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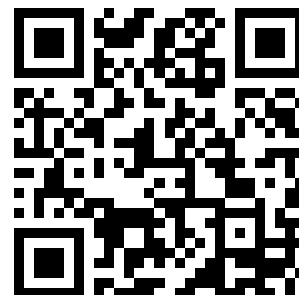
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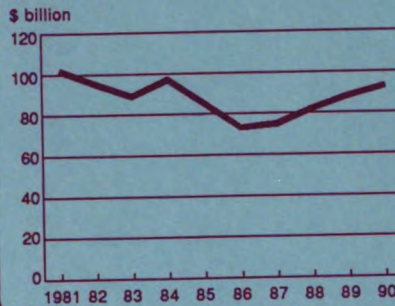
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Agricultural
Cooperative
Service

Farmer Cooperative Statistics, 1990

ACS
Service Report
Number 31

**Business
Volume**



Net Income

ABSTRACT

FARMER COOPERATIVE STATISTICS, 1990, by Ralph M. Richardson, Celestine C. Adams, Katherine C. DeVille, Charles A. Kraenzle, Jacqueline E. Penn, and John W. Stutzman, Statistics and Technical Services Staff, Agricultural Cooperative Service, U.S. Department of Agriculture, Post Office Box 96576, Washington, DC 20090-6576, ACS Service Report 31, December 1991.

A survey of U.S. farmer cooperatives for calendar year 1990 showed a record high net business volume. Net income, however, was down from 1989. Assets, liabilities, and net worth were all up. Gross and net business volumes were reported for 4,663 cooperatives. Business volume, number of cooperatives, and cooperative memberships were reported by commodity for those cooperatives classified as marketing, farm supply, and service. Cooperative growth trends showed changes in cooperative numbers, memberships, business size, and sales volume. Data on balance sheet and net income and selected activities of other service organizations were also reported.

Keywords: Cooperatives, statistics, business volume, memberships, balance sheet, net income.

ACS Service Report 31, December 1991

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PREFACE

Farmer cooperative statistics are collected annually to provide information on the progress and trends in cooperatives' growth and development. Many people use these statistics for various purposes such as research, technical assistance, education, planning, and public policy. Acquiring, analyzing, and disseminating farmer cooperative statistics are authorized by the Cooperative Marketing Act of 1926.

This report provides aggregate information on the number, membership, and business volume of farmer cooperatives classified by commodity and functional type. Both gross (includes intercooperative business) and net (excludes intercooperative business) dollar volumes of cooperatives are reported.

Basic information is provided on business volume and net income of farmer cooperatives by principal product marketed and major functional type.

Statistics for 1990 are compiled only on a national basis. Data by State are collected every other year. Therefore, to include information by State in this report, 1989 numbers are reported.

Data are collected from individual farmer cooperatives by mail survey of organizations identified by Agricultural Cooperative Service (ACS) as a farmer cooperative.

Data for this report are derived from a census of all farmer cooperatives. An annual census is taken because of the reduced number of cooperatives, the need to make more accurate estimates for all cooperatives, and the need for more data on individual cooperatives for research purposes. Before 1989, survey data were collected from cooperatives selected in a stratified random sample in 3 of 4 years. The census provides better information to develop a database for research and other purposes.

Statistics for all cooperatives are derived by estimating and adding data for nonrespondents to respondent data. The number of cooperatives responding to the survey in 1990 accounted for 88.8 percent of the total sales handled by farmer cooperatives.

New methods were developed on personal computers for processing the 1990 survey of farmer cooperatives. In previous years, the data were processed on a mainframe computer using methodology developed by USDA's National Agricultural Statistics Service. Consequently, some unexplained differences in the statistics between 1989 and 1990 or earlier years may be the result of differences in methods used in processing.

ACS 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 rapidity with which it is furnished are greatly appreciated.

Appreciation is extended to Todd Holloway for assisting with the survey and to John H. Wells for providing technical support, both ACS employees.

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HIGHLIGHTS

For 1990, marketing, farm supply, and selected service cooperatives reported a record high net business volume. However, net income was lower than for 1989. Combined assets, liabilities, and net worth were up. The number of cooperatives and memberships declined.

Farmer cooperatives' net income was nearly \$1,447 million, a 21.8-percent decrease from the \$1,851 million in 1989. The 1990 net included intercooperative dividends and refunds of \$330 million--up 7.1 percent from \$308.1 million.

Total gross business volume (including intercooperative business) handled by cooperatives was \$92.7 billion, up 5.2 percent from \$88.1 billion.

Total net business, excluding business done between cooperatives, was \$77.3 billion, up 7.1 percent from the \$72.1 billion.

The total number of cooperatives dropped from 4,799 to 4,663, a net decrease of 2.8 percent. Each year, new cooperatives are formed and others disappear as they discontinue operations due to consolidation, merger, acquisition, or unsuccessful operations.

Cooperative memberships of 4,119,340 were down from 4,133,542, or 0.3 percent.

The gross value of farm products marketed by cooperatives in 1990 increased from \$60.3 billion to \$64.1 billion, or 6.3 percent. Net value of these farm products, after eliminating duplication from intercooperative business, amounted to \$57.8 billion, a 8.6-percent increase from \$53.2 billion.

Also in 1990:

- Gross value of farm supplies handled by farmer cooperatives was \$26.3 billion, up 1.6 percent from \$25.8 billion. Net value of these supplies, after eliminating intercooperative business, amounted to \$17.1 billion, an increase of 1.1 percent from \$16.9 billion.
- Receipts for services related to marketing farm products and handling farm supplies totaled \$2.3 billion, an increase of 18.9 percent from \$1.97 billion. The increase was due partly to including other income and revenue.
- Combined assets for all farmer cooperatives totaled \$30.0 billion, a 1.3-percent increase. Net assets, after eliminating intercooperative investments, were \$27.2 billion, up 0.3 percent from \$27.1 billion.
- Total liabilities of \$16.6 billion were up from \$16.3 billion, or 1.5 percent.
- Net worth, or member and patron equity, was \$13.4 billion, up 1.0 percent. Member and patron equity financed 44.8 percent of total assets, down from 44.9 percent.

HIGHLIGHTS CAPSULE

	<u>1989</u>	<u>1990</u>
Number of cooperatives	4,799	4,663
Memberships	4,133,542	4,119,340
Business volume (mil. dol.)	72,129	77,266
Net income (mil. dol.)	1,851	1,447
Total assets (mil. dol.)	29,649	30,024
Net worth (mil. dol.)	13,313	13,449

Leading States:

	<u>1987</u>	<u>1989</u>
Number of cooperatives	Minnesota (519)	Minnesota (467)
Memberships	Minnesota (370,660)	Minnesota (352,926)
Business volume (mil. dol.)	California (6,880)	California (7,448)

FARMER COOPERATIVE STATISTICS, 1990

Ralph M. Richardson, Celestine C. Adams,
Katherine C. DeVille, Charles A. Kraenzle,
Jacqueline E. Penn, and John W. Stutzman ^{1/}

I--DEFINITION OF A FARMER COOPERATIVE

Criteria used to identify an organization as a farmer cooperative:

(1) Membership is limited to persons engaged in the production of agricultural and aquacultural products and associations of such producers; (2) no member of the cooperative is allowed more than one vote despite 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) the cooperative does not deal in farm products, farm supplies, and farm business services with or for nonmembers in an amount greater in value than it handles for its members; and (4) the cooperative operates for the mutual interest of members by providing benefits on the basis of patronage.

The above statement is slightly revised from criteria in earlier reports to better define whether an association should be included in statistics of farmer cooperatives.

The above criteria may result in larger or smaller numbers of farmer cooperatives being included in these statistics compared to the ones found in lists or directories of State agencies or cooperative councils. Agricultural Cooperative Service (ACS) includes only marketing, farm supply, and selected service cooperatives on its list. Livestock shipping associations and wool pools are included as marketing cooperatives. Many State lists include other types of cooperatives such as production, credit, telephone, electric, and consumer cooperatives as well as those that do not fulfill ACS's definition. Other reasons for possible differences in the number of cooperatives are: (1) ACS may not learn of certain cooperatives operating in a State for a considerable period of time; (2) a cooperative may not have completed and returned an initial questionnaire; or (3) ACS did not receive notification that a cooperative has discontinued operating.

Comparisons from year to year in specific commodity groups, therefore, should reflect any differences in lists and classifications in State and Federal data.

^{1/} Ralph M. Richardson, agricultural statistician; Celestine C. Adams, agricultural statistician; Katherine C. DeVille, statistical assistant; Jacqueline E. Penn, statistical assistant; Charles A. Kraenzle, director, Statistics and Technical Services Staff (STSS); and John W. Stutzman, computer systems analyst, STSS.

Classification of Cooperatives

Statistics are presented according to a cooperative's major function or classification, such as marketing, farm supply, and selected service. These classifications are defined as follows:

Marketing cooperatives are associations whose primary business is marketing farm products for members--that is, more than 50 percent of total dollar volume was derived from the sale of members' farm products. Marketing cooperatives are further classified according to which commodity of 13 classifications is predominant (in terms of dollar volume) in each association's business. If a cooperative consistently indicates it is handling a larger volume of a commodity than the one it was originally organized to handle, and which provided the basis for its initial classification, it is reclassified by the commodity currently representing the predominant product in its business volume.

Cooperatives first furnished data by individual commodities handled and services performed in the 1950-51 survey. 2/ Cooperatives operating in more than one State were asked to furnish information on memberships and business volumes for the individual States they served. Before 1950, all memberships and business were credited to the States in which each association maintained its headquarters.

Farm supply cooperatives are those whose farm supply business accounted for more than 50 percent of total dollar volume.

Farm supply cooperatives include those handling all types of farm production supplies and equipment such as feed, seed, fertilizer, petroleum products, farmstead equipment, and building supplies. Some also handle farm and home items such as heating oil, lawn and garden equipment, and food.

Service cooperatives are those predominantly involved in providing specialized business services related to the agricultural business operations of farmers, ranchers, or cooperatives. Major services provided are trucking, storing, cotton ginning, drying, artificial insemination, or similar services.

Many cooperatives handle more than one commodity and provide both marketing and farm supply services, as well as facilities and equipment to perform related services such as storing, drying, and trucking. These associations are classified according to the predominant commodity or function as indicated by their business volumes.

Other types of service cooperatives such as Farm Credit System institutions, rural credit unions, rural electric cooperatives, and dairy herd improvement associations are presented separately.

2/ A detailed discussion of the revisions initiated in statistical methods in 1950-51 was given in Statistics of Farmers' Marketing, Purchasing, and Service Cooperatives, 1950-51, U.S. Dept. Agr., Farm Credit Admin., Misc. Rpt. 169, March 1953, pp. 1-3.

Organizational Membership Structures

Centralized

Most farmer cooperatives are centralized organizations. Individual farmers make up the membership. These 4,537 centralized cooperatives usually serve a local area or community, county, or several counties. Most local associations usually perform a limited number of the first steps of marketing. In farm supply associations, practically all sales are at the retail level. A few centralized cooperatives operate over large geographic areas and have members in several States. They often provide more vertically integrated services such as processing farm products or manufacturing feed and fertilizer.

Bargaining associations usually have centralized organizational structures. These associations derive all or a major portion of business volume from negotiating with distributors, processors, and other buyers and sellers over price, quantities, grade, terms of sale, and other factors involved in marketing farm products; only a few bargain for the purchase of 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 generally performed only price negotiation. Now, many perform additional functions, such as physically handling a portion of the milk and making spot sales for their patrons. Bargaining associations, like other dairy marketing cooperatives, represent their members at Federal or State milk marketing order hearings.

Federated

Federated cooperatives comprise two or more member associations organized to market farm products, purchase production supplies, or perform bargaining functions.

Member associations often operate at points quite distant from federation headquarters. Seventy-four federated cooperatives have been identified. Individual farmers are not members of strictly federated associations; rather, they are members of cooperatives that comprise the federation--sometimes called a regional cooperative. Also, some federations are made up of regional cooperatives--often called interregional associations.

Mixed

A small number of cooperatives have both individual farmer-members and autonomous cooperative members. Therefore, these associations are a combination of both the centralized and federated structures. Often, these cooperatives serve large geographic areas with members in many States and provide a variety of integrated services. Fifty-two cooperatives have been identified as having a "mixed" structure.

II--COOPERATIVE GROWTH TRENDS, 1981-90

Many cooperatives went through difficult times during the decade of the 1980's. As a result, some did not survive. The changing economic environment forced cooperatives to make some difficult adjustments such as reducing the number of employees and selling off less productive assets. The business volume of farmer cooperatives dropped from \$73 billion in 1984 to \$58.4 billion in 1986. Volume has since recovered to reach a record \$77.3 billion in 1990 (app. fig. 1).

Number of Cooperatives

The total number of marketing, farm supply, and selected service cooperatives declined from 6,211 in 1981 to 4,663 in 1990 (table 1 and fig. 1). The number of marketing cooperatives declined from 3,743 to 2,519 and farm supply cooperatives from 2,356 to 1,717. The number of selected service cooperatives increased from 112 to 427. The increase, however, was due primarily to the reclassification of cotton ginning cooperatives from marketing to service.

From 1981 through 1990, 2,285 cooperatives were removed from ACS's list of farmer cooperatives because of dissolutions, mergers, consolidations, and other reasons. This was an average decrease of nearly 229 cooperatives each year. Over the 10-year period, 40 percent were dissolved, 21.3 percent were merged or consolidated, 15 percent were acquired by other cooperatives or investor-owned firms, and the remaining 23.7 percent were removed due to inactivity, to their no longer being a cooperative, or to miscellaneous reasons (app. fig. 2).

Business Size

Measured by annual gross business volume, farmer cooperatives increased in size. Although the majority of cooperatives remain small and primarily serve local areas, several are seeking regional, national, or even international markets as a means of business growth and survival.

The increased size of individual cooperatives comes in part from mergers and consolidations. However, data used were not adjusted for changes in price levels, and some size changes are due in part to inflationary effects.

In 1990, 84.9 percent of all farmer cooperatives reported business volumes of less than \$15 million, representing 16.6 percent of the total gross dollar volume (table 2 and fig. 2). Only 1.3 percent of farmer cooperatives reported business volumes of \$250 million or more. These cooperatives, however, accounted for 55.2 percent of the total sales, up from 52.6 percent in 1989.

The 100 largest cooperatives (usually operating over large geographic areas) make up an important segment of farmer cooperatives. During 1981, the 100 largest cooperatives accounted for \$57.8 billion, or 54.4 percent of total gross business volume. By 1990, the 100 largest cooperatives ^{3/} accounted for nearly \$52.7 billion ^{4/} in business volume, 56.9 percent of the total. These cooperatives, however, directly and through member cooperatives serve a large proportion of the total memberships.

^{3/} Michael D. Kane, "Revenues Grow, But Net Income Slumps For Nation's Largest Cooperatives," Farmer Cooperatives, Vol. 58, No. 6, September 1991, ACS, USDA, Washington, DC, p. 9.

^{4/} Business volume for the 100 largest cooperatives decreased during the 1980's before turning upward again.

Table 1--Number and percentage of predominantly marketing, farm supply, and service cooperatives, selected years, 1950-90

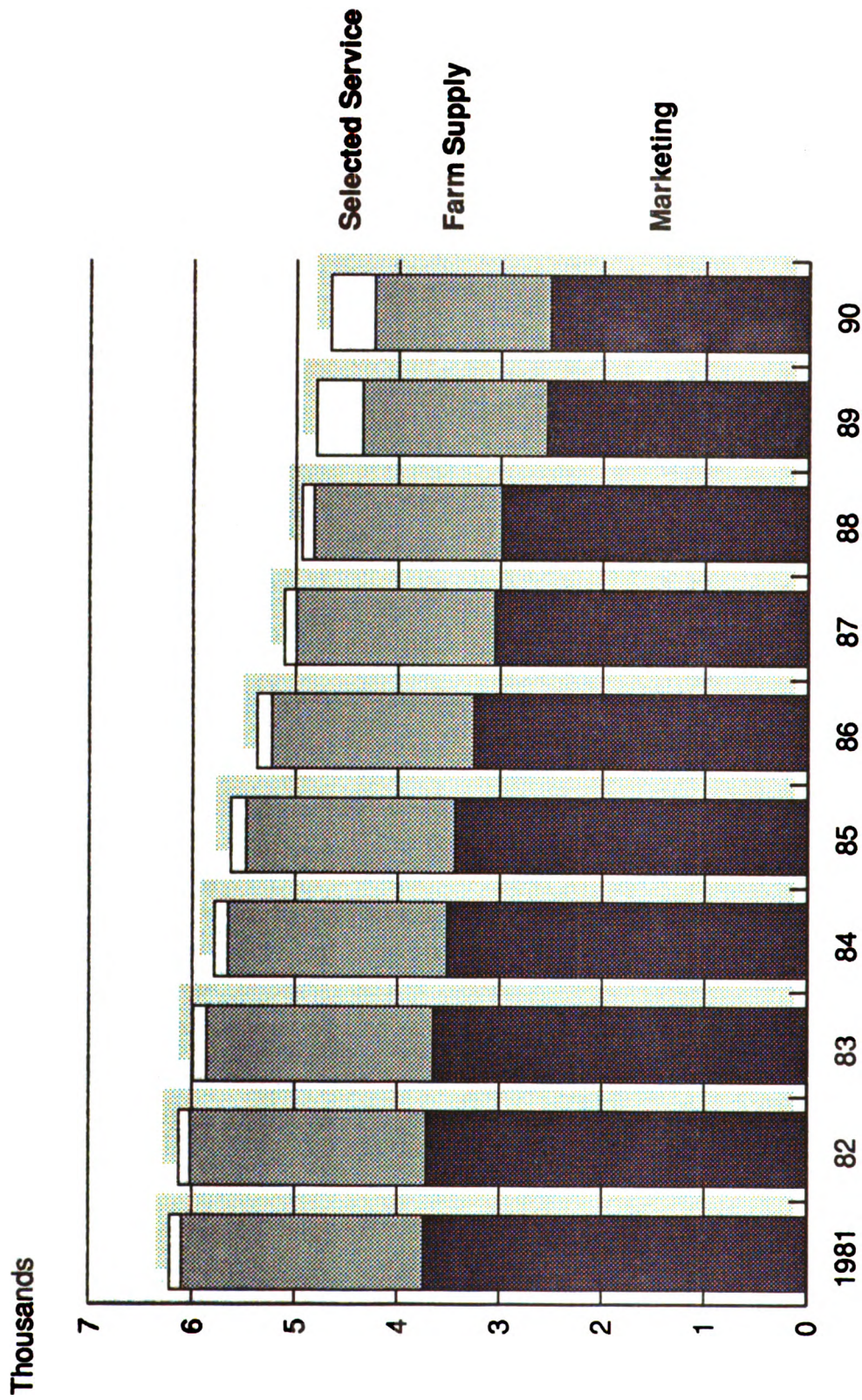
Period ^{1/}	Marketing		Farm supply		Service		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1950-51	6,519	64.8	3,283	32.6	262	2.6	10,064	100
1955-56	6,284	63.5	3,375	34.1	235	2.4	9,894	100
1960-61	5,727	62.5	3,222	35.2	214	2.3	9,163	100
1961-62	5,626	62.2	3,206	35.5	207	2.3	9,039	100
1962-63	5,502	61.8	3,211	36.0	194	2.2	8,907	100
1963-64	5,421	61.3	3,226	36.5	200	2.2	8,847	100
1964-65	5,305	61.8	3,085	35.9	193	2.3	8,583	100
1965-66	5,194	62.4	2,949	35.4	186	2.2	8,329	100
1966-67	5,076	62.5	2,871	35.3	178	2.2	8,125	100
1967-68	4,929	62.1	2,835	35.7	176	2.2	7,940	100
1968-69	4,773	61.6	2,793	36.1	181	2.3	7,747	100
1969-70	4,834	62.1	2,775	35.6	181	2.3	7,790	100
1970-71	5,097	63.7	2,731	34.2	167	2.1	7,995	100
1971-72	4,864	62.4	2,781	35.7	152	1.9	7,797	100
1972-73	4,897	62.3	2,801	35.7	156	2.0	7,854	100
1973-74	4,822	62.2	2,778	35.8	155	2.0	7,755	100
1974-75	4,770	62.4	2,729	35.7	146	1.9	7,645	100
1975-76	4,658	61.8	2,731	36.3	146	1.9	7,535	100
1976-77	4,008	59.5	2,593	38.5	135	2.0	6,736	100
1978 ^{2/}	3,930	59.6	2,550	38.6	120	1.8	6,600	100
1979	3,825	59.3	2,507	38.9	113	1.8	6,445	100
1980	3,808	60.5	2,369	37.7	116	1.8	6,293	100
1981	3,743	60.3	2,356	37.9	112	1.8	6,211	100
1982	3,714	60.7	2,299	37.5	112	1.8	6,125	100
1983	3,647	60.9	2,208	36.9	134	2.2	5,989	100
1984	3,514	60.8	2,136	36.9	132	2.3	5,782	100
1985	3,441	61.2	2,036	36.2	148	2.6	5,625	100
1986	3,260	60.7	1,971	36.7	138	2.6	5,369	100
1987	3,054	59.8	1,941	38.0	114	2.2	5,109	100
1988	2,988	60.5	1,836	37.2	113	2.3	4,937	100
1989 ^{3/}	2,550	53.1	1,803	37.6	446	9.3	4,799	100
1990	2,519	54.0	1,717	36.8	427	9.2	4,663	100

^{1/} For years before 1950-51, see Cooperative Historical Statistics, CIR 1, Section 26, USDA, ACS, Wash., DC, Revised October 1987.

^{2/} Previously, data for farmer cooperatives were reported on a fiscal year basis. Beginning in 1978, data were included for the calendar year. Data for 1978 were estimated.

^{3/} Cotton ginning cooperatives were reclassified from marketing to service cooperatives.

Figure 1 — Farmer Cooperatives in the United States



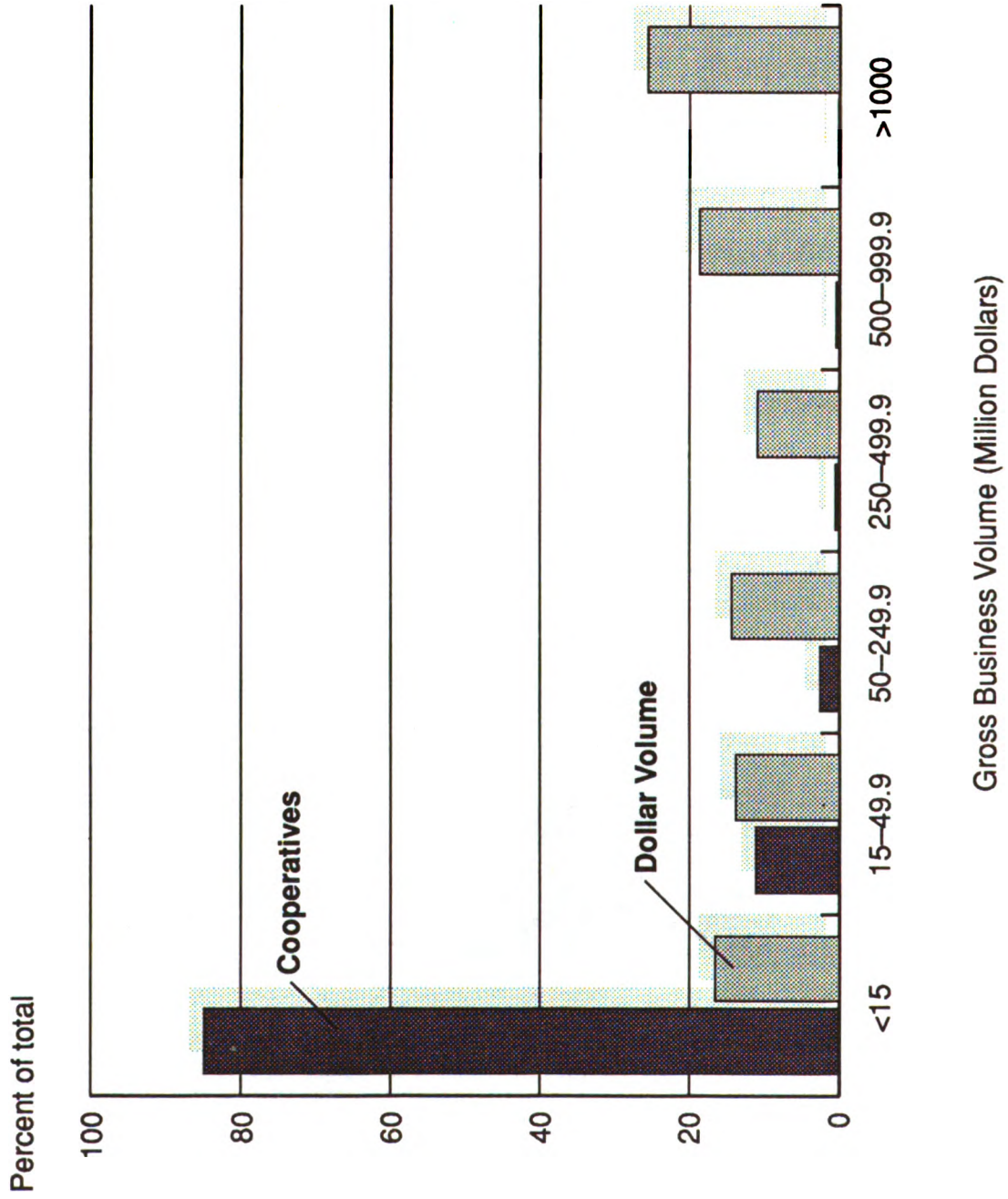
Cotton ginning cooperatives reclassified from marketing to service cooperatives in 1989.

Table 2--Farmer cooperatives grouped by gross business volume, 1990

Volume group (mil. dol.)	Cooperatives		Dollar volume	
	Number	Percent of total	Gross ^{1/} (mil. dol.)	Percent of total
Less than 5.0	2,768	59.4	5,181	5.6
5 - 9.9	854	18.3	6,112	6.6
10 - 14.9	336	7.2	4,089	4.4
15 - 24.9	334	7.2	6,420	6.9
25 - 49.9	186	4.0	6,386	6.9
50 - 99.9	72	1.5	5,093	5.5
100 - 199.9	38	.8	5,494	5.9
200 - 249.9	12	.3	2,720	3.0
250 - 499.9	28	.6	10,113	10.9
500 - 999.9	24	.5	17,330	18.7
1,000 and more	11	.2	23,729	25.6
Total	4,663	100.0	92,667	100.0

^{1/} Includes intercooperative volume.

Figure 2 — Farmer Co-ops Grouped by Business Volume, 1990



Business Volume

Net cooperative business, unadjusted for changes in the price level, increased from \$71.5 billion in 1981 to \$77.3 billion in 1990 (table 3 and fig. 3). During this period, marketing of farm products reached \$54.6 billion in 1984, decreased to its lowest level at \$41.5 billion in 1986, and set a record at \$57.8 billion in 1990. Combined sales of farm supplies were steadier over the period. Sales were \$17.1 billion both in 1981 and 1990 compared with a low of \$14.3 billion in 1987. Income from services has been increasing. However, beginning with 1990, other income and revenue were included with service receipts.

Marketing volume increased from \$53.3 billion to \$57.8 billion, supplies purchased were \$17.1 billion in both years, and income from services increased from \$1.2 billion to \$2.3 billion.

Four major commodity groups--dairy, grains and oilseeds excluding cottonseed, fruits and vegetables, and livestock--decreased slightly from 83.6 percent of all products marketed in 1981 to 83.1 percent in 1990. Grains and oilseeds excluding cottonseed and livestock showed a significant decrease--from 37.1 to 24.7 percent. Dairy and fruits and vegetables as a percentage of total cooperative business increased from 27.3 percent in 1981 to 37.5 percent in 1990.

In the farm supply group, three items--petroleum, fertilizer, and feed--were especially important. They accounted for 75.3 percent of the total production supply business in 1981 and 70.5 percent in 1990.

Considering changes in the production supplies group, the proportion of total business volume accounted for by fertilizer and petroleum declined, while farm chemicals, feed, and other supplies showed an increase.

III--1990 STATISTICS

Number of Cooperatives

The 1990 survey accounted for 4,663 marketing, farm supply, and selected service 5/ cooperatives, compared with 4,799 in 1989.

The net decrease of 136 associations, 2.8 percent fewer, largely reflected a continuing trend involving dissolution, merger, consolidation, or acquisition.

Of the 4,663 cooperatives, 2,519 primarily marketed farm products, 1,717 handled farm production supplies, and 427 provided services.

Comparison of 1990 to 1989 shows that marketing cooperatives increased from 53.1 to 54 percent of the total number of cooperatives; farm supply cooperatives decreased from 37.6 to 36.8 percent; and selected service cooperatives decreased from 9.3 to 9.2 percent.

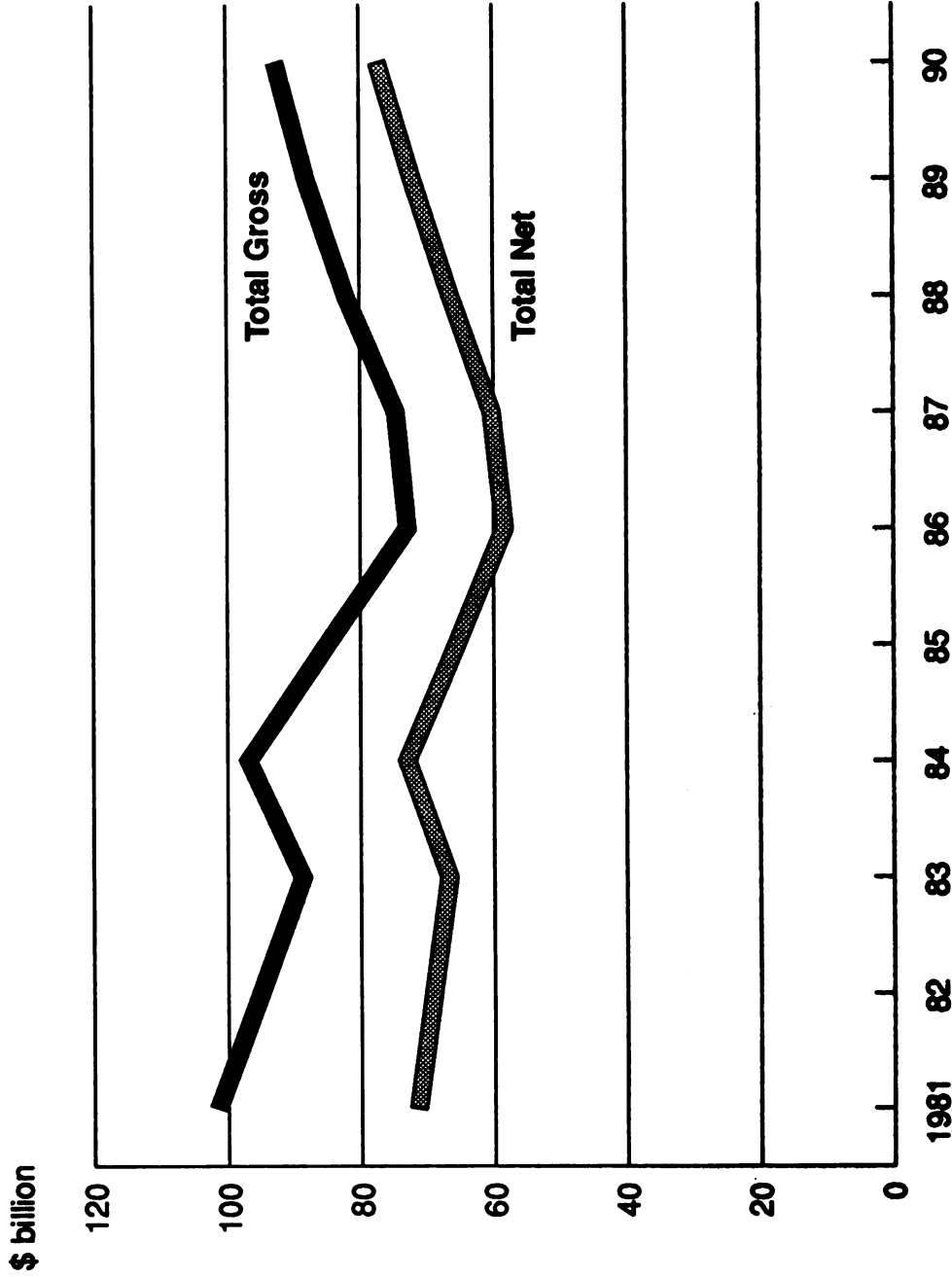
5/ Services include trucking, cotton ginning, storage, drying, artificial insemination, and similar services affecting the form, quality, or location of farm products and supplies handled by cooperatives. They do not include credit, electric, telephone, or other such services not directly related to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

Table 3--Cooperative's net volume of farm products, farm supplies, and service receipts and other income, 1981 and 1990 ^{1/}

	Net volume	
	1981	1990
<u>Million dollars</u>		
Products marketed:		
Beans and peas (dry edible)....	154.0	213.1
Cotton.....	2,099.4	2,087.5
Dairy.....	15,051.8	20,719.1
Fruits and vegetables.....	4,495.9	8,241.4
Grains and oilseeds ^{2/}	19,777.4	14,259.2
Livestock.....	5,195.8	4,861.4
Nuts.....	692.5	800.8
Poultry.....	1,157.4	1,130.4
Rice.....	1,279.3	733.1
Sugar.....	1,924.5	2,124.4
Tobacco.....	471.8	597.0
Wool and mohair.....	35.5	19.8
Other products.....	949.6	^{3/} 2,043.4
Total farm products.....	^{4/} 53,285.0	^{4/} 57,830.6
Supplies purchased:		
Farm chemicals.....	1,275.0	1,767.9
Feed.....	3,530.6	4,102.9
Fertilizer.....	3,676.3	3,230.4
Petroleum.....	5,646.0	4,715.2
Seed.....	574.8	562.0
Other supplies.....	2,355.9	2,710.2
Total farm supplies.....	^{4/} 17,058.6	^{4/} 17,088.4
Services provided:		
Trucking, cotton ginning, storage, grinding, locker plants, misc.....	^{4/} 1,190.4	^{4/} 2,347.3
Total business.....	^{4/} 71,534.0	^{4/} 77,266.4

^{1/} Totals may not add due to rounding. ^{2/} Excludes cottonseed.
^{3/} Includes value of processed oilseeds. ^{4/} Adjusted for duplication arising from multiple activities performed by many cooperatives.

Figure 3 — Business Volume of Farmer Cooperatives



Net excludes intercooperative business.

The percentage changes in table 1 are due to some extent to the reclassification of cooperatives because of changes in the function from which they derive the major portion of their dollar volume. For example, some cooperatives handle both grain and farm supplies. In one year, the primary business of some of these cooperatives may be farm supplies. The next year, it could be grains and oilseeds. Much depends on demand and supply conditions.

In table 4, the number of cooperatives headquartered in States is listed with the business activity that consistently accounted for the largest percent of their dollar volume for 1989.

Memberships

Memberships in marketing, farm supply, and selected service cooperatives totaled 4,119,340 in 1990, a decrease of 0.3 percent from 4,133,542 in 1989 (table 5 and fig. 4).

The long-term trend has been one of decline, reflecting, in part, the decreasing number of farmers in the United States. Many farmers were members of more than one cooperative and each membership was counted. Total membership contains duplication that cannot be eliminated with current reporting methods.

Though many farmers maintained membership in more than one cooperative, nearly 19.2 percent did not actively patronize their cooperatives, up from 17.1 percent in 1989.

Membership figures often vary widely from year to year for cooperatives participating in price stabilization programs, particularly for those handling cotton, peanuts, or tobacco.

Classification of members is affected also by the diversity of services offered by cooperatives. For example, a member may use a cooperative to market only one of the farm products handled by the cooperative, or a member may use a cooperative classified in the marketing group only for purchasing one or more types of production supplies. The member's business with the cooperative, therefore, may not be in the group that represents the cooperative's major business volume (which determines how the cooperative is classified in this report). The membership, however, will be included arbitrarily in that classification.

Business Volume

Total gross business volume of 4,663 marketing, farm supply, and selected service cooperatives was \$92.7 billion (table 6), a 5.2-percent increase from \$88.1 billion in 1989.

Table 4--Cooperative numbers 1/ and memberships, 2/ by major business activity and major State, 1989 3/

Major State	Co-op hqts. in State	Member- ships	Major State	Co-op hqts. in State	Member- ships
BEANS AND PEAS, DRY EDIBLE			FRUITS AND VEGETABLES (Continued)		
California	5	917	New York	7	1,047
Other States	<u>4</u>	<u>1,155</u>	North Carolina	8	1,861
United States	9	2,072	Ohio	4	1,123
COTTON 4/			Oregon	13	1,358
Arkansas	3	645	Pennsylvania	6	1,873
California	3	2,979	Texas	5	280
Mississippi	3	2,164	Virginia	5	217
Texas	7	21,159	Washington	28	5,947
Other States	<u>4</u>	<u>9,116</u>	Other States	<u>22</u>	<u>6/ 4,666</u>
United States	20	36,063	United States	298	53,185
DAIRY			GRAINS AND OILSEEDS EXCLUDING COTTONSEED 7/		
California	8	1,618	Alabama	5	2,253
Illinois	6	3,364	Arkansas	4	10,434
Iowa	10	8,677	California	3	614
Minnesota	53	22,754	Colorado	20	13,182
New York	57	8,120	Idaho	9	8,131
North Dakota	5	1,609	Illinois	153	93,284
Ohio	7	4,357	Indiana	37	71,881
Oregon	3	585	Iowa	188	98,468
Pennsylvania	19	7,886	Kansas	167	133,931
South Carolina	3	678	Louisiana	4	666
Texas	3	2,245	Michigan	14	9,476
Vermont	4	2,548	Minnesota	154	89,277
Virginia	3	913	Mississippi	6	3,176
Washington	4	1,236	Missouri	14	16,002
Wisconsin	45	29,096	Montana	20	12,346
Other States	<u>29</u>	<u>40,429</u>	Nebraska	103	74,854
United States	259	136,115	North Dakota	182	72,095
FRUITS AND VEGETABLES 5/			Ohio	56	48,289
Arizona	3	525	Oklahoma	70	45,648
Arkansas	5	972	Oregon	6	4,381
California	91	21,923	South Dakota	97	55,660
Colorado	12	1,039	Texas	47	17,033
Florida	34	2,714	Utah	3	3,810
Georgia	3	105	Washington	29	11,572
Hawaii	6	283	Other States	<u>9</u>	<u>4,321</u>
Illinois	3	110	United States	1,400	900,784
Kentucky	6	297	LIVESTOCK 5/		
Maine	4	1,608	Alabama	9	4,471
Massachusetts	3	71	Arkansas	3	644
Michigan	17	3,845	Colorado	4	4,669
Nebraska	4	32	Idaho	5	6,435
New Jersey	9	1,289	Illinois	4	19,705
			Indiana	3	26,520

Table 4--Cooperative numbers 1/ and memberships, 2/ by major business activity and major State, 1989 3/ (Continued)

Major State	Co-op hqts. in State	Member- ships	Major State	Co-op hqts. in State	Member- ships
LIVESTOCK 5/ (Continued)			SUGAR 2/ (Continued)		
Iowa	4	13,090	Other States	<u>18</u>	<u>4,646</u>
Kentucky	8	7,350	United States	45	10,840
Michigan	5	28,533	TOBACCO 8/		
Minnesota	47	55,768	Kentucky	5	89,282
Mississippi	5	1,826	North Carolina	7	94,509
Missouri	7	11,278	Tennessee	7	50,043
Nebraska	4	3,077	Virginia	3	13,115
New York	4	20,805	Other States	<u>5</u>	<u>21,317</u>
North Dakota	15	9,858	United States	27	268,266
Ohio	4	8,136	WOOL AND MOHAIR		
Pennsylvania	4	299	Idaho	16	1,051
Tennessee	3	501	Montana	21	1,606
Virginia	13	2,897	North Dakota	6	285
West Virginia	6	643	Pennsylvania	20	3,999
Wisconsin	70	25,878	Utah	7	525
Other States	<u>19</u>	<u>37,280</u>	Virginia	15	2,155
United States	246	289,663	Washington	3	421
NUTS 8/			West Virginia	9	1,505
California	4	7,500	Wyoming	6	1,308
Other States	<u>10</u>	<u>44,523</u>	Other States	<u>32</u>	<u>32,142</u>
United States	14	52,023	United States	135	44,997
POULTRY			MISCELLANEOUS 10/		
California	3	76	California	3	953
Utah	3	125	Hawaii	5	571
Other States	<u>6</u>	<u>38,223</u>	Minnesota	3	105
United States	12	38,424	Washington	3	130
RICE 5/			Other States	<u>23</u>	<u>1,730</u>
Arkansas	22	14,220	United States	37	3,489
California	4	2,763	TOTAL MARKETING		
Louisiana	10	869	Alabama	16	17,899
Texas	10	1,464	Arizona	5	2,406
Other States	<u>2</u>	<u>524</u>	Arkansas	37	27,544
United States	48	19,840	California	129	44,386
SUGAR 2/			Colorado	41	20,453
California	3	2,182	Florida	41	5,766
Louisiana	9	743	Georgia	9	42,731
Minnesota	3	1,712	Hawaii	18	955
Montana	3	314	Idaho	36	20,000
Nebraska	5	682	Illinois	170	116,733
Wyoming	4	561	Indiana	41	101,420

Table 4--Cooperative numbers ^{1/} and memberships, ^{2/} by major business activity and major State, 1989 ^{3/} (Continued)

Major State	Co-op hqts. in State	Member- ships	Major State	Co-op hqts. in State	Member- ships
<u>TOTAL MARKETING</u> (Continued)			<u>FARM SUPPLY</u> (Continued)		
Iowa	208	123,524	Iowa	95	132,622
Kansas	169	142,187	Kansas	43	41,957
Kentucky	22	101,147	Kentucky	32	125,089
Louisiana	27	4,119	Louisiana	27	10,274
Maine	6	3,017	Maryland	16	59,920
Massachusetts	8	2,977	Massachusetts	5	5,782
Michigan	43	47,415	Michigan	41	30,278
Minnesota	264	173,284	Minnesota	196	155,581
Mississippi	21	9,981	Mississippi	54	59,633
Missouri	24	34,213	Missouri	61	105,689
Montana	50	16,084	Montana	51	24,966
Nebraska	121	87,515	Nebraska	72	61,586
New Jersey	13	3,645	New Jersey	4	5,416
New Mexico	3	1,226	New York	91	20,941
New York	72	30,820	North Dakota	126	59,705
North Carolina	24	112,960	Ohio	35	27,924
North Dakota	212	85,110	Oklahoma	18	14,177
Ohio	76	79,718	Oregon	18	27,385
Oklahoma	76	55,766	Pennsylvania	18	40,099
Oregon	27	7,116	South Dakota	97	65,402
Pennsylvania	49	14,080	Tennessee	77	73,361
South Carolina	7	10,469	Texas	54	27,243
South Dakota	102	66,320	Utah	10	6,447
Tennessee	13	52,009	Virginia	43	184,639
Texas	78	53,172	Washington	36	21,773
Utah	19	9,667	West Virginia	15	57,950
Vermont	9	2,619	Wisconsin	155	160,476
Virginia	43	30,115	Wyoming	9	4,315
Washington	67	19,322	Other States	9	96,930
West Virginia	17	2,700	United States	1,803	2,035,173
Wisconsin	121	58,695			
Wyoming	10	2,970			
Other States	6	11,506			
United States	2,550	1,855,761			
<u>FARM SUPPLY</u>			<u>SERVICES</u> 11/		
Alabama	51	47,814	Alabama	6	259
Arkansas	46	46,220	Arizona	5	408
California	24	15,251	Arkansas	8	938
Colorado	22	17,381	California	49	4,825
Connecticut	3	2,148	Florida	3	102
Florida	8	7,623	Illinois	5	3,115
Georgia	6	3,175	Kentucky	8	330
Hawaii	6	1,556	Louisiana	8	1,508
Idaho	15	15,587	Michigan	3	7,301
Illinois	82	107,623	Minnesota	7	24,061
Indiana	32	63,235	Mississippi	41	2,720
			Nebraska	3	500
			New Mexico	9	842
			New York	5	21,196
			North Carolina	3	60

Table 4--Cooperative numbers 1/ and memberships, 2/ by major business activity and major State, 1989 3/ (Continued)

Major State	Co-op hqts. in State	Member- ships	Major State	Co-op hqts. in State	Member- ships
SERVICES 11/ (Continued)			TOTAL (Continued)		
Ohio	6	21,477	Massachusetts	13	8,759
Oklahoma	38	14,058	Michigan	87	84,994
Pennsylvania	5	26,489	Minnesota	467	352,926
Texas	193	40,605	Mississippi	116	72,334
Washington	3	4,653	Missouri	87	139,902
Wisconsin	11	59,706	Montana	101	41,050
Other States	<u>27</u>	<u>7,455</u>	Nebraska	196	149,601
United States	446	242,608	New Jersey	19	9,078
			New Mexico	12	2,073
TOTAL			New York	168	72,957
Alabama	73	65,972	North Carolina	29	124,598
Arizona	12	63,218	North Dakota	342	144,815
Arkansas	91	74,702	Ohio	117	129,119
California	202	64,462	Oklahoma	132	84,001
Colorado	64	37,838	Oregon	46	34,536
Connecticut	5	2,613	Pennsylvania	72	80,668
Delaware	3	15,152	South Carolina	10	10,868
Florida	52	13,491	South Dakota	200	131,756
Georgia	16	46,019	Tennessee	92	126,068
Hawaii	26	2,592	Texas	325	121,020
Idaho	52	35,587	Utah	30	18,432
Illinois	257	227,471	Vermont	9	6,125
Indiana	75	164,755	Virginia	87	218,354
Iowa	304	256,396	Washington	106	45,748
Kansas	214	184,256	West Virginia	32	60,650
Kentucky	62	226,566	Wisconsin	287	278,877
Louisiana	62	15,901	Wyoming	19	7,285
Maine	7	9,002	Other States	<u>3</u>	<u>9,746</u>
Maryland	18	61,209	United States	4,799	4,133,542

Footnotes to Table 4

- 1/ Includes centralized and federated cooperatives and those with mixed organizational structures.
- 2/ Includes farmer-members (those entitled to vote for directors) but does not include nonvoting patrons. (Duplication in these membership figures occurs because many farmers belong to more than one cooperative.) Totals may not add due to rounding.
- 3/ Data covering operations of cooperatives for calendar year 1989. Figures may vary from previously published data due to estimation procedures for nonrespondents. Major States include those with more than two cooperatives or where disclosure is not a problem.
- 4/ Cotton ginning cooperatives in previous reports were included in this classification. Cotton ginning cooperatives were reclassified as service cooperatives.
- 5/ Cooperatives performing specific services related to a commodity are included. Incorporated local associations of a federation that performs the actual marketing or processing are counted.
- 6/ Includes foreign memberships.
- 7/ Excludes soybean meal and oil.
- 8/ Membership fluctuates from year to year and is affected by the extent to which producers participate in price stabilization programs.
- 9/ Includes sugar, sugarcane, sugar beets, honey, maple syrup, molasses, and sorghum.
- 10/ Includes forest products, hay, hops, nursery stock, coffee, aquaculture products, and other farm products not separately classified.
- 11/ Cooperatives providing services related to marketing or purchasing activities.

Table 5--Memberships in predominantly marketing, farm supply, and service cooperatives, selected years, 1950-90

Period 1/	Marketing		Farm supply		Service		Total	
	1,000	Pct.	1,000	Pct.	1,000	Pct.	1,000	Pct.
1950-51	4,118	58.1	2,879	40.6	94	1.3	7,091	100
1955-56	4,223	54.6	3,444	44.6	65	.8	7,732	100
1960-61	3,473	48.2	3,680	51.1	50	.7	7,203	100
1961-62	3,420	48.2	3,635	51.2	44	.6	7,099	100
1962-63	3,582	49.6	3,596	49.8	41	.6	7,219	100
1963-64	3,613	51.0	3,425	48.4	42	.6	7,080	100
1964-65	3,791	53.5	3,251	45.9	40	.6	7,082	100
1965-66	3,636	53.3	3,154	46.2	36	.5	6,826	100
1966-67	3,298	50.7	3,169	48.8	34	.5	6,502	100
1967-68	3,225	50.0	3,187	49.5	34	.5	6,445	100
1968-69	3,141	49.4	3,189	50.1	33	.5	6,364	100
1969-70	3,103	48.8	3,222	50.7	30	.5	6,355	100
1970-71	3,105	50.4	3,028	49.2	25	.4	6,158	100
1971-72	3,134	51.0	2,991	48.7	22	.3	6,147	100
1972-73	3,118	50.9	2,988	48.8	22	.3	6,128	100
1973-74	3,111	51.0	2,972	48.7	22	.3	6,106	100
1974-75	3,127	51.1	2,971	48.5	25	.4	6,123	100
1975-76	2,812	47.6	3,056	51.7	38	.7	5,906	100
1976-77	2,655	46.1	3,066	53.3	37	.6	5,758	100
1978 2/	2,595	45.6	3,063	53.8	37	.6	5,695	100
1979	2,531	45.0	3,060	54.4	36	.6	5,627	100
1980	2,542	47.3	2,804	52.1	32	.6	5,379	100
1981	2,452	46.0	2,856	53.5	27	.5	5,335	100
1982	2,444	47.6	2,666	51.9	25	.5	5,136	100
1983	2,308	46.6	2,553	51.5	3/ 95	1.9	4,955	100
1984	2,317	47.9	2,397	49.5	128	2.6	4,842	100
1985	2,214	46.3	2,398	50.2	169	3.5	4,781	100
1986	2,140	46.5	2,310	50.2	150	3.3	4,600	100
1987	2,026	45.6	2,282	51.4	132	3.0	4,440	100
1988	1,912	45.6	2,142	51.1	141	3.4	4,195	100
1989 4/	1,856	44.9	2,035	49.2	243	5.9	4,134	100
1990	1,882	45.7	2,006	48.7	232	5.6	4,119	100

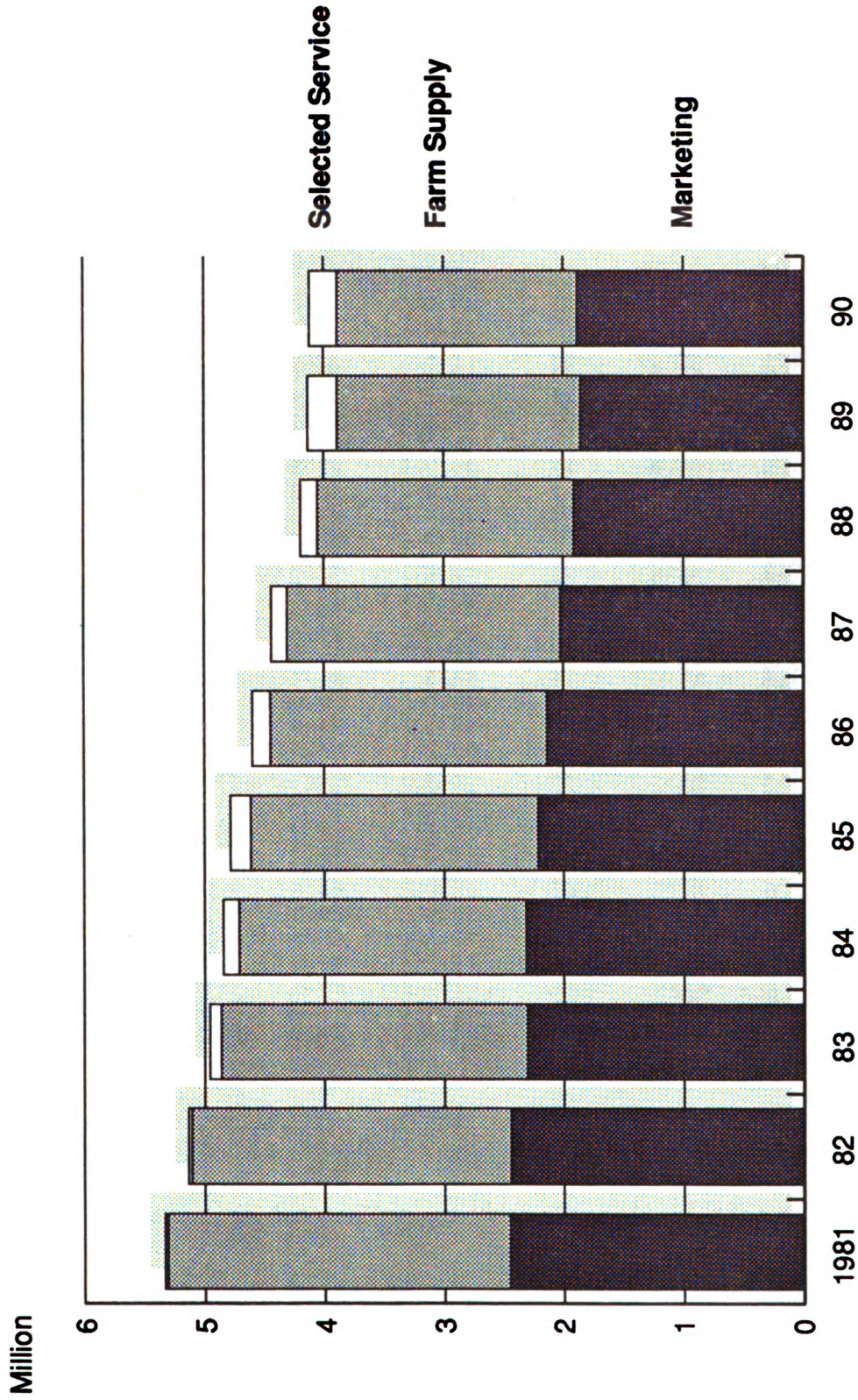
1/ For years before 1950-51, see Cooperative Historical Statistics, CIR 1, Section 26, USDA, ACS, Wash., DC, Revised October 1987.

2/ Previously, data for farmer cooperatives were reported on a fiscal year basis. Beginning in 1978, data were included for the calendar year. Data for 1978 were estimated.

3/ Memberships were up significantly due to inclusion of artificial insemination cooperatives in the service category.

4/ Cotton ginning cooperatives included as service cooperatives. In previous years, they were classified as marketing cooperatives.

Figure 4 — Memberships in Farmer Cooperatives



Cotton ginning cooperatives reclassified from marketing to service cooperatives in 1989.

Table 6--Business volume of marketing, farm supply, and selected service cooperatives, selected years, 1950-90

Period 1/	Gross volume (includes inter-cooperative business)				Net volume (excludes inter-cooperative business)			
	Farm products	Farm supplies	Selected services 2/	Total	Farm products	Farm supplies	Selected services 2/	Total
<u>Billion dollars</u>								
1950-51	8.0	2.4	0.1	10.5	6.4	1.7	0.1	8.1
1955-56	9.5	3.0	.2	12.7	7.5	2.0	.2	9.8
1960-61	12.1	3.7	.3	16.2	9.6	2.5	.3	12.4
1961-62	13.0	3.9	.3	17.2	10.2	2.6	.3	13.0
1962-63	13.9	4.1	.3	18.3	10.8	2.7	.3	13.8
1963-64	14.5	4.4	.3	19.2	11.2	2.8	.3	14.4
1964-65	14.8	4.5	.3	19.6	11.5	2.9	.3	14.7
1965-66	15.5	4.8	.3	20.6	12.2	3.1	.3	15.6
1966-67	16.3	5.3	.3	21.9	12.9	3.3	.3	16.6
1967-68	16.6	5.6	.3	22.4	13.2	3.5	.3	17.0
1968-69	16.8	5.6	.4	22.8	13.4	3.6	.4	17.4
1969-70	18.4	6.0	.4	24.8	14.8	3.9	.4	19.1
1970-71	20.1	6.7	.4	27.3	15.8	4.3	.4	20.6
1971-72	20.8	7.4	.5	28.7	16.5	4.7	.5	21.7
1972-73	25.1	8.8	.5	34.5	19.6	5.9	.5	26.0
1973-74	35.6	11.4	.7	47.7	26.9	7.8	.7	35.4
1974-75	40.3	13.4	.4	54.5	31.9	8.7	.7	41.3
1975-76	39.4	15.6	.9	55.8	29.8	9.4	.9	40.1
1976-77	40.8	17.8	.9	59.5	32.3	10.6	.9	43.6
1978 3/	45.1	18.6	.9	64.6	35.3	11.1	.9	47.3
1979	53.7	22.7	1.1	77.4	41.7	13.5	1.1	56.3
1980	63.7	27.7	1.2	92.5	48.9	16.1	1.2	66.3
1981	70.2	30.1	1.2	101.5	53.3	17.1	1.2	71.5
1982	65.6	28.1	1.4	95.1	51.4	16.4	1.4	69.2
1983	61.2	26.1	1.5	88.7	49.3	15.9	1.5	66.8
1984	67.6	27.7	1.5	96.9	54.6	17.0	1.5	73.0
1985	57.0	26.4	1.6	85.1	47.3	16.6	1.6	65.6
1986	47.6	23.6	1.8	73.0	41.5	15.1	1.8	58.4
1987	50.3	22.5	1.9	74.7	44.2	14.3	1.9	60.3
1988	56.2	24.0	1.9	82.1	49.1	15.4	1.9	66.4
1989	60.3	25.8	2.0	88.1	53.2	16.9	2.0	72.1
1990	64.1	26.3	2.3	92.7	57.8	17.1	2.3	77.3

Continued

Table 6--Business volume of marketing, farm supply, and selected service cooperatives, selected years, 1950-90 (Continued)

Period ^{1/}	Gross volume (includes inter-cooperative business)				Net volume (excludes inter-cooperative business)			
	Farm products	Farm supplies	Selected services ^{2/}	Total	Farm products	Farm supplies	Selected services ^{2/}	Total
<u>Percent</u>								
1950-51	75.9	23.2	0.9	100	78.1	20.7	1.2	100
1955-56	74.9	23.4	1.7	100	76.8	21.0	2.2	100
1960-61	75.0	23.1	1.9	100	77.6	19.9	2.5	100
1961-62	75.5	22.7	1.8	100	78.0	19.7	2.3	100
1962-63	75.7	22.6	1.7	100	78.3	19.5	2.2	100
1963-64	75.5	22.9	1.6	100	78.1	19.7	2.2	100
1964-65	75.5	22.9	1.6	100	78.1	19.8	2.1	100
1965-66	75.1	23.3	1.6	100	78.1	19.8	2.1	100
1966-67	74.3	24.3	1.4	100	77.9	20.2	1.9	100
1967-68	73.8	24.8	1.4	100	77.4	20.8	1.8	100
1968-69	73.8	24.7	1.5	100	77.2	20.8	2.0	100
1969-70	74.2	24.2	1.6	100	77.7	20.3	2.0	100
1970-71	73.8	24.7	1.5	100	76.9	21.1	2.0	100
1971-72	72.6	25.8	1.6	100	76.0	21.9	2.1	100
1972-73	72.9	25.7	1.4	100	75.3	22.8	1.9	100
1973-74	74.7	23.9	1.4	100	76.2	21.9	1.9	100
1974-75	74.0	24.6	1.4	100	77.3	20.9	1.8	100
1975-76	70.6	27.9	1.5	100	74.4	23.5	2.1	100
1976-77	68.6	29.9	1.5	100	73.7	24.2	2.1	100
1978 ^{3/}	69.7	28.8	1.5	100	74.6	23.4	2.0	100
1979	69.3	29.3	1.4	100	74.1	24.0	1.9	100
1980	68.8	29.9	1.3	100	73.8	24.4	1.8	100
1981	69.1	29.7	1.2	100	74.5	23.8	1.7	100
1982	69.0	29.5	1.5	100	74.3	23.7	2.0	100
1983	69.0	29.4	1.6	100	73.9	23.9	2.2	100
1984	69.8	28.6	1.6	100	74.7	23.2	2.1	100
1985	67.0	31.1	1.9	100	72.1	25.4	2.5	100
1986	65.2	32.4	2.4	100	71.1	25.9	3.0	100
1987	67.3	30.2	2.5	100	73.2	23.7	3.1	100
1988	68.4	29.2	2.4	100	73.9	23.2	2.9	100
1989	68.4	29.3	2.3	100	73.8	23.4	2.8	100
1990	69.1	28.4	2.5	100	74.9	22.1	3.0	100

^{1/} For years prior to 1950-51, see Cooperative Historical Statistics, CIR 1, Section 26, USDA, ACS, Wash., DC, Revised October 1987. Data for prior years are not entirely comparable due to revisions in statistical procedures in 1950-51.

^{2/} Services related to marketing or supply purchasing but not included in the volumes reported for these activities.

^{3/} Previously, data for farmer cooperatives were reported on a fiscal year basis. Beginning in 1978, data were included for the calendar year. Data for 1978 were estimated.

Total net business volume of farmer cooperatives was \$77.3 billion. This amount included \$57.8 billion for farm products marketed, \$17.1 billion for farm supplies purchased, and \$2.3 billion for services performed. The total net figure of \$77.3 billion, which excludes intercooperative business (the difference between gross and net business volumes), represented an increase of 7.1 percent from \$72.1 billion in 1989. However, discounting for price changes, business volume increased only 4.0 percent. 6/

Intercooperative business decreased from \$15.9 billion to \$15.4 billion. Gross and net volumes of business for marketing, purchasing, and related service activities are shown in table 6 for selected years from fiscal 1951 through calendar 1990.

Gross volume of farm products marketed by cooperatives increased from \$60.3 billion in 1989 to \$64.1 billion in 1990, an increase of 6.3 percent. The net volume of farm products marketed was \$57.8 billion and accounted for 74.9 percent of the total net volume of cooperatives. The net marketing volume represented an increase of 8.6 percent from \$53.2 billion. The increase resulted primarily from unusually high milk prices during high production months and higher prices for livestock marketed by cooperatives. Production of food and feed grains was also up in 1990.

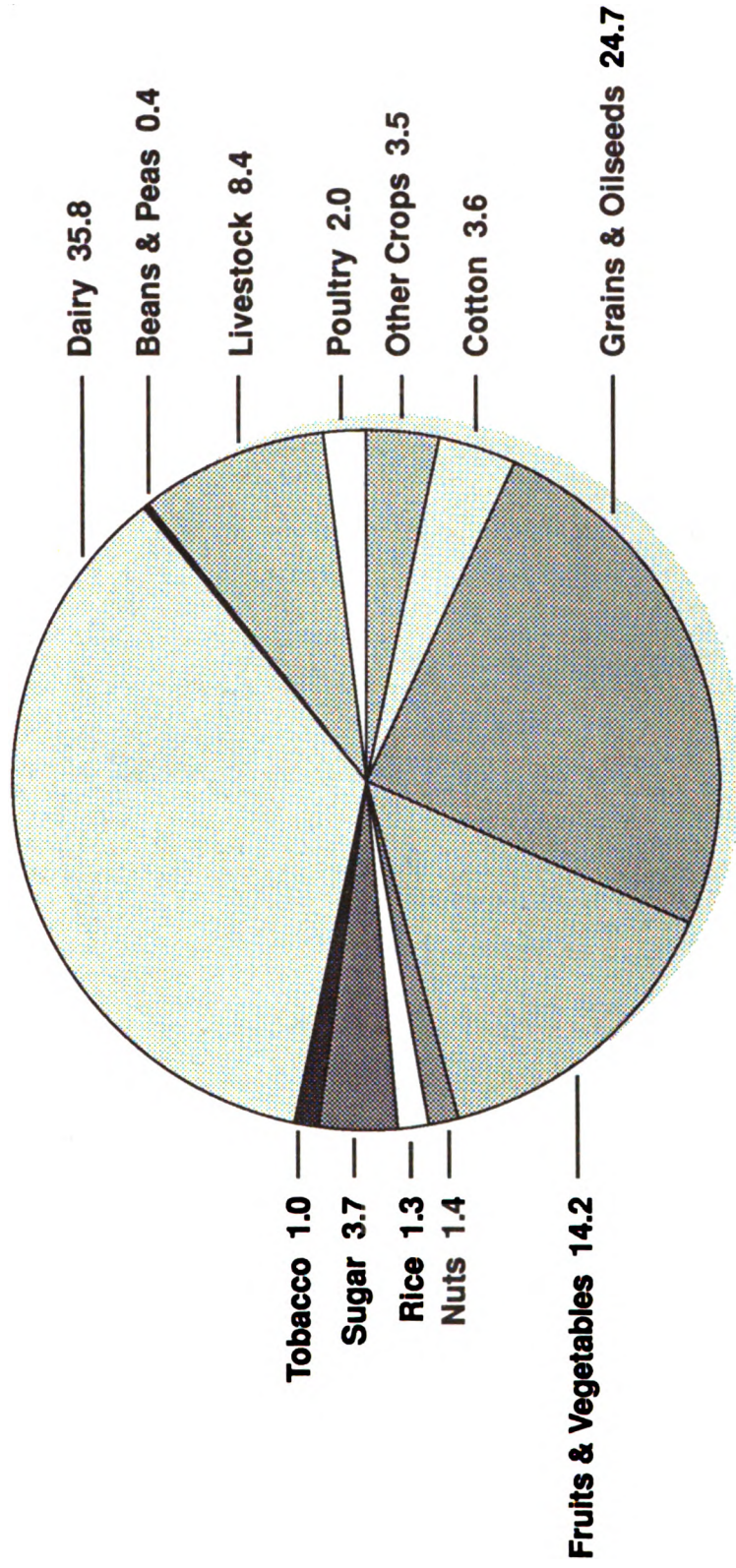
Figure 5 illustrates the leading products marketed by cooperatives based on net marketing business volume. Dairy led with 35.8 percent of total net marketing volume, followed by grains and oilseeds (excluding cottonseed) with 24.7 percent. Fruits and vegetables ranked third with 14.2 percent of total net marketing volume.

Gross volume of all farm supplies handled by cooperatives was \$26.3 billion, a 1.6-percent increase from \$25.8 billion. The net farm supply volume of \$17.1 billion accounted for 22.1 percent of the total net business volume, a 1.1-percent increase from \$16.9 billion. Lower prices for feed and fertilizer were contributing factors to the relatively small percentage increase. Sales of feed, fertilizer, petroleum, and seed were all down. Sales of farm chemicals and other supplies were up.

As shown in figure 6, leading farm supplies handled by cooperatives in terms of net business volume were petroleum, with 27.6 percent of the total, followed by feed and fertilizer at 24 and 18.9 percent, respectively.

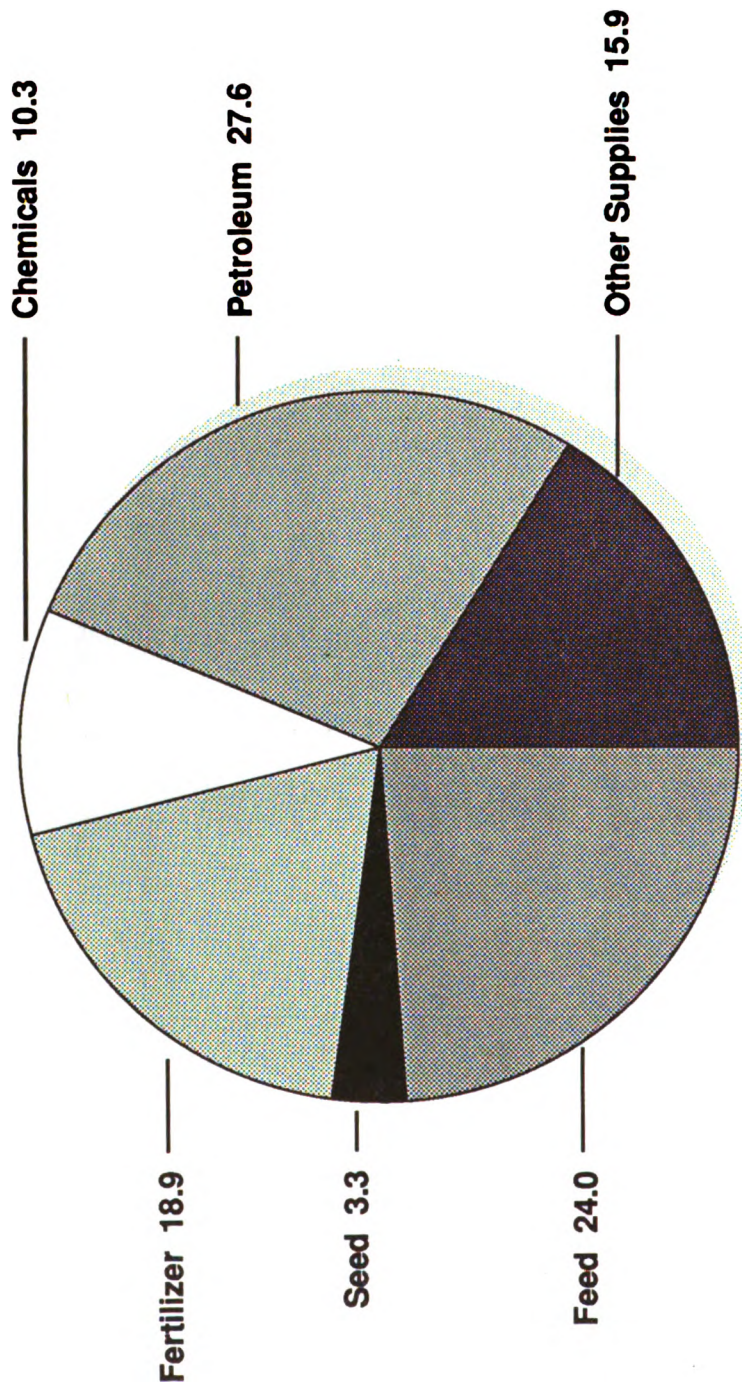
6/ Deflated cooperative business volume was \$75 billion--a 4.0-percent increase. This value was derived by deflating farm products marketed by indices of producer prices and processed foods and feeds and farm supplies (inputs) and service income by the index of prices paid by farmers for production items excluding interest, taxes, and wages.

Figure 5 — Relative Importance of Major Farm Products Marketed by Cooperatives, 1990



Percent based on a net marketing business volume of \$57.8 billion.

Figure 6 — Relative Importance of Major Farm Supplies Handled by Cooperatives, 1990



Percent based on a net farm supply business volume of \$17.1 billion.

Receipts for services performed by marketing, farm supply, and selected service cooperatives amounted to \$2.3 billion, up 18.9 percent. Service receipts represented 3.0 percent of total net business volume (table 7).

The 1989 estimated volume of farm products marketed, farm supplies sold, and services provided by cooperatives is shown by State in table 8.

Net Income

Total net income, taking losses into account, for all cooperatives in 1990 was \$1,447 million, including intercooperative dividends and refunds (fig. 7). No net income is included for those cooperatives operating strictly on a pooling basis. As shown in table 9, net income was down 21.8 percent from the previous year's total of \$1,850.6 million. Decreased earnings of farm supply and dairy cooperatives were major contributing factors. Net income or patronage refunds from other cooperatives of \$330 was up 7.1 percent from \$308.1 million.

Marketing cooperatives' net income of \$823.3 million was down 12.7 percent from the \$942.8 million generated in 1989 (table 10). Cooperatives primarily handling grains and oilseeds, milk and milk products, and fruits and vegetables accounted for the largest percent of marketing cooperatives' net income (77.7 percent). Grain cooperatives accounted for 39.9 percent; dairy, 19.6 percent; and fruit and vegetable cooperatives, 18.3 percent.

Farm supply cooperatives, for the fourth year in a row, experienced the greatest change in net income, registering a \$525.6-million net compared with \$781.2 million in 1989. Income from farm supply cooperatives' operations totaled \$373.7 million compared with \$623 million in 1989. Income from other cooperatives of \$151.9 million also was down from \$158.2 million.

Farmer cooperatives' net income from operations in 1990 totaled \$1,117 million--a 27.6-percent decrease from \$1,542.6 million. More than 22.8 percent, or \$330 million, of total net income was generated from other cooperatives. Marketing cooperatives' net income from other cooperatives increased from 13.9 percent to 19.9 percent of the total. Grain cooperatives' net income from other cooperatives amounted to \$101.5 million compared with \$89.2 million in 1989.

Income before losses equaled \$1,567.8 million. Losses from an estimated 857 cooperatives totaled \$120.8 million compared with \$82.4 million in 1989, \$164.7 million in 1988, and nearly \$87 million in 1987. Losses for 1988 would have been less than 1987 had it not been for the one-time loss writeoff from the sale of a refinery by two regional cooperatives.

Table 7--Cooperative business volume by commodity, 1990 1/

Commodity	Gross volume (includes inter- cooperative business)		Net volume (excludes inter- cooperative business)	
	<u>Mil. dol.</u>	<u>Pct.</u>	<u>Mil. dol.</u>	<u>Pct.</u>
Products marketed:				
Beans and peas (dry edible)	216.3	0.2	213.1	0.3
Cotton	2,236.7	2.4	2,087.5	2.7
Dairy	21,930.1	23.7	20,719.1	26.8
Fruits and vegetables	8,846.6	9.5	8,241.4	10.7
Grain and oilseeds excluding cottonseed	18,241.2	19.7	14,259.2	18.5
Livestock	4,863.3	5.2	4,861.4	6.3
Nuts	802.8	0.9	800.8	1.0
Poultry	1,323.7	1.4	1,130.4	1.5
Rice	734.2	0.8	733.1	1.0
Sugar	2,176.8	2.3	2,124.4	2.8
Tobacco	597.0	0.6	597.0	.8
Wool and mohair	35.1	2/	19.8	2/
Miscellaneous <u>3/</u>	2,058.6	2.2	2,043.4	2.6
Total farm products	64,062.4	69.1	57,830.6	74.9
Supplies purchased:				
Farm chemicals	2,773.8	3.0	1,767.9	2.3
Feed	5,815.3	6.3	4,102.9	5.3
Fertilizer	5,638.6	6.1	3,230.4	4.2
Petroleum	7,753.2	8.4	4,715.2	6.1
Seed	729.9	.8	562.0	.7
Other supplies <u>4/</u>	3,546.9	3.8	2,710.2	3.5
Total farm supplies	26,257.7	28.3	17,088.4	22.1
Services provided:				
Trucking, cotton ginning, storage, grinding, locker plants, misc.	<u>5/</u> 2,347.3	2.5	<u>5/</u> 2,347.3	3.0
Total business	92,667.4	100.0	77,266.4	100.0

Footnotes to Table 7

1/ Totals may not add due to rounding.

2/ Less than .05 percent.

3/ Includes coffee, pond raised fish, forest products, hay, hops, seed marketed for growers, nursery stock, 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.

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

5/ Charges for services related to marketing or purchasing but not included in the volume reported for those activities plus other income.

Table 8--Cooperative business volume 1/ by commodity and major State, 1989 2/

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
<u>1,000 dollars</u>			<u>1,000 dollars</u>		
PRODUCTS MARKETED:			DAIRY (CONTINUED)		
BEANS AND PEAS, DRY EDIBLE			Nebraska	284,071	283,474
California	53,215	51,330	New Jersey	19,986	19,633
Colorado	16,156	16,156	New York	962,100	849,938
Idaho	14,092	13,442	North Carolina	221,948	216,246
Michigan	35,854	35,646	North Dakota	135,167	121,727
North Dakota	3,230	3,225	Ohio	493,639	480,124
Washington	12,443	12,162	Oregon	229,084	217,999
Other States	<u>18,046</u>	<u>17,589</u>	Pennsylvania	983,973	952,652
United States	153,036	149,550	South Carolina	63,336	62,131
COTTON			South Dakota	289,352	236,547
Alabama	16,610	16,610	Tennessee	178,282	172,766
Arizona	221,616	221,616	Texas	607,516	587,162
Arkansas	120,783	120,783	Utah	143,226	136,128
California	618,189	548,878	Vermont	328,875	310,624
Louisiana	75,999	75,999	Virginia	296,831	289,056
Mississippi	292,017	292,017	Washington	536,602	536,339
New Mexico	33,551	33,551	West Virginia	51,962	50,420
North Carolina	14,065	14,065	Wisconsin	4,154,931	3,897,734
Oklahoma	83,042	69,409	Other States	<u>737,527</u>	<u>702,151</u>
Tennessee	11,681	11,681	United States	19,850,349	18,339,045
Texas	661,296	525,052	FRUITS AND VEGETABLES		
Other States	<u>77,557</u>	<u>59,633</u>	Arizona	120,141	120,141
United States	2,226,406	1,989,293	Arkansas	9,975	9,549
DAIRY			California	3,277,924	3,277,924
California	1,959,019	1,785,033	Colorado	44,598	44,598
Colorado	221,229	210,471	Florida	1,312,397	1,312,397
Delaware	20,417	19,450	Georgia	50,195	27,864
Florida	376,694	348,184	Hawaii	17,822	17,822
Georgia	133,907	129,137	Illinois	4,053	4,053
Idaho	261,398	240,789	Indiana	47,220	28,653
Illinois	674,819	469,855	Iowa	21,242	11,115
Indiana	339,720	325,317	Kentucky	874	874
Iowa	685,529	632,652	Maine	21,946	21,946
Kansas	239,744	236,160	Massachusetts	333,079	333,079
Kentucky	301,333	282,595	Michigan	346,306	262,287
Louisiana	172,404	171,363	Minnesota	9,135	9,135
Maryland	289,034	277,951	New Jersey	157,178	157,178
Massachusetts	168,262	157,757	New York	223,765	177,502
Michigan	578,494	575,283	North Carolina	11,766	11,766
Minnesota	1,898,784	1,582,063	Ohio	21,658	21,019
Mississippi	83,265	80,944	Oklahoma	1,301	1,301
Missouri	700,931	664,272	Oregon	431,686	416,422
Montana	26,959	26,920	Pennsylvania	333,831	297,870
			South Carolina	16,923	16,923
			Tennessee	37	37
			Texas	15,989	15,989

Continued

Table 8--Cooperative business volume 1/ by commodity and major State, 1989 2/
(Continued)

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
	<u>1,000 dollars</u>			<u>1,000 dollars</u>	
FRUITS AND VEGETABLES (CONTINUED)			LIVESTOCK		
Virginia	2,819	2,819	Alabama	12,752	12,752
Washington	785,536	731,445	Arkansas	4,123	4,123
Wisconsin	278,068	278,068	Colorado	81,773	81,773
Other States	<u>278,225</u>	<u>278,225</u>	Idaho	52,395	52,395
United States	8,175,689	7,888,001	Illinois	469,525	469,525
			Indiana	138,247	138,247
GRAINS AND OILSEEDS EXCLUDING COTTONSEED			Iowa	603,635	603,635
Alabama	72,800	43,939	Kansas	72,182	72,182
Arkansas	166,443	166,443	Kentucky	47,862	47,862
California	28,948	28,948	Michigan	449,757	449,757
Colorado	162,288	162,111	Minnesota	328,810	328,810
Idaho	70,163	70,163	Mississippi	36,350	36,350
Illinois	1,778,867	1,663,349	Missouri	229,291	229,291
Indiana	1,007,197	682,087	Montana	4,604	4,604
Iowa	2,539,626	2,437,114	Nebraska	279,517	279,517
Kansas	1,098,197	1,060,917	New York	58,918	58,918
Kentucky	102,048	38,440	North Carolina	7,895	7,895
Louisiana	34,423	34,423	North Dakota	18,873	18,873
Maryland	112,433	34,689	Ohio	282,831	282,831
Michigan	174,319	138,034	Pennsylvania	162	162
Minnesota	2,494,224	1,693,564	South Dakota	28,017	28,017
Mississippi	127,730	127,730	Tennessee	6,213	6,213
Missouri	354,205	333,957	Texas	86,700	86,700
Montana	258,323	145,779	Virginia	7,556	7,556
Nebraska	1,132,028	1,094,748	West Virginia	2,517	2,517
New York	27,061	27,061	Wisconsin	500,615	500,615
North Dakota	1,437,736	1,097,931	Other States	<u>235,114</u>	<u>235,114</u>
Ohio	1,376,919	887,804	United States	4,046,234	4,046,234
Oklahoma	1,560,841	372,716			
Oregon	324,747	194,267	NUTS		
Pennsylvania	29,180	29,180	California	640,636	640,636
South Dakota	777,635	552,662	Hawaii	6,678	6,678
Tennessee	2,510	2,510	Oregon	21,384	21,384
Texas	381,183	381,183	Texas	5,524	5,524
Utah	12,691	11,517	Other States	<u>160,657</u>	<u>160,657</u>
Virginia	68,377	68,377	United States	834,878	834,878
Washington	638,460	489,340			
Wisconsin	56,052	56,052			
Wyoming	1,744	1,744			
Other States	<u>116,381</u>	<u>60,407</u>			
United States	18,525,778	14,189,186			

Table 8--Cooperative business volume ^{1/} by commodity and major State, 1989 ^{2/}
(Continued)

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
	<u>1,000 dollars</u>			<u>1,000 dollars</u>	
POULTRY			WOOL AND MOHAIR (CONTINUED)		
California	48,426	48,426	North Dakota	72	72
Minnesota	143,635	67,209	Pennsylvania	484	484
Utah	146,791	43,744	Utah	5,062	5,062
Other States	<u>1,069,755</u>	<u>1,034,547</u>	Virginia	393	393
United States	1,408,606	1,193,926	Washington	105	105
			West Virginia	356	356
			Wyoming	1,783	1,783
			Other States	<u>46,855</u>	<u>22,085</u>
			United States	58,195	33,425
RICE			MISCELLANEOUS MARKETING ^{4/}		
Arkansas	394,907	394,907	California	158,701	158,701
California	233,841	233,841	Florida	8,076	8,076
Louisiana	19,442	19,442	Hawaii	4,005	4,005
Mississippi	7,659	7,659	Idaho	3,785	3,785
Texas	84,720	84,720	Illinois	14,740	14,740
Other States	<u>24,277</u>	<u>24,277</u>	Iowa	175,681	160,481
United States	764,845	764,845	Kansas	725	725
			Michigan	7,892	7,892
			Minnesota	70,535	65,215
			Nebraska	3,604	3,604
			Ohio	5,911	5,911
			Oregon	38,942	38,942
			Texas	3,193	3,193
			Washington	5,130	5,130
			Other States	<u>1,188,909</u>	<u>950,731</u>
			United States	1,689,826	1,431,130
SUGAR			TOTAL FARM PRODUCTS MARKETED		
California	742,187	739,507	Alabama	579,647	549,596
Florida	172,151	172,151	Arizona	565,620	562,572
Idaho	106,537	62,148	Arkansas	989,612	980,932
Louisiana	123,783	123,783	California	7,249,017	7,003,834
Minnesota	405,925	354,249	Colorado	552,819	531,928
Montana	15,218	15,218	Connecticut	86,250	75,245
Nebraska	6,985	5,741	Delaware	41,242	40,276
North Dakota	191,144	166,126	Florida	2,012,819	1,984,310
Texas	47,946	47,946	Georgia	654,663	627,562
Wyoming	4,899	4,899	Hawaii	583,332	580,653
Other States	<u>96,237</u>	<u>85,038</u>	Idaho	721,207	655,560
United States	1,913,013	1,776,806	Illinois	2,942,063	2,621,582
TOBACCO					
Kentucky	156,312	156,312			
North Carolina	293,076	293,076			
Tennessee	33,802	33,802			
Virginia	55,551	55,551			
Other States	<u>72,140</u>	<u>72,140</u>			
United States	610,880	610,880			
WOOL AND MOHAIR					
Idaho	1,643	1,643			
Montana	1,442	1,442			

Continued

Table 8--Cooperative business volume 1/ by commodity and major State, 1989 2/
(Continued)

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
	<u>1,000 dollars</u>			<u>1,000 dollars</u>	
TOTAL FARM PRODUCTS MARKETED			<u>FARM SUPPLIES PROVIDED:</u>		
(CONTINUED)			BUILDING MATERIALS		
Indiana	1,539,174	1,181,094	Alabama	8,323	5,790
Iowa	4,059,415	3,878,700	Arizona	8,069	7,466
Kansas	1,418,866	1,376,758	Arkansas	11,829	5,116
Kentucky	614,266	531,919	California	9,682	3,803
Louisiana	426,961	425,913	Colorado	4,793	3,865
Maine	44,241	41,924	Connecticut	3,014	2,064
Maryland	403,894	315,067	Delaware	1,786	1,404
Massachusetts	508,216	497,711	Florida	5,097	5,046
Michigan	1,593,071	1,469,349	Georgia	8,935	7,692
Minnesota	5,360,695	4,101,462	Hawaii	399	399
Mississippi	548,482	546,136	Idaho	5,362	5,310
Missouri	1,515,511	1,425,397	Illinois	22,751	14,410
Montana	312,165	198,785	Indiana	24,808	21,362
Nebraska	1,740,654	1,684,358	Iowa	64,724	57,825
Nevada	12,320	11,831	Kansas	17,134	13,794
New Hampshire	26,769	23,294	Kentucky	11,131	9,424
New Jersey	191,309	190,955	Louisiana	4,697	1,838
New Mexico	41,097	41,097	Maine	3,817	2,867
New York	1,287,944	1,129,519	Maryland	6,527	5,333
North Carolina	656,028	650,327	Massachusetts	3,328	2,536
North Dakota	1,865,093	1,460,030	Michigan	20,041	17,820
Ohio	2,219,069	1,699,458	Minnesota	25,429	20,850
Oklahoma	1,875,342	666,417	Mississippi	6,651	3,929
Oregon	1,139,725	964,863	Missouri	26,634	19,214
Pennsylvania	1,349,408	1,282,126	Montana	4,215	3,674
South Carolina	116,319	115,114	Nebraska	13,164	9,761
South Dakota	1,128,919	841,820	New Jersey	4,690	3,260
Tennessee	232,530	227,014	New Mexico	75	45
Texas	1,894,078	1,737,480	New York	21,342	14,096
Utah	372,700	261,381	North Carolina	7,641	4,546
Vermont	333,304	315,053	North Dakota	26,347	24,758
Virginia	457,788	450,013	Ohio	19,120	12,467
Washington	1,979,816	1,776,061	Oklahoma	6,130	4,884
West Virginia	56,195	54,652	Oregon	5,699	5,130
Wisconsin	5,017,438	4,760,242	Pennsylvania	16,121	10,383
Wyoming	31,103	30,356	South Dakota	12,902	11,346
Other States	8,911	7,753	Tennessee	33,994	18,172
Foreign 3/	900,624	661,717	Texas	7,040	5,639
United States	60,257,736	53,247,198			

Continued

Table 8--Cooperative business volume ^{1/} by commodity and major State, 1989 ^{2/}
(Continued)

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
	<u>1,000 dollars</u>			<u>1,000 dollars</u>	
BUILDING MATERIALS (CONTINUED)			CONTAINERS AND PACKAGING SUPPLIES (CONTINUED)		
Utah	541	537	Wisconsin	4,507	2,703
Virginia	22,860	17,965	Other States	<u>13,622</u>	<u>4,047</u>
Washington	3,520	2,085	United States	317,466	146,936
West Virginia	4,440	3,880			
Wisconsin	9,093	6,271	FARM CHEMICALS		
Wyoming	1,105	998	Alabama	53,983	27,357
Other States	5,499	3,902	Arizona	486	277
Foreign ^{3/}	<u>3,397</u>	<u>2,060</u>	Arkansas	86,794	46,666
United States	533,898	405,017	California	41,702	29,221
			Colorado	25,050	9,687
CONTAINERS AND PACKAGING SUPPLIES			Connecticut	4,862	3,138
Alabama	11,363	11,194	Delaware	3,742	3,085
Arkansas	2,432	2,432	Florida	14,261	13,499
California	54,151	5,509	Georgia	25,411	22,743
Colorado	1,114	1,114	Hawaii	1,129	1,129
Florida	127,167	52,912	Idaho	17,347	12,005
Georgia	13,281	10,960	Illinois	246,320	159,810
Hawaii	1,155	905	Indiana	109,174	73,581
Idaho	223	223	Iowa	329,266	204,607
Illinois	2,311	1,891	Kansas	101,472	46,215
Iowa	1,134	1,134	Kentucky	21,014	17,875
Kansas	264	139	Louisiana	53,089	27,119
Kentucky	279	279	Maine	7,958	6,234
Louisiana	289	245	Maryland	11,725	9,685
Massachusetts	252	252	Massachusetts	4,428	2,991
Michigan	2,609	2,511	Michigan	26,920	18,860
Minnesota	1,715	1,707	Minnesota	243,272	137,554
Mississippi	1,189	1,189	Mississippi	53,050	29,490
Montana	271	271	Missouri	77,845	50,917
New Jersey	1,653	1,189	Montana	20,922	8,750
New Mexico	421	421	Nebraska	137,078	75,941
New York	3,200	2,039	New Jersey	8,181	5,530
North Carolina	3,403	2,662	New Mexico	835	351
North Dakota	960	960	New York	50,975	30,558
Ohio	2,783	1,792	North Carolina	9,550	5,559
Oklahoma	1,654	1,654	North Dakota	77,791	43,038
Oregon	787	787	Ohio	89,601	59,999
Pennsylvania	3,710	2,093	Oklahoma	29,745	9,121
Tennessee	526	372	Oregon	29,768	15,654
Texas	32,966	24,231	Pennsylvania	26,888	18,464
Utah	43	43	South Dakota	68,790	35,124
Virginia	195	186	Tennessee	69,714	34,686
Washington	25,836	6,890			

Continued

Table 8--Cooperative business volume ^{1/} by commodity and major State, 1989 ^{2/}
(Continued)

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
	<u>1,000 dollars</u>		<u>1,000 dollars</u>		
FARM CHEMICALS (CONTINUED)			FARM MACHINERY AND EQUIPMENT (CONTINUED)		
Texas	60,721	28,899	Pennsylvania	22,038	15,706
Utah	6,770	6,706	South Dakota	8,461	6,657
Virginia	22,240	16,785	Tennessee	18,661	8,227
Washington	38,629	18,381	Texas	6,854	3,899
West Virginia	4,442	3,518	Utah	119	115
Wisconsin	101,208	45,449	Virginia	10,072	8,120
Wyoming	2,723	948	Washington	12,796	11,142
Other States	10,668	7,679	West Virginia	2,951	2,697
Foreign ^{3/}	<u>13,416</u>	<u>3,237</u>	Wisconsin	18,758	15,432
United States	2,440,954	1,428,121	Wyoming	157	43
FARM MACHINERY AND EQUIPMENT			Other States	19,603	15,433
Alabama	6,490	5,214	Foreign	<u>2,098</u>	<u>1,402</u>
Arkansas	19,223	8,750	United States	427,065	307,834
California	13,021	8,403	FEED		
Colorado	2,182	1,194	Alabama	166,314	146,828
Delaware	1,401	1,119	Arizona	14,738	13,172
Florida	4,804	4,756	Arkansas	84,936	46,812
Georgia	6,677	6,654	California	179,157	149,000
Hawaii	277	277	Colorado	72,352	49,797
Idaho	5,585	5,303	Connecticut	58,560	45,898
Illinois	22,838	12,288	Delaware	11,693	8,217
Indiana	6,895	5,415	Florida	116,377	110,966
Iowa	20,861	12,792	Georgia	178,675	173,999
Kansas	12,858	9,305	Hawaii	4,472	4,472
Kentucky	7,922	7,131	Idaho	32,134	18,807
Louisiana	8,141	3,912	Illinois	264,382	181,887
Maryland	4,969	4,318	Indiana	169,912	102,494
Massachusetts	3,594	2,698	Iowa	798,883	534,366
Michigan	3,257	3,249	Kansas	245,248	156,211
Minnesota	30,684	19,297	Kentucky	56,803	45,160
Mississippi	3,942	2,722	Louisiana	40,334	26,009
Missouri	7,215	5,961	Maine	34,436	21,774
Montana	2,057	1,441	Maryland	44,300	35,866
Nebraska	11,541	7,860	Massachusetts	46,229	35,677
New Jersey	6,556	4,939	Michigan	87,113	72,044
New Mexico	1,005	220	Minnesota	495,530	298,092
New York	34,095	25,503	Mississippi	90,670	76,194
North Carolina	5,621	3,215	Missouri	214,383	152,295
North Dakota	16,449	14,637	Montana	37,407	9,439
Ohio	10,279	8,378	Nebraska	217,329	127,133
Oklahoma	4,785	3,459	Nevada	6,735	5,217
Oregon	19,272	18,551			

Continued

Table 8--Cooperative business volume 1/ by commodity and major State, 1989 2/
(Continued)

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
	<u>1,000 dollars</u>			<u>1,000 dollars</u>	
FEED (CONTINUED)			FERTILIZER (CONTINUED)		
New Jersey	45,882	26,795	Massachusetts	7,036	4,518
New Mexico	7,915	6,516	Michigan	58,511	44,478
New York	263,719	180,770	Minnesota	509,674	269,628
North Carolina	66,973	59,972	Mississippi	86,281	60,490
North Dakota	99,586	40,100	Missouri	217,705	158,343
Ohio	176,877	136,384	Montana	48,819	31,532
Oklahoma	83,434	51,779	Nebraska	251,192	163,154
Oregon	58,814	53,676	New Jersey	12,443	7,819
Pennsylvania	175,792	114,491	New Mexico	1,896	1,193
South Dakota	193,637	103,956	New York	68,220	42,192
Tennessee	215,757	112,892	North Carolina	22,492	17,946
Texas	123,963	86,094	North Dakota	197,900	115,007
Utah	61,035	60,252	Ohio	203,194	127,345
Vermont	45,209	30,437	Oklahoma	101,731	71,163
Virginia	103,036	88,231	Oregon	50,308	30,474
Washington	33,995	32,476	Pennsylvania	40,833	26,140
West Virginia	18,853	15,440	South Carolina	12,075	11,018
Wisconsin	357,328	233,114	South Dakota	123,992	75,928
Wyoming	6,620	4,014	Tennessee	196,306	99,413
Other States	99,023	83,393	Texas	174,337	101,259
Foreign 3/	77,559	55,471	Utah	12,713	12,619
United States	6,084,109	4,224,079	Virginia	61,262	54,122
			Washington	56,262	35,039
FERTILIZER			West Virginia	13,433	11,225
Alabama	127,139	84,972	Wisconsin	275,090	147,347
Arizona	1,175	187	Wyoming	4,539	1,964
Arkansas	137,672	77,286	Other States	13,965	8,790
California	87,758	73,429	Foreign 3/	162,717	35,381
Colorado	63,331	41,038	United States	5,634,752	3,337,232
Connecticut	7,133	4,113			
Delaware	7,825	6,439	MEATS AND GROCERIES		
Florida	153,976	50,081	Arkansas	751	751
Georgia	61,803	50,899	California	165	165
Hawaii	3,005	3,005	Colorado	174	174
Idaho	36,200	29,039	Idaho	20	20
Illinois	589,878	327,091	Illinois	373	373
Indiana	304,580	170,113	Indiana	628	628
Iowa	598,115	359,658	Iowa	2,898	2,874
Kansas	243,309	162,488	Kansas	3,552	3,552
Kentucky	79,904	52,620	Kentucky	613	428
Louisiana	109,331	49,159	Maryland	469	355
Maine	9,418	6,398	Michigan	7,417	7,417
Maryland	28,276	23,688	Minnesota	12,702	12,670

Continued

Table 8--Cooperative business volume 1/ by commodity and major State, 1989 2/
(Continued)

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
	<u>1,000 dollars</u>			<u>1,000 dollars</u>	
MEATS AND GROCERIES (CONTINUED)			PETROLEUM (CONTINUED)		
Missouri	4,534	4,534	Ohio	152,900	111,881
Montana	1,910	1,910	Oklahoma	116,749	65,677
Nebraska	4,496	4,496	Oregon	72,228	43,365
New York	2,699	2,699	Pennsylvania	306,463	279,623
North Dakota	3,263	3,263	South Dakota	178,774	148,267
Ohio	5,212	5,212	Tennessee	59,640	32,529
Pennsylvania	3,636	3,636	Texas	127,402	79,644
South Dakota	616	616	Utah	4,300	4,167
Texas	679	679	Virginia	118,164	100,978
Virginia	3,972	3,774	Washington	99,094	52,923
Washington	588	588	West Virginia	23,962	20,858
Wisconsin	21,345	21,345	Wisconsin	440,958	281,836
Other States	<u>2,716</u>	<u>2,339</u>	Wyoming	39,025	21,573
United States	85,428	84,500	Other States	124,687	117,670
			Foreign 3/	<u>291,194</u>	<u>200,089</u>
			United States	7,395,049	4,768,719
PETROLEUM			SEED		
Alabama	5,562	4,953	Alabama	37,572	16,544
Arkansas	102,423	56,166	Arizona	700	700
California	24,595	6,902	Arkansas	18,673	10,685
Colorado	108,795	77,133	California	18,038	18,038
Delaware	31,165	27,047	Colorado	2,785	2,785
Florida	4,107	2,577	Connecticut	4,354	3,607
Idaho	78,782	50,717	Delaware	2,813	2,348
Illinois	463,787	254,987	Florida	3,808	3,724
Indiana	277,842	205,185	Georgia	7,864	7,612
Iowa	673,642	366,511	Hawaii	33	33
Kansas	797,390	218,147	Idaho	8,661	7,690
Kentucky	94,382	78,048	Illinois	63,884	43,493
Louisiana	14,229	7,013	Indiana	25,149	15,789
Maine	50,883	49,433	Iowa	45,887	33,067
Maryland	99,616	85,023	Kansas	11,390	11,390
Massachusetts	40,001	37,817	Kentucky	17,256	14,691
Michigan	65,003	52,390	Louisiana	26,152	15,517
Minnesota	508,129	328,934	Maine	6,468	5,721
Mississippi	21,144	13,529	Maryland	9,447	7,747
Missouri	373,024	271,725	Massachusetts	4,054	3,432
Montana	141,894	67,783	Michigan	9,960	8,854
Nebraska	365,353	235,065	Minnesota	38,336	33,327
New Jersey	68,094	64,810	Mississippi	24,368	15,870
New Mexico	1,691	693	Missouri	37,358	24,353
New York	519,629	446,422	Montana	3,321	1,902
North Carolina	33,468	28,587			
North Dakota	274,880	170,041			

Continued

Table 8--Cooperative business volume 1/ by commodity and major State, 1989 2/
(Continued)

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
	<u>1,000 dollars</u>			<u>1,000 dollars</u>	
SEED (CONTINUED)			MISCELLANEOUS SUPPLIES 5/ (CONTINUED)		
Nebraska	9,286	7,848	Michigan	44,787	37,203
New Jersey	6,643	5,523	Minnesota	172,184	109,934
New Mexico	175	175	Mississippi	31,221	25,616
New York	27,334	23,228	Missouri	73,595	45,993
North Carolina	9,713	7,894	Montana	44,689	36,826
North Dakota	25,322	21,807	Nebraska	67,115	56,817
Ohio	42,221	29,904	Nevada	660	575
Oklahoma	5,955	5,955	New Hampshire	6,829	4,173
Oregon	10,077	9,604	New Jersey	35,315	23,347
Pennsylvania	24,521	20,912	New Mexico	658	587
South Dakota	12,532	11,586	New York	189,557	129,659
Tennessee	49,182	28,489	North Carolina	11,194	5,586
Texas	21,338	20,218	North Dakota	92,144	80,310
Utah	2,917	2,917	Ohio	38,021	32,525
Virginia	21,115	18,379	Oklahoma	30,632	27,620
Washington	14,274	12,855	Oregon	41,356	38,141
West Virginia	4,771	3,920	Pennsylvania	123,909	84,759
Wisconsin	28,208	19,880	South Carolina	938	926
Wyoming	1,024	533	South Dakota	44,226	41,821
Other States	<u>14,672</u>	<u>12,461</u>	Tennessee	85,691	54,319
United States	759,610	573,007	Texas	52,846	49,462
MISCELLANEOUS SUPPLIES 5/			Utah	18,498	18,417
Alabama	22,112	16,970	Vermont	25,233	15,864
Arizona	17,122	15,055	Virginia	76,338	54,139
Arkansas	46,383	34,418	Washington	48,409	38,507
California	57,362	44,461	West Virginia	10,541	8,961
Colorado	27,706	25,393	Wisconsin	130,748	112,952
Connecticut	20,857	12,888	Wyoming	7,508	5,712
Delaware	6,083	4,125	Other States	3,397	2,069
Florida	9,650	9,529	Foreign 3/	<u>34,330</u>	<u>20,778</u>
Georgia	11,919	11,613	United States	2,166,767	1,631,756
Hawaii	751	751	TOTAL FARM SUPPLIES		
Idaho	27,181	23,952	Alabama	438,919	319,882
Illinois	70,288	42,495	Arizona	50,230	37,804
Indiana	44,717	18,356	Arkansas	511,116	289,083
Iowa	89,053	72,235	California	485,631	338,930
Kansas	67,424	59,354	Colorado	308,282	212,180
Kentucky	25,366	20,430	Connecticut	144,340	114,742
Louisiana	23,011	17,825	Delaware	66,788	54,040
Maine	21,672	13,702	Florida	439,248	253,090
Maryland	15,927	11,633	Georgia	315,602	292,478
Massachusetts	19,617	12,976			

Continued

Table 8--Cooperative business volume 1/ by commodity and major State, 1989 2/
(Continued)

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
	<u>1,000 dollars</u>			<u>1,000 dollars</u>	
TOTAL FARM SUPPLIES (CONTINUED)			<u>SERVICES PROVIDED: 6/</u>		
Hawaii	11,416	11,166	Alabama	2,867	2,867
Idaho	211,494	153,065	Arizona	7,200	7,200
Illinois	1,746,813	1,038,725	Arkansas	38,130	38,130
Indiana	963,716	612,926	California	105,382	105,382
Iowa	2,624,463	1,645,069	Colorado	19,197	19,197
Kansas	1,500,041	680,596	Delaware	650	650
Kentucky	314,670	246,085	Florida	73,131	73,131
Louisiana	279,454	148,817	Georgia	5,483	5,483
Maine	147,023	117,425	Hawaii	2,536	2,536
Maryland	221,290	183,682	Idaho	10,636	10,636
Massachusetts	128,576	102,936	Illinois	100,959	100,959
Michigan	325,618	264,828	Indiana	32,823	32,823
Minnesota	2,037,652	1,231,992	Iowa	165,979	165,979
Mississippi	318,520	229,032	Kansas	112,362	112,362
Missouri	1,032,394	733,358	Kentucky	5,809	5,809
Montana	305,505	163,528	Louisiana	12,437	12,437
Nebraska	1,076,557	688,077	Maine	3,436	3,436
Nevada	9,113	7,061	Maryland	3,010	3,010
New Hampshire	49,585	38,752	Massachusetts	2,174	2,174
New Jersey	189,477	143,233	Michigan	29,248	29,248
New Mexico	14,670	10,201	Minnesota	182,547	182,547
New York	1,180,771	897,167	Mississippi	35,950	35,950
North Carolina	170,459	136,248	Missouri	25,735	25,735
North Dakota	814,642	513,922	Montana	5,221	5,221
Ohio	740,208	525,885	Nebraska	100,844	100,844
Oklahoma	380,836	241,332	New Jersey	4,836	4,836
Oregon	288,434	215,508	New Mexico	2,536	2,536
Pennsylvania	743,909	576,207	New York	26,083	26,083
South Carolina	62,879	60,244	North Carolina	3,467	3,467
South Dakota	643,963	435,335	North Dakota	33,989	33,989
Tennessee	729,533	389,162	Ohio	74,057	74,057
Texas	608,145	400,025	Oklahoma	52,549	52,549
Utah	106,937	105,775	Oregon	35,035	35,035
Vermont	150,182	115,088	Pennsylvania	32,689	32,689
Virginia	439,253	362,678	South Dakota	50,098	50,098
Washington	333,402	210,884	Tennessee	9,524	9,524
West Virginia	83,598	70,643	Texas	304,001	304,001
Wisconsin	1,387,242	886,330	Utah	50,543	50,543
Wyoming	62,707	35,789	Virginia	8,190	8,190
Other States	57,579	43,894	Washington	106,848	106,848
Foreign 3/	592,213	322,306	West Virginia	387	387
United States	25,845,096	16,907,203	Wisconsin	90,893	90,893

Continued

Table 8--Cooperative business volume 1/ by commodity and major State, 1989 2/
(Continued)

Major State	<u>Business volume</u>		Major State	<u>Business volume</u>	
	Gross	Net		Gross	Net
	<u>1,000 dollars</u>			<u>1,000 dollars</u>	
SERVICES PROVIDED <u>5/</u> (CONTINUED)			TOTAL (CONTINUED)		
Wyoming	1,460	1,460	Missouri	2,573,640	2,184,490
Other States	<u>3,328</u>	<u>3,328</u>	Montana	622,890	367,533
United States	1,974,259	1,974,259	Nebraska	2,918,055	2,473,279
TOTAL:			Nevada	21,442	18,899
Alabama	1,021,433	872,345	New Hampshire	76,963	62,655
Arizona	623,050	607,576	New Jersey	385,621	339,024
Arkansas	1,538,858	1,308,145	New Mexico	58,303	53,834
California	7,840,029	7,448,146	New York	2,494,798	2,052,769
Colorado	880,297	763,305	North Carolina	829,955	790,042
Connecticut	230,690	190,087	North Dakota	2,713,724	2,007,942
Delaware	108,680	94,965	Ohio	3,033,334	2,299,400
Florida	2,525,198	2,310,530	Oklahoma	2,308,728	960,298
Georgia	975,748	925,523	Oregon	1,463,194	1,215,406
Hawaii	597,284	594,355	Pennsylvania	2,126,005	1,891,022
Idaho	943,338	819,261	Rhode Island	31,525	24,942
Illinois	4,789,835	3,761,266	South Carolina	179,294	175,454
Indiana	2,535,713	1,826,843	South Dakota	1,822,980	1,327,254
Iowa	6,849,857	5,689,747	Tennessee	971,587	625,699
Kansas	3,031,269	2,169,716	Texas	2,806,224	2,441,506
Kentucky	934,745	783,813	Utah	530,181	417,699
Louisiana	718,852	587,167	Vermont	484,986	431,640
Maine	194,700	162,785	Virginia	905,231	820,881
Maryland	628,194	501,759	Washington	2,420,066	2,093,793
Massachusetts	638,966	602,821	West Virginia	140,179	125,682
Michigan	1,947,937	1,763,425	Wisconsin	6,495,574	5,737,465
Minnesota	7,580,895	5,516,001	Wyoming	95,270	67,605
Mississippi	902,952	811,118	Other States	35,915	27,654
			Foreign <u>3/</u>	<u>1,492,901</u>	<u>984,088</u>
			United States	88,077,090	72,128,659

Footnotes to Table 8

1/ Data covering operations of cooperatives whose business years ended during the 1989 calendar year. Includes independent local cooperatives, federations, centralized regional cooperatives, and cooperatives with mixed organizational structures. The volume of products marketed is allocated to the State in which they originate and the volume of farm supplies is allocated to the State in which they are sold; service volume is allocated to the State of origin when services relate to farm products marketed or to the State of destination when related to farm supplies sold.

2/ Gross business volume includes sales between cooperatives. Net business volume excludes sales between cooperatives. Major States include those where more than two cooperatives handle the commodity or farm supply or where disclosure is not a problem. Totals may not add due to rounding.

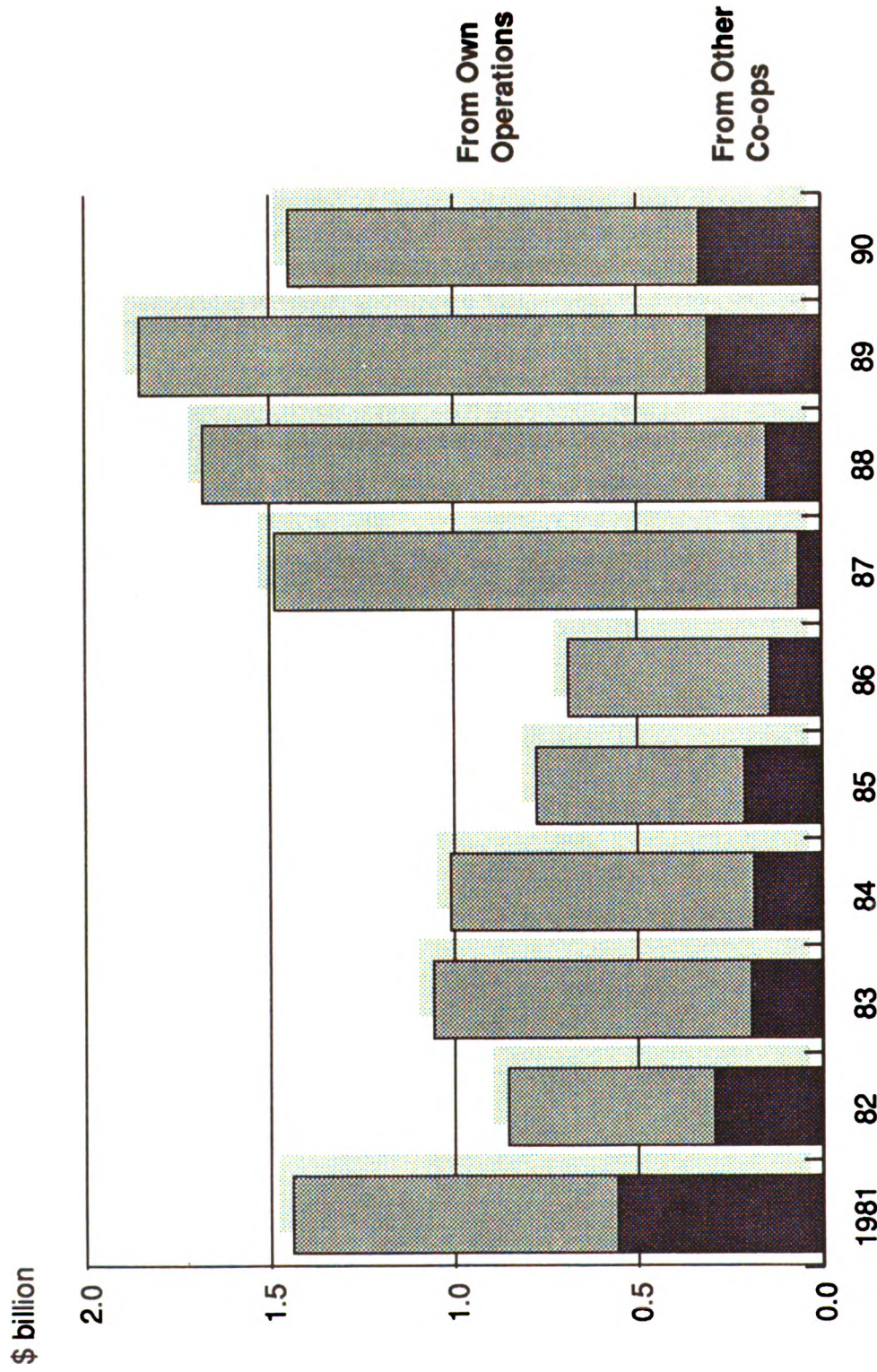
3/ Includes value of farm products imported, farm supplies exported, services related to imported farm products or exported farm supplies, sales to domestic military installations, or sales of farm products not received directly from member-patrons.

4/ Includes forest products, hay, hops, nursery stock, fish, coffee, seed marketed for growers, and other farm products not separately classified. Also includes manufactured food products and resale items marketed by cooperatives.

5/ Includes automotive supplies, hardware, chicks, and other supplies not separately classified.

6/ Income from services related to marketing and purchasing activities but not included in the volumes reported for these activities.

Figure 7 — Net Income of Farmer Cooperatives



Excludes cooperatives operating on a strictly pooling basis.

Table 9--Net income of farmer cooperatives, selected years, 1954-90 1/

Year	From other cooperatives	From own operations	Total
<u>Million dollars</u>			
1954	57	275	332
1962	62	464	525
1970	40	438	478
1976	515	1,330	1,844
1977	390	956	1,346
1979	294	1,262	1,556
1980	541	1,403	1,944
1981	558	882	1,440
1982	294	560	854
1983	193	863	1,055
1984	185	824	1,009
1985	210	566	775
1986	140	548	688
1987	63	1,423	1,486
1988	148	1,532	1,680
1989	308	1,543	1,851
1990	330	1,117	1,447

1/ Data for 1954, 1962, 1970, and 1976 were taken from ACS financial profile studies. These studies did not include all cooperatives. Totals may not add due to rounding. Does not include income from cooperative pooling operations.

Table 10--Farmer cooperative net income, 1990 ^{1/}

Principal products marketed and major function	Co-ops ^{2/}	Total net income	Income from own operations	Income from other co-ops ^{3/}
	<u>Number</u>	<u>-----Million dollars-----</u>		
Products marketed:				
Cotton	18	64.4	62.5	1.9
Dairy	264	161.3	116.4	44.9
Fruits & vegetables	297	150.6	138.6	12.0
Grains and oilseeds excluding cottonseed	1,400	328.2	226.6	101.5
Livestock and poultry	235	100.7	99.7	1.0
Rice	48	(2.4)	(4.2)	1.7
Sugar	44	4.7	4.3	.4
Other products ^{4/}	213	15.9	15.7	.2
Total farm products	2,519	823.3	659.6	163.7
Total farm supplies	1,717	525.6	373.7	151.9
Total selected services	427	98.1	83.7	14.4
Combined total	4,663	1,447.0	1,117.0	330.0

^{1/} Number of cooperatives includes cooperatives operating on a pooling rather than net margin basis. Totals may not add due to rounding.

^{2/} Many cooperatives are multiproduct and multifunctional in operations and are classified in most cases according to predominant commodity or function indicated by business volume.

^{3/} Excludes dividends and patronage refunds from CoBank and Banks for Cooperatives.

^{4/} Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Balance Sheet

Combined assets for all farmer cooperatives totaled \$30 billion in 1990, up 1.3 percent from \$29.6 billion for 1989 (table 11 and fig. 8). Assets of cooperatives, excluding intercooperative investments, totaled \$27.2 billion compared with \$27.1 billion, a 0.3-percent increase (table 12).

Total liabilities were \$16.6 billion, up 1.5 percent from the \$16.3 billion reported in 1989. Net worth, or member and patron equity, was \$13.4 billion, up 1 percent from \$13.3 billion in 1989. The proportion of total assets financed by equity decreased from 44.9 to 44.8 percent.

Of the \$30 billion in total assets, marketing cooperatives accounted for nearly \$18.9 billion, up 2.6 percent from \$18.5 billion for 1989. Cooperatives whose principal products were grains and oilseeds excluding cottonseed had total assets of \$6.7 billion in 1990 and \$6.2 billion in 1989, an 8.6-percent increase. Among the marketing cooperatives, grain cooperatives also maintained the largest proportion of investments in other cooperatives in both 1990 (12 percent) and 1989 (12.6 percent).

Assets of marketing cooperatives, excluding investments in other cooperatives, were \$17.4 billion, up slightly from the \$17.3 billion reported in 1989.

Farm supply cooperatives had total assets of nearly \$10.5 billion compared with \$10.6 billion in 1989. Excluding intercooperative investments, assets amounted to \$9.2 billion in 1990, up slightly (0.4 percent) from the previous year.

Net worth or member and patron equity for all marketing cooperatives totaled \$8.1 billion, up 3.2 percent from 1989. Marketing cooperatives accounted for 60.1 percent of farmer cooperatives' combined net worth. Farm supply cooperatives accounted for 36.6 percent. The highest percent (52.3 percent) of total assets represented by net worth for all marketing cooperatives was for cooperatives primarily marketing grains and oilseeds excluding cottonseed. The lowest percent (26.8 percent) was for cooperatives primarily marketing other products. 7/ Cooperatives classified as farm marketing and farm supply had 42.7 and 47 percent, respectively.

Combined balance sheet data for all farmer cooperatives are shown in table 13.

7/ Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Table 11--Selected combined balance sheet data for farmer cooperatives, 1990 ^{1/}

Principal products marketed and major function	Co-ops ^{2/}	Total assets	Total liabilities	Net worth
	<u>Number</u>	<u>-----Million dollars-----</u>		
Products marketed:				
Cotton	18	595.5	341.2	254.2
Dairy	264	4,426.2	2,746.6	1,679.6
Fruits & vegetables	297	4,304.1	2,829.4	1,474.7
Grains and oilseeds excluding cottonseed	1,400	6,719.3	3,205.5	3,513.7
Livestock and poultry	235	965.5	551.3	414.2
Rice	48	291.4	185.3	106.1
Sugar	44	872.7	516.1	356.6
Other products ^{3/}	213	755.2	467.7	287.4
Total farm products	2,519	18,929.9	10,843.2	8,086.7
Total farm supplies	1,717	10,475.5	5,555.3	4,920.2
Total selected services	427	618.2	176.6	441.6
Combined total	4,663	30,023.6	16,575.1	13,448.5

^{1/} Totals may not add due to rounding.

^{2/} Many cooperatives are multiproduct and multifunctional in operations and are classified in most cases according to predominant commodity or function indicated by business volume.

^{3/} Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Figure 8 — Assets of Farmer Cooperatives

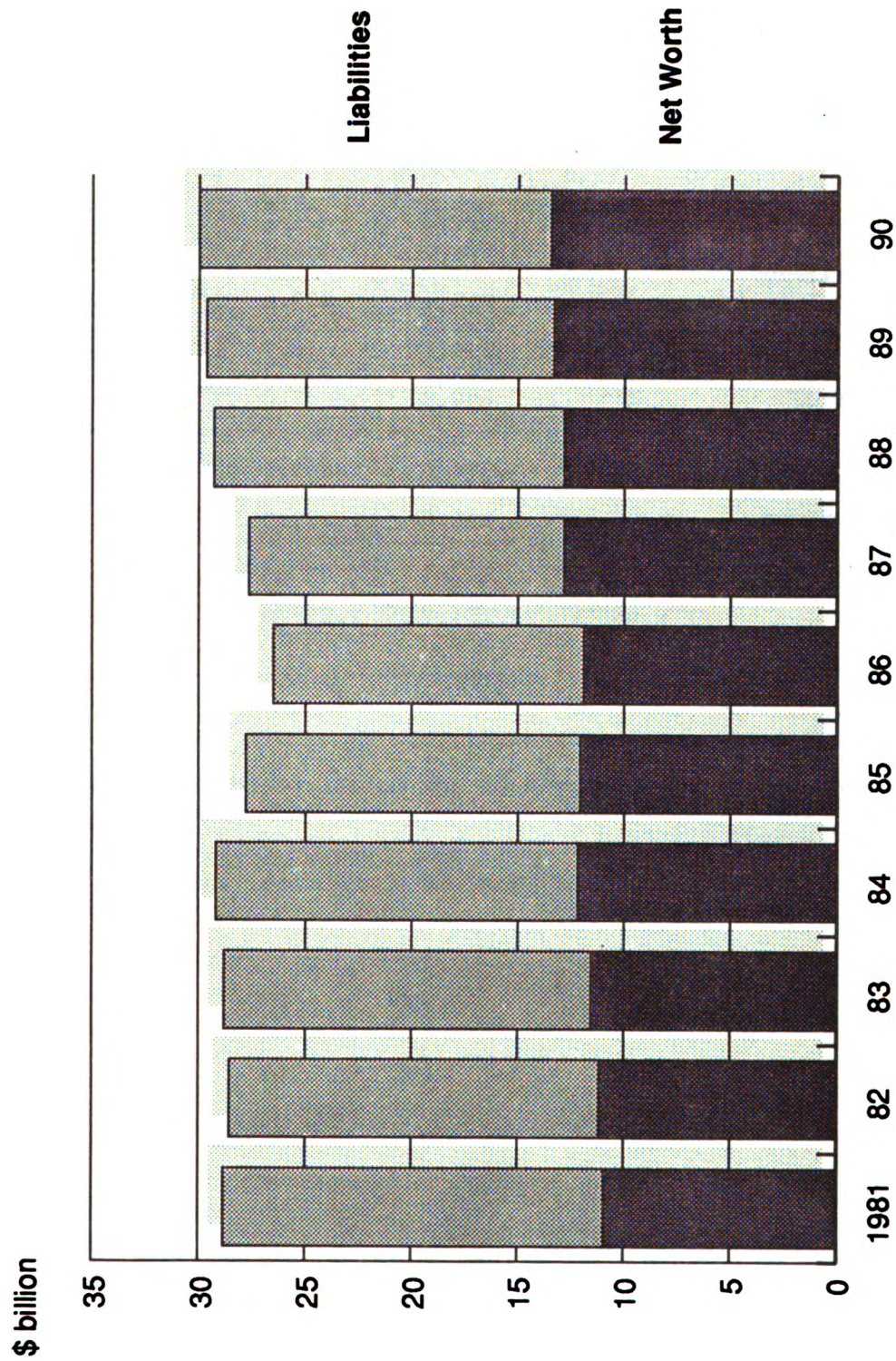


Table 12--Combined assets of farmer cooperatives, 1990 ^{1/}

Principal products marketed and major function	Co-ops ^{2/}	Assets from own operations	Investments in other co-ops	Total assets	Investments in other co-ops as percent of total
Products marketed:					
Cotton	18	567.8	27.6	595.5	1.3
Dairy	264	4,157.8	268.4	4,426.2	6.1
Fruits & vegetables	297	3,996.0	308.2	4,304.1	7.2
Grains and oilseeds excluding cottonseed	1,400	5,915.4	803.8	6,719.3	12.0
Livestock and poultry	235	931.5	34.0	965.5	3.5
Rice	48	274.7	16.7	291.4	5.7
Sugar	44	842.5	30.3	872.7	3.5
Other products ^{3/}	213	688.2	67.0	755.2	8.9
Total farm products	2,519	17,374.0	1,555.9	18,929.9	8.2
Total farm supplies	1,717	9,242.8	1,232.7	10,475.5	11.8
Total selected services	427	537.9	80.3	618.2	13.0
Combined total	4,663	27,154.7	2,869.0	30,023.6	9.6

1/ Totals may not add due to rounding.

2/ Many cooperatives are multiproduct and multifunctional in operations and are classified in most cases according to predominant commodity or function indicated by business volume.

3/ Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Table 13--Balance sheet data of farmer cooperatives, selected years, 1954-90 ^{1/}

Year	Total liabilities	Net worth	Total assets	Investments in other co-ops	Assets from own operations
<u>Million dollars</u>					
1954	1,437	1,914	3,351	278	3,073
1962	2,266	3,057	5,323	498	4,825
1970	4,527	3,950	8,477	796	7,681
1976	10,827	7,727	18,554	1,586	16,968
1977	10,879	8,061	18,940	2,088	16,852
1979	15,607	9,546	25,153	2,248	22,905
1980	18,825	10,591	29,416	2,490	26,926
1981	17,918	10,922	28,840	2,585	26,255
1982	17,394	11,159	28,553	2,751	25,802
1983	17,275	11,535	28,810	2,946	25,864
1984	17,001	12,181	29,182	2,981	26,201
1985	15,726	12,053	27,779	3,270	24,509
1986	14,601	11,895	26,496	2,857	23,639
1987	14,819	12,824	27,643	2,820	24,823
1988	16,461	12,825	29,286	2,762	26,524
1989	16,337	13,313	29,649	2,571	27,078
1990	16,575	13,449	30,024	2,869	27,155

^{1/} Data for 1954, 1962, 1970, and 1976 were taken from ACS financial profile studies. These studies did not include all cooperatives.

OTHER SERVICE COOPERATIVES

Other types of service cooperatives were operating in 1990 besides those directly related to marketing and purchasing.

Farm Credit System

The Farm Credit System includes Federal Land Bank Associations (FLBAs), Production Credit Associations (PCAs), Agricultural Credit Associations (ACAs), Federal Land Credit Associations (FLCAs), Farm Credit Banks, and Banks for Cooperatives. In 1990, the combined assets of the Farm Credit System totaled \$63.5 billion. This was up from \$61.6 billion in 1988 but down from \$64 billion in 1989 (table 14). Net worth totaled \$5.8 billion and net income was \$0.6 billion in 1990.

The number of selected farm credit cooperatives is shown by farm credit district in table 15. A map showing States in each district appears as figure 9.

Federal Land Bank Associations

Federal Land Bank Associations (FLBAs) totaled 140 in 1990 (table 15). Due to a reorganization of the Farm Credit Banks, the number of FLBAs decreased from 232 in 1987. In 1990, the Texas district had the largest number of FLBAs.

Production Credit Associations

Production Credit Associations (PCAs) totaled 102, down from 145 in 1987. The Texas district accounted for the largest number with 21. Columbia was second with 20. A number of the PCAs merged with FLBAs in several of the districts to form Agricultural Credit Associations.

Agricultural Credit Associations

Forty Agricultural Credit Associations (ACAs) were operating in 1990. These associations were formed under Section 411 of the Agricultural Credit Act of 1987. The Springfield and Baltimore districts accounted for 29.

Federal Land Credit Associations

Of the seven Federal Land Credit Associations (FLCAs) operating in 1990, four were located in the Western district. The FLCAs, which were created by the granting of direct lending authority to FLBAs, make long-term loans.

Farm Credit Banks

Combined assets of the 12 Farm Credit Banks totaled \$47.2 billion in 1990, down from nearly \$60 billion in 1986 (table 16). Net worth was \$4.2 billion, and net loans totaled \$38.9 billion. Net income was nearly \$0.3 billion in 1990, down from \$0.5 billion in 1989.

Banks for Cooperatives

Assets of the Banks for Cooperatives totaled \$14.5 billion on December 31, 1990 (table 17). This includes the assets of CoBank, which resulted from a merger of the Central Bank for Cooperatives and 10 of 12 district banks for cooperatives. The merger was effective January 1, 1989. The combined net worth of \$933 million financed 6.5 percent of the banks' combined assets. The combined net loans of the Banks for Cooperatives totaled \$11.2 billion, up 5.8 percent from 10.5 billion in 1989. Net income in 1990 totaled \$71.8 million, down 32.5 percent from \$106.3 million in 1989.

Table 14--Farm Credit System combined assets, net worth, and net income, 1986-90 1/

Year	Assets	Net worth	Net income (loss)
<u>Million dollars</u>			
1986	70,100.6	5,641.0	(1,912.8)
1987	62,238.5	5,030.1	(17.5)
1988	61,616.2	5,300.7	704.4
1989	63,953.9	5,440.5	695.0
1990	63,515.0	5,840.2	608.3

1/ As of December 31 of each year. Data for 1986, 1987, and 1988 were taken from Farm Credit Administration Annual Report, 1989, Farm Credit Administration, McLean, VA. Data for 1989 and 1990 were taken from Farm Credit System, Annual Information Statement, 1990, Federal Farm Credit Banks Funding Corporation, Jersey City, NJ, Feb. 27, 1991.

Table 15--Number and structure of selected farm credit cooperatives, 1990 ^{1/}

District	Federal Land Bank Associations (FLBAs)	Production Credit Associations (PCAs)	Agricultural Credit Associations (ACAs)	Federal Land Credit Associations (FLCAs)
	<u>Number</u>			
Springfield	-	-	13	-
Baltimore	1	1	16	-
Columbia	20	20	-	-
Louisville	-	1	4	1
Jackson	-	2	-	-
St. Louis	21	5	-	-
St. Paul	20	19	4	2
Omaha	1	1	-	-
Wichita	15	15	-	-
Texas	50	21	-	-
Western	11	15	3	4
Spokane	<u>1</u>	<u>2</u>	<u>-</u>	<u>-</u>
Total	140	102	40	7

- None located in the district.

^{1/} The Farm Credit System structure also includes three Banks for Cooperatives--National Bank for Cooperatives (CoBank), the Springfield (MA) Bank for Cooperatives, and the St. Paul (MN) Bank for Cooperatives--and 12 Farm Credit Banks, which are not included in this table.

Source: Farm Credit Administration Annual Report, 1990, Farm Credit Administration, McLean, VA, p. 9.

Figure 9 — Cooperative Farm Credit Districts

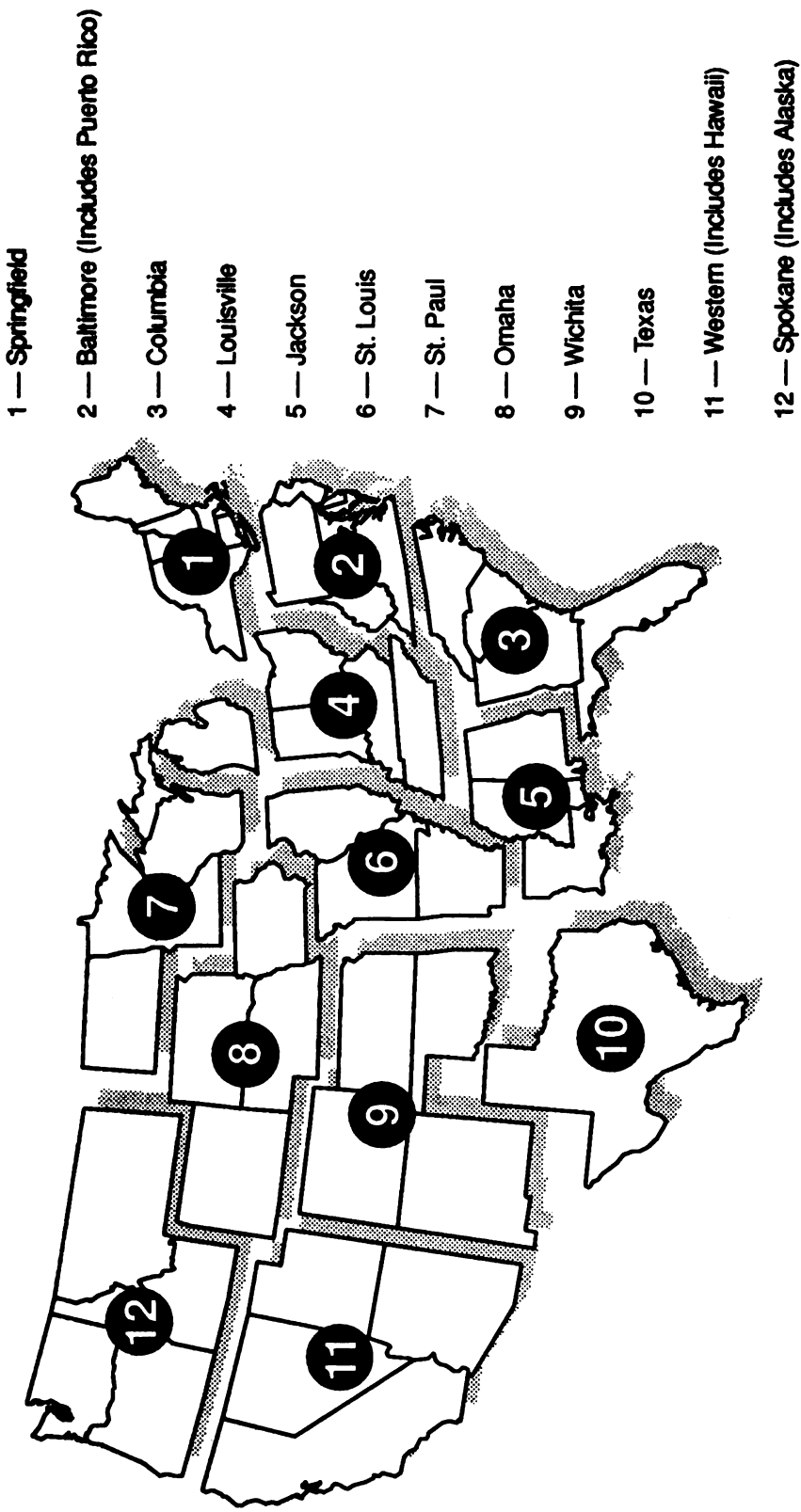


Table 16--Farm Credit Banks combined assets, net worth, net loans, and net income, 1986-90 1/

Year	Assets	Net worth	Net loans	Net income (loss)
<u>Million dollars</u>				
1986	59,888.9	3,806.5	49,310.5	(1,405.4)
1987	50,432.1	3,368.9	42,629.6	(127.9)
1988	47,843.7	3,975.7	40,956.1	749.5
1989	48,515.9	3,706.7	39,476.7	516.1
1990	47,228.9	4,198.7	38,919.7	259.6

1/ As of December 31 of each year. The Farm Credit Banks resulted from the mergers of the Federal Land Banks and Federal Intermediate Credit Banks on July 6, 1988.

Source: Farm Credit Administration Annual Report, 1990, Farm Credit Administration, McLean, VA, pp. 32-33.

Table 17--Banks for Cooperatives combined assets, net worth, net loans, and net income, 1986-90 1/

Year	Assets	Net worth	Net loans	Net income
<u>Million dollars</u>				
1986	9,811.0	1,074.4	7,401.8	0.5
1987	11,138.0	1,034.9	8,245.5	79.8
1988	13,174.9	1,008.3	10,067.3	85.8
1989	13,945.8	946.1	10,548.1	106.3
1990	14,463.5	933.1	11,154.7	71.8

1/ As of December 31 of each year.

Source: Farm Credit Administration Annual Report, 1990, Farm Credit Administration, McLean, VA, pp. 35-36.

Rural Telephone Cooperatives

Rural telephone cooperatives borrowing from the Rural Electrification Administration (REA) totaled 240, with revenues of \$826 million and 1,156,000 subscriber members (table 18).

Iowa had the largest number of cooperatives (12.9 percent of the total), while South Carolina accounted for more subscriber memberships (9.9 percent) than any other State. Texas led all States in revenue, with 13.6 percent of the total.

Rural Electric Cooperatives

Rural electric cooperatives, totaling 894, reported 10.9 million consumer members and revenue of \$22.2 billion.

Texas led all States, with 8.1 percent of total associations, while Georgia led with the most consumer members (9.6 percent of total) and revenue (10.2 percent of the total).

Rural Credit Unions

Rural credit unions, numbering 781, reported more than 3.4 million members and savings of \$9.8 billion.

Wisconsin led all States in number of associations with 9.9 percent of total, while California led in number of members, with 24.6 percent of the total, and in savings with 28.9 percent of the total.

Dairy Herd Improvement Associations

Dairy herd improvement memberships numbered 33,043 and cows tested totaled nearly 3.2 million.

New York (2,216), Pennsylvania (3,110), Minnesota (4,502), and Wisconsin (6,321) combined accounted for 48.9 percent of total members. About 654,000, or 20.2 percent, of the cows tested were in California.

Table 18--Number, participation, and level of activity of selected service cooperatives by State, 1990 1/

Rural telephone cooperatives 2/							
State	Cooperatives	Members (subscribers)	Revenue	State	Cooperatives	Members (subscribers)	Revenue
	Number	1,000	Mil. dol.		Number	1,000	Mil. dol.
Alabama	3	21	11	Montana	8	33	37
Alaska	7	37	48	Nebraska	5	9	6
Arizona	1	3	5	Nevada	-	-	-
Arkansas	2	7	4	New Hampshire	-	-	-
California	-	-	-	New Jersey	-	-	-
Colorado	5	7	7	New Mexico	5	15	30
Delaware	-	-	-	New York	-	-	-
Florida	-	-	-	North Carolina	9	105	47
Georgia	4	23	13	North Dakota	10	51	36
Idaho	3	9	5	Ohio	7	7	4
Illinois	7	22	13	Oklahoma	2	39	37
Indiana	8	27	16	Oregon	9	34	23
Iowa	31	52	32	Pennsylvania	-	-	-
Kansas	11	53	44	South Carolina	6	115	69
Kentucky	8	78	41	South Dakota	13	42	30
Louisiana	-	-	-	Tennessee	7	99	51
Maine	-	-	-	Texas	21	100	112
Maryland	-	-	-	Utah	3	8	8
Michigan	-	-	-	Vermont	-	-	-
Minnesota	19	65	39	Virginia	4	13	7
Mississippi	-	-	-	Washington	-	-	-
Missouri	8	42	28	West Virginia	2	3	2
				Wisconsin	11	36	20
				Wyoming	1	1	1
				United States	240	1,156	826

Continued

Table 18--Number, participation, and level of activity of selected service cooperatives by State, 1990 1/ (Continued)

Rural electric cooperatives <u>2</u> /							
State	Cooperatives	Members (consumers)	Revenue	State	Cooperatives	Members (consumers)	Revenue
	<u>Number</u>	<u>1,000</u>	<u>Mil. dol.</u>		<u>Number</u>	<u>1,000</u>	<u>Mil. dol.</u>
Alabama	22	360	553	Montana	25	97	138
Alaska	13	153	293	Nebraska	3	8	104
Arizona	7	99	302	Nevada	3	17	38
Arkansas	20	323	747	New Hampshire	1	63	64
California	3	13	16	New Jersey	1	10	12
Colorado	24	304	870	New Mexico	17	141	317
Delaware	1	45	41	New York	4	13	11
Florida	15	497	1,011	North Carolina	29	592	1,255
Georgia	43	1,043	2,261	North Dakota	25	102	805
Idaho	9	45	58	Ohio	28	267	464
Illinois	26	191	487	Oklahoma	26	326	558
Indiana	41	345	628	Oregon	14	103	135
Iowa	49	176	375	Pennsylvania	13	174	299
Kansas	35	175	402	South Carolina	22	434	858
Kentucky	28	522	1,326	South Dakota	33	108	188
Louisiana	13	288	797	Tennessee	20	618	754
Maine	4	14	11	Texas	72	843	1,405
Maryland	2	125	169	Utah	5	22	206
Michigan	14	210	214	Vermont	3	21	30
Minnesota	49	506	865	Virginia	14	308	656
Mississippi	22	464	847	Washington	8	34	47
Missouri	46	459	1,141	West Virginia	1	5	3
				Wisconsin	28	181	324
				Wyoming	13	68	141
				United States	894	10,912	22,226

Continued

Table 18--Number, participation, and level of activity of selected service cooperatives by State, 1990 ^{1/} (Continued)

Rural credit unions ^{3/}							
State	Cooperatives	Members	Savings	State	Cooperatives	Members	Savings
	<u>Number</u>	<u>1,000</u>	<u>Mil. dol.</u>		<u>Number</u>	<u>1,000</u>	<u>Mil. dol.</u>
Alabama	12	22	48	Montana	15	46	144
Alaska	1	16	46	Nebraska	19	11	25
Arizona	5	14	22	Nevada	7	30	107
Arkansas	3	4	8	New Hampshire	3	2	1
California	71	832	2,822	New Jersey	6	9	14
Colorado	14	16	42	New Mexico	4	38	123
Connecticut	1	1	1	New York	34	147	421
Delaware	1	2	8	North Carolina	18	32	58
Florida	20	94	245	North Dakota	39	90	338
Georgia	18	29	53	Ohio	18	43	49
Hawaii	19	94	434	Oklahoma	4	5	23
Idaho	14	16	30	Oregon	13	59	169
Illinois	17	56	120	Pennsylvania	23	33	52
Indiana	21	50	256	Rhode Island	5	52	341
Iowa	10	7	14	South Carolina	4	9	27
Kansas	26	67	187	South Dakota	9	12	27
Kentucky	7	28	60	Tennessee	12	13	26
Louisiana	11	15	27	Texas	39	95	256
Maine	11	22	58	Utah	10	12	25
Maryland	7	47	160	Vermont	8	10	15
Massachusetts	9	9	13	Virginia	8	37	90
Michigan	29	359	662	Washington	17	132	401
Minnesota	42	165	429	West Virginia	4	3	5
Mississippi	6	6	6	Wisconsin	77	473	1,232
Missouri	8	16	30	Wyoming	2	2	2
				United States	781	3,382	9,752

Continued

Table 18--Number, participation, and level of activity of selected service cooperatives by State, 1990 ^{1/} (Continued)

Dairy herd improvement ^{4/}					
State	Members (herds)	Cows tested	State	Members (herds)	Cows tested
	<u>Number</u>	<u>1,000</u>		<u>Number</u>	<u>1,000</u>
Alabama	134	19	Montana	79	8
Alaska	-	-	Nebraska	402	32
Arizona	71	47	Nevada	27	8
Arkansas	174	13	New Hampshire	122	10
California	1,220	654	New Jersey	136	12
Colorado	110	24	New Mexico	29	18
Connecticut	143	14	New York	2,216	188
Delaware	40	5	North Carolina	454	61
Florida	65	28	North Dakota	127	9
Georgia	254	45	Ohio	1,462	102
Hawaii	-	-	Oklahoma	198	17
Idaho	300	41	Oregon	357	55
Illinois	1,015	66	Pennsylvania	3,110	194
Indiana	634	43	Rhode Island	12	1
Iowa	1,311	74	South Carolina	136	23
Kansas	530	40	South Dakota	243	17
Kentucky	429	33	Tennessee	489	51
Louisiana	226	25	Texas	488	95
Maine	205	13	Utah	264	36
Maryland	588	49	Vermont	700	52
Massachusetts	165	11	Virginia	631	73
Michigan	1,408	125	Washington	505	93
Minnesota	4,502	250	West Virginia	122	10
Mississippi	175	20	Wisconsin	6,321	375
Missouri	714	54	Wyoming	-	-
			United States	33,043	3,233

- None reported in the State.

^{1/} For year ended December 31, 1990. Totals may not add due to rounding.

^{2/} Source: Rural Electrification Administration, USDA.

^{3/} Source: Credit Union National Association, Inc. (Includes federally chartered and State-chartered credit unions.)

^{4/} Source: Agricultural Research Service, USDA.

APPENDIX FIGURES

Appendix Figure 1--Cooperative Net Business Volume, 1970-90

Appendix Figure 2--Cooperatives Removed from ACS's List

Appendix Figure 3--U.S. Farms and Farmer Cooperative Memberships

Appendix Figure 4--Distribution of Farmer Cooperatives by Type, 1990

Appendix Figure 5--Farmer Cooperatives Grouped by Size of Membership, 1990

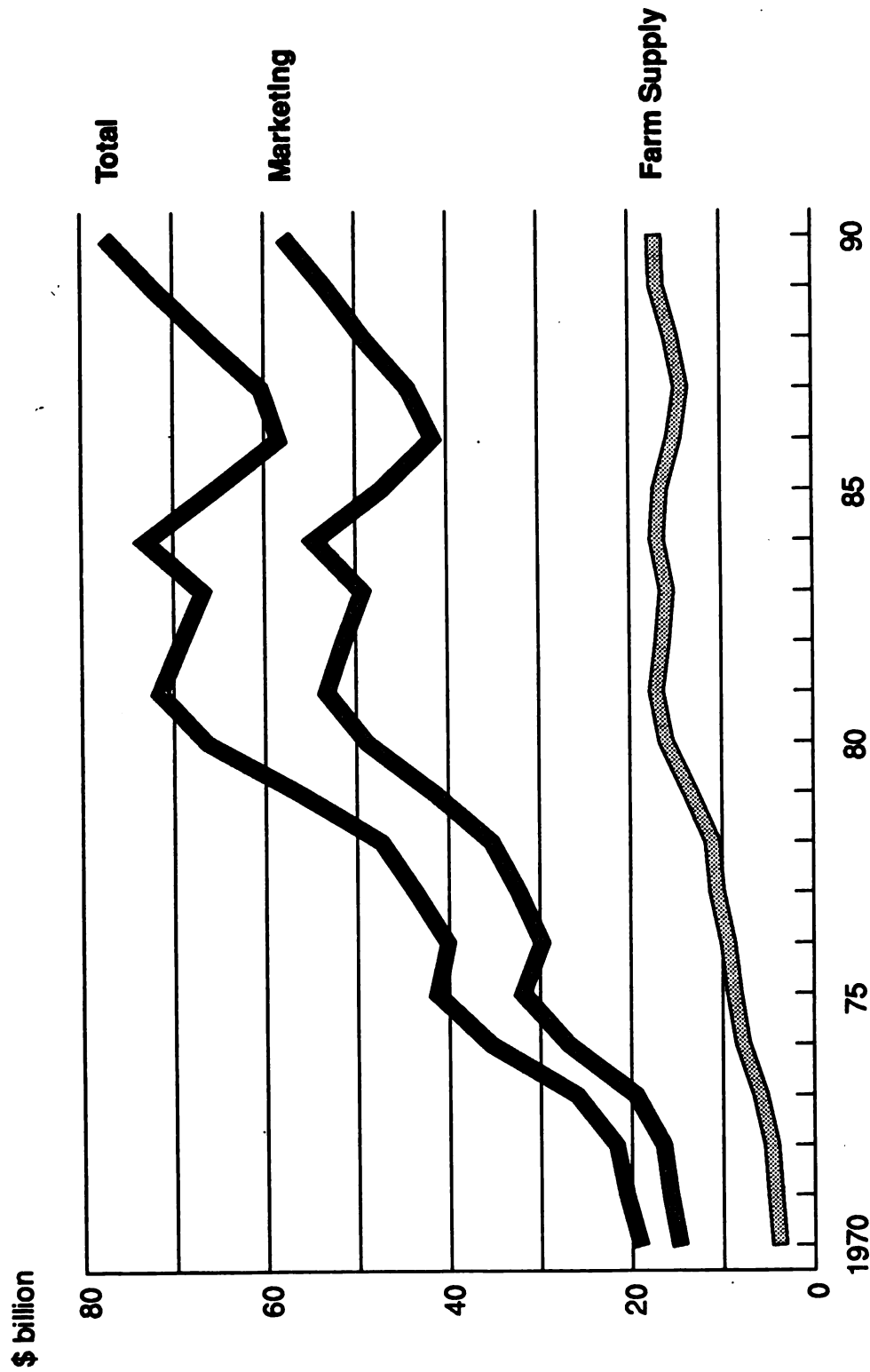
Appendix Figure 6--Cooperatives Grouped by Size of Assets, 1990

Appendix Figure 7--Cooperatives' Assets Financed by Net Worth, 1990

Appendix Figure 8--Distribution of Cooperatives' Net Income, 1990

Appendix Figure 9--Distribution of Cooperatives' Losses, 1990

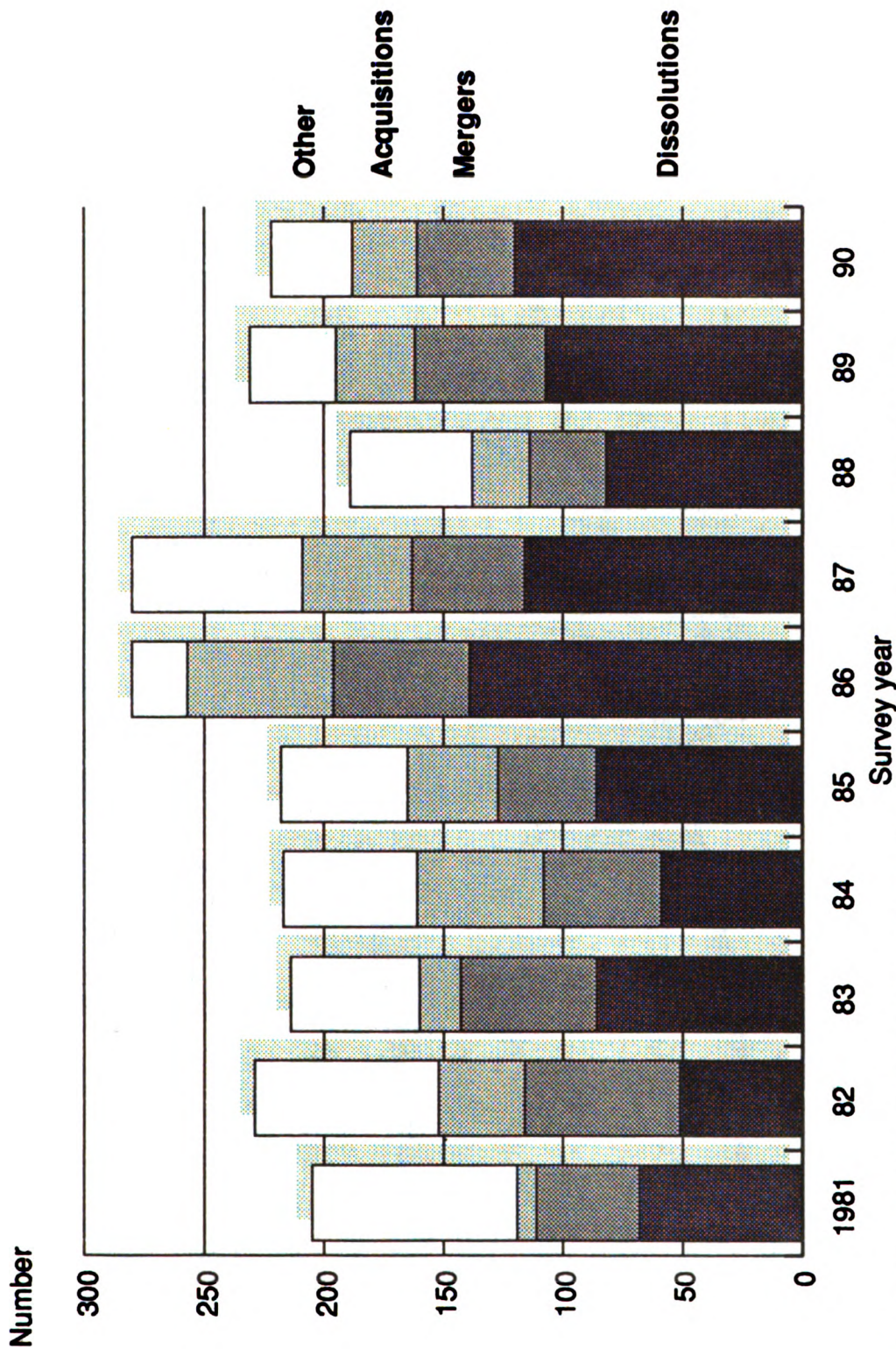
Appendix Figure 1 — Cooperative Net Business Volume, 1970-90



Total includes value of related services provided.

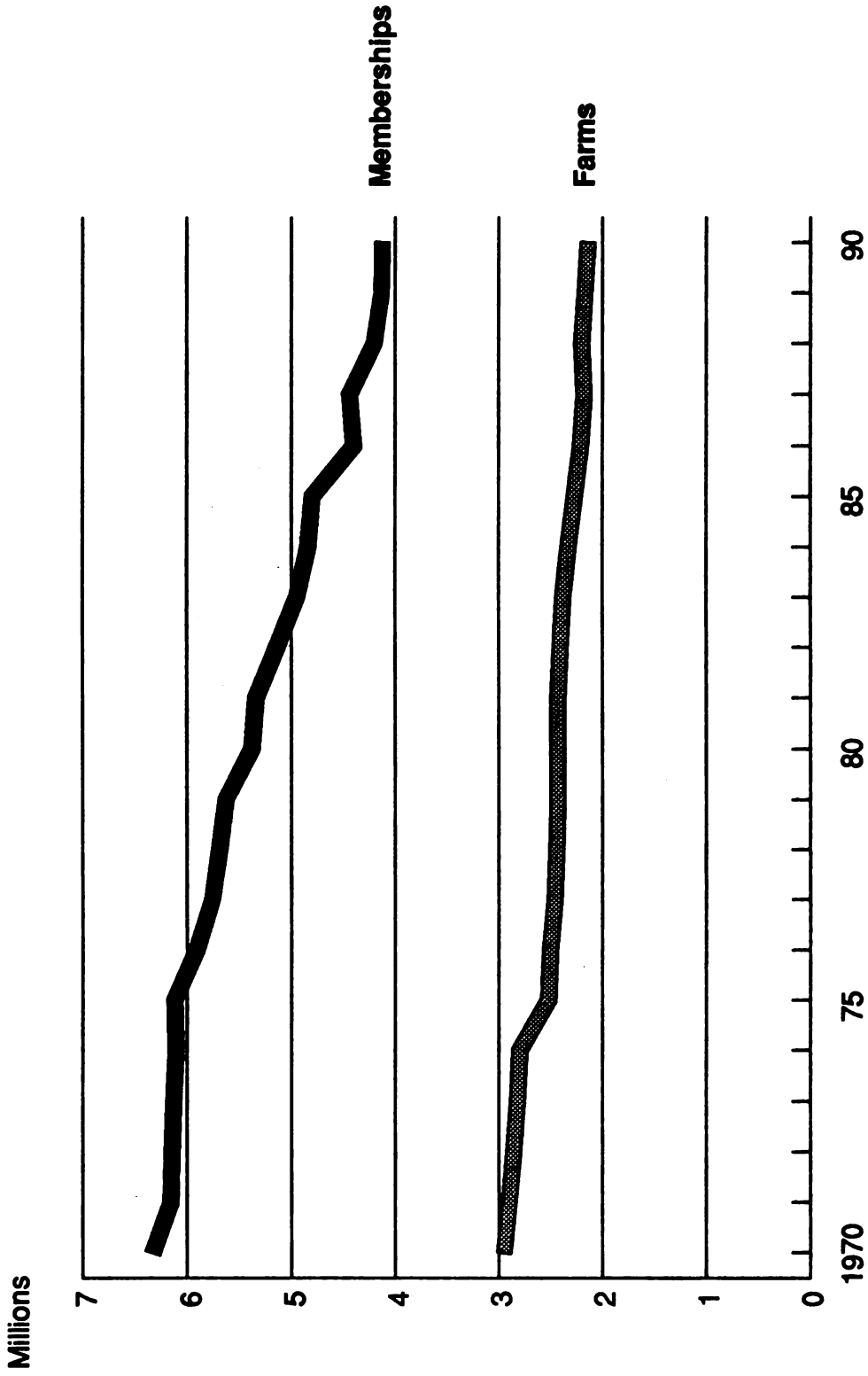
Appendix Figure 2 — Cooperatives Removed from ACS's List

Appendix Figure 2 — Cooperatives Removed from ACS's List



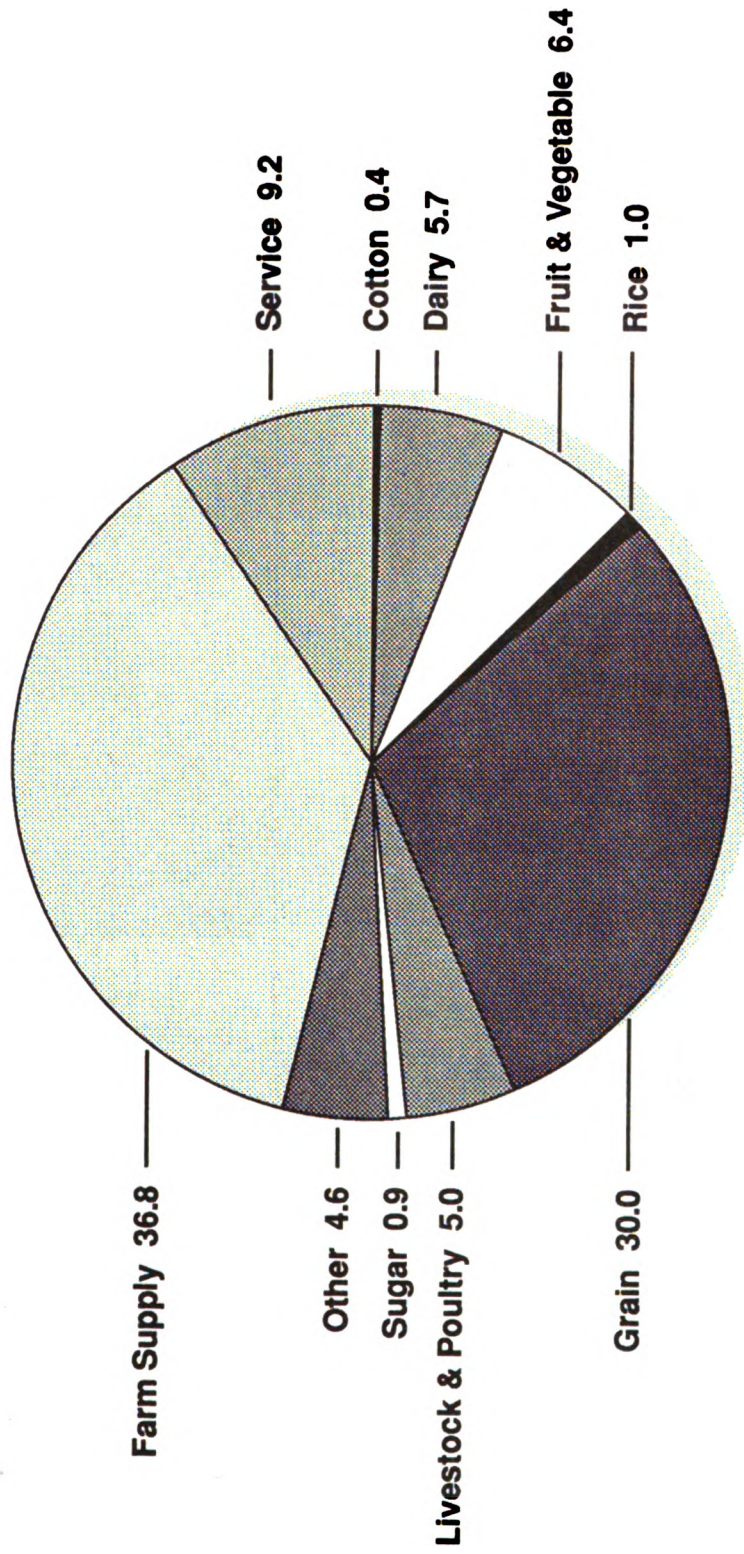
Based on a list of all U.S. farmer cooperatives maintained by the Agricultural Cooperative Service. Mergers also include consolidations. Other includes cooperatives dropped due to inactivity, and unknown and miscellaneous reasons.

Appendix Figure 3 — U.S. Farms and Farmer Cooperative Memberships



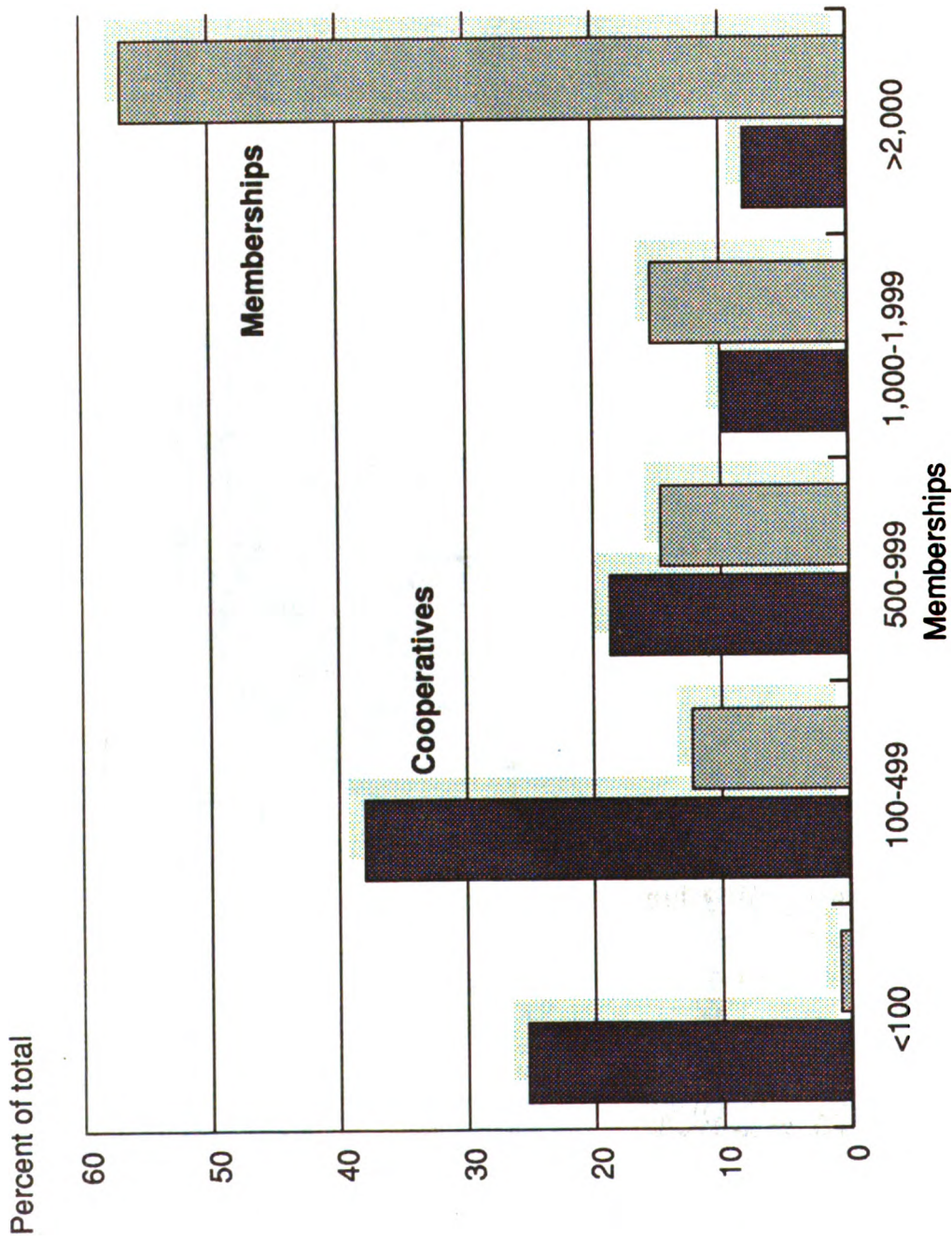
Memberships were higher than farm numbers because many farmers belonged to more than one cooperative.

Appendix Figure 4 — Distribution of Farmer Cooperatives by Type, 1990



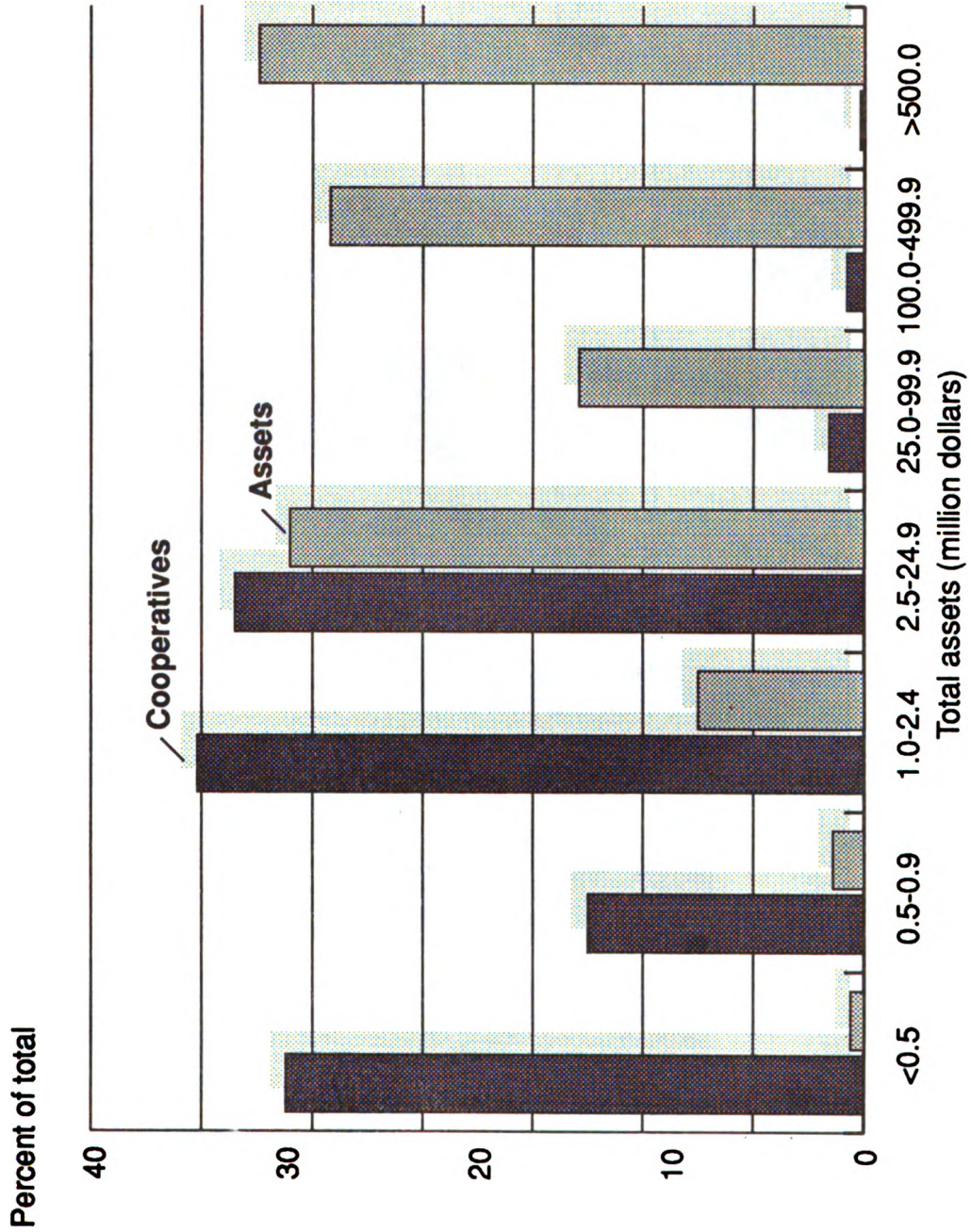
Percent based on 4,663 cooperatives.

Appendix Figure 5 — Farmer Cooperatives Grouped by Size of Membership, 1990



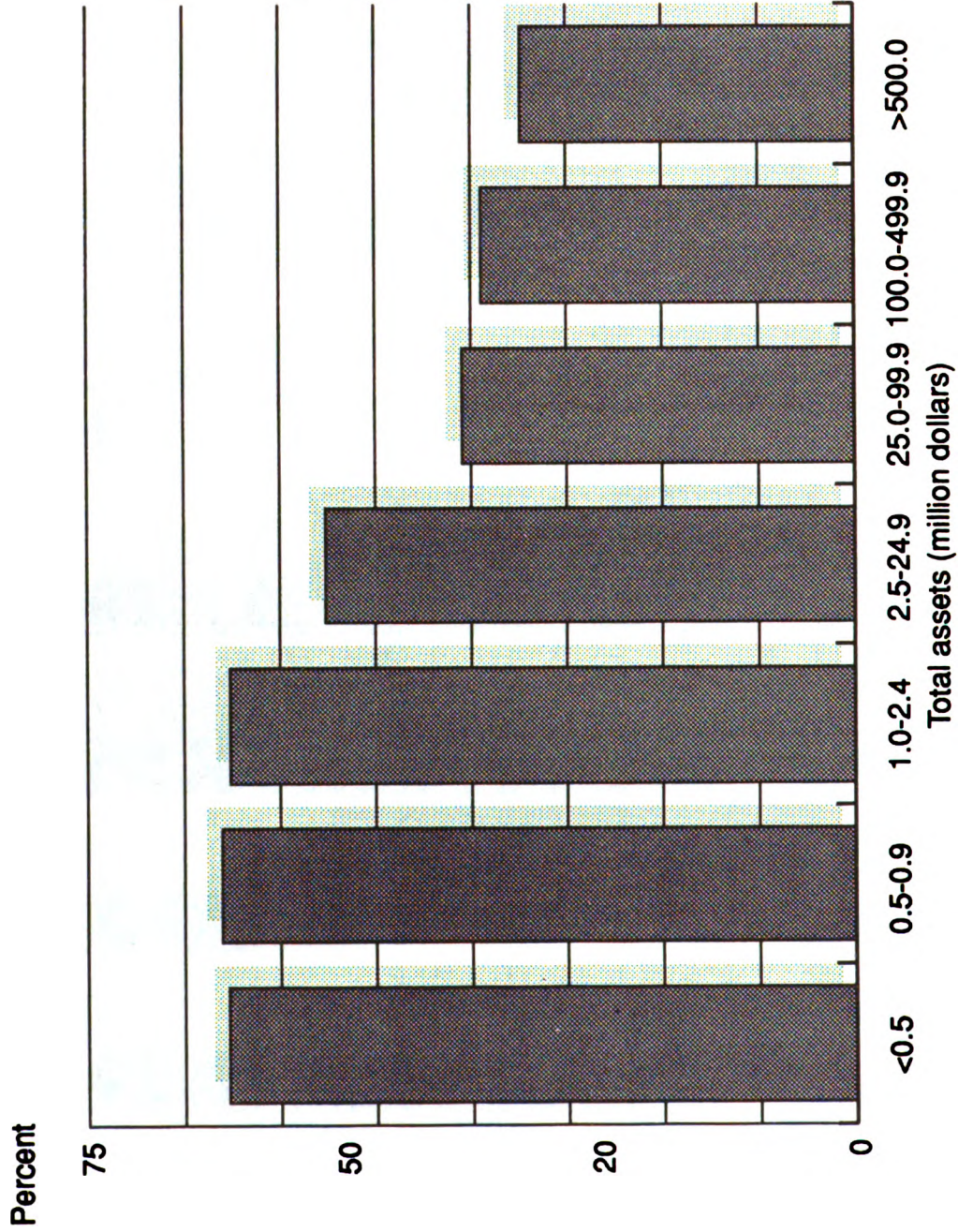
Percent based on 4,663 cooperatives and 4,119,340 memberships.

Appendix Figure 6 — Cooperatives Grouped by Size of Assets, 1990



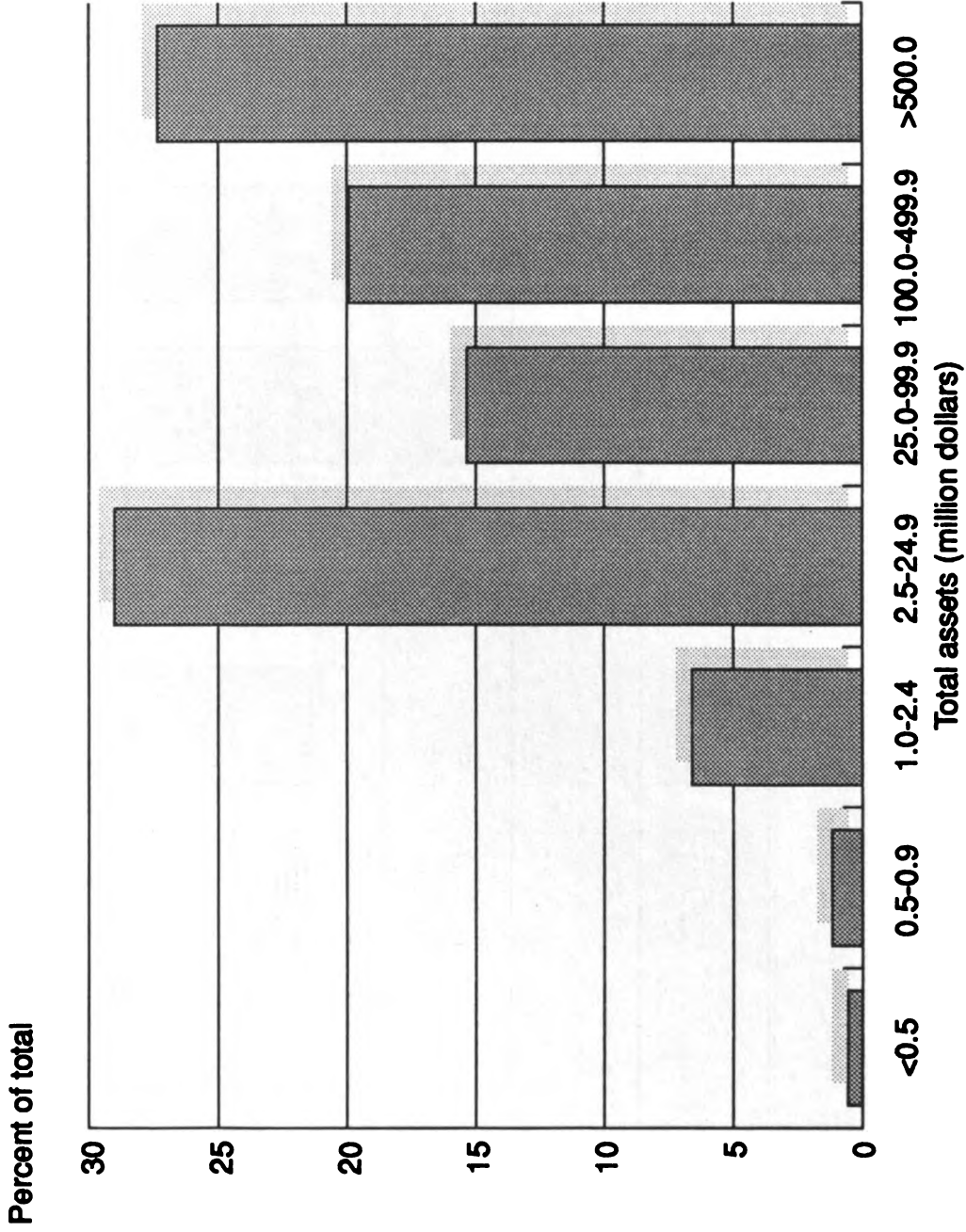
Percent based on 4,663 cooperatives and combined assets of \$30 billion.

Appendix Figure 7 — Cooperatives' Assets Financed by Net Worth, 1990



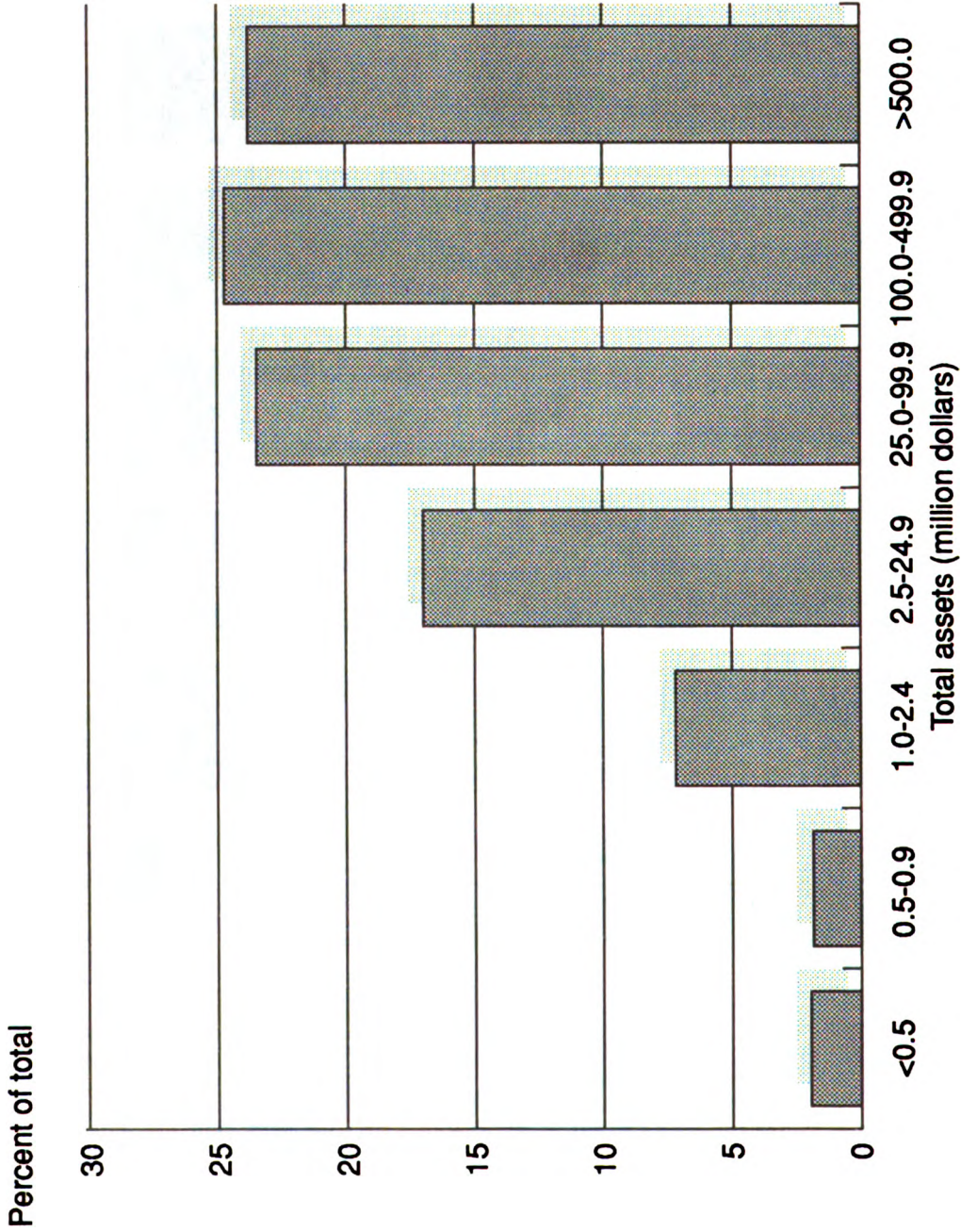
Based on assets of \$30 billion and net worth of \$13.4 billion.

Appendix Figure 8 — Distribution of Cooperatives' Net Income, 1990



Based on 2,076 cooperatives reporting net income.

Appendix Figure 9 — Distribution of Cooperatives' Losses, 1990



Based on 406 cooperatives with losses of \$109 million.

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**U.S. Department of Agriculture
Agricultural Cooperative Service**

P.O. Box 96576
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Agricultural Cooperative Service (ACS) provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

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

ACS publishes research and educational materials and issues *Farmer Cooperatives* magazine. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, age, marital status, handicap, or national origin.