had a decline of 132,000 (54 percent), while memberships in farm supply cooperatives decreased 345,000 (18 percent).

The largest proportions of memberships in farm supply cooperatives were in the smallest and mid-size cooperatives (figure 8). Memberships in marketing cooperatives were the greatest proportion of total memberships among those same mid-size cooperatives (gross business volumes of \$15 million to \$99.9 million).

Employees

Farmer cooperatives had an estimated 165,000 full-time employees in 2003, a decrease of about 1,000 from 2002 (table 5), and far less than the peak of 176,665 in 2000. Livestock and poultry and sugar cooperatives have increased their full-time employees by about 7,000 from 1998 while all other cooperatives have decreased by a combined 14,000. There has been a fairly steady decline in full-time employees in most marketing cooperatives while farm supply cooperatives increased some but now are back to 1998 levels of employment. Larger cooperatives have more employees, but some types of cooperatives have many more assets per employee (appendix figure 3). Sugar cooperatives have the largest amount of assets per employee at \$496,000. Other cooperatives that process raw products, such as livestock and poultry (\$86,000 per employee), and fruit and vegetable cooperatives (\$199,000), have more assets than sugar cooperatives, but they also use many more employees.

Farmer cooperatives employ full-time and, in most cases, part-time and seasonal employees to run their operations. Their number and type depends on a number of factors, such as size of operation, type of

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
BEANS AND PEAS, DRY EDIBLE				
California	3	0.3	5.43	5.43
North Dakota	3	0.8	52.81	52.81
Other States	2	1.0	73.91	70.79
United States	8	2.1	132.16	129.03
COTTON⁶				
California	3	1.4	382.72	332.72
Texas	5	24.5	672.35	661.98
Other States	6	17.5	1,561.60	1,540.93
Foreign ⁷	0	0.0	0.00	0.00
United States	14	43.4	2,616.67	2,535.63
DAIRY				
California	6	1.3	2,216.23	2,199.99
Illinois	4	2.9	1,473.22	1,109.07
Iowa	5	4.4	1,557.01	1,311.95
Massachusetts	3	0.2	64.56	64.07
Minnesota	32	12.7	3,193.56	2,994.83
New Mexico	3	0.2	421.44	400.88
New York	61	5.5	1,575.37	1,229.88
North Dakota	4	0.9	285.34	262.41
Ohio	6	1.2	135.71	116.54
Oregon	3	0.6	383.76	367.00
Pennsylvania	18	3.6	478.22	423.36
Virginia	3	1.0	691.20	691.20
Wisconsin	32	19.5	5,262.28	4,867.26
Other States	20	26.8	8,171.99	7,341.02
Foreign ⁷	0	0.0	74.46	74.46
United States	200	80.8	25,984.37	23,453.91

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
FRUITS AND VEGETABLES				
Arizona	4	0.8	79.98	79.98
Arkansas	3	0.1	2.14	1.96
California	53	13.8	2,577.30	2,577.11
Colorado	6	0.4	9.58	9.58
Florida	22	1.2	909.03	431.18
Hawaii	4	0.1	6.10	6.10
Idaho	3	1.4	269.77	269.77
Kentucky	4	0.2	5.12	5.12
Maine	8	0.5	5.62	5.62
Massachusetts	3	0.4	366.07	366.07
Michigan	14	2.7	524.80	465.57
Minnesota	4	0.2	8.87	8.87
New Jersey	8	0.7	160.34	160.34
New York	9	0.9	72.57	72.50
North Carolina	4	0.1	19.52	18.91
North Dakota	3	0.2	18.62	18.62
Ohio	4	0.3	4.26	4.26
Oregon	10	0.9	414.23	414.23
Pennsylvania	5	0.5	423.36	423.36
Texas	3	0.3	56.36	56.36
Washington	16	4.4	1,063.28	1,063.28
Other States	16	2.3	454.78	440.38
Foreign ⁷	0	0.1	0.85	0.85
United States	206	32.6	7,452.54	6,900.01
GRAINS AND OILSEEDS⁸				
Colorado	15	8.5	216.42	212.15
Idaho	4	0.8	39.16	35.04
Illinois	101	88.3	2,322.93	2,229.33
Indiana	13	18.6	462.48	459.31
Iowa	82	75.3	5,115.16	4,405.91
Kansas	90	93.4	1,632.66	1,517.30
Michigan	4	2.0	126.17	125.10

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
GRAINS AND OILSEEDS ⁸ (continued)				
Minnesota	81	46.1	3,605.25	2,962.21
Mississippi	3	2.0	190.12	185.03
Missouri	11	18.0	689.57	519.86
Montana	9	1.7	315.76	216.88
Nebraska	41	53.8	2,112.73	1,942.79
North Dakota	102	40.6	1,729.65	1,461.07
Ohio	32	22.2	741.68	739.12
Oklahoma	31	21.7	267.65	244.82
South Dakota	58	33.1	1,299.33	1,123.50
Texas	34	14.6	465.91	416.56
Washington	18	9.0	553.90	487.14
Other States	16	5.6	1,361.33	1,137.87
Foreign ⁷	0	0.0	303.84	191.36
United States	745	555.3	23,551.70	20,612.37
LIVESTOCK				
Alabama	4	3.2	20.82	20.82
Idaho	3	3.4	87.28	87.28
Indiana	3	1.6	162.19	162.19
Kentucky	4	0.2	4.51	4.51
Mississippi	3	2.6	38.98	38.98
Missouri	4	1.8	723.08	723.08
North Dakota	5	0.5	21.57	21.57
Virginia	4	0.4	13.70	13.70
West Virginia	3	0.2	2.51	2.51
Wisconsin	4	50.1	589.04	589.04
Other States	30	28.0	5,131.41	5,131.41
Foreign ⁷	0	0.0	0.33	0.33
United States	67	91.9	6,795.41	6,795.41

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered		Business volume	
	in State	Memberships	Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
NUT⁹				
California	7	5.9	762.50	762.50
Other States	11	27.8	88.73	88.73
Foreign ⁷	0	0.1	0.00	0.00
United States	18	33.8	851.23	851.23
POULTRY¹⁰				
California	4	0.1	209.45	195.30
Utah	3	0.2	131.64	131.64
Other States	12	25.9	2,325.60	2,325.60
Foreign ⁷	0	0.1	0.00	0.00
United States	19	26.3	2,666.69	2,652.55
RICE				
California	4	0.9	239.51	238.16
Louisiana	3	0.4	21.53	21.53
Texas	5	0.9	29.93	29.93
Other States	3	10.3	677.98	677.98
United States	15	12.5	968.95	967.60
SUGAR¹¹				
Idaho	7	1.8	512.37	512.37
Louisiana	8	0.5	249.51	249.51
Michigan	7	1.8	190.82	190.82
Minnesota	3	2.7	1,193.82	1,193.82
Montana	3	0.4	55.61	55.61
Wyoming	4	0.4	25.70	25.70
Other States	16	6.0	1,282.50	1,282.50
Foreign ⁷	0	0.0	2.19	2.19
United States	48	13.9	3,512.52	3,512.52

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered		Business volume	
	in State	Memberships	Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
TOBACCO⁷				
Kentucky	5	5.7	19.24	19.24
North Carolina	3	0.9	1.01	1.01
Tennessee	7	119.7	63.28	63.28
Virginia	3	0.9	1.87	1.87
Other States	3	0.2	0.06	0.06
United States	21	127.4	85.45	85.45
WOOL AND MOHAIR				
Idaho	4	0.1	0.03	0.03
Montana	19	0.6	0.49	0.49
North Dakota	4	0.3	0.06	0.06
Pennsylvania	12	1.1	0.17	0.17
Virginia	7	0.4	0.03	0.03
West Virginia	9	0.7	0.01	0.01
Wyoming	3	0.1	0.69	0.69
Other States	18	7.6	8.66	8.66
Foreign ⁷	0	0.1	0.37	0.37
United States	76	10.9	10.50	10.50
OTHER MARKETING¹²				
Alaska	7	4.4	10.42	10.42
California	9	1.2	117.33	92.91
Florida	6	0.3	32.31	10.83
Georgia	3	0.1	8.03	8.03
Hawaii	4	0.4	1.87	1.87
Maine	15	0.7	51.15	51.15
Minnesota	13	10.0	565.78	547.95
North Dakota	3	2.3	47.32	47.32
Washington	5	0.7	66.83	66.83
Other States	25	3.4	1,712.77	1,658.58
United States	90	23.3	2,613.82	2,495.89

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered		Business volume	
	in State	Memberships	Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
TOTAL MARKETING				
Alabama	8	11.8	769.82	767.26
Alaska	7	4.4	10.75	10.75
Arizona	5	1.4	613.88	590.13
Arkansas	10	13.0	1,401.12	1,385.98
California	97	27.3	6,561.37	6,455.02
Colorado	23	10.4	530.88	512.35
Florida	32	4.9	1,757.06	1,257.58
Georgia	9	20.4	1,048.83	1,046.15
Hawaii	13	0.6	10.64	10.64
Idaho	24	7.9	1,223.86	1,217.91
Illinois	109	95.5	4,054.32	3,596.58
Indiana	16	21.7	1,068.60	949.38
Iowa	94	83.7	8,084.58	7,123.90
Kansas	94	96.8	3,088.52	2,898.07
Kentucky	15	9.3	137.14	136.83
Louisiana	16	5.0	574.21	514.54
Maine	25	1.6	121.09	121.09
Maryland	3	0.8	194.28	194.21
Massachusetts	8	1.0	434.35	433.86
Michigan	32	11.1	1,458.91	1,378.98
Minnesota	137	73.3	9,174.82	8,312.09
Mississippi	12	7.2	829.83	824.32
Missouri	18	26.4	3,462.91	2,991.66
Montana	34	3.3	427.28	328.40
Nebraska	49	57.9	3,522.35	3,242.42
New Jersey	11	1.7	225.42	222.90
New Mexico	3	0.8	450.54	429.94
New York	75	7.2	1,800.50	1,454.49
North Carolina	14	3.7	381.03	379.53
North Dakota	127	49.3	3,058.80	2,767.30
Ohio	47	31.3	1,819.18	1,793.11
Oklahoma	34	29.5	971.56	912.50
Oregon	19	4.9	1,330.12	1,198.91

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
TOTAL MARKETING (continued)				
Pennsylvania	38	5.2	996.89	942.02
South Carolina	3	2.9	105.85	105.85
South Dakota	59	35.9	1,909.30	1,702.82
Tennessee	8	122.3	141.10	140.49
Texas	57	45.8	2,758.37	2,568.74
Utah	9	3.1	223.07	212.74
Vermont	4	1.6	420.48	410.06
Virginia	19	21.0	731.64	731.64
Washington	44	15.2	2,196.03	2,126.59
West Virginia	13	1.3	11.95	11.95
Wisconsin	41	71.7	6,441.95	6,041.32
Wyoming	7	0.7	49.90	49.83
Other States	5	1.9	274.92	229.74
Foreign ⁷	0	0.4	382.04	269.57
United States	1,527	1,054.3	77,242.01	71,002.11
FARM SUPPLIES PROVIDED:				
CROP PROTECTANTS¹³				
Alabama			63.88	38.50
Arkansas			103.79	92.54
California			26.37	26.34
Colorado			40.60	37.65
Florida			14.60	11.05
Georgia			115.25	108.88
Idaho			25.80	25.77
Illinois			399.39	265.85
Indiana			144.06	143.59
Iowa			369.52	326.24
Kansas			106.40	105.73
Kentucky			47.83	42.89
Louisiana			28.11	27.76
Maryland			15.35	14.34

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
CROP PROTECTANTS ¹³ (continued)				
Massachusetts			2.03	2.03
Michigan			31.42	31.36
Minnesota			279.95	270.15
Mississippi			24.23	23.53
Missouri			123.05	85.55
Montana			29.63	29.60
Nebraska			184.32	181.59
New York			50.99	50.93
North Dakota			104.25	104.12
Ohio			97.30	97.18
Oklahoma			21.12	21.05
Oregon			61.89	61.80
Pennsylvania			24.88	24.86
South Dakota			109.35	108.88
Tennessee			120.48	69.83
Texas			43.02	41.02
Utah			6.99	6.98
Virginia			31.32	23.35
Washington			86.34	83.21
West Virginia			3.32	3.09
Wisconsin			118.88	108.76
Wyoming			3.33	3.32
Other States			84.88	75.20
Foreign ⁷			21.56	1.89
United States			3,165.48	2,776.42
FEED ¹³				
Alabama			114.71	40.57
Arkansas			90.43	51.67
California			187.06	133.88
Colorado			78.01	39.45
Florida			80.71	36.24
Georgia			378.37	335.73
Idaho			85.70	58.36

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
FEED ¹³ (continued)				
Illinois			259.27	193.56
Indiana			113.67	73.79
Iowa			1,154.15	1,114.29
Kansas			169.58	152.49
Kentucky			99.42	54.47
Louisiana			27.96	26.52
Maryland			41.69	38.44
Massachusetts			13.25	12.97
Michigan			109.19	69.22
Minnesota			771.63	720.48
Mississippi			40.75	40.56
Missouri			207.61	169.52
Montana			58.66	13.39
Nebraska			291.93	236.38
New York			113.43	103.79
North Dakota			54.63	43.26
Ohio			124.23	123.85
Oklahoma			61.62	58.77
Oregon			324.11	219.35
Pennsylvania			85.05	83.40
South Dakota			164.69	126.58
Tennessee			197.08	123.32
Texas			167.38	121.16
Utah			85.83	84.48
Virginia			125.54	115.83
Washington			257.33	169.90
West Virginia			20.59	18.47
Wisconsin			538.87	527.45
Wyoming			43.87	5.37
Other States			319.65	226.86
Foreign ⁷			162.75	109.61
United States			7,220.41	5,873.41

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
FERTILIZER ¹³				
Alabama			140.46	103.39
Arkansas			103.50	91.54
California			121.95	118.50
Colorado			68.77	62.58
Florida			127.79	32.57
Georgia			79.31	69.72
Idaho			33.30	32.26
Illinois			846.29	632.76
Indiana			314.75	221.78
Iowa			700.89	463.25
Kansas			253.62	233.90
Kentucky			97.72	90.87
Louisiana			22.99	21.60
Maryland			27.42	25.38
Massachusetts			3.47	3.47
Michigan			43.11	41.78
Minnesota			477.93	342.57
Mississippi			48.55	44.56
Missouri			379.05	244.12
Montana			58.15	58.08
Nebraska			322.61	265.64
New York			44.80	42.63
North Dakota			279.61	174.43
Ohio			236.49	156.68
Oklahoma			102.95	70.09
Oregon			96.14	96.05
Pennsylvania			36.31	36.26
South Dakota			205.58	148.62
Tennessee			212.03	129.37
Texas			133.33	83.31
Utah			16.40	16.28
Virginia			77.11	72.18
Washington			106.86	105.90

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
FERTILIZER ¹³ (continued)				
West Virginia			9.02	7.90
Wisconsin			209.79	157.46
Wyoming			10.64	9.39
Other States			134.04	121.17
Foreign ⁷			298.82	12.02
United States			6,481.53	4,640.05
PETROLEUM ¹³				
Alabama			5.62	5.07
Arkansas			89.22	84.53
California			7.11	6.42
Colorado			347.39	211.56
Florida			3.65	3.48
Georgia			184.02	55.30
Idaho			253.10	129.02
Illinois			1,213.75	695.98
Indiana			697.29	396.01
Iowa			1,168.78	665.18
Kansas			1,590.12	343.45
Kentucky			52.31	36.11
Louisiana			10.32	9.84
Maryland			7.52	7.50
Massachusetts			1.72	1.72
Michigan			233.47	107.21
Minnesota			855.64	642.63
Mississippi			22.29	20.53
Missouri			709.65	552.28
Montana			324.17	231.08
Nebraska			534.45	385.43
New York			30.91	28.47
North Dakota			507.74	362.77
Ohio			185.74	158.79
Oklahoma			278.65	135.51
Oregon			295.86	194.71

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
PETROLEUM ¹³ (continued)				
Pennsylvania			27.09	26.11
South Dakota			381.57	257.58
Tennessee			302.76	132.74
Texas			137.52	112.67
Utah			184.54	59.29
Virginia			551.86	369.60
Washington			305.95	210.71
West Virginia			7.64	7.62
Wisconsin			780.74	599.94
Wyoming			232.22	144.47
Other States			36.47	35.43
Foreign ⁷			267.84	85.03
United States			12,826.67	7,511.78
SEED ¹³				
Alabama			28.46	17.13
Arkansas			38.03	37.46
California			22.98	22.98
Colorado			6.38	6.38
Florida			4.21	3.48
Georgia			8.71	7.78
Idaho			47.17	6.17
Illinois			168.56	118.55
Indiana			54.94	32.15
Iowa			216.35	105.09
Kansas			24.96	24.96
Kentucky			30.37	28.04
Louisiana			13.35	13.21
Maryland			11.92	11.09
Massachusetts			5.05	4.93
Michigan			11.86	11.86
Minnesota			157.45	111.90
Mississippi			19.76	19.43

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered		Business volume	
	in State	Memberships	Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
SEED ¹³ (continued)				
Missouri			215.15	51.54
Montana			27.43	18.32
Nebraska			64.38	50.72
New York			58.14	57.81
North Dakota			51.34	37.67
Ohio			39.72	39.70
Oklahoma			6.03	6.03
Oregon			22.05	22.05
Pennsylvania			53.45	53.14
South Dakota			66.88	52.82
Tennessee			82.78	54.15
Texas			16.48	16.48
Utah			2.83	2.83
Virginia			26.23	24.47
Washington			37.98	33.42
West Virginia			5.21	4.80
Wisconsin			111.71	66.87
Wyoming			0.65	0.65
Other States			55.41	52.15
Foreign ⁷			13.59	5.89
United States			1,827.97	1,234.10
OTHER FARM SUPPLIES ^{13, 14}				
Alabama			78.99	51.15
Arkansas			67.57	66.01
California			137.70	97.77
Colorado			83.36	71.57
Florida			156.95	152.53
Georgia			110.55	103.31
Idaho			36.74	34.19
Illinois			111.08	90.23
Indiana			68.75	57.61
Iowa			125.09	106.94
Kansas			90.73	75.35

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered		Business volume	
	in State	Memberships	Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
OTHER FARM SUPPLIES ^{13, 14} (continued)				
Kentucky			66.37	57.08
Louisiana			17.41	16.78
Maryland			29.27	26.72
Massachusetts			16.23	14.91
Michigan			124.50	119.27
Minnesota			294.69	272.76
Mississippi			43.02	41.95
Missouri			207.00	156.36
Montana			47.14	46.11
Nebraska			162.70	129.45
New York			78.18	73.67
North Dakota			149.81	145.46
Ohio			81.64	72.41
Oklahoma			37.70	31.05
Oregon			128.49	127.53
Pennsylvania			49.57	46.53
South Dakota			79.45	74.36
Tennessee			248.60	151.36
Texas			78.63	66.17
Utah			50.87	47.99
Virginia			224.79	206.09
Washington			108.34	85.93
West Virginia			14.43	14.35
Wisconsin			335.46	329.84
Wyoming			36.97	33.96
Other States			188.35	163.68
Foreign ⁷			8.91	4.99
United States			3,976.06	3,463.41
FARM SUPPLY				
Alabama	47	19.8	432.13	255.81
Arkansas	36	35.7	492.54	423.76
California	18	13.4	503.17	405.89

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
FARM SUPPLY (continued)				
Colorado	19	20.4	624.50	429.19
Florida	6	8.0	387.92	239.35
Georgia	5	1.1	876.20	680.72
Idaho	12	8.6	481.82	285.77
Illinois	48	52.8	2,998.34	1,996.93
Indiana	25	35.2	1,393.46	924.94
Iowa	53	68.6	3,734.78	2,780.98
Kansas	33	26.6	2,235.41	935.87
Kentucky	26	168.3	394.02	309.47
Louisiana	19	5.9	120.14	115.72
Maryland	12	74.2	133.17	123.49
Massachusetts	4	3.6	41.75	40.02
Michigan	23	10.1	553.55	380.70
Minnesota	121	81.0	2,837.29	2,360.48
Mississippi	38	73.1	198.60	190.56
Missouri	43	66.0	1,841.51	1,259.37
Montana	29	22.4	545.18	396.57
Nebraska	35	23.0	1,560.40	1,249.20
New York	8	28.2	376.45	357.29
North Dakota	98	44.4	1,147.38	867.71
Ohio	19	15.7	765.12	648.61
Oklahoma	29	22.1	508.07	322.50
Oregon	13	21.7	928.54	721.49
Pennsylvania	7	27.4	276.35	270.30
South Dakota	59	41.6	1,007.52	768.83
Tennessee	69	63.0	1,163.73	660.78
Texas	46	35.0	576.36	440.80
Utah	5	1.3	347.46	217.85
Virginia	36	159.8	1,036.85	811.51
Washington	29	11.7	902.80	689.07
West Virginia	13	83.6	60.21	56.23
Wisconsin	83	83.9	2,095.46	1,790.32
Wyoming	5	3.5	327.68	197.17
Other States	11	127.5	818.80	674.49

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered		Business volume	
	in State	Memberships	Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
FARM SUPPLY (continued)				
Foreign ⁷	0	2.1	773.46	219.43
United States	1,182	1,590.4	35,498.12	25,499.18
SERVICE¹⁵				
Alabama	6	0.2	12.83	12.83
Arizona	4	0.5	16.39	16.39
Arkansas	5	0.5	81.78	81.78
California	47	3.5	467.33	467.33
Georgia	3	0.3	8.26	8.26
Hawaii	6	0.2	2.79	2.79
Illinois	3	0.3	194.66	194.66
Louisiana	11	0.6	21.41	21.41
Michigan	5	1.1	61.91	61.91
Minnesota	25	6.4	432.51	432.51
Mississippi	20	10.9	508.15	508.15
New Mexico	5	1.3	7.08	7.08
New York	4	0.3	242.33	242.33
North Carolina	3	0.1	14.59	14.59
North Dakota	3	3.6	54.38	54.38
Ohio	3	2.6	103.01	103.01
Oklahoma	15	5.3	43.27	43.27
Pennsylvania	6	0.2	5.23	5.23
Texas	128	21.8	247.88	247.88
Virginia	3	9.8	50.77	50.77
Washington	4	2.5	164.16	164.16
Wisconsin	47	17.6	90.65	90.65
Other States	21	24.0	1,286.86	1,286.86
United States	377	113.3	4,118.19	4,118.19

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered	Memberships	Business volume	
	in State		Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
TOTAL				
Alabama	61	31.7	1,214.78	1,035.90
Alaska	7	4.4	71.56	52.89
Arizona	9	2.3	692.39	624.80
Arkansas	51	49.2	1,975.43	1,891.51
California	162	44.2	7,531.86	7,328.24
Colorado	43	30.8	1,187.29	973.46
Connecticut	4	1.8	243.74	197.42
Delaware	3	43.5	62.91	59.99
Florida	39	23.4	2,223.07	1,575.02
Georgia	17	21.8	1,933.30	1,735.13
Hawaii	20	0.9	64.54	47.21
Idaho	37	16.6	1,723.56	1,521.57
Illinois	160	148.6	7,247.32	5,788.17
Indiana	43	57.0	2,538.46	1,950.71
Iowa	148	155.8	12,151.32	10,236.84
Kansas	129	123.5	5,456.50	3,966.51
Kentucky	42	179.4	535.35	450.49
Louisiana	46	11.5	715.76	651.67
Maine	27	7.1	210.19	208.80
Maryland	16	75.0	328.50	318.74
Massachusetts	12	4.6	479.44	477.23
Michigan	60	22.2	2,074.37	1,821.58
Minnesota	283	160.7	12,444.61	11,105.07
Mississippi	70	91.3	1,536.58	1,523.03
Missouri	62	93.2	5,564.05	4,510.65
Montana	63	25.7	978.53	731.04
Nebraska	86	80.9	5,231.12	4,640.00
New Jersey	13	6.0	283.29	277.14
New Mexico	9	2.2	471.93	449.15
New York	87	35.7	2,419.28	2,054.11
North Carolina	19	72.3	643.60	604.17
North Dakota	228	97.3	4,260.56	3,689.38
Ohio	69	49.6	2,687.31	2,544.73
Oklahoma	78	56.9	1,522.89	1,278.27

Table 4—Number¹ of cooperatives, memberships², and gross and net sales by State, 2003³
(continued)

State	Headquartered		Business volume	
	in State	Memberships	Gross ⁴	Net ⁵
	<i>Number</i>	<i>Thousands</i>	<i>Million \$</i>	
TOTAL (continued)				
Oregon	32	26.6	2,295.09	1,956.83
Pennsylvania	51	32.8	1,278.47	1,217.55
South Carolina	5	3.1	176.09	168.93
South Dakota	118	81.0	2,974.24	2,529.08
Tennessee	79	187.6	1,345.04	841.48
Texas	231	102.6	3,582.61	3,257.42
Utah	15	5.7	615.17	475.23
Vermont	4	4.5	463.39	452.15
Virginia	58	190.7	1,819.26	1,593.93
Washington	77	29.4	3,262.99	2,979.81
West Virginia	26	84.9	72.62	68.64
Wisconsin	171	173.1	8,628.06	7,922.29
Wyoming	12	4.3	383.85	253.27
Other States	4	2.1	100.56	93.23
Foreign ⁷	0	2.5	1,155.50	489.00
United States	3,086	2,758.0	116,858.32	100,619.48

¹ Includes centralized and federated cooperatives and those with mixed organizational structures. Headquartered in the State listed.

² Includes voting farmer-members, but not nonvoting patrons. (Duplication in these membership figures occurs because many farmers belong to more than one cooperative.) Memberships include members of cooperatives not headquartered in the State listed. Totals may not add due to rounding.

³ Data covering operations of cooperatives for fiscal years ended in 2003. States listed are those with more than two cooperatives or where disclosure was not a problem.

⁴ Gross business volume includes sales between cooperatives. Gross sales include sales of cooperatives not headquartered in the State listed. Totals may not add due to rounding.

⁵ Net business volume excludes sales between cooperatives. Net sales include sales of cooperatives not headquartered in the State listed. Totals may not add due to rounding.

⁶ Cotton ginning cooperatives are included as service cooperatives.

⁷ Includes memberships, marketing and sales in other countries.

⁸ Excludes oilseed meal and oil. Oilseed meal is included in feed sales while oil sales are included in other marketing sales.

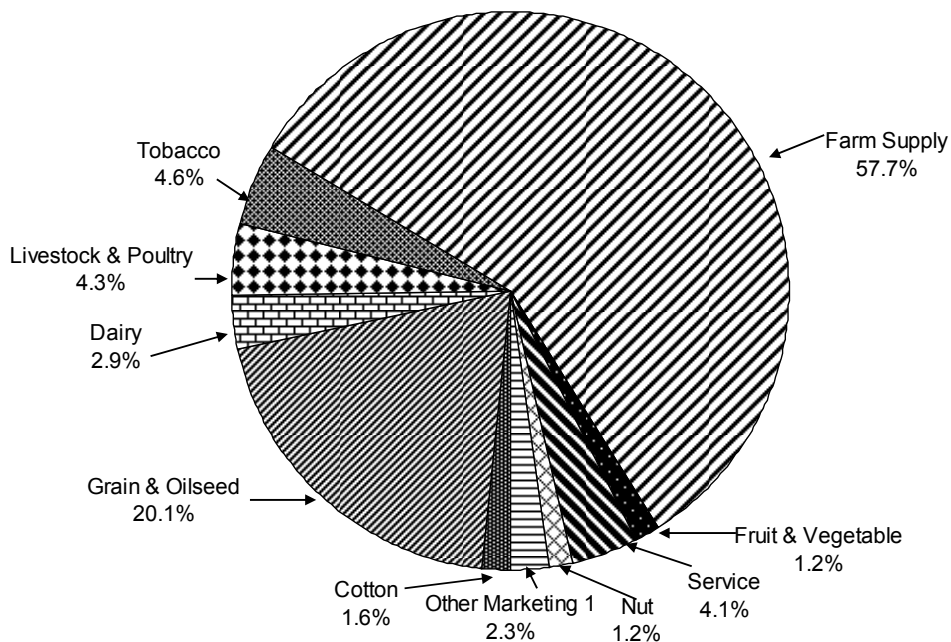
⁹ Membership fluctuates annually and is affected by the extent to which producers participate in price stabilization programs.

¹⁰ Includes eggs, turkeys, ratite, squab, and related products.

¹¹ Includes sugar, sugarcane, sugar beets, honey, maple syrup, molasses, and sorghum.

- ¹² Includes forest products, fish, hay, hops, seed marketed for growers, nursery stock, ethanol, coffee, and other farm products not classified separately. Also includes manufactured food products and resale items marketed by cooperatives.
- ¹³ Headquartered in State and membership values are not collected for individual farm supply products, rather they are collected for total farm supplies.
- ¹⁴ Includes building materials, containers and packaging supplies, farm machinery and equipment, meats and groceries, automotive supplies, hardware, chicks, and other supplies not separately classified.
- ¹⁵ Includes cooperatives providing services such as cotton ginning, livestock shipping, storing, grinding, drying, and artificial insemination. Sales include charges for services related to marketing or purchasing, but not included in the volume reported for those activities, plus other income.

Figure 6—Distribution of Memberships, by Type of Cooperative, 2003



Percentages are based on 2.8 million total memberships.

¹ Includes dry bean and pea, wool and mohair, rice, sugar, fishery, and other products marketing cooperatives.

Figure 7—Cooperative Memberships by Function, 1994-2003

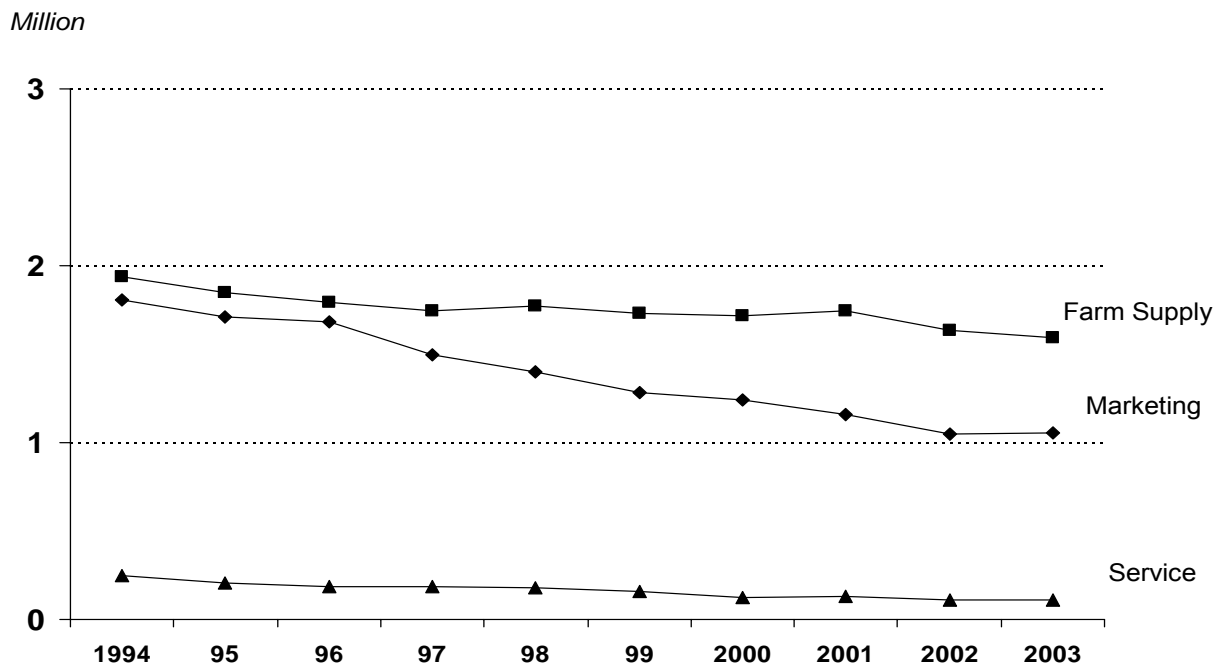


Figure 8—Cooperative Memberships Grouped by Function and Volume, 2003

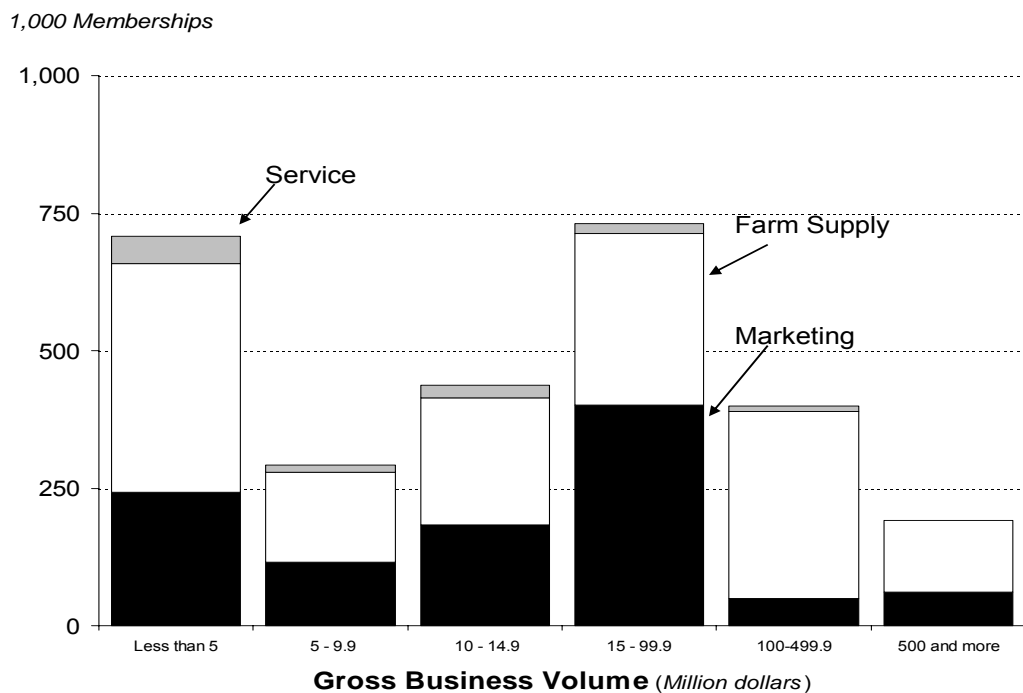


Table 5—Cooperatives' number of full-time employees, 2003-1998

Commodity	2003	2002	2001	2000	1999	1998
	<i>Thousands</i>					
Cotton	1.9	2.0	1.8	1.8	1.8	1.8
Dairy	23.4	23.7	20.7	23.4	24.6	27.1
Fruits and vegetables	18.4	18.7	19.9	25.1	23.3	23.7
Grains and oilseeds	20.4	18.9	19.6	20.3	21.0	23.9
Livestock and poultry	34.4	34.4	35.8	34.6	32.7	28.0
Rice	2.6	2.5	2.4	2.6	2.6	2.7
Sugar	4.9	4.5	4.4	4.5	4.5	4.4
Other products	5.8	6.8	6.3	8.8	8.5	8.5
Total marketing	111.9	111.3	111.0	121.1	119.0	120.1
Total farm supply	48.2	50.7	50.6	51.3	49.5	48.2
Service	5.0	4.0	4.0	4.2	4.5	5.6
Total	165.1	166.1	165.7	176.7	173.0	173.8

commodity handled, and involvement in value-added activities.

In 2003, farmer cooperatives employed an estimated 227,000 full-time and part-time and seasonal employees, about 7,000 more than in 2002 (table 6). Among marketing cooperatives, those primarily handling fruits and vegetables had the most employees (42,000), followed by livestock and poultry (37,000), then grains and oilseeds (26,000), and dairy (25,000).

By type, marketing cooperatives had 151,000 full-time and part-time and seasonal employees (67 percent of total); farm supply cooperatives had 66,000 (29 percent); and related-service cooperatives had 10,000 (4 percent, appendix figure 4). Marketing associations employed about 5,000 more

employees in 2003 than in 2002.

Figure 9 shows the number of full-time and part-time and seasonal employees by type of cooperative for 2003. Farm supply, fruit and vegetable, and livestock and poultry cooperatives used the most employees; cotton cooperatives the fewest. Dairy, livestock and poultry, and cotton cooperatives had the smallest proportion of part-time and seasonal employees to total employees. Fruit and vegetable and cotton ginning cooperatives both had more than half of their employees as part-time and seasonal employees.

Cooperatives used almost 62,000 part-time and seasonal employees in 2003, up about 7,000, or 14 percent, from 2002. The

Table 6—Full-time and part-time and seasonal employees of farmer cooperatives, by type of cooperative, 2003-2002¹

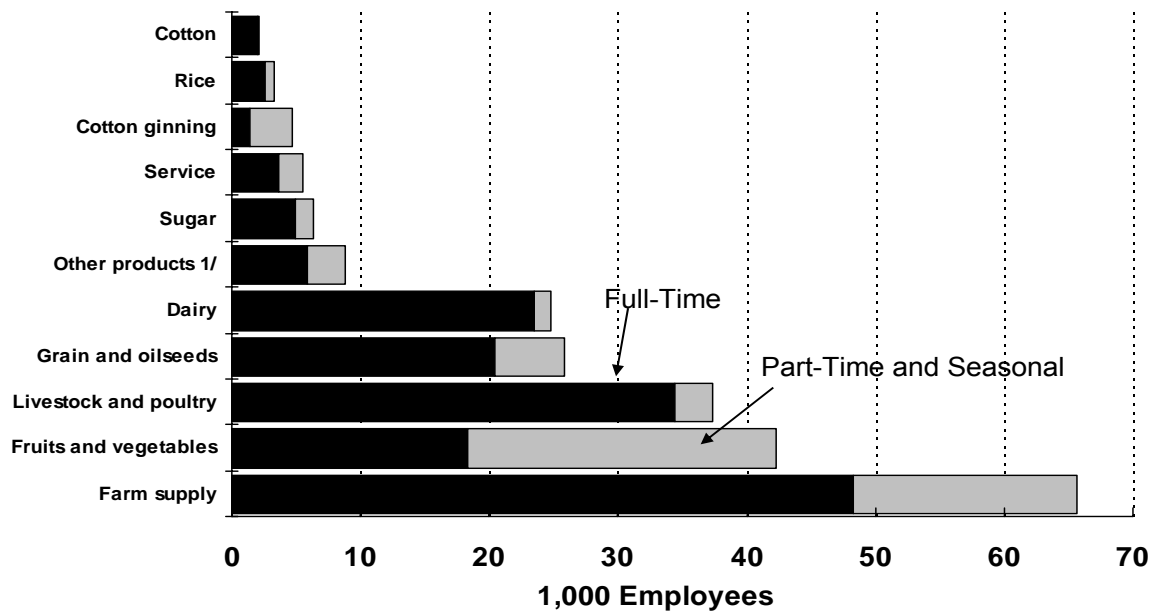
Principal product(s) marketed or major function	<u>Total</u>		<u>Full-time employees</u>		<u>Part-time and seasonal</u>	
	2003	2002	2003	2002	2003	2002
<i>Thousands</i>						
Products marketed						
Cotton	2.1	2.1	1.9	2.0	0.2	0.2
Dairy	24.7	24.9	23.4	23.7	1.3	1.3
Fruit and vegetable	42.3	37.2	18.4	18.7	23.9	18.6
Grain and oilseed ²	25.8	24.5	20.4	18.9	5.4	5.6
Livestock and poultry	37.3	35.6	34.4	34.4	3.0	1.2
Rice	3.3	3.0	2.6	2.5	0.7	0.5
Sugar	6.4	7.6	4.9	4.5	1.5	3.1
Other products ³	8.8	10.7	5.8	6.8	3.0	3.9
Marketing	150.8	145.6	111.9	111.3	38.9	34.3
Farm supply	65.7	65.3	48.2	50.7	17.4	14.6
Service	10.3	9.4	5.0	4.0	5.3	5.4
Total	226.7	220.4	165.1	166.1	61.6	54.3

¹ Totals may not add due to rounding.

² Excludes oilseed meal and oil. Oilseed meal is included in feed sales while oil sales are included in other marketing sales.

³ Includes dry edible bean and pea, nut, tobacco, wool, fishery, and other products marketing cooperatives.

Figure 9—Full-Time and Part-Time and Seasonal Employees, by Cooperative Type, 2003



1/ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other products marketing cooperatives.

largest increase was in fruit and vegetable cooperatives, up about 5,000. Livestock and poultry cooperatives increased their use of part-time and seasonal employees by about 2,000, while farm supply cooperatives increased theirs close to 3,000.

In 2003, marketing cooperatives reported 39,000 part-time and seasonal employees, or 63 percent of those type of workers used. Marketing cooperatives averaged 25 part-time and seasonal employees per cooperative. Fruit and vegetable cooperatives, with 24,000, accounted for about 39 percent of all part-time and seasonal employees used by cooperatives. Farm supply cooperatives had over 17,000 part-time and seasonal employees, an average of 15 per cooperative. 32

Most types of marketing cooperatives operated with more employees than did farm supply cooperatives. For example, livestock and poultry cooperatives averaged 434 employees; rice, 220; fruit and vegetable, 204; while farm supply cooperatives averaged 57 (figure 10).

Labor Expenses

As with any other business, one of the largest expense items of cooperatives is wages and benefits. Hiring employees full-time or part-time and seasonally involves decisions on the number of employees and levels of salaries and wages. Other employee-related expenses include

Table 7—Sales per dollar of labor expense for cooperatives reporting, by selected type and size, 2003-2002

Type of cooperative and by size of assets in million \$	Sales per dollar of labor expense ¹				Average total labor expense			
				Best observed				Best observed
	2003	2002	change	2003	2003	2002	change	2003
	<i>Dollars</i>		<i>Percent</i>	<i>Dollars</i>	<i>Million \$</i>		<i>Percent</i>	<i>Million \$</i>
All respondents	13.14	12.57	4.5		2.58	2.43	6.3	
Cotton - all sizes	19.61	18.09	8.4		3.09	2.99	3.6	
Assets less than \$25.0	18.75	17.82	5.2	27.85	1.78	1.80	-1.1	0.69
25.0 - 499.99	20.10	18.25	10.1	115.26	5.28	4.96	6.4	0.98
Cotton gin - all sizes	6.59	6.25	5.4		0.79	0.74	5.6	
∞ Assets of 0.5 - \$0.99	6.03	6.26	-3.7	9.98	0.26	0.26	1.2	0.13
1.0 - 2.49	5.46	5.73	-4.6	10.88	0.39	0.38	2.2	0.20
2.5 - 24.99	6.88	6.36	8.1	15.45	1.34	1.25	6.8	0.35
Dairy - all sizes	18.66	19.34	-3.5		7.76	7.57	2.5	
Assets of 0.5 - 0.99	20.81	25.43	-18.2	93.32	0.09	0.08	7.1	0.04
1.0 - 2.49	36.63	35.87	2.1	78.41	0.16	0.17	-4.3	0.08
2.5 - 24.99	32.60	34.23	-4.8	106.10	1.77	1.74	1.5	0.29
25.0 - 499.99	17.49	18.08	-3.3	60.34	20.83	20.30	2.6	3.20
Fruit & vegetable - all sizes	6.20	6.39	-3.0		9.63	9.15	5.3	
Assets less than \$0.5	19.45	19.33	0.6	48.27	0.09	0.10	-8.7	0.01
0.5 - 2.49	9.37	6.93	35.2	30.81	0.55	0.70	-21.9	0.13
2.5 - 24.99	14.93	15.51	-3.7	79.09	1.97	1.62	21.7	0.41
25.0 - 499.99	5.46	5.74	-5.0	9.82	38.53	36.79	4.7	4.36

Table 7—Sales per dollar of labor expense for cooperatives reporting, by selected type and size, 2003-2002 (continued)

Type of cooperative and by size of assets in million \$	Sales per dollar of labor expense ¹				Average total labor expense			
	2003	2002	change	Best observed 2003	2003	2002	change	Best observed 2003
	<i>Dollars</i>		<i>Percent</i>	<i>Dollars</i>	<i>Million \$</i>		<i>Percent</i>	<i>Million \$</i>
Fruit & vegetable - all sizes	6.20	6.39	-3.0		9.63	9.15	5.3	
Fresh - all sizes	9.07	9.91	-8.5	79.09	2.31	2.07	12.0	0.03
Processed - all sizes	5.36	5.48	-2.2	18.39	45.81	44.10	3.9	0.13
Grain & oilseed - all sizes	22.79	20.37	11.9		1.75	1.64	6.5	
Assets of 0.5 - \$2.49	26.53	23.73	11.8	53.67	0.22	0.22	-1.3	0.03
2.5 - 24.99	20.97	19.07	9.9	77.26	1.16	1.13	2.5	0.12
25.0 - 99.99	24.29	21.49	13.0	53.00	6.11	5.51	10.7	1.55
Livestock - all sizes	104.76	103.67	1.1		0.91	0.76	20.3	
Assets of 0.5 - \$2.49	71.47	58.54	22.1	1,542.89	0.18	0.17	10.2	0.00
2.5 - 24.99	108.08	108.63	-0.5	651.27	1.52	1.25	21.4	0.03
Nuts - all sizes	8.42	8.20	2.7	57.09	25.61	24.07	6.4	0.06
Poultry - all sizes	9.46	8.39	12.9	18.82	12.87	12.20	5.5	5.40
Tobacco - all sizes	6.60	14.80	-55.4	89.99	0.07	0.07	0.3	0.02
Rice - all sizes	10.14	8.90	13.9	77.05	8.10	7.94	2.1	0.11

Table 7—Sales per dollar of labor expense for cooperatives reporting, by selected type and size, 2003-2002 (continued)

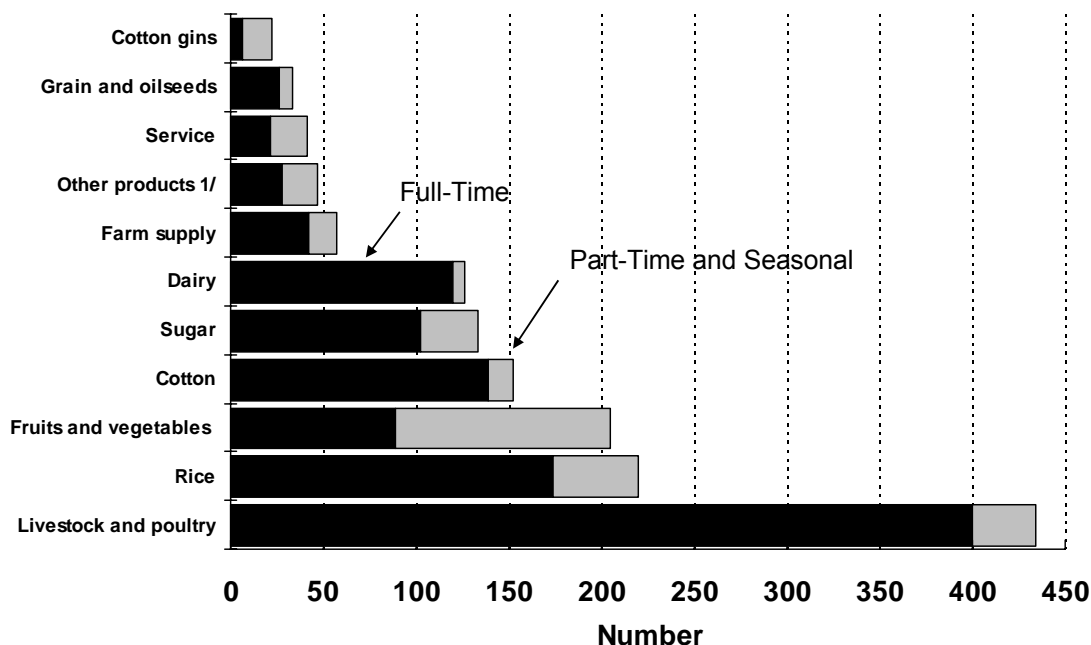
Type of cooperative and by size of assets in million \$	Sales per dollar of labor expense ¹				Average total labor expense			
				Best observed				Best observed
	2003	2002	change	2003	2003	2002	change	2003
	<i>Dollars</i>		<i>Percent</i>	<i>Dollars</i>	<i>Million \$</i>		<i>Percent</i>	<i>Million \$</i>
Sugar - all sizes	7.46	7.51	-0.7		33.07	30.27	9.3	
Assets of 0.5 - \$99.9	11.73	11.02	6.5	549.94	5.00	4.81	3.9	0.15
100 - 500 +	7.11	7.21	-1.4	11.05	61.15	55.73	9.7	17.86
Fishery - all sizes	12.43	13.90	-10.6		0.53	0.49	6.8	
Assets less than \$0.5	19.66	19.36	1.6	48.87	0.13	0.13	4.8	0.01
0.5 - 24.9	11.38	13.10	-13.1	39.78	0.92	0.86	7.1	0.16
Other products - all sizes	12.86	11.75	9.5	30.29	1.51	1.50	0.7	0.37
Service - all sizes	2.65	2.49	6.8		1.18	1.14	3.2	
Assets less than \$0.99	3.08	2.30	34.1	4.93	0.27	0.34	-22.4	0.04
1.0 - 2.49	4.78	4.52	5.8	7.92	0.49	0.39	25.2	0.12
2.5 - 24.99	2.27	2.24	1.6	6.27	2.45	2.37	3.3	0.46
Artificial insemination - all	2.10	2.56	-18.0	4.01	5.29	4.30	23.1	1.29
Other service - all sizes	2.83	2.85	-0.8		1.15	1.06	8.3	
Assets less than \$0.5	2.30	2.18	5.4	2.67	0.21	0.23	-7.5	0.16
0.5 - 24.99	2.88	2.93	-1.7	6.11	2.08	1.89	10.2	0.19

Table 7—Sales per dollar of labor expense for cooperatives reporting, by selected type and size, 2003-2002 (continued)

Type of cooperative and by size of assets in million \$	Sales per dollar of labor expense ¹				Average total labor expense			
	2003	2002	change	Best observed 2003	2003	2002	change	Best observed 2003
	<i>Dollars</i>		<i>Percent</i>	<i>Dollars</i>	<i>Million \$</i>		<i>Percent</i>	<i>Million \$</i>
Farm supply - all sizes	10.76	10.42	3.3		1.61	1.51	6.6	
Assets less than \$0.5	9.32	8.68	7.3	33.85	0.09	0.09	-0.9	0.00
0.5 - 0.99	9.49	9.43	0.7	22.66	0.17	0.17	1.6	0.10
1.0 - 2.49	9.45	9.89	-4.4	26.08	0.38	0.37	4.0	0.10
2.5 - 24.99	10.45	10.07	3.8	95.14	1.53	1.46	4.8	0.24
38 25.0 - 499.99	11.50	11.15	3.2	18.19	9.27	8.41	10.2	2.77

¹ Includes wages and salaries, payroll taxes, and employee benefits for cooperatives reporting both years. The average total labor expense is derived by dividing total wages and benefits by the number of cooperatives where the information was provided. Sales includes receipts from marketings, farm supplies, and services, plus other income. Values considered not to be representative of each group were not included.

Figure 10—Average Full-Time and Part-Time and Seasonal Employees, 2003



1/ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other products marketing cooperatives.

associated payroll taxes, health and life insurance, and other employee benefits.

One measure of labor productivity is the relationship between total sales and total labor expense. Table 7 shows total sales per dollar of total labor expense by type of cooperative, region, and in some cases, size of cooperative.

Total sales per dollar of total labor expense is relatively high for cooperatives involved in bargaining (dairy) or operating auctions (livestock). In these situations, total labor requirements are low and sales are high. Livestock cooperatives accounted for the highest sales per dollar of labor expense, \$104.76 in 2003. Service cooperatives had the lowest sales per dollar of labor expense, \$2.65. Also shown in this table is the best observed total sales per dollar of total labor expense. These values are, of course, for only one cooperative, and some of the values are more than 10 times those shown for the group as a whole.

For grain and oilseed and farm supply cooperatives, total sales per dollar of total labor expense by region is shown in table 8. Again, the best observed values are also presented in this table, and each value is based on the best value from one cooperative. Grain and oilseed cooperatives have higher sales per dollar of labor expense than farm supply cooperatives. Among the regions, grain and oilseed cooperatives in the Pacific region had the highest sales per dollar of total labor expense both in 2003 and 2002. Farm supply cooperatives generally had sales between \$8 and \$11 per dollar of labor expense.

The average total labor expense per cooperative for those reporting in both 2003 and 2002 is shown in table 7 and 8 by type of cooperative, region, and, in some cases, by asset group. This information can be used for comparing the average total labor expense of individual cooperatives of similar type, region, and size. Best observed values are included.

Table 8—Sales per dollar of labor expense for grain and oilseed cooperatives, by region¹ and size, 2003-2002

Type of cooperative and by size of assets in million \$	Sales per dollar of labor expense ²				Average total labor expense			
	2003	2002	change	Best observed 2003	2003	2002	change	Best observed 2003
	<i>Dollars</i>		<i>Percent</i>	<i>Dollars</i>	<i>Million \$</i>		<i>Percent</i>	<i>Million \$</i>
Grain and Oilseed Cooperatives:								
Corn Belt - all sizes	24.01	20.95	14.6		2.27	2.07	9.7	
Assets of 1.0 - \$2.49	26.88	26.36	2.0	44.11	0.11	0.10	7.7	0.17
2.5 - 24.99	23.90	20.50	16.6	77.26	1.24	1.20	3.1	0.20
25.0 - 499.99	24.08	21.27	13.2	38.51	8.04	7.00	15.0	2.08
Lake States - all sizes	25.63	21.93	16.9		1.99	1.86	6.9	
Assets of 0.5 - \$2.49	25.41	21.59	17.7	35.96	0.21	0.21	-2.3	0.10
2.5 - 24.99	23.72	20.59	15.2	44.04	0.91	0.87	4.7	0.21
25.0 - 99.99	26.38	22.48	17.4	38.41	5.17	4.79	8.0	1.99
Northern Plains - all sizes	19.27	18.85	2.2		1.00	1.00	-0.2	
Assets of 1.0 - \$2.49	20.72	19.41	6.7	35.95	0.22	0.24	-9.3	0.10
2.5 - 24.99	19.22	18.83	2.1	54.02	1.15	1.15	0.2	0.12
25.0 - 99.99	19.52	17.78	9.8	30.35	5.26	5.29	-0.7	3.11
Mountain - all sizes	16.83	15.78	6.7		1.11	0.89	24.7	
Southern Plains - all sizes	19.23	17.38	10.6		0.88	0.85	2.9	
Assets of 1.0 - \$2.49	19.27	17.13	12.5	35.09	0.23	0.23	0.7	0.16
2.5 - 99.99	19.23	17.41	10.5	33.79	1.20	1.16	3.1	0.36

Table 8—Sales per dollar of labor expense for grain and oilseed cooperatives, by region¹ and size, 2003-2002 (continued)

Type of cooperative and by size of assets in million \$	Sales per dollar of labor expense ²				Average total labor expense			
	2003	2002	change	Best observed 2003	2003	2002	change	Best observed 2003
	<i>Dollars</i>		<i>Percent</i>	<i>Dollars</i>	<i>Million \$</i>		<i>Percent</i>	<i>Million \$</i>
Grain and Oilseed Cooperatives:								
Pacific - all sizes	28.55	30.93	-7.7		0.84	0.79	5.6	
Assets of 1.0 - \$2.49	24.01	18.52	29.7	32.38	0.19	0.18	4.6	0.16
2.5 - 24.99	29.14	32.57	-10.5	34.46	1.48	1.40	5.7	0.66
Farm Supply Cooperatives:								
30 Northeast - all sizes	8.62	9.02	-4.4		0.63	0.57	10.4	
Assets less than \$0.5	8.45	8.42	0.4	12.63	0.46	0.44	4.4	0.16
2.5 - 24.99	8.79	9.71	-9.5	15.30	1.04	0.88	17.4	0.54
Appalachian - all sizes	7.47	7.62	-1.9		1.18	1.12	5.5	
Assets of 0.5 - \$2.49	7.91	7.85	0.7	10.04	0.37	0.36	4.9	0.30
2.5 - 24.99	7.43	7.60	-2.2	10.12	1.53	1.45	5.5	1.39
Southeast - all sizes	10.58	10.25	3.2		0.50	0.47	5.9	
Assets of 0.5 - \$2.49	12.49	12.34	1.2	22.31	0.29	0.31	-6.7	0.20
2.5 - 24.99	9.77	9.19	6.3	13.63	0.70	0.62	12.2	0.46
Delta States - all sizes	10.99	11.41	-3.7		0.64	0.57	11.4	
Assets less than \$0.99	7.79	7.32	6.3	11.23	0.16	0.16	-0.8	0.13
1.0 - 2.49	9.01	9.35	-3.7	13.00	0.48	0.44	8.5	0.19
2.5 - 24.99	12.33	12.96	-4.8	20.72	1.08	0.95	14.1	0.44

Table 8—Sales per dollar of labor expense for grain and oilseed cooperatives, by region¹ and size, 2003-2002 (continued)

Type of cooperative and by size of assets in million \$	Sales per dollar of labor expense ²				Average total labor expense			
	2003	2002	change	Best observed	2003	2002	change	Best observed
				2003				2003
	<i>Dollars</i>		<i>Percent</i>	<i>Dollars</i>	<i>Million \$</i>		<i>Percent</i>	<i>Million \$</i>
Farm Supply Cooperatives:								
Corn Belt - all sizes	11.52	10.94	5.3		3.35	3.13	7.1	
Assets less than \$0.99	8.67	8.60	0.8	15.12	0.17	0.16	4.0	0.03
1.0 - 2.49	9.86	9.70	1.6	12.70	0.41	0.39	5.8	0.23
2.5 - 24.99	11.98	11.35	5.6	95.14	2.20	2.01	9.6	0.50
25.0 - 99.99	11.26	10.72	5.1	18.19	10.72	10.16	5.5	2.77
Lake States - all sizes	9.99	9.19	8.8		1.63	1.54	5.7	
Assets less than \$0.5	10.74	10.89	-1.3	n.a.	0.06	0.05	11.1	n.a.
0.5 - 0.99	8.02	8.50	-5.8	9.13	0.15	0.14	5.0	0.13
1.0 - 2.49	10.06	10.12	-0.6	26.08	0.32	0.30	7.6	0.13
2.5 - 24.99	9.52	9.05	5.2	18.08	1.52	1.46	3.7	0.24
25.0 - 99.99	11.38	9.54	19.3	14.14	5.75	5.14	11.7	3.54
Northern Plains - all sizes	10.47	10.74	-2.5		0.83	0.79	4.2	
Assets less than \$0.5	13.22	11.67	13.3	29.34	0.10	0.10	-1.3	0.05
0.5 - .99	10.47	10.03	4.5	14.88	0.17	0.17	-0.4	0.10
1.0 - 2.49	9.77	9.70	0.7	16.50	0.31	0.29	4.5	0.10
2.5 - 24.99	10.84	10.92	-0.7	24.77	1.01	0.99	1.9	0.24
25.0 - 99.99	8.99	10.44	-13.8	16.04	4.55	3.86	18.0	2.99

Table 8—Sales per dollar of labor expense for grain and oilseed cooperatives, by region¹ and size, 2003-2002 (continued)

Type of cooperative and by size of assets in million \$	Sales per dollar of labor expense ²				Average total labor expense			
	2003	2002	change	Best observed 2003	2003	2002	change	Best observed 2003
	<i>Dollars</i>		<i>Percent</i>	<i>Dollars</i>	<i>Million \$</i>		<i>Percent</i>	<i>Million \$</i>
Farm Supply Cooperatives:								
Southern Plains - all sizes	10.29	9.61	7.0		0.68	0.67	1.1	
Assets less than \$0.99	9.19	8.19	12.2	11.95	0.15	0.17	-11.4	0.11
1.0 - 2.49	9.87	9.79	0.8	20.90	0.41	0.41	-0.5	0.18
2.5 - 24.99	10.48	9.64	8.8	19.64	1.13	1.11	2.4	0.27
Mountain - all sizes	9.91	9.72	2.0		1.23	1.24	-1.0	
Assets less than \$0.5	8.88	8.08	9.9	33.85	0.07	0.07	0.1	0.00
0.5 - .99	12.18	12.85	-5.2	22.66	0.12	0.12	3.2	0.10
1.0 - 2.49	8.86	8.90	-0.4	19.14	0.40	0.39	2.2	0.12
2.5 - 24.99	9.93	9.72	2.2	19.41	1.68	1.70	-1.2	0.40
Pacific - all sizes	10.23	9.43	8.6		1.69	1.63	4.2	
Assets of 0.5 - \$2.49	6.93	6.74	2.9	8.83	0.42	0.42	2.0	0.18
2.5 - 24.99	10.60	9.73	8.9	23.69	2.54	2.43	4.5	1.21

¹ The States included in each region are as follows:

Region	States
Northeast	ME, VT, NY, MA, RI, CT, PA, NH, NJ, DE, MD, and DC
Lake States	MI, WI, and MN
Corn Belt	OH, IN, IL, IA, and MO
Northern Plains	ND, SD, NE, and KS
Appalachian	VA, WV, KY, TN, and NC
Southeast	SC, GA, AL, and FL

Region	States (continued)
Delta States	MS, LA, and AR
Southern Plains	OK and TX
Mountain	MT, ID, WY, CO, UT, NV, AZ, and NM
Pacific	WA, OR, CA, HI, and AK

² Labor expense includes wages and salaries, payroll taxes, and employee benefits for cooperatives reporting both years. Sales includes receipts from marketings, farm supplies, and services, plus other income. Values considered not to be representative of each group were not included. The sales per dollar of labor expense was derived by dividing total sales by total labor expenses.

n.a. means not available.

The average total labor expense corresponds directly to cooperative size; therefore, bigger cooperatives generally have higher labor expenses. Most cooperatives had higher total labor expenses in 2003. Cooperatives that further process raw products, such as fruit and vegetable, poultry, and sugar cooperatives, all had higher labor expenses. Labor expenses by region for grain and oilseed and farm supply cooperatives were higher in the Corn Belt than other regions.

Business Size

Most farmer cooperatives, as measured by annual gross business volume, are relatively small and serve local areas. Some actively seek regional, national, and even international markets to increase business volume. Although few in number, larger cooperatives account for much of cooperatives' business volume. They have grown in size partly from mergers, consolidations, and acquisitions.

In 2003, 71 percent of all farmer cooperatives reported a business volume of less than \$15 million. However, they accounted for only 7.5 percent of the total gross dollar volume (down from 9.1 percent in 2002, table 9 and figure 11). Only 2 percent of farmer cooperatives reported a business volume of at least \$200 million, but they accounted for 64 percent of the total sales.

Business Volume

Total gross business volume of the 3,086 marketing, farm supply, and related-

service cooperatives for 2003 was \$117 billion (table 10), up 5 percent from \$112 billion in 2002. Gross business volume grew from \$106 billion in 1994 to \$117 billion in 2003; however, that was down from a record \$128 billion in 1996 (appendix table 3, appendix figure 5). The volume increase of \$16 billion in 1996 was due mainly to higher prices for grains and oilseeds.

Gross dollar volume of farm products marketed by cooperatives increased less than \$1 billion, from \$76.6 billion in 2002 to \$77.2 billion in 2003 (less than 1 percent). Gross volume of all farm supplies handled by cooperatives was \$35.5 billion, up 13 percent from \$31.5 billion in 2002.

Total net business volume of farmer cooperatives in 2003 was \$100.6 billion—\$71 billion from farm products marketed, \$25.5 billion from farm supply sales, and \$4.1 billion from services performed and other income sources. The total net figure, which excludes inter-cooperative business, was up 4 percent from \$96.8 billion in 2002. Cooperatives' net business volume reached a high of \$106.7 billion in 1997 (appendix table 4, appendix figure 6). Net cooperative business, unadjusted for price changes, increased from \$89.3 billion in 1994 to \$100.6 billion in 2003. When adjusted,² net business totaled \$82.5

² Marketing sales was deflated by the index of producer prices received for "all farm products" (1991 = 100). Supply sales and service receipts and other income were deflated by the index of prices paid by farmers for "production items," excluding interest, taxes, and wages (1991 = 100).

Table 9—Farmer cooperatives and memberships, by gross business volume, 2003¹

Sales volume group (million \$)	Cooperatives		Dollar volume		Memberships ²	
	Number	Percent of total	Gross ³ (million \$)	Percent of total	Number (1,000)	Percent of total
Less than 5.0	1,484	48.1	2,405	2.1	416	15.1
5 - 9.9	487	15.8	3,547	3.0	270	9.8
10 - 14.9	226	7.3	2,781	2.4	158	5.7
15 - 24.9	259	8.4	4,953	4.2	200	7.3
25 - 49.9	297	9.6	9,566	8.2	361	13.1
50 - 99.9	151	4.9	10,566	9.0	330	12.0
100 - 199.9	107	3.5	8,386	7.2	269	9.7
200 - 499.9	39	1.3	12,173	10.4	139	5.0
500 - 999.9	19	0.6	14,449	12.4	176	6.4
1,000 and more	17	0.6	48,124	41.1	438	15.9
Total ⁴	3,086	100.0	116,950	100.0	2,758	100.0

¹ Business volume includes revenues from marketing plus the value of products bargained for or handled on a commission basis, supply sales, service receipts, and other income.

² Includes number of farmers, ranchers, and fishermen eligible to vote for directors. Does not include memberships held by other cooperatives, such as local cooperative memberships in regional cooperatives.

³ Excludes inter-cooperative business volume.

⁴ Total may not add due to rounding.

Figure 11—Distribution of Farmer Cooperatives and Volume, by Size, 2003

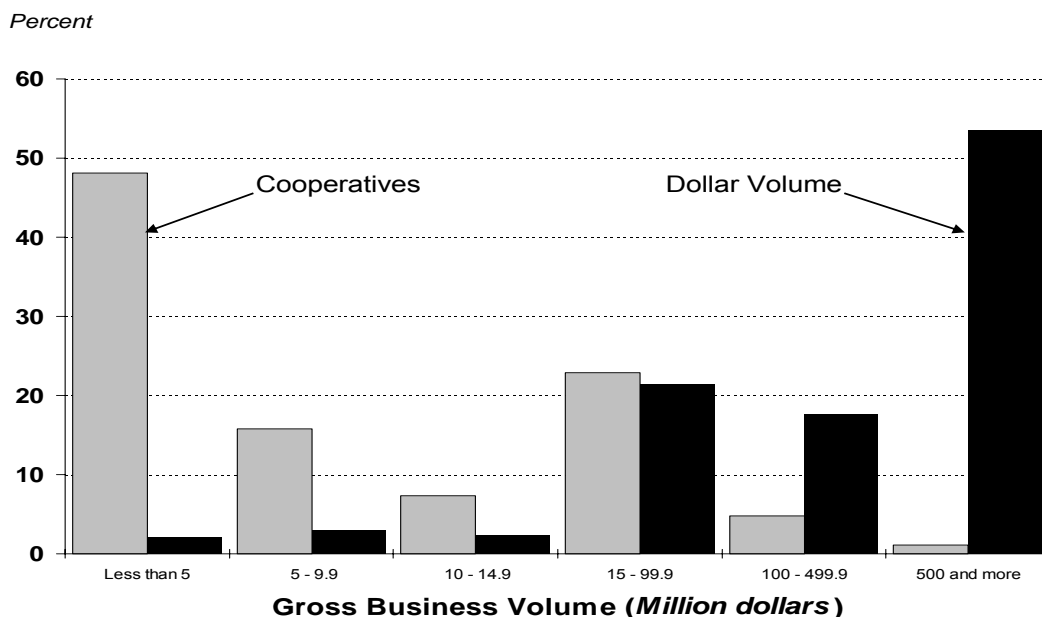


Table 10—Cooperatives' gross and net business volumes by commodity, 2003 and 2002¹

Commodity	Gross volume		Net volume	
	2003	2002	2003	2002
<i>Billion \$</i>				
Products marketed:				
Beans and peas (dry edible)	.13	.10	.13	.10
Cotton	2.62	2.53	2.54	2.46
Dairy	25.98	25.89	23.45	23.04
Fruits and vegetables	7.45	8.44	6.90	7.34
Grains and oilseeds ²	23.55	20.15	20.61	17.47
Livestock	6.80	9.90	6.80	9.90
Nuts	.85	.95	.85	.94
Poultry ³	2.67	2.47	2.65	2.40
Rice	.97	.75	.97	.75
Sugar	3.51	2.44	3.51	2.44
Tobacco	.09	.23	.09	.23
Wool and mohair	.01	.01	.01	.01
Other products ⁴	<u>2.61</u>	<u>2.77</u>	<u>2.50</u>	<u>2.58</u>
Total farm products	77.24	76.62	71.00	69.66
Supplies purchased:				
Crop protectants	3.17	3.12	2.78	2.71
Feed	7.22	6.69	5.87	5.37
Fertilizer	6.48	5.15	4.64	4.31
Petroleum	12.83	11.38	7.51	7.16
Seed	1.83	1.59	1.23	1.09
Other supplies ⁵	<u>3.98</u>	<u>3.59</u>	<u>3.46</u>	<u>3.04</u>
Total farm supplies	35.50	31.52	25.50	23.68
Services and other income ⁶	<u>4.12</u>	<u>3.42</u>	<u>4.12</u>	<u>3.42</u>
Total business	116.86	111.55	100.62	96.75

¹ Gross includes and net excludes inter-cooperative business. Totals may not add due to rounding.

² Excludes cottonseed. Cottonseed oil is included in other marketings while cottonseed meal is included in feed.

³ Includes eggs, turkeys, ratite, squab, and related products.

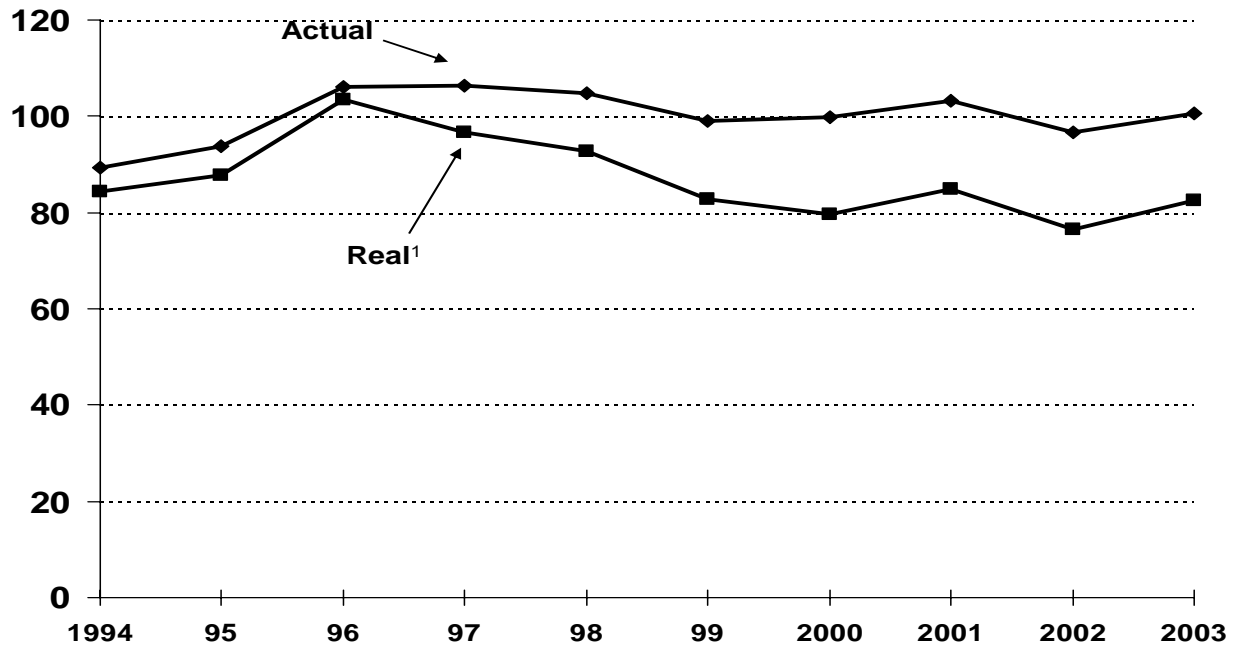
⁴ Includes coffee, fish, forest products, hay, hops, seed marketed for growers, nursery stock, ethanol, other farm products not separately classified, and sales of farm products not received directly from member-patrons. Also includes manufactured food products and resale items marketed by cooperatives.

⁵ Includes building materials, containers and packaging supplies, farm machinery and equipment, meats and groceries, automotive supplies, hardware, chicks, and other supplies not separately classified.

⁶ Includes trucking, cotton ginning, storage, grinding, application, locker plants, and other related items. Service includes charges related to marketing or purchasing, but not included in the volume reported for those activities, plus other income and extraordinary items.

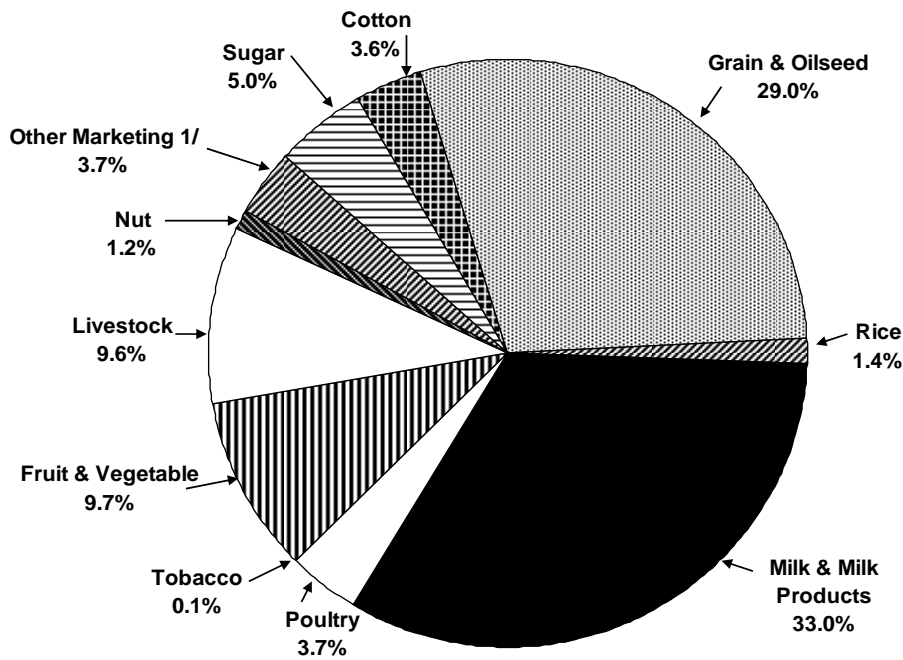
Figure 12—Cooperatives' Net Business Volume, 1994-2003

Billion dollars



¹ Actual sales were adjusted for price change based on 1991 = 100.

Figure 13—Relative Importance of Farm Products Marketed by Cooperatives, 2003



Percentages are based on a total net marketing business volume of \$71.0 billion.

¹ Includes wool and mohair, dry beans and peas, fish, and other product marketings.

billion in 2003 (figure 12). Consequently, the difference between actual and real net business volume in 2003 was \$18 billion. The real net business volume was lower than the actual value in 2003 due to lower prices received for farm products and higher prices paid for farm production inputs. The index for prices received for all farm commodities from 1994 to 2003 rose 5 points, while the index for prices paid for farm production items increased 22 points, hence the large gap between actual and real cooperative net business volume when adjusted by prices paid and prices received for farm production.

Net volume of farm products marketed also increased from 2002, from \$70 billion to \$71 billion—a growth of 2 percent. Net marketing business volume accounted for 71 percent of total cooperative sales in 2003, virtually unchanged from 2002.

Figure 13 illustrates the leading products marketed by cooperatives based on net marketing business volume. Dairy (milk and milk products) led with 33 percent, followed by grains and oilseeds (excluding cottonseed) with 29 percent, and livestock with 10 percent. The proportions of dairy and grains and oilseeds were about the same as those in 2002, while livestock had dropped.

Net farm supply volume of \$25.5 billion, up 8 percent from \$23.7 billion, accounted for 25 percent of the total net business volume. The leading farm production goods handled by cooperatives in terms of farm supply net business volume were petroleum, 30 percent; feed, 23; and fertilizer, 18 percent (figure 14). Every farm supply good had increased in sales from 2002.

Receipts for services provided by marketing, farm supply, and related-service cooperatives, plus other income, increased 21 percent to \$4 billion. Service receipts and other income represented 4 percent of total net business volume.

Marketing sales of four major commodity groups—dairy; grains and oilseeds; fruits and vegetables; and livestock—were down from 84 percent of marketing sales in 1994 to 81 percent in 2003

(figure 15). In 1994 and a decade later, net volume among commodity groups was highest for dairy, with \$23.5 billion (\$21.5 billion in 1994), followed by grains and oilseeds with \$20.6 billion in 2003 and \$17.6 billion in 1994.

Milk and milk product sales showed the strongest dollar growth during 1994-2003. There was steady growth in cooperative sales of milk and milk products, with a slight decline in 2000 and 2002 due to lower prices.

In the farm supply group, petroleum, feed, and fertilizer sales were especially important (figure 16). They accounted for about 71 percent of cooperatives' total farm supply sales in both 1994 and 2003. Cooperatives' sales of petroleum, feed, fertilizer, and crop protectants grew steadily until 1997. In 2003, the sales of all farm supplies increased. Feed sales rebounded strongly after sliding downward from 1997 through 2001.

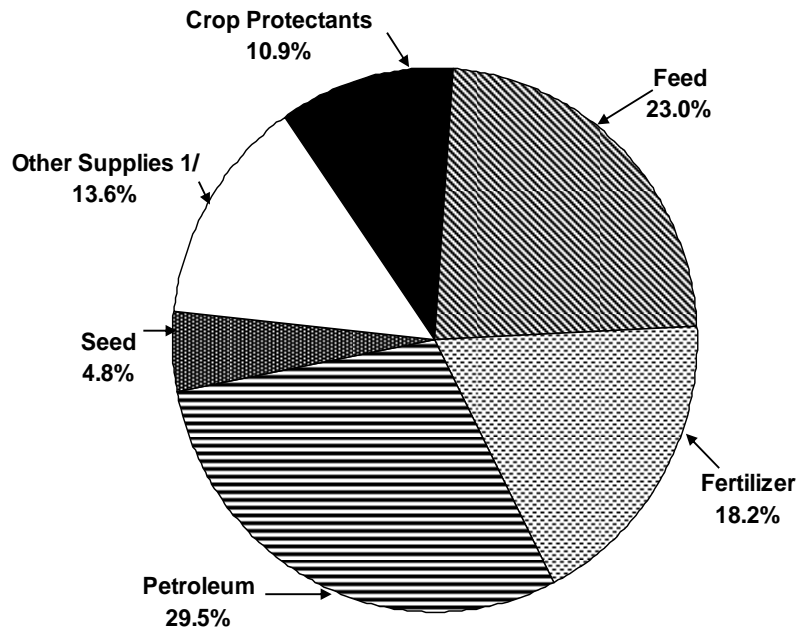
Net marketing of farm products totaled \$65.5 billion in 1994, and increased annually through 1996. Since 1997, the net marketing dollar volume declined, as prices paid for many farm commodities dropped. Farm supply sales increased every year, from \$20.8 billion in 1994 to \$25.2 billion in 1997, then dropped to \$23 or \$24 billion from 1998 through 2002 until increasing to \$25.5 billion in 2003. Service receipts (includes other income and revenue) increased from \$3 billion in 1994 to \$4.1 billion in 2003, the highest on record.

Gross and net business volume by State are presented in table 3. Sales are allocated to the State in which the product marketed was originated and the farm supplies were sold. Minnesota led all States in total gross and net business volume with \$12.5 billion and \$11.2 billion, respectively, followed by Iowa with \$12.2 billion in gross business and \$10.3 billion in net business volume.

Net Income

Total net income (adjusted for losses and before taxes) for all cooperatives in 2003

Figure 14—Relative Importance of Farm Supplies Handled by Cooperatives, 2003



Percentages are based on a total net farm supply business volume of \$25.5 billion.

¹ Includes building materials, tires, batteries and accessories, equipment, animal health products, pet food, semen, hardware, food, clothing, and other.

Figure 15—Cooperatives' Net Sales of Selected Commodities, 1994-2003

Billion dollars

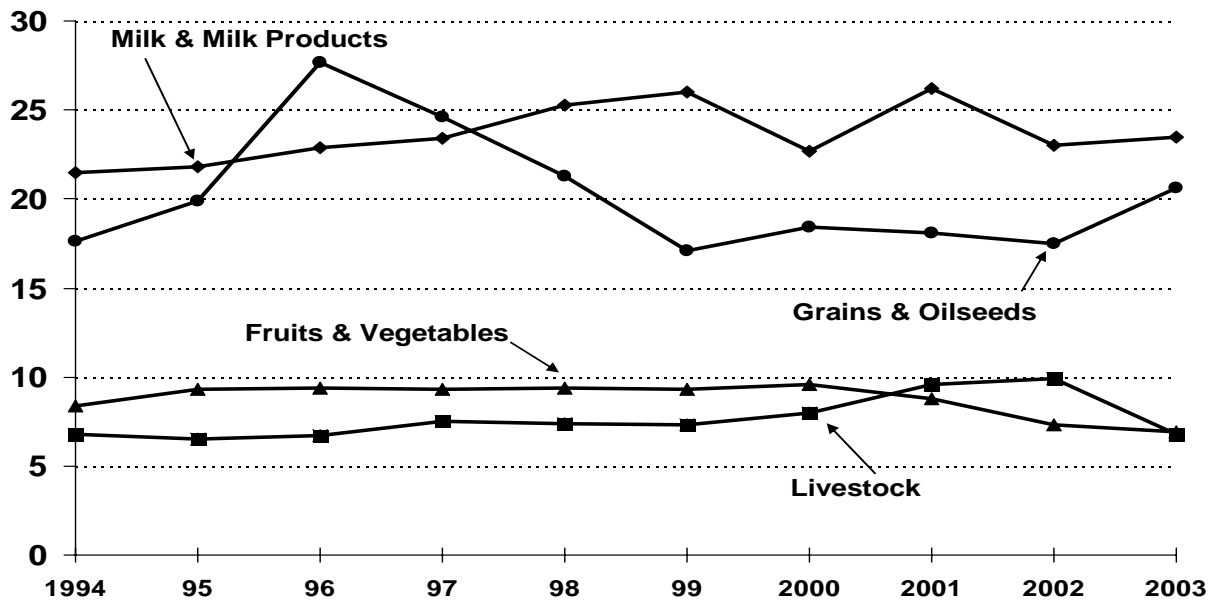


Table 11—Farmer cooperatives' net income, 2003¹

Principal product(s) marketed and major function	Cooperatives ²	Total net income	Income from own operations	Income from other cooperatives ³
	<i>Number</i>		<i>Million dollars</i>	
Products marketed:				
Cotton	14	93.2	91.4	1.8
Dairy	197	359.3	273.9	85.5
Fruits and vegetables	207	413.6	400.4	13.2
Grains and oilseeds ⁴	772	105.1	147.8	-42.7
Livestock and poultry	86	-520.0	-509.0	-11.0
Rice	15	46.7	45.7	1.0
Sugar	48	-4.4	10.5	-14.8
Other products ⁵	212	81.5	76.5	5.1
Total marketing	1,551	575.0	537.1	38.0
Total farm supply	1,156	345.5	298.9	46.5
Service	379	184.9	177.3	7.6
Total	3,086	1,105.4	1,013.3	92.1

¹ Adjusted for losses and before taxes. Totals may not add due to rounding.

² Includes a number of cooperatives operating on a strictly pooling basis, but not their pool proceeds.

³ Includes patronage refunds from CoBank.

⁴ Excludes cottonseed and other oilseed oils and meals. Oilseed oil is included in other marketings while meal is included in farm supplies (feed).

⁵ Includes dry edible beans and peas, fish, nuts, tobacco, wool, and other products.

Figure 16—Cooperatives' Net Sales of Selected Farm Supplies, 1994-2003

Billion dollars

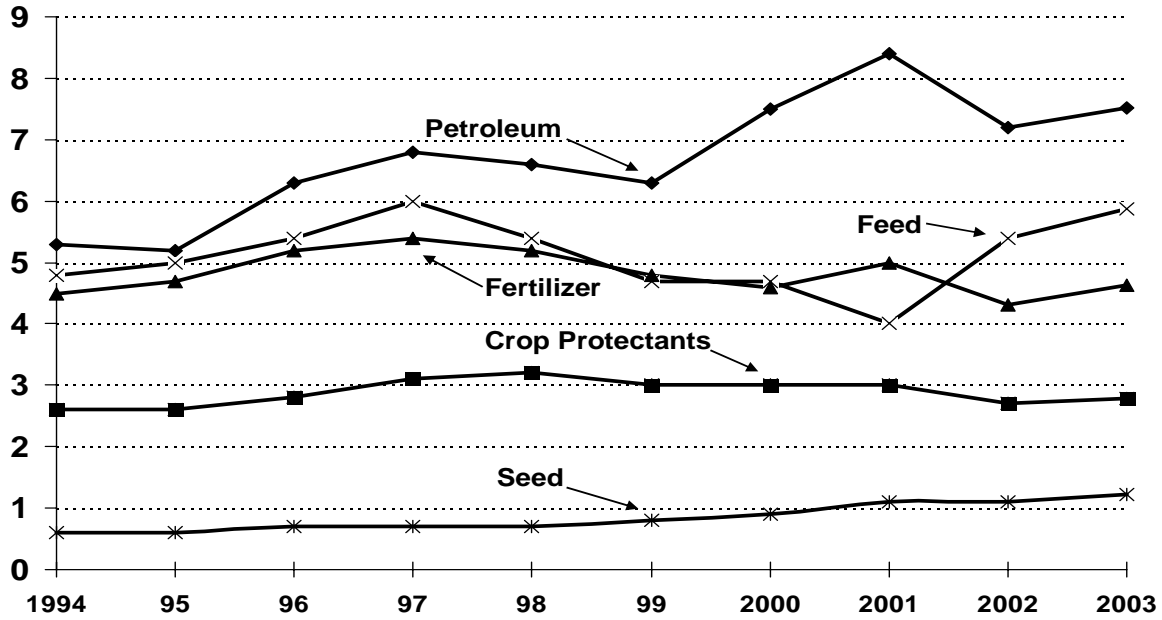
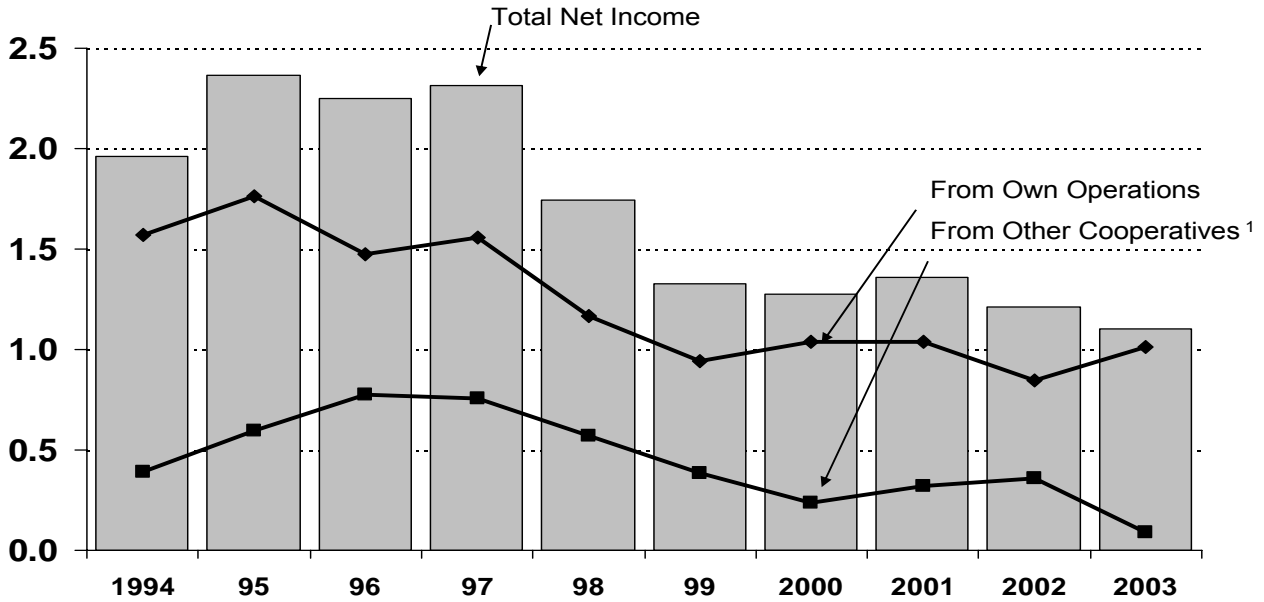


Figure 17—Cooperatives' Net Income, 1994-2003

Billion dollars



1/ Includes dividends and patronage refunds from other farmer cooperatives, CoBank, and Banks for Cooperatives.

was \$1.1 billion, including inter-cooperative dividends and refunds (table 11). Cooperatives operating strictly on a pooling basis were excluded. Net income was down 9 percent from the \$1.2 billion in 2002. Patronage refunds received from other cooperatives, including CoBank, totaled \$92 million, down precipitously (75 percent) from \$362 million in 2002 (appendix figure 7). Two large cooperatives filed for bankruptcy and sold off their assets, resulting in vastly lowered patronage refunds due to large operational losses.

Net income was \$2 billion in 1994, then set a record at \$2.36 billion in 1995, and has generally fallen to the level of \$1.1 billion in 2003 (appendix table 5 and figure 17). Net income received from operations and from other cooperatives has varied over time. Both reflected better economic times in agriculture in the mid-1990s compared with conditions in the early 90s and more recent years. In 1994, refunds from other cooperatives totaled \$392 million, or 20 percent of total net income. In 2003, refunds had fallen to 8 percent of total net income.

Marketing cooperatives' total net income of \$575 million was down 25 percent from the \$763 million generated in 2002. The drop in net income was mainly due to one unprofitable livestock cooperative. Three types of cooperatives—grains and oilseeds, livestock and poultry, and sugar cooperatives—all received allocated losses in income from other cooperatives. Fruit and vegetable, dairy, and farm supply cooperatives accounted for over 100 percent of all cooperative net income—enormous losses by livestock and poultry cooperatives make this anomaly possible (figure 18).

Total net income of farm supply cooperatives was \$346 million in 2003, up 2 percent from \$338 million in 2002. They accounted for 31 percent of cooperatives' total net income in 2003, compared with 28 percent in 2002 (appendix figure 8). Income from their own operations, excluding patronage refunds from other cooperatives and CoBank, was \$299 million, up 57 percent

from \$191 million in 2002.

Farmer cooperatives' net income from their operations in 2003 totaled \$1,013 million, up 20 percent from \$847 million. Only 8 percent, or \$92 million, of total net income was generated by other cooperatives and CoBank, compared with an average 28 percent or \$488 million from 2002 to 1994. Again, as stated earlier, losses by a livestock marketing cooperative led to lower income distributions from other cooperatives.

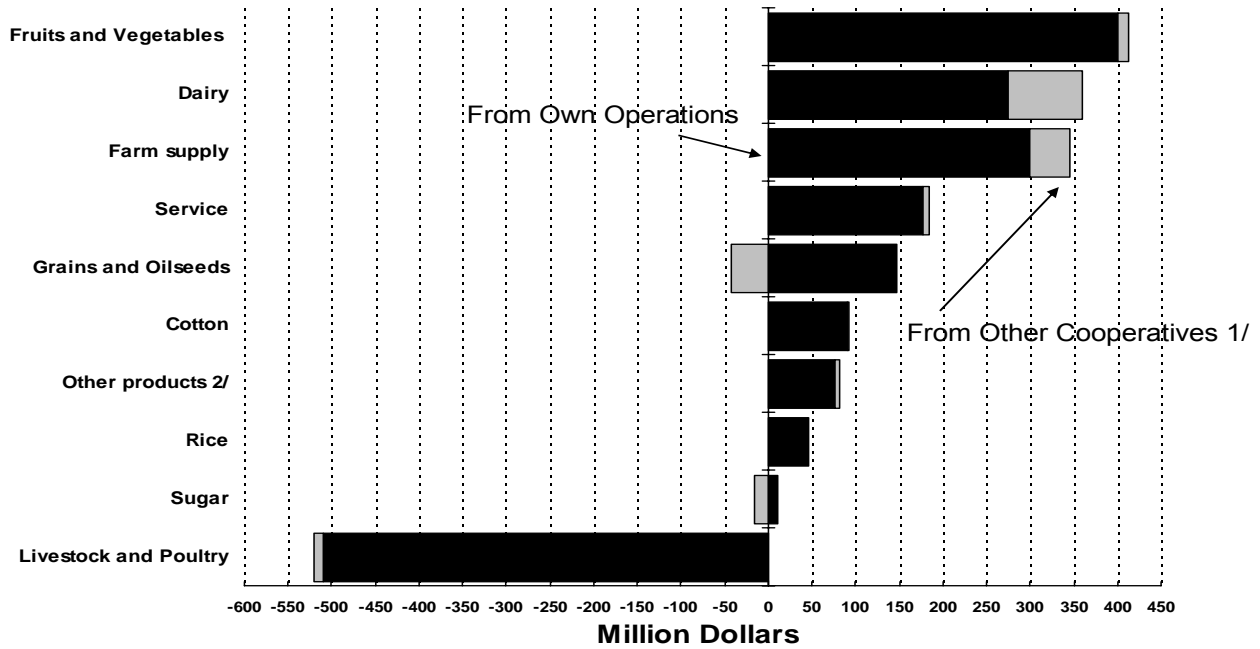
Income before adjusting for losses was \$2,048 million, compared with \$1,512 million in 2002. Losses totaled \$1,034 million in 2003, up 56 percent from \$664 million in 2002. The number of cooperatives with losses was up from 706 to 778, or an increase of 10 percent. In addition to losses by a livestock cooperative, over 250 grain and oilseed cooperatives had a combined loss in excess of \$110 million (appendix figure 9). About the same number of farm supply cooperatives (260) had combined losses of \$235 million, double that of grain and oilseed cooperatives. About 30 fewer farm supply cooperatives had losses in 2003 than 2002, but the losses totaled \$15 million more. Related-service cooperative losses dropped from \$14.4 million in 2002, to \$7 million.

Balance Sheet

Combined assets for all farmer cooperatives totaled \$47 billion in 2003, down 2 percent from \$48 billion in 2002 (table 12). Total assets of cooperatives, excluding inter-cooperative investments, remained virtually unchanged at \$43 billion. Cooperatives' total assets grew from \$36 billion in 1994 to \$47 billion in 2003 (appendix table 6 and figure 19), reflecting growth in their own operations and investments in other cooperatives. In 1994, \$3 billion (9 percent of total assets) was invested in other cooperatives, including CoBank. In 2003, these investments were \$4 billion, up \$1 billion from 1994, but still remained about 9 percent of total assets.

Total liabilities was \$27 billion, down 6 percent from \$28 billion in 2002 (table 13). Cooperatives' total liabilities grew from \$20

Figure 18—Net Income or Loss, by Type of Cooperative, 2003



1/ Includes dividends and patronage refunds from other farmer cooperatives and CoBank.
 2/ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other products marketing cooperatives.

Figure 19—Cooperatives' Assets, Liabilities, and Net Worth, 1994-2003

Billion dollars

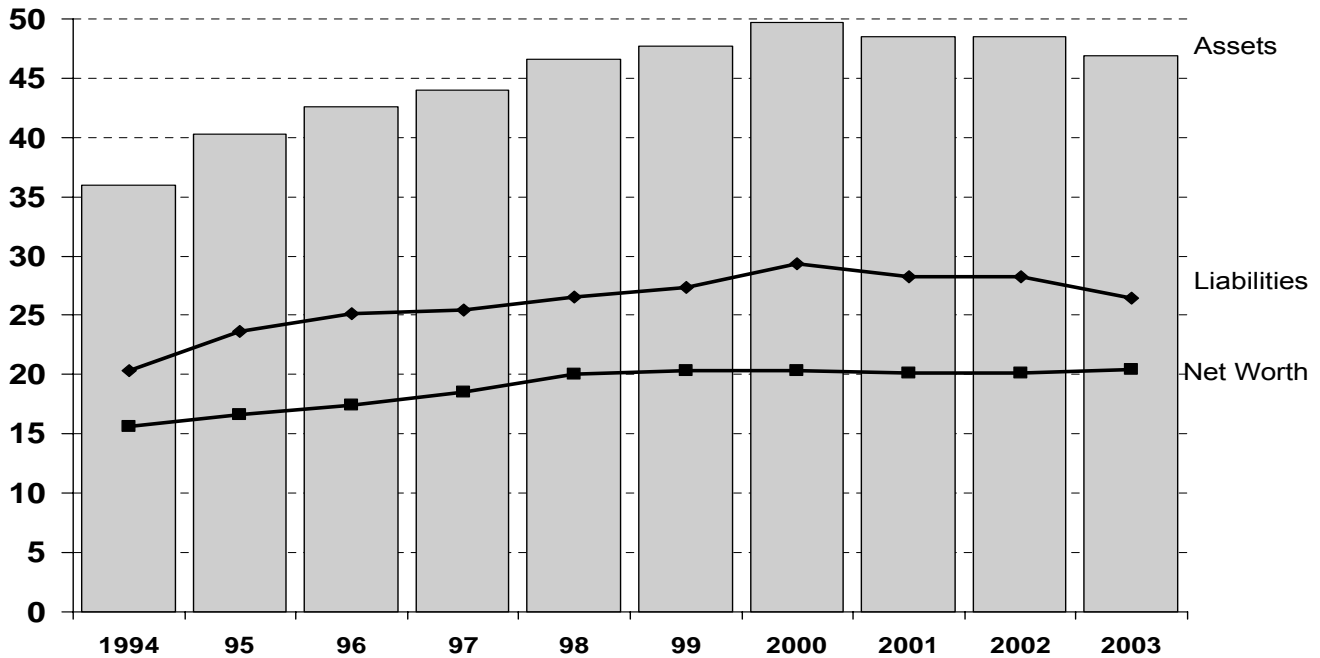


Table 12—Combined assets for farmer cooperatives, 2003¹

Principal product(s) marketed and major function	Cooperatives ²	Assets of own operations	Investments in other cooperatives ³	Total assets	Investments in other co-ops as percent of total
	<i>Number</i>	<i>Billion dollars</i>			<i>Percent</i>
Products marketed:					
Cotton	14	.807	.020	.827	2.4
Dairy	197	8.322	.625	8.947	7.0
Fruits and vegetables	207	3.546	.109	3.656	3.0
Grains and oilseeds ⁴	772	7.751	.821	8.572	9.6
Livestock and poultry	86	2.721	.231	2.952	7.8
Rice	15	.472	.004	.475	0.8
Sugar	48	2.332	.106	2.438	4.3
Other products ⁵	212	2.447	.056	2.503	2.2
Total marketing	1,551	28.399	1.971	30.370	6.5
Total farm supply	1,156	13.433	2.029	15.461	13.1
Service	379	1.033	.058	1.091	5.3
Total	3,086	42.864	4.058	46.922	8.6

¹ Totals may not add due to rounding.

² Many cooperatives have multi-product and multi-functional operations. Most are classified according to predominant commodity or function as indicated by business volume.

³ Also includes investments in CoBank.

⁴ Excludes cottonseed and other oilseed oils and meals. Oilseed oil is included in other marketings while meal is included in farm supplies (feed).

⁵ Includes dry edible beans and peas, fish, nuts, tobacco, wool, and other products.

Table 13—Combined balance sheet data for farmer cooperatives, 2003¹

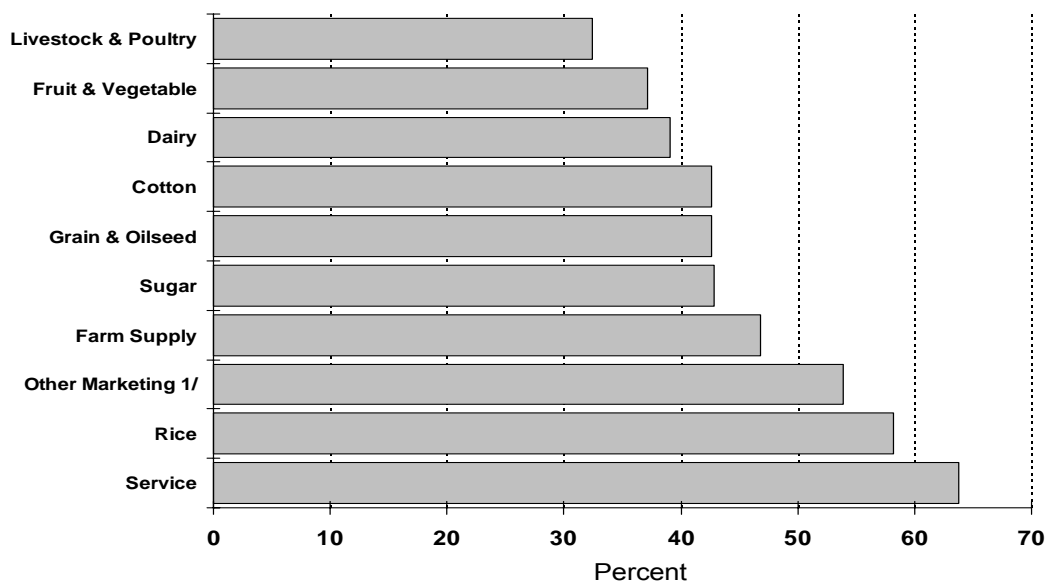
Principal product(s) marketed and major function	Cooperatives	Total assets	Total liabilities	Net worth
	<i>Number</i>		<i>Billion dollars</i>	
Products marketed:				
Cotton	14	.83	.47	.35
Dairy	197	8.95	5.45	3.50
Fruits and vegetables	207	3.66	2.30	1.36
Grains and oilseeds ²	772	8.57	4.91	3.66
Livestock and poultry	86	2.95	2.00	.96
Rice	15	.48	.20	.28
Sugar	48	2.44	1.39	1.05
Other products ³	212	2.50	1.15	1.35
Total marketing	1,551	30.37	17.88	12.49
Total farm supply	1,156	15.46	8.22	7.24
Service	379	1.09	.39	.70
Total	3,086	46.92	26.49	20.43

¹ Totals may not add due to rounding.

² Excludes cottonseed and other oilseed oils and meals. Oilseed oil is included in other marketings while meal is included in farm supplies (feed).

³ Includes dry edible beans and peas, fish, nuts, tobacco, wool, cottonseed, and other products.

Figure 20—Percentage of Assets Financed by Net Worth, by Cooperative Type, 2003



1/ Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other products marketing cooperatives.

billion in 1994 to \$27 billion but remained about 57 percent of total assets in 2003.

A measure of balance sheet strength is the proportion of assets financed by net worth or equity capital. Net worth, or member and patron equity, was \$20 billion, up about \$0.8 billion from 2002. The proportion of total assets financed by member and patron equity was 44 percent, 3 points higher than in 2002. As assets and liabilities increased over the 10-year period on cooperative balance sheets, net worth fell from 43 percent to a low of 41 percent in 2000, but rose to 44 percent in 2003. In dollar terms, net worth rose from \$16 billion in 1994 to \$20 billion in 2003.

Net worth, or member and patron equity, for all marketing cooperatives totaled \$12.5 billion, up \$0.4 billion from 2002. Marketing cooperatives accounted for 61 percent of farmer cooperatives' combined net worth, about the same as 2002. Net worth for farm supply cooperatives totaled \$7 billion, again, about the same as in 2002. Their net worth accounted for 35 percent of the total (appendix figure 10). For marketing cooperatives, the highest percentage of total assets represented by net worth shown in figure 20 (58 percent) was for those marketing rice. Service cooperatives, at 64 percent, had the most assets financed with net worth. The lowest, 32 percent, was for cooperatives marketing livestock and poultry. Marketing and farm supply cooperatives had 41 percent and 47 percent, respectively, of their assets financed by net worth.

Of the \$47 billion in total assets, marketing cooperatives accounted for \$30 billion, down 2 percent from 2002. Both dairy and grain and oilseed cooperatives had about \$9 billion in assets, about \$6 billion more than any of the other marketing cooperatives and second only to farm supply cooperatives. Both dairy and grain and oilseed cooperatives had over \$600 million of their assets invested in other cooperatives. Grain and oilseed, livestock and poultry, and dairy cooperatives maintained at least 7 percent of total assets as investments in other cooperatives in 2003. Marketing cooperatives as a group

maintained almost \$2 billion of their assets as investments in other cooperatives.

Farm supply cooperatives had total assets of \$15.5 billion, unchanged from 2002. Farm supply cooperatives had investments in other cooperatives exceeding \$2 billion. Excluding investments in other cooperatives, total assets increased 6 percent, from \$12.7 billion in 2002 to \$13.4 billion.

Selected Financial Ratios

Financial ratios express relationships between items in the balance sheet and income statements of a business operation and help in analyzing a cooperative's economic and financial situation. Ratios can indicate problem areas, serve as guidelines for planning, and aid in formulating actions. However, ratio interpretation is largely subjective.

Six financial ratios were used to measure cooperative performance or financial condition—return on total assets, net worth-to-total assets, return on total sales, total sales-to-total assets, the current ratio, and times interest earned.

The return on total assets and return on total sales ratios indicate profitability. The net worth-to-total assets ratio shows a cooperative's ability to meet long-term financial obligations. The total sales-to-total assets ratio (asset turnover ratio) indicates how efficiently a cooperative is using its assets. The current ratio measures a cooperative's ability to meet short-run obligations. Times interest earned shows the number of times interest charges were covered by net income.

Table 14 presents the values of these ratios. Extreme high and low values were excluded in the average values section of this table so those used would be more representative of the cooperatives reporting. Ratios are also shown by selected asset category for those cooperatives where sufficient information was available. The right hand side of the table shows the best observed values, which are based on the operations of a single cooperative and thus

Table 14—Selected financial ratios for cooperatives, average and best observed values, 2003¹

		Average values							Best observed values (N=1)					
Type of cooperative and by size of assets in million \$	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷	N ⁸	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷	
		----- Percent -----			----- Number -----				----- Percent -----			----- Number -----		
Cotton - all sizes	8.81	47.63	2.29	3.84	1.44	6.07	8							
Assets of \$15 to \$99.9	10.01	42.51	4.05	2.47	1.48	5.43	5	27.34	72.64	13.69	5.24	2.42	23.58	
\$100.0 - 499.99	8.52	48.84	2.05	4.17	1.43	6.33	3	15.10	56.29	11.69	6.15	1.46	7.63	
Cotton gin - all sizes	17.58	63.20	13.48	1.30	1.67	17.70	86							
Assets less than \$0.5	3.21	21.80	2.28	1.41	1.04	-1.19	5	34.67	78.96	46.15	3.70	8.72	5.69	
0.5 - 0.99	8.06	66.06	3.99	2.02	1.64	3.33	18	41.15	99.71	17.92	4.24	156.37	316.19	
1.0 - 2.49	11.30	60.48	7.66	1.47	1.65	9.71	25	60.03	92.31	33.38	4.44	9.01	260.04	
2.49 - 99.99	19.37	63.85	15.71	1.23	1.68	24.09	38	49.91	86.22	36.49	2.48	3.05	96.46	
Dairy - all sizes	4.70	34.02	1.53	3.07	1.33	3.19	78							
Assets less than \$0.5	1.30	64.99	0.09	14.45	2.26	n.a.	11	90.69	99.50	7.41	75.63	199.36	n.a.	
0.5 - 0.99	2.92	54.71	0.47	6.28	1.35	3.52	7	13.50	99.11	1.89	13.80	53.38	3.93	
1.0 - 2.49	5.74	53.78	1.03	5.57	1.33	2.66	18	33.81	82.21	3.61	15.90	2.47	305.03	
2.49 - 99.99	4.48	40.38	0.70	6.37	1.19	6.43	34	19.49	75.53	41.83	19.28	2.32	n.a.	
100.0 and more	4.73	32.91	1.85	2.55	1.36	3.03	8	14.15	73.12	4.77	5.03	2.22	19.73	
Dry beans and peas - all sizes	1.35	29.75	0.96	1.40	1.18	2.06	3	12.68	67.04	4.43	2.86	1.94	35.40	

Table 14—Selected financial ratios for cooperatives, average and best observed values, 2003¹ (continued)

		Average values						Best observed values (N=1)					
Type of cooperative and by size of assets in million \$	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷	N ⁸	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷
		----- Percent -----			----- Number -----			----- Percent -----			----- Number -----		
Fruit and vegetable - all sizes	6.73	40.43	2.77	2.43	1.25	1.81	45						
Assets less than \$0.5	-4.33	60.37	-0.71	6.07	1.82	-4.58	11	23.11	97.15	19.35	67.69	29.45	10.31
0.5 - 0.99	5.79	74.34	1.48	3.91	2.93	5.87	6	40.54	87.53	13.45	9.10	7.82	1,041.69
1.0 - 2.49	1.32	52.43	0.37	3.52	2.00	3.18	11	27.24	85.42	8.91	7.65	10.56	1,226.65
2.49 - 99.99	6.96	39.67	2.94	2.37	1.22	1.79	35	52.45	98.49	10.18	11.43	64.59	737.59
100.0 and more	12.82	37.15	7.28	1.76	1.70	7.32	10	39.57	55.12	34.82	5.19	3.18	27.99
56 Fresh only - all sizes	6.20	38.53	2.46	2.52	1.25	4.27	53						
Assets less than \$0.5	-4.48	59.24	-0.76	5.91	1.73	-4.58	9	23.11	97.15	19.35	24.93	29.45	10.31
0.5 - 0.99	2.45	71.96	0.50	4.94	2.77	8.76	3	4.70	85.23	2.28	9.10	7.19	1,041.69
1.0 - 2.49	-2.39	54.51	-0.62	3.85	2.31	0.70	8	27.24	85.42	4.25	7.65	10.56	1,226.65
2.49 - 99.99	6.54	37.72	2.67	2.45	1.23	4.47	33	52.45	98.49	10.18	11.43	64.59	737.59
Processed only - all sizes	15.98	32.85	9.60	1.66	1.56	7.41	11						
Assets less than \$0.99	21.70	71.42	5.83	3.73	2.65	8.25	3	40.54	97.10	13.45	7.50	24.46	8.25
15.0 - 499.99	15.97	32.81	9.61	1.66	1.56	7.41	8	39.57	55.12	34.82	3.54	3.18	27.99
Fresh and processed - all sizes	10.36	39.79	5.03	2.06	1.82	3.41	11						
Assets less than \$2.49	-1.42	72.06	-0.04	39.31	3.00	6.93	5	18.58	91.63	8.91	n.a.	7.82	20.34
15.0 and more	10.42	39.62	5.58	1.87	1.82	3.40	6	23.47	66.88	8.42	5.19	2.12	7.56

Table 14—Selected financial ratios for cooperatives, average and best observed values, 2003¹ (continued)

		Average values						Best observed values (N=1)					
Type of cooperative and by size of assets in million \$	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷	N ⁸	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷
		----- Percent -----			----- Number -----			----- Percent -----			----- Number -----		
Grain and oilseed - all sizes	1.36	40.12	0.54	2.53	1.17	1.80	462						
Assets less than \$0.99	-2.70	63.52	-0.71	3.81	2.23	-1.94	11	4.36	83.89	0.68	6.40	6.49	3.39
1.0 - 2.49	0.25	64.01	0.08	3.09	2.02	1.31	73	20.38	99.66	55.32	8.35	143.68	657.67
2.49 - 99.99	1.29	43.04	0.50	2.58	1.24	1.67	373	31.38	97.38	92.50	7.86	7.22	129.03
100.0 and more	1.95	21.82	0.89	2.19	0.88	2.73	5	4.73	46.44	4.70	2.87	1.41	4.42
57 Livestock - all sizes	-26.06	28.52	-5.86	4.45	2.12	2.04	17						
Assets less than \$0.5	-38.26	4.20	-1.32	28.97	1.04	-30.15	4	17.75	97.65	0.76	132.18	31.78	n.a.
0.5 - 2.49	1.74	89.69	0.18	9.73	6.77	8.09	5	10.04	98.91	22.50	60.41	70.60	20.88
2.49 - 99.99	2.22	17.88	0.29	7.76	1.20	2.79	6	7.59	48.41	0.89	16.92	1.73	9.30
Nut - all sizes	3.08	37.93	1.50	2.05	1.63	2.09	8						
Assets less than \$2.49	-5.71	62.66	-0.68	8.44	2.49	4.64	3	25.33	95.60	4.39	9.59	21.64	160.37
2.5 - 499.99	3.11	37.84	1.53	2.03	1.63	2.08	5	4.50	44.17	2.29	2.49	1.87	2.31
Poultry - all sizes	4.57	29.63	1.59	2.87	1.24	2.35	5	7.19	60.56	1.59	6.21	1.24	5.22
Tobacco - all sizes	2.65	99.43	47.25	0.06	n.a.	8.09	6						
Assets less than \$0.5	8.70	94.34	18.40	0.47	8.65	8.09	4	10.44	99.85	18.40	0.58	n.a.	33.06

Table 14—Selected financial ratios for cooperatives, average and best observed values, 2003¹ (continued)

Type of cooperative and by size of assets in million \$	Average values							Best observed values (N=1)					
	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷	N ⁸	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷
	----- Percent -----			----- Number -----				----- Percent -----			----- Number -----		
Rice - all sizes	12.01	53.99	5.07	2.37	1.63	15.80	7						
Assets less than \$2.49	-3.98	67.19	-1.29	3.09	1.66	-10.96	4	10.50	99.04	0.18	57.87	83.29	-10.96
2.5 - 499.99	12.40	53.66	5.28	2.35	1.63	16.02	3	72.13	64.25	49.96	2.47	1.86	n.a.
Sugar - all sizes	1.76	42.92	1.83	0.96	1.19	1.73	10						
Assets less than \$100.0	1.87	53.75	1.43	1.31	1.27	2.00	5	7.01	73.18	4.76	1.76	1.50	10.56
100.0 and more	1.75	42.01	1.88	0.93	1.18	1.72	5	5.10	48.61	5.52	1.15	1.66	3.63
Fish - all sizes	-6.97	25.35	-3.28	2.12	0.99	-2.23	9						
Assets less than \$0.99	-3.85	6.72	-0.39	9.84	0.84	-0.44	4	16.22	33.25	2.34	31.81	1.28	4.61
0.99 - 99.99	-7.05	25.80	-3.64	1.94	1.00	-2.28	5	3.07	54.24	0.82	6.23	6.31	0.84
Other products - all sizes	2.27	56.14	0.81	2.82	1.61	3.21	9	16.42	95.83	8.47	9.03	13.86	11.66
Ethanol - all sizes	7.35	62.16	8.56	0.86	1.38	5.87	6	20.54	99.79	95.15	1.50	2.43	1,571.95
Artificial Insemination - all sizes	4.09	59.30	3.28	1.25	1.86	2.84	12	19.61	91.45	17.18	2.95	6.48	79.98

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Table 14—Selected financial ratios for cooperatives, average and best observed values, 2003¹ (continued)

Type of cooperative and by size of assets in million \$	Average values							Best observed values (N=1)					
	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷	N ⁸	Return on total assets ²	Net worth to total assets ³	Return on total sales ⁴	Total sales to total assets ⁵	Current ratio ⁶	Times interest earned ⁷
	----- Percent -----			----- Number -----				----- Percent -----			----- Number -----		
Other services - all sizes	14.95	68.10	15.06	0.99	1.27	2.76	38						
Assets less than \$0.5	11.21	66.45	5.19	2.16	2.17	-4.19	15	70.33	99.44	26.23	9.38	146.04	2.73
0.5 - 0.99	7.74	74.45	4.56	1.70	2.62	9.49	5	21.19	90.44	10.64	2.73	12.88	9.55
1.0 - 2.49	38.43	57.63	33.26	1.16	1.72	n.a.	5	79.09	93.27	54.20	1.49	7.82	383.46
2.49 - 99.99	12.90	68.99	14.28	0.90	1.16	1.49	13	52.57	99.07	61.87	2.48	35.67	n.a.
Farm supply - all sizes	1.96	44.35	0.92	2.12	1.40	2.28	692						
Assets less than \$0.5	-4.21	76.92	-1.00	4.20	3.75	-0.78	36	19.97	99.99	12.61	30.64	n.a.	64.44
0.5 - 0.99	-1.47	65.37	-0.69	2.12	2.06	0.04	56	13.94	97.68	27.56	5.48	29.34	1,333.97
1.0 - 2.49	0.23	69.72	0.11	2.14	2.38	0.90	150	42.38	98.60	40.90	4.46	18.20	n.a.
2.49 - 99.99	2.99	52.90	1.51	1.98	1.40	3.25	439	33.17	94.15	16.64	13.09	33.25	1,240.73
100.0 - 499.99	-0.23	29.06	-0.08	2.72	1.26	0.94	6	9.16	45.03	6.30	3.47	1.54	5.09
500 and more	1.83	40.94	0.87	2.10	1.40	2.53	5	11.45	60.25	6.35	2.72	2.65	3.81

¹ Based on cooperatives reporting. Excludes strictly pooling cooperatives. Ratios were calculated by adding the individual items and dividing. The same cooperatives were included in each group to calculate all ratios. Extreme values not representative of the group were excluded in the average values, but many are shown in best observed values.

² Calculated by dividing net income (before taxes) by total assets.

³ Net worth, or member equity, is the book value of the assets owned by members. The ratio was calculated by dividing total net worth by total assets.

- ⁴ Total sales includes service receipts, other income, and patronage refunds received from other cooperatives and CoBank. The return on sales was found by dividing net income (before taxes) by total sales.
- ⁵ Calculated by dividing total sales by total assets.
- ⁶ The current ratio was derived by dividing current assets by current liabilities.
- ⁷ The ratio was calculated by summing net income before taxes and interest expense and dividing by interest expense for each grouping.
- ⁸ N is the number of cooperatives comprising the average values. For best observed values, N is always 1.
- ⁹ Excludes cottonseed and other oilseed oils and meals. Oilseed oil is included in other marketings while meal is included in farm supplies (feed).
- ¹⁰ Includes coffee, fish, forest products, hay, hops, seed marketed for growers, nursery stock, ethanol, other farm products not separately classified, and sales of farm products not received directly from member-patrons. Also includes manufactured food products and resale items marketed by cooperatives.
- ¹¹ Includes trucking, cotton ginning, storage, grinding, application, locker plants, rice drying, and other related items.
- n.a. means not available.

often show values quite different than the average values. They are included to show values that can be obtained. Ratios offer cooperative leaders a general barometer to use in comparing their operations with others of the same type and/or size.

The return on total assets (net income/total assets) varied considerably. It was negative for these smaller cooperatives: grain and oilseed, livestock, nut, rice, fish, fresh fruit and vegetable, and farm supply cooperatives. Not shown (an outlier) is the large loss in a large livestock cooperative. Best observed values show profitable cooperatives for both small and large cooperatives of all marketing, farm supply, and service types. Returns are generally the lowest for the smallest and largest cooperatives.

The net worth-to-total assets ratio (net worth/total assets) is generally higher for small cooperatives and falls as size increases. By type, dry beans and peas, poultry, and fish cooperatives have the smallest net worth (or equity) ratios. Generally, as cooperatives become larger and/or do more processing, fewer of their assets are financed by members, which lowers the net worth-to-assets ratio. By best observed values, almost every type of cooperative has at least one cooperative that has little or no debt. The return on total sales

(net income before taxes/total sales) was generally lower for small cooperatives and increased with larger ones. As a group, fish cooperatives averaged negative returns on total sales. Few cooperative groups generated a return on sales above 3 percent (only 11 of the 55 groupings shown in table 14). Best observed returns on total sales show only 10 observations with returns less than 3 percent.

The total sales-to-total assets ratio (total sales/total assets) clustered around the 2 to 3 range for almost all cooperatives—the pointed exception is the largest dairy cooperatives that averaged around 6. Among most cooperatives, the ratio tended to decrease as cooperative size increased. Generally, this reflects the large investment in processing or manufacturing equipment typical of the larger cooperatives that engage in these types of activities. The high total sales-to-total assets ratios for smaller fresh and processed fruit and vegetable cooperatives is due to bargaining activity or other marketing functions not requiring major investments in plant and equipment.

The current ratio (current assets/current liabilities) was generally under 2 for all but the smallest cooperatives and decreased with size. As a best observed value, the current ratio was almost always greater than 2 (current ratios less than 2 are often

considered low).

Times interest earned $((\text{net income before taxes} + \text{interest expense}) / \text{interest expense})$ varied most by type of cooperative, but often fell as cooperative size increased. A number of the different sizes of farm supply cooperatives had a times interest earned ratio of less than 1—this means that their net incomes before taxes were less than their interest expenses. Best observed times interest earned values were always greater than 1 except for larger fish cooperatives.

APPENDIX TABLES

Appendix Table 1—Number of cooperatives by major business activity, 2003-1994

Major business activity	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994
Products marketed:										
										<i>Number</i>
Bean and pea (dry edible)	8	8	9	8	8	8	8	9	10	10
Cotton	14	14	14	14	15	15	16	16	16	17
Dairy	197	198	204	208	221	228	236	237	241	247
Fruit and vegetable	207	212	220	232	231	249	259	267	281	288
Grain and oilseed ¹	772	769	789	826	896	964	1,014	1,066	1,090	1,159
Livestock	67	66	70	74	81	80	88	89	94	100
Nuts	17	18	18	18	18	18	18	19	21	21
☞ Poultry ²	19	19	19	19	15	18	20	16	18	17
Rice	15	15	15	16	17	17	18	19	19	21
Sugar ³	48	48	48	48	48	52	51	49	51	52
Tobacco	21	22	24	25	25	26	26	26	26	25
Wool and mohair	76	78	80	83	84	91	88	97	98	100
Other products	90	92	96	101	90	97	99	102	109	116
Total farm products	1,551	1,559	1,606	1,672	1,749	1,863	1,941	2,012	2,074	2,173
Total farm supplies	1,156	1,201	1,234	1,277	1,313	1,347	1,386	1,403	1,458	1,496
Total related services	379	380	389	397	404	441	464	469	474	505
Total business	3,086	3,140	3,229	3,346	3,466	3,651	3,791	3,884	4,006	4,174

¹ Cooperatives primarily handling grains and oilseeds, excluding cottonseed.

² Cooperatives primarily handling eggs, turkeys, ratite, squab, and related products.

³ Cooperatives primarily handling sugar beets, sugarcane, honey, and related products.

Appendix Table 2—Cooperative memberships, by major business activity, 2003-1994

Major business activity	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994
Products marketed:	<i>Thousands</i>									
Bean and pea (dry edible)	2.1	2.2	2.7	2.8	2.8	2.9	2.9	4.0	3.3	2.5
Cotton	43.4	43.5	45.9	45.4	43.8	41.3	42.7	42.6	41.9	40.2
Dairy	80.8	81.7	91.0	96.9	90.7	92.9	104.9	111.4	117.3	124.7
Fruit and vegetable	32.7	32.5	37.8	41.1	40.9	44.0	44.0	46.8	49.1	50.6
Grain and oilseed ¹	555.3	542.5	581.5	615.3	657.9	728.7	745.0	783.4	805.9	828.5
Livestock	91.9	94.0	105.3	132.1	137.1	161.5	236.0	278.8	273.6	330.6
Nuts	33.8	35.8	40.1	41.7	43.7	46.0	41.7	48.0	48.4	49.0
Poultry ²	26.3	26.1	19.1	29.2	29.2	36.3	34.3	32.3	28.6	30.0
Rice	12.5	12.4	13.9	12.2	11.8	12.9	14.0	14.8	15.9	16.8
Sugar ³	13.9	13.9	16.3	15.6	15.7	15.9	13.8	11.8	15.3	12.5
Tobacco	127.4	127.8	165.7	165.9	170.0	172.8	172.9	266.7	270.1	275.3
Wool and mohair	10.9	11.1	12.6	13.0	15.4	17.9	16.7	17.5	19.7	24.8
Other products	23.3	25.5	28.0	31.9	23.9	25.3	29.0	24.2	22.5	19.7
Total farm products	1,054.2	1,049.1	1,160.0	1,243.0	1,282.8	1,398.4	1,497.8	1,682.4	1,711.5	1,805.2
Total farm supplies	1,590.4	1,637.1	1,745.8	1,717.8	1,731.4	1,773.7	1,743.2	1,794.7	1,845.5	1,935.6
Total related services	113.3	107.4	128.1	124.3	159.1	180.6	183.1	186.5	210.3	245.3
Total business	2,758.0	2,793.6	3,033.9	3,085.1	3,173.3	3,352.6	3,424.2	3,663.6	3,767.3	3,986.0

¹ Cooperatives primarily handling grains and oilseeds, excluding cottonseed.

² Cooperatives primarily handling eggs, turkeys, ratite, squab, and related products.

³ Cooperatives primarily handling sugar beets, sugarcane, honey, and related products.

Appendix Table 3—Cooperatives' gross business volume, by type of cooperative, 2003-1994

Major business activity	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994
Products marketed:	<i>Billion \$</i>									
Beans and peas (dry edible)	0.1	0.1	.2	.1	.2	.2	.2	.2	.2	.2
Cotton	2.6	2.5	2.5	2.8	2.2	3.0	3.1	2.7	2.9	2.5
Dairy	26.0	25.9	29.4	25.8	28.5	27.8	26.3	26.0	23.7	23.1
Fruits and vegetables	7.5	8.4	9.7	10.1	10.1	9.9	9.8	9.9	9.9	9.3
Grains and oilseeds	23.6	20.1	22.6	22.9	21.7	25.3	28.8	33.9	25.2	21.2
Livestock	6.8	9.9	9.6	8.0	7.4	7.6	7.5	6.7	6.5	6.8
Nuts	0.9	.9	.9	.7	.9	.9	.9	1.0	.9	1.0
Poultry	2.7	2.5	2.2	2.2	2.2	2.1	2.1	2.1	1.9	1.8
Rice	1.0	.8	.8	.8	.9	.9	.9	.9	.9	.9
Sugar	3.5	2.4	2.7	2.7	2.7	2.7	2.4	2.0	2.0	1.9
Tobacco	0.1	.2	.4	.6	.3	.3	.6	1.4	1.2	.4
Wool and mohair	0.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Other products	2.6	2.8	3.0	3.7	3.5	3.7	3.3	3.4	2.7	3.0
Total farm products	77.2	76.6	84.0	80.4	80.5	84.5	85.9	90.3	77.9	72.1
Supplies purchased:										
Crop protectants	3.2	3.1	3.6	4.0	3.8	4.1	4.4	3.9	3.6	3.5
Feed	7.2	6.7	5.5	6.6	6.4	7.2	8.1	7.4	6.6	6.5
Fertilizer	6.5	5.2	7.4	7.3	7.3	7.8	8.9	8.7	7.9	7.4
Petroleum	12.8	11.4	14.1	13.3	8.1	8.8	10.6	9.8	8.1	8.4
Seed	1.8	1.6	1.5	1.4	1.1	1.0	.9	.9	.8	.8
Other supplies	4.0	3.6	4.0	4.1	4.3	4.1	4.2	4.1	3.9	3.8
Total farm supplies	35.5	31.5	36.1	36.8	30.9	33.0	37.1	34.7	31.0	30.4
Services and other income	4.1	3.4	3.5	3.5	3.9	3.5	3.6	3.1	3.3	3.0
Total business	116.9	111.6	123.6	120.7	115.3	121.0	126.7	128.1	112.2	105.5

Appendix Table 4—Cooperatives' net business volume, by type of cooperative, 2003-1994

Major business activity	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994
Products marketed:										
	<i>Billion \$</i>									
Beans and peas (dry edible)	0.1	.1	.2	.1	.2	.2	.2	.2	.2	.2
Cotton	2.5	2.5	2.4	2.7	2.1	3.0	3.0	2.7	2.8	2.5
Dairy	23.5	23.0	26.2	22.7	26.0	25.3	23.4	22.9	21.8	21.5
Fruits and vegetables	6.9	7.3	8.8	9.6	9.3	9.4	9.3	9.4	9.3	8.4
Grains and oilseeds	20.6	17.5	18.1	18.4	17.1	21.3	24.6	27.7	19.9	17.6
Livestock	6.8	9.9	9.6	8.0	7.3	7.4	7.5	6.7	6.5	6.8
Nuts	0.9	.9	.9	.7	.9	.9	.9	1.0	.9	1.0
☞ Poultry	2.7	2.4	2.2	2.1	2.2	2.1	2.1	1.8	1.6	1.5
Rice	1.0	.7	.8	.8	.9	.9	.9	.9	.9	.9
Sugar	3.5	2.4	2.6	2.7	2.5	2.4	2.3	1.9	1.9	1.8
Tobacco	0.1	.2	.4	.6	.3	.3	.6	1.4	1.2	.4
Wool and mohair	0.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Other products	2.5	2.6	2.9	3.6	3.1	3.3	3.1	2.9	2.5	2.9
Total farm products	71.0	69.7	75.0	72.1	72.0	76.6	77.8	79.4	69.3	65.5
Supplies sold:										
Crop protectants	2.8	2.7	3.0	3.0	3.0	3.2	3.1	2.8	2.6	2.6
Feed	5.9	5.4	4.0	4.7	4.7	5.4	6.0	5.4	5.0	4.8
Fertilizer	4.6	4.3	5.0	4.6	4.8	5.2	5.4	5.2	4.7	4.5
Petroleum	7.5	7.2	8.4	7.5	6.3	6.6	6.8	6.3	5.2	5.3
Seed	1.2	1.1	1.1	.9	.8	.7	.7	.7	.6	.6
Other supplies	3.5	3.0	3.3	3.4	3.7	3.5	3.2	3.3	3.1	3.0
Total farm supplies	25.5	23.7	24.8	24.1	23.2	24.6	25.2	23.7	21.2	20.8
Services and other income	4.1	3.4	3.5	3.5	3.9	3.5	3.6	3.1	3.3	3.0
Total business	100.6	96.8	103.3	99.7	99.1	104.7	106.7	106.2	93.8	89.3

Appendix Table 5—Net income of farmer cooperatives, 1994-2003¹

Year	From own operations	From other cooperatives ²	Total
		<i>Million dollars</i>	
1994	1,571	392	1,963
1995	1,766	597	2,363
1996	1,475	773	2,248
1997	1,557	757	2,314
1998	1,169	573	1,742
1999	945	384	1,328
2000	1,041	235	1,276
2001	1,039	318	1,357
2002	847	362	1,210
2003	1,013	92	1,105

¹ Totals may not add due to rounding. Excludes income from cooperative pooling operations.

² Dividends and patronage refunds received from other marketing, farm supply, and related-service cooperatives, CoBank, and Banks for Cooperatives, where applicable.

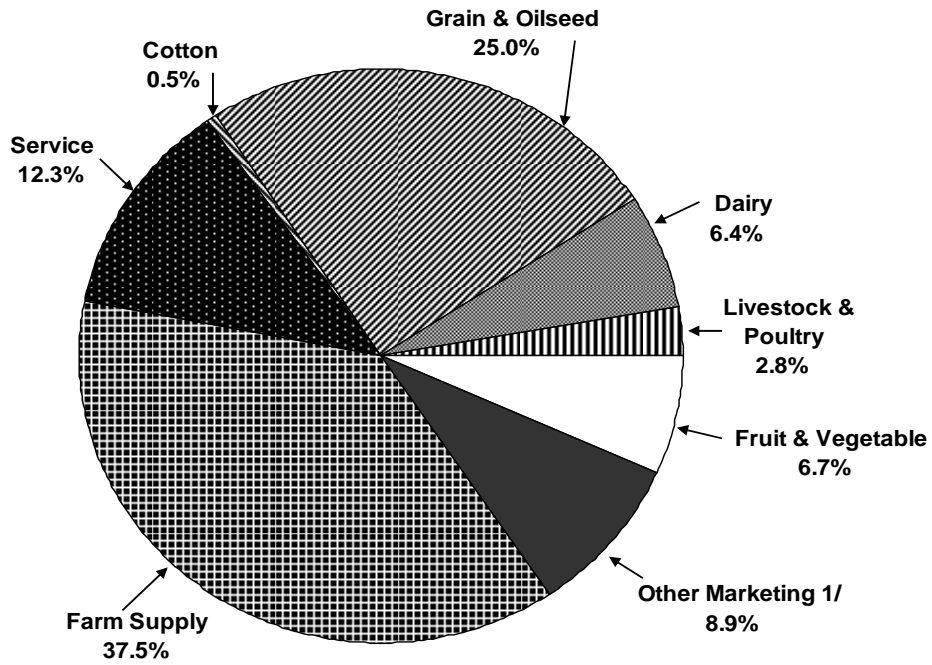
Appendix Table 6—Combined balance sheet data for farmer cooperatives, 1994-2003

Year	Assets from own operations	Investments in other cooperatives ¹	Total assets	Total liabilities	Net worth
<i>Billion dollars</i>					
1994	32.78	3.18	35.96	20.34	15.62
1995	37.05	3.23	40.27	23.64	16.63
1996	39.01	3.58	42.59	25.20	17.39
1997	39.92	4.07	44.00	25.46	18.54
1998	41.88	4.68	46.56	26.61	19.95
1999	42.33	5.35	47.68	27.42	20.26
2000	44.64	5.09	49.72	29.45	20.28
2001	43.29	5.18	48.47	28.32	20.15
2002	41.95	5.54	47.49	27.88	19.60
2003	42.86	4.06	46.92	26.49	20.43
<i>Percent of total assets</i>					
1994	91.2	8.8	100.0	56.6	43.4
1995	92.0	8.0	100.0	58.7	41.3
1996	91.6	8.4	100.0	59.2	40.8
1997	90.7	9.3	100.0	57.9	42.1
1998	90.0	10.0	100.0	57.1	42.9
1999	88.8	11.2	100.0	57.5	42.5
2000	89.8	10.2	100.0	59.2	40.8
2001	89.3	10.7	100.0	58.4	41.6
2002	88.3	11.7	100.0	58.7	41.3
2003	91.4	8.6	100.0	56.5	43.5

¹ Includes investments in other farmer cooperatives, CoBank, and Banks for Cooperatives, where applicable.

APPENDIX FIGURES

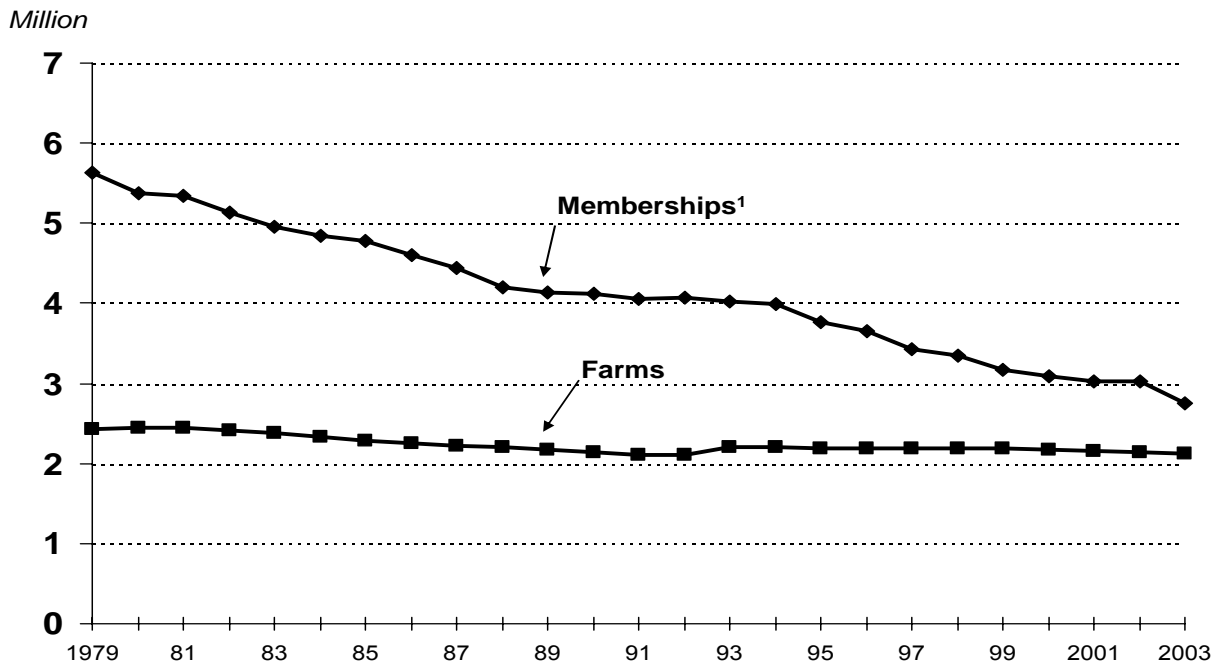
Appendix Figure 1—Distribution of Farmer Cooperatives by Type, 2003



Percentages are based on a total of 3,086 cooperatives.

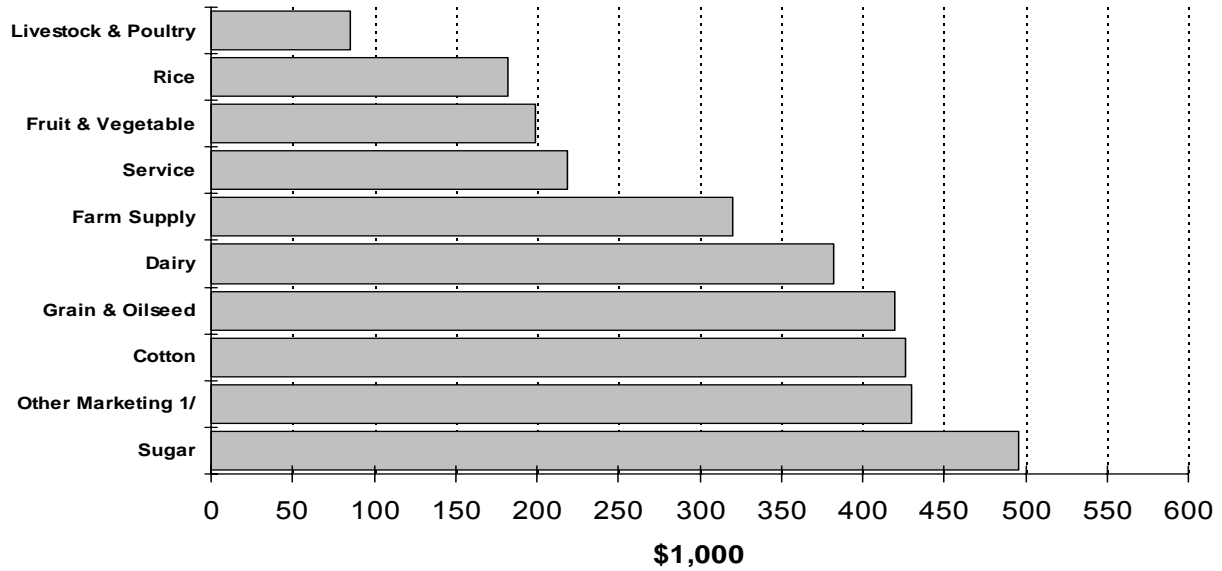
¹ Includes dry bean and pea, nut, wool and mohair, tobacco, rice, sugar, fishery, and other products marketing cooperatives.

Appendix Figure 2—U.S. Farms and Farmer Cooperative Memberships, 1979-2003



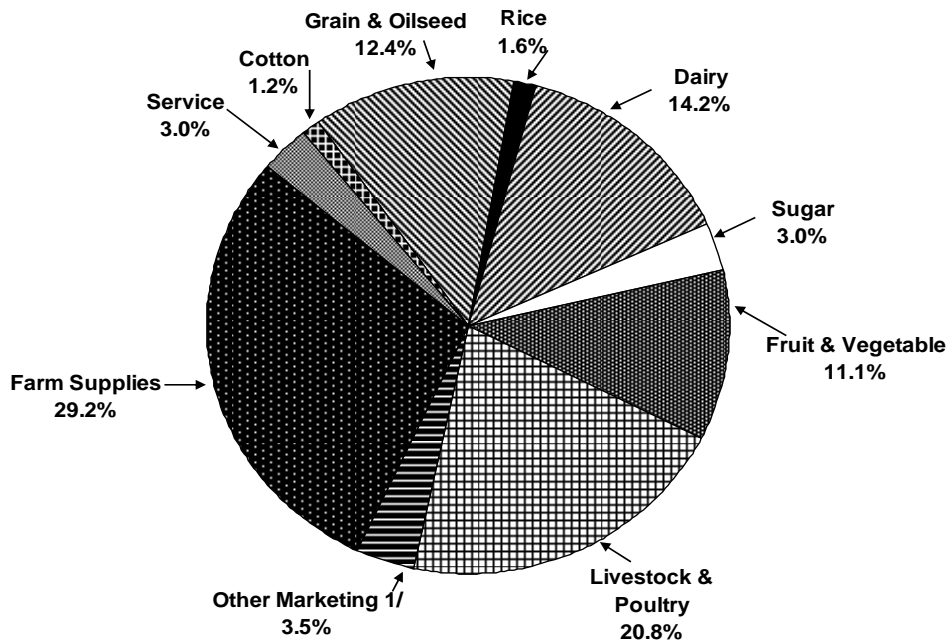
¹ Memberships were higher than farm numbers because many farmers belonged to more than one cooperative.

Appendix Figure 3—Assets per Full-Time Employee, by Type of Cooperative, 2003



1/ Includes dry bean and pea, nut, wool and mohair, tobacco, fishery, and other products marketing cooperatives.

Appendix Figure 4—Distribution of Full-Time Employees by Cooperative Type, 2003

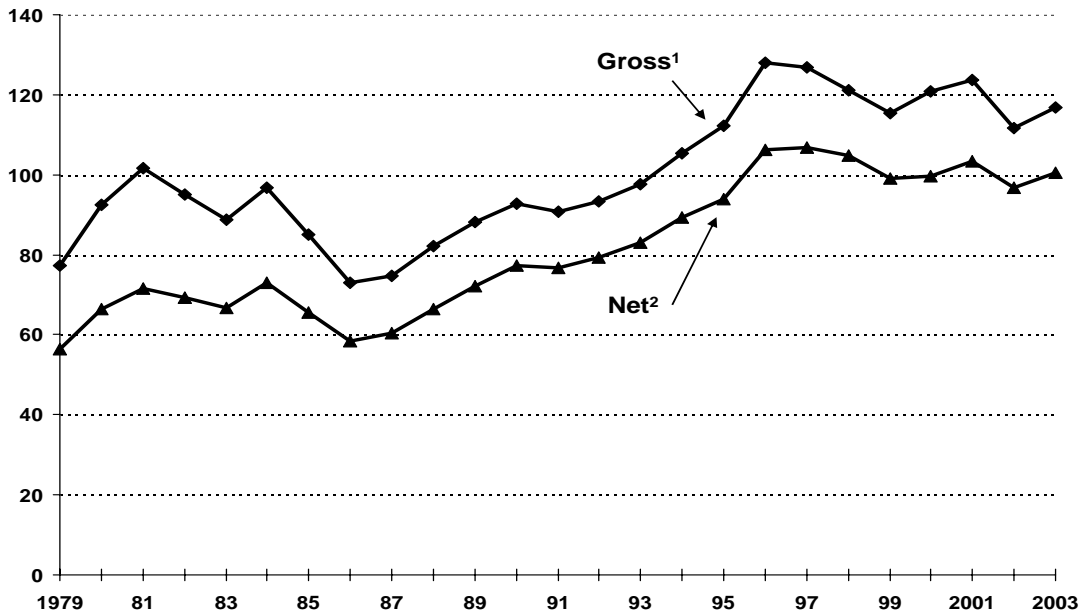


Percentages are based on a total of 165,000 full-time employees.

1/ Includes dry bean and pea, nut, wool and mohair, tobacco, fishery, and other products marketing cooperatives.

Appendix Figure 5—Cooperatives' Gross and Net Business Volumes, 1979-2003

Billion dollars

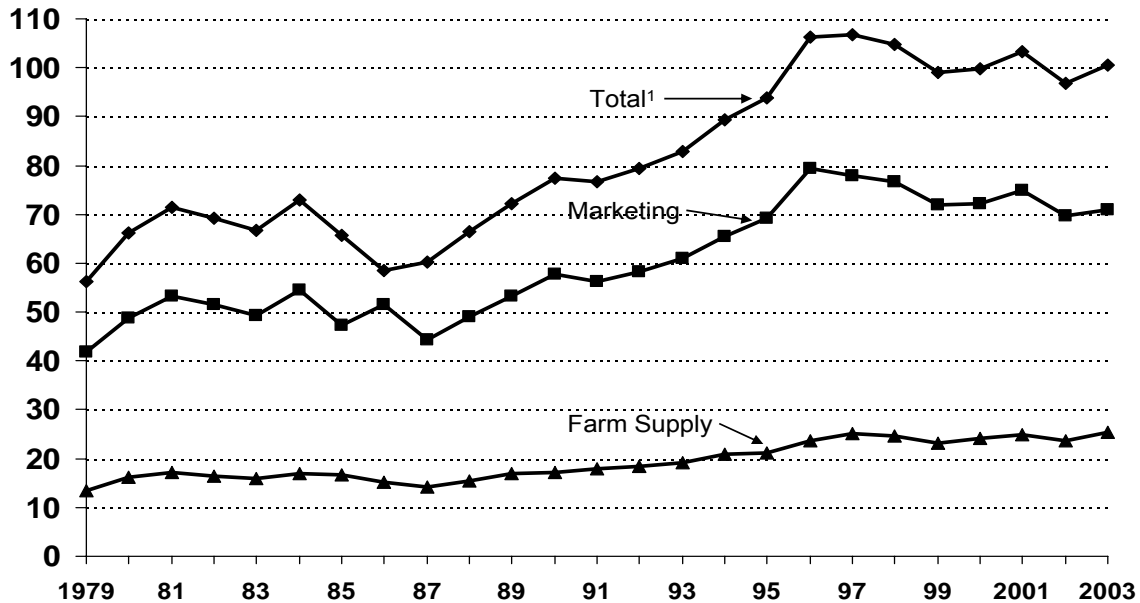


¹ Includes inter-cooperative business.

² Excludes inter-cooperative business.

Appendix Figure 6—Cooperatives' Net Business Volume, 1979-2003

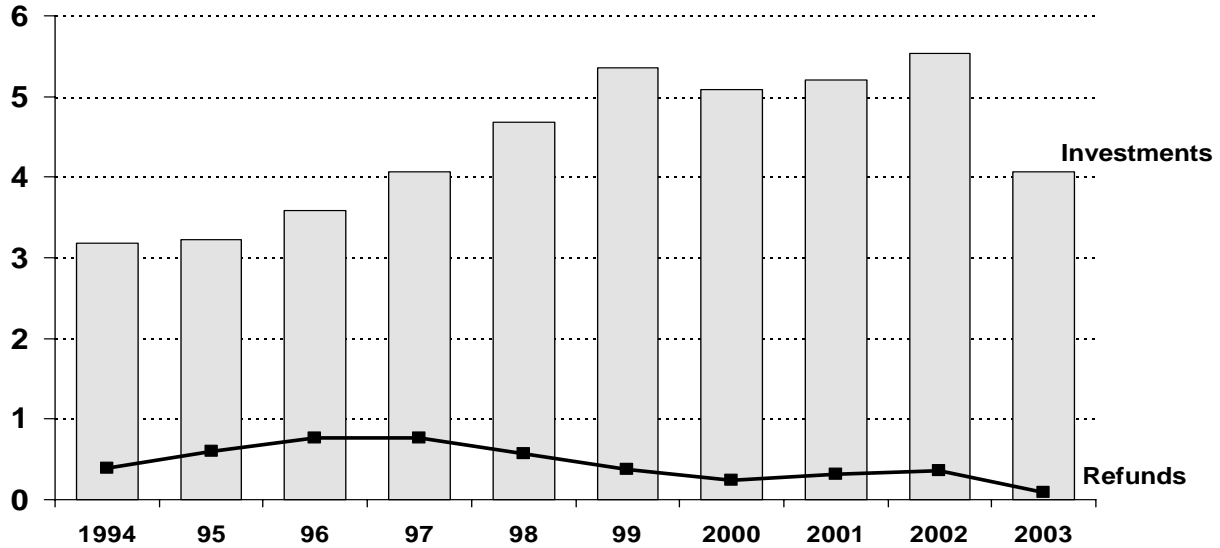
Billion dollars



¹ Total includes value of related services and other income.

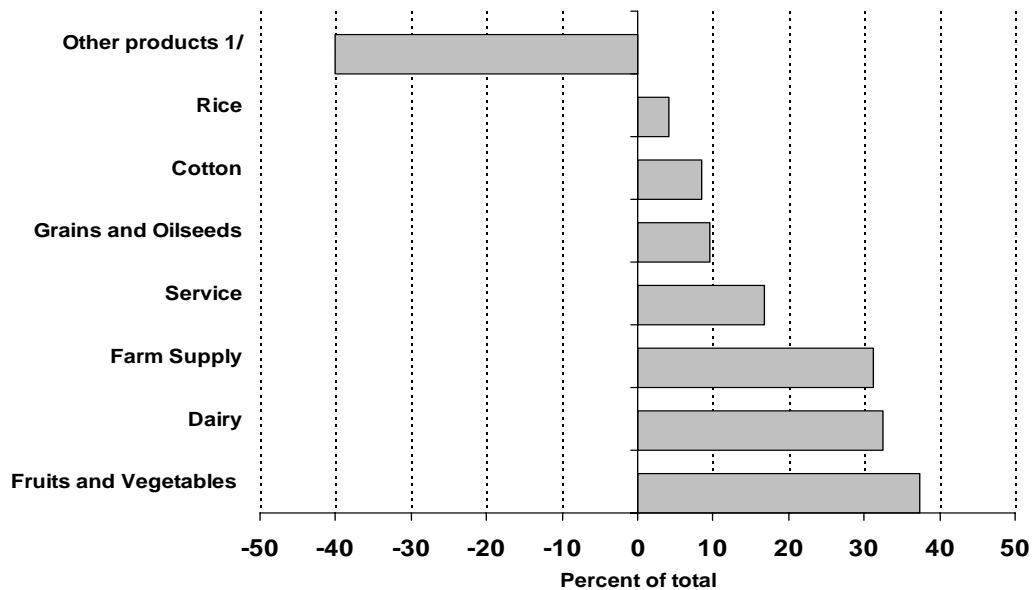
Appendix Figure 7—Cooperatives’ Investments in Other Cooperatives and Patronage Refunds Received From Other Cooperatives,¹ 1994-2003

Billion dollars



¹ Includes other farmer cooperatives and CoBank.

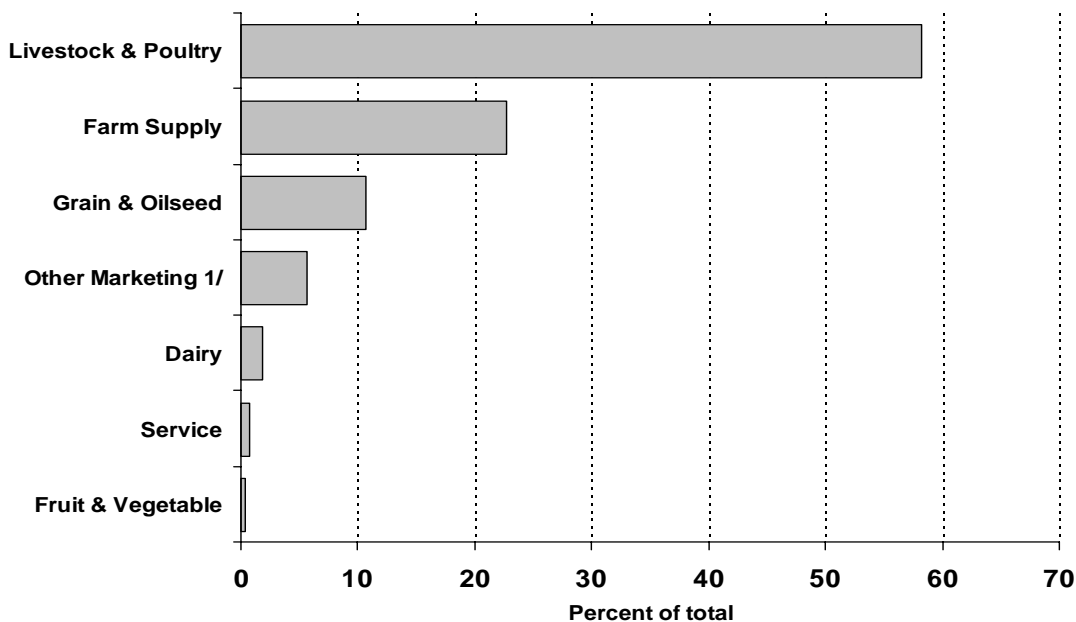
Appendix Figure 8—Distribution of Net Income, by Type of Cooperative, 2003



Percentage based on total net income of \$1.1 billion.

¹ Includes dry bean and pea, livestock, poultry, nut, wool and mohair, tobacco, sugar, fishery, and other products marketing cooperatives.

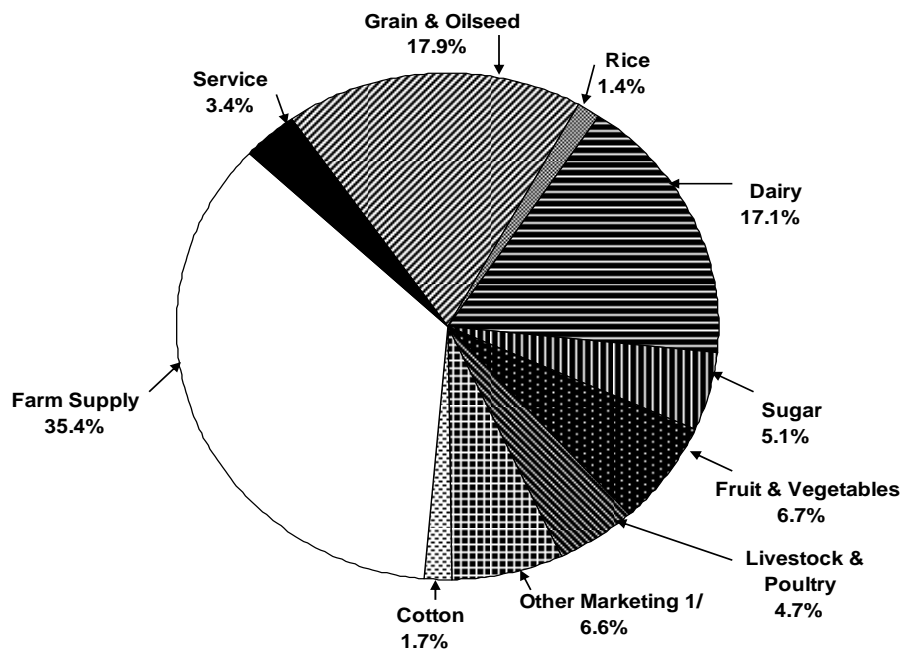
Appendix Figure 9—Distribution of Losses, by Type of Cooperative, 2003



Percentage based on total losses of \$1 billion.

¹ Includes dry bean and pea, cotton, nut, wool and mohair, sugar, tobacco, rice, sugar, fishery, and other products marketing cooperatives.

Appendix Figure 10—Distribution of Net Worth, by Type of Cooperative, 2003



Percentages are based on total net worth of \$20 billion.

¹ Includes dry bean and pea, nut, wool and mohair, tobacco, fishery, and other products marketing cooperatives.

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