

UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE
AGRICULTURAL EXPERIMENT STATION

F. B. MUMFORD, *Director*

Farmers' Cooperative Market- ing and Purchasing Associ- ations in Missouri

EDWARD G. SCHIFFMAN AND HERMAN M. HAAG

COLUMBIA, MISSOURI

TABLE OF CONTENTS

	Page
Introduction	3
Exchanges and Elevators	6
Location	6
Laws under which chartered	8
Dates of incorporation	9
Variations in volume of sales	11
Associations and volume of business by areas	12
Products and supplies handled	15
Diversity of business	17
Variations in importance of commodities by areas	18
Number of patrons	22
Margins	23
Methods of handling	26
Methods of transportation	30
Services performed for patrons	33
Quantity discounts	34
Credit policy	34
Collection practice	35
Membership	36
Stockholders	42
Directors	47
Managers	51
Financial condition	55
Auditing	58
Distribution of earnings	59
Local Creameries	63
Livestock Shipping Associations	65
Fruit Associations	67
Large-Scale Central Associations	68
Miscellaneous Associations	69
Appendix	69

Farmers' Cooperative Marketing and Purchasing Associations in Missouri

EDWARD G. SCHIFFMAN AND HERMAN M. HAAG*

The Missouri farmer makes extensive use of cooperatives in marketing his products and in buying supplies. According to census reports, more than one-fifth of the farms in this state reported either sales or purchases through cooperative associations in 1929. As a result Missouri was ninth among the 48 states in the proportion of farmers doing business with cooperatives at that time.

Results of this survey also indicate that a large part of the marketings of Missouri farmers is handled through local cooperatives. It is estimated that, on the basis of value, approximately one-sixth of the eggs, one-fifth of the poultry, one-eighth of the cream and one-fourth of the wheat marketed in this state in 1935 were sold through local cooperatives. (Table 1). Since information as to the value of feeds, fertilizers and other supplies bought

TABLE 1.—PROPORTION OF CERTAIN FARM PRODUCTS SOLD THROUGH LOCAL COOPERATIVES, MISSOURI, 1935.

Product	Cash Farm Income, 1935*	Estimated Purchases by Local Cooperatives	Per Cent Handled by Cooperatives
	(Thousands of Dollars)		
Eggs.....	23,512	3,556	15.1
Poultry.....	9,427	1,871	19.8
Cream.....	18,082	2,316	12.8
Wheat.....	13,266	3,624	27.3

*Farm Value, Gross Income and Cash Income From Farm Production, 1934-35. Crop Reporting Board, Bureau of Agricultural Economics, U. S. Department of Agriculture.

by Missouri farmers in 1935 is not available, the proportion of these bought through cooperatives can not be estimated. The proportion of farm purchases and sales through cooperatives varies widely within the state, being relatively high in the area around Springfield and particularly low in Southeast Missouri.

*The original data for this study were furnished largely by the managers of Missouri Cooperative Associations whose cooperation the authors appreciate and acknowledge. The advice of R. J. Rosier, Secretary, Missouri Farmers' Association, relative to the arrangement and content of the survey schedule, is also greatly appreciated, as well as the assistance of representatives of the Farm Credit Administration who aided in the collection of data.

Besides the products handled by local cooperatives, large quantities of livestock, wool, fluid milk, cotton, and grain are handled by large scale central associations, which are not covered by this publication. Supplies are also handled by such organizations. In many instances, such products and supplies do not pass through local associations on their way from or to the farmer and, consequently, are not included in this study.

According to available information, there were 410 local cooperative marketing and purchasing associations in Missouri in 1935. This number included 313 exchanges and elevators, 54 livestock shipping associations, 27 fruit associations, 8 local creameries, and 8 miscellaneous associations. (Table 2). In addition 29

TABLE 2.—NUMBER OF LOCAL ASSOCIATIONS AND ESTIMATED AMOUNT OF SALES, MISSOURI, 1935.

Type of Association	Number	Per Cent	Estimated Sales	Per Cent	Average Sales
Exchange or Elevator:					
Commodities Other than Livestock	313	76.3	\$28,639,000	90.9	\$91,500
Livestock Handled.....	(43)	(10.5)	450,000	1.4	(10,500)
Total.....	313	76.3	\$29,089,000	92.3	\$92,900
Livestock Shipping.....	54	13.1	1,134,000	3.6	21,000
Creamery.....	8	2.0	659,000	2.1	82,400
Fruit.....	27	6.6	380,000	1.2	14,100
Other.....	8	2.0	257,000	0.8	32,100
All.....	410	100.0	\$31,519,000	100.0	\$76,900

central organizations, each serving a large area, were located in Missouri. At least three other central organizations located in adjoining states received large quantities of products from Missouri.

The total sales of the 410 local associations were estimated at \$31,519,000 in 1935 (Table 2). The 313 exchanges and elevators accounted for \$29,089,000, or more than 92 per cent of this total. The average volume of business was largest, \$92,900 per association, for these organizations. The sales of creameries averaged \$82,400 per plant.

Although these local associations make up such an important part of the marketing structure for farm products in this state, little information concerning them was available prior to this study. An earlier survey had been made by this station in 1926¹ but the information obtained is now out of date. It also was limited because it was collected by a mail questionnaire which covered less than one-half of all associations in the state at that time.

1. Reported in *Cooperative Marketing for Missouri* by F. L. Thomsen and G. B. Thorne, Missouri Agricultural Experiment Station Bulletin, 253.

The first and most important objective of this survey, therefore, was to obtain information as to the present status of farmers' cooperative associations in Missouri. A second purpose was to obtain, when possible, data to be used in an analysis of the business operations of local associations. This latter, it was hoped, would point out factors contributing to the success of such organizations. This publication is concerned only with the first objective.

Data for this study were obtained primarily by means of a survey schedule² which in each instance, was filled out by an enumerator from the association's financial records and from replies of the manager to questions of the enumerator. This method not only assured more complete and accurate returns and permitted the obtaining of more detailed information but also established personal contacts with managers, directors, and members of associations which have been helpful in the tabulation and interpretation of the data.

Records of 332 local associations, more than 80 per cent of the total, were obtained by the survey method. This included 273 exchanges and elevators, 21 livestock shipping associations, 8 creameries, 24 fruit associations, and 6 miscellaneous associations. Limited information concerning 61 others, including 26 exchanges and elevators, was obtained by a mail questionnaire. Although data could not be obtained from the remaining 17, their existence was established by personal visits and by correspondence with agricultural extension agents, and their volume of business was obtained from other sources or estimated on the basis of information available. Of these, 14 were produce exchanges, one was a fruit association and two were livestock shipping associations. Only six refused to give the data requested personally by an enumerator. It was not possible, even by the personal visit, to obtain complete information on each schedule, principally because certain data were not always available from the association's records.

All local farmers' cooperative marketing and purchasing associations, except those dealing exclusively in petroleum products, were included in this survey. Local mutual insurance companies, telephone companies, electric power companies, credit agencies, and other cooperative business service organizations, therefore, were not included. Associations receiving products or selling supplies over a relatively wide area, usually more than one county, were termed central rather than local associations.

2. A copy of this schedule for exchanges and elevators is available from the Department of Agricultural Economics, University of Missouri, Columbia, Mo.

The decision as to whether or not an organization is cooperative is often difficult and at best requires the setting up of arbitrary standards. In addition to the associations operating on a pool basis, the only others considered to be cooperative for purposes of this study were those engaged primarily in the marketing of farm products or in the purchasing of supplies for farmers, operated for the mutual benefit of their members as producers, and limiting by by-law, either the amount of stock that one stockholder may own to ten per cent of the total outstanding, or the rate of dividends on capital stock to ten per cent.

The data obtained were for the year 1935, or as of December 31, 1935, whichever was applicable, except for a very few associations whose fiscal years did not end on December 31. For these later, data were obtained for the latest fiscal year available at the time of the survey. As a matter of expediency, however, these data have been regarded as for the calendar year, 1935, throughout the study.

The remainder of this publication deals with the results of the survey. As will be seen, it is almost entirely concerned with the organization and operations of exchanges and elevators. This seems justified, however, since they did most of the business of local cooperative associations in the state and also because little information was readily available on other types of associations.

PRODUCE EXCHANGES AND ELEVATORS

At the end of 1935, there were 313 cooperative exchanges and elevators operating in Missouri. In addition, 21 of these associations maintained 32 branches, making a total of 345 locations at which business was done by such cooperatives. The number of branches ranged from one to seven, 16 associations having one each, three having two each, one having three, and another having seven. An association and its branches were regarded as one unit in all tabulations unless otherwise stated.

Location

The location of each exchange or elevator and its branches is shown in Figure 1. Associations were most numerous in the southwestern part of the state, in the east central counties along the Missouri River, and in a block of twelve counties in Northeast Missouri. Polk county in Southwest Missouri, for example, had 13 associations and one branch and Franklin county in the East Central area had ten associations. Although the number averaged

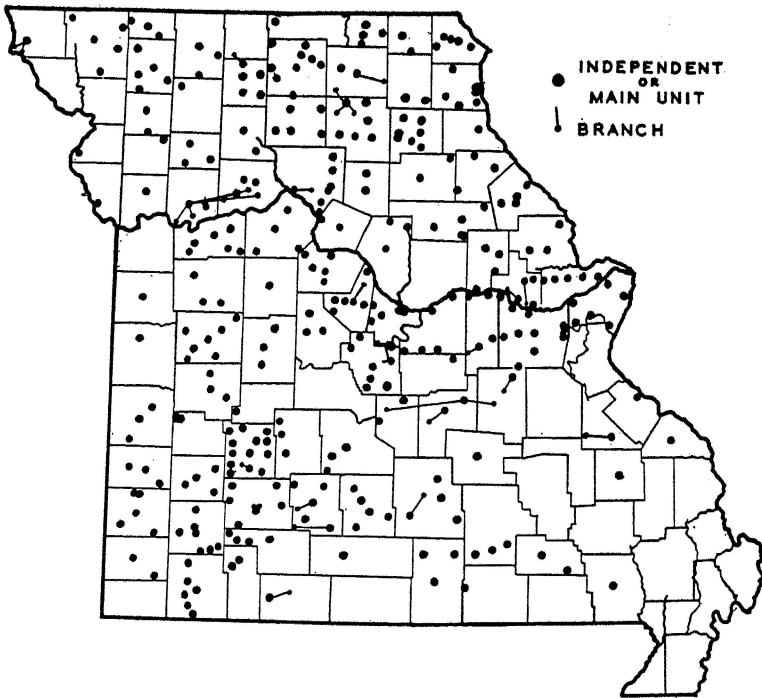


Fig. 1.—Location of Cooperative Exchanges and Elevators, 1935.

less than three per county, six or more were located in each of sixteen counties in 1935.

The total sales, exclusive of livestock, of the 313 associations during 1935 amounted to approximately \$28,639,000, or \$91,500 per association. These sales included both products and supplies. Products commonly marketed were: Poultry, eggs, cream, wool, hides, furs, rabbits, wheat, and other grains. Very little grain other than wheat, however, was purchased from farmers during 1935 because of the unusual crop conditions that prevailed. Many associations which, under normal circumstances, would have bought corn and other feed grains from farmers and shipped them out, brought in such grain and sold it to farmers in this particular year. Among the supplies commonly handled were: feeds, flour, salt, grains for feed, hay, straw, petroleum products, auto supplies, groceries, hardware, machinery, fencing, paints, seeds, fuel, twine, sacks, building materials, fertilizer, and lime.

After considerable study of the kind of business done by local exchanges and elevators, it was considered impossible to classify

accurately such associations into two groups, namely exchanges and elevators, and therefore they have been maintained as one group. Because the handling of feeds is almost universal among them, the predominant local associations in Missouri, in fact, may be characterized as cooperative feed stores which handle, in addition, various numbers of products and other supplies such as produce, grain, groceries, hardware, and petroleum products. The local commodity association seems to have little place in Missouri, principally due to the prevalence of general rather than specialized farming throughout most of the state. Even the functions of livestock shipping associations are being taken over by the exchanges and elevators, further reducing the number of this once numerous type of commodity association.

Laws Under Which Chartered

Missouri has two laws providing especially for the incorporation of cooperative business associations. The first, providing for capital stock associations, was enacted in 1919 and is commonly known as the 1919 Capital Stock Act. The other, passed in 1923, provides for non-stock associations and is called the 1923 Non-Stock, Non-Profit Act. This latter was sponsored by Aaron Sapiro and corresponds quite closely to non-stock laws enacted in other states at that time. In addition, some associations were organized under the general business corporation laws of the state.

Of the associations reporting, 239, or 85 per cent, were originally set up under the 1919 act; 28, or 10 per cent, under the 1923 act and 14, or 5 per cent, under general business corporation laws. (Table 3).

The law under which the association was originally organized depended largely on its date of organization. At least ten of the fourteen associations set up under general corporation law were established before the 1919 act became available and none was organized under this law after 1920. Also, 198 of the 239 associations chartered under the 1919 Act were set up before the 1923 law was enacted. Since 1923, one-half of the new associations has been established under the 1923 act and for late years, the 1923 law has been favored by incorporators.

Since organization, a number of associations had been re-chartered under different laws. Seven, or one-half, of those set up under general corporation law shifted to the capital stock law. Prior to 1936, nine associations originally set up under the capital stock act had been rechartered under the non-stock act. At the

TABLE 3.—NUMBER OF ASSOCIATIONS, BY DATES OF INCORPORATION AND LAWS UNDER WHICH ORIGINALLY INCORPORATED, 281 EXCHANGES AND ELEVATORS, 1935.

Year of Incorporation	Law Under Which Incorporated			All Associations		Cumulative Per Cent
	General Corporation	1919 Act	1923 Act	Number	Per Cent	
1912	1	--	--	1	0.4	0.4
1914	4	--	--	4	1.4	1.8
1917	2	--	--	2	0.7	2.5
1918	3	--	--	3	1.1	3.6
1919	3	33	--	36	12.8	16.4
1920	1	88	--	89	31.7	48.1
1921	--	57	--	57	20.3	68.4
1922	--	20	--	20	7.1	75.5
1923	--	13	--	13	4.6	80.1
1924	--	4	--	4	1.4	81.5
1925	--	7	3	10	3.6	85.1
1926	--	1	1	2	0.7	85.8
1927	--	4	--	4	1.4	87.2
1928	--	--	1	1	0.4	87.6
1929	--	1	3	4	1.4	89.0
1930	--	1	1	2	0.7	89.7
1931	--	1	8	9	3.2	92.9
1932	--	2	3	5	1.8	94.7
1933	--	2	1	3	1.1	95.8
1934	--	3	5	8	2.8	98.6
1935	--	2	2	4	1.4	100.0
All	14	239	28	281	100.0	----

end of 1935, 37, or 13.2 per cent of the associations, were operating under the 1923 law; 237, or 84.3 per cent, under the 1919 act; and 7, or 2.5 per cent, were still chartered under non-cooperative law. The shift from capital stock to membership association has been spurred since 1935 by the efforts of the Missouri Farmers' Association to obtain federal income tax exemption for the associations affiliated with it, since it is easier for associations operating under the Missouri non-stock law to obtain and maintain exemption.

Dates of Incorporation

In Missouri the development of cooperative exchanges and elevators was relatively early. Nearly one-third of the associations operating in 1935 had been chartered in 1920 and three-fourths of them in the five years, 1919-23. (Table 3). As a result of this and earlier activity, four-fifths of the associations had been in business for 12 years or longer at the time of this study. Since 1923, the organization of new associations has continued at a much slower but fairly constant rate, from one to ten organizations having been set up each year. The oldest exchange in 1935 had started business in 1912.

The dates of incorporation coincide fairly closely with the dates of starting business. More than 87 per cent of the associations started business in the same year in which they were incor-

TABLE 4.—NUMBER OF ASSOCIATIONS, BY DATES OF INCORPORATION AND BY AREAS, 281 EXCHANGES AND ELEVATORS, 1935.

Year of Incorporation	Area							All
	North-west	North-east	West Central	East Central	South-west	South Central	South-east	
1912	--	--	1	--	--	--	--	1
1914	--	1	1	1	1	--	--	4
1917	--	--	2	--	--	--	--	2
1918	--	1	1	2	--	--	--	3
1919	5	9	7	9	5	--	1	36
1920	9	20	12	19	27	2	--	89
1921	4	15	6	10	14	8	--	57
1922	2	4	2	8	3	1	--	20
1923	--	2	1	4	1	5	--	13
1924	1	1	--	1	1	--	--	4
1925	2	2	--	4	1	1	--	10
1926	--	1	--	--	1	--	--	2
1927	--	1	1	1	1	--	--	4
1928	--	1	--	--	--	--	--	1
1929	--	1	--	--	3	--	--	4
1930	--	--	--	--	2	--	--	2
1931	--	2	3	2	1	1	--	9
1932	--	--	1	2	--	2	--	5
1933	--	3	--	--	--	--	--	3
1934	--	2	--	1	3	2	--	8
1935	--	1	2	--	--	--	1	4
All	23	66	40	64	63	23	2	281



Fig. 2.—Geographic Areas of Missouri as Used in This Study.

porated; 11 per cent, the year before incorporation; and the remainder, the year after they were incorporated.

The cooperative exchange and elevator movement in this state apparently developed first in the west central section of the state where five of its 40 reporting organizations in 1935 had been set up prior to 1919. (Table 4). Organization of new associations has continued in each section of the state, except the northwestern where no associations have been set up during the last ten years.

The areas used here are geographic areas modified to some extent to include associations handling similar products and supplies. (Figure 2). For example, the associations in the West Central and East Central areas handle large quantities of wheat, while those in the Northeast and Southwest handle considerable produce. Boundaries of the areas were adjusted to bring together in an area as many similar associations as possible.

Variations in Volume of Sales

The sales of exchanges and elevators during 1935 ranged from \$850 to \$483,000 per association. More than one-tenth of the associations did less than \$25,000 of business and one-half sold less than \$75,000 of products and supplies. (Table 5). On the other hand, 7.6 per cent had sales of \$200,000 or more. Of the latter 24 associations, two had sales of \$400,000 or more, and six a volume of business of \$300,000 or more.

TABLE 5.—NUMBER OF ASSOCIATIONS, BY AMOUNT OF SALES, 313 EXCHANGES AND ELEVATORS, 1935.

Sales		Associations		Cumulative Per Cent
Range	Average	Number	Per Cent	
Less than \$25,000.....	\$14,218	35	11.2	11.2
\$25,000—50,000.....	37,444	76	24.3	35.5
50,000—75,000.....	61,020	50	16.0	51.5
75,000—100,000.....	85,646	40	12.8	64.3
100,000—150,000.....	119,631	58	18.5	82.8
150,000—200,000.....	174,912	30	9.6	92.4
200,000 or more.....	276,388	24	7.6	100.0
All.....	\$91,500	313	100.0	----

Although comprising less than 8 per cent of the total number, the 24 largest associations accounted for nearly one-fourth of the total sales. (Table 6). In fact, the two associations with sales of \$400,000 or more handled 3.1 per cent of the total business of the 313 associations. On the other hand, the 35 smallest associations, although 11.5 per cent of the number, made less than 2 per cent of the total sales.

TABLE 6.—ESTIMATED SALES, BY SIZE OF ASSOCIATION, 313 EXCHANGES AND ELEVATORS, 1935.

Sales	Number of Associations	Estimated Sales		Cumulative Per Cent
		Amount (Thousands of Dollars)	Per Cent	
Less than \$25,000.....	35	498	1.7	1.7
\$25,000— 50,000.....	76	2,846	9.9	11.6
50,000— 75,000.....	50	3,051	10.7	22.3
75,000—100,000.....	40	3,426	12.0	34.3
100,000—150,000.....	58	6,938	24.2	58.5
150,000—200,000.....	30	5,247	18.3	76.8
200,000 or more.....	24	6,633	23.2	100.0
All.....	313	28,639	100.0	---

According to information obtained from 135 associations, the average dollar volume of business of exchanges and elevators was at its lowest point in recent years in 1932 and had increased each year since. (Table 7). Average sales in 1935 were estimated to be twice as large as in 1932, and 27 per cent above 1931 averages.

TABLE 7.—INDEX OF DOLLAR VOLUME OF SALES OF 135 ELEVATORS AND EXCHANGES, BY YEARS AND SIZE OF ASSOCIATION, 1931-35.*

Sales, 1935	Number of Associations	Index of Sales (1935=100)				
		1931	1932	1933	1934	1935
Less than \$50,000.....	30	104	62	75	94	100
\$50,000— 100,000.....	40	91	57	68	93	100
100,000— 150,000.....	29	65	49	55	83	100
150,000 or more.....	36	74	45	54	86	100
All.....	135	79	50	60	87	100

*The index for each group is a simple average of the relatives of the sales of each association with 1935 as 100. The average for all associations is a weighted average of the group indexes weighted by the total volume of business done in 1935 by each group as given in Table 6. This latter represents roughly an index of total volume of sales in each year since the number of associations did not change greatly.

Although all groups of associations had increased their dollar volume of business since 1932, the associations that were large in 1935 apparently had increased their sales much more rapidly than the smaller ones. The average sales of the 30 smallest associations in 1935 were only 61 per cent above 1932 levels and were less than the 1931 volume, while the 37 largest ones sold, in 1935, 122 per cent more products and supplies than in 1932 and considerably more than in 1931. (Table 7).

Associations and Volume of Business by Areas

Associations were most numerous in the Southwestern area where the number averaged 3.8 per county. (Table 8). Nearly one-half of the associations was located in this and the East Central area, a total of 39 counties.

TABLE 8.—NUMBER OF ASSOCIATIONS, BY AREAS, 313 EXCHANGES AND ELEVATORS, 1935.

Area	Number of Counties	Associations		
		Number	Per Cent	Per County
Northwest.....	12	25	8.0	2.1
Northeast.....	19	68	21.8	3.6
West Central.....	17	46	14.7	2.7
East Central.....	20	73	23.3	3.6
Southwest.....	19	72	23.0	3.8
South Central.....	16	27	8.6	1.7
Southeast.....	11	2	0.6	0.2
All.....	114	313	100.0	2.7

Sales amounted to more than \$5,000,000 in each of four areas, Southwestern, East Central, Northeastern, and West Central. (Table 9). The Southwestern area alone accounted for more than one-fourth of total sales.

TABLE 9.—ESTIMATED SALES, BY AREAS, 313 EXCHANGES AND ELEVATORS, 1935.

Area	Number of Associations	Estimated Sales		
		Amount	Per Cent	Average
		(Thousands of Dollars)		
Northwest.....	25	1,970	6.9	\$78,808
Northeast.....	68	5,150	18.0	75,739
West Central.....	46	5,131	17.9	111,963
East Central.....	73	6,259	21.9	85,738
Southwest.....	72	7,851	27.4	109,043
South Central.....	27	2,212	7.7	81,905
Southeast.....	2	66	0.2	33,103
All.....	313	28,639	100.0	\$91,500

Average sales of exchanges and elevators, however, were largest in West Central Missouri where the handling of grains is relatively important and second in the Springfield area where produce and feeds predominate. (Table 9). The two Southeast Missouri associations were very small. In the other areas, the average volume of business was somewhat uniform.

According to reports from a substantial number of exchanges and elevators, the average dollar volume of business in the West Central and East Central areas declined most from 1931 to 1932 and had increased most rapidly from 1932 to 1935. (Table 10). In contrast, the sales of associations in Southwest Missouri declined least from 1931 to 1932 and had risen relatively less since 1932, (Figure 3).

Apparently, most of this difference between areas resulted from the behavior of prices of the commodities handled. Associations in the two central areas handled a large volume of grain,

TABLE 10.—INDEX OF AVERAGE DOLLAR VOLUME OF SALES OF 122 EXCHANGES AND ELEVATORS, BY AREAS AND YEARS, 1931-35.

Area	Number of Associations	Index of Sales (1935 = 100)*				
		1931	1932	1933	1934	1935
Northeast.....	32	95	61	67	89	100
West Central.....	18	65	40	63	102	100
East Central.....	29	80	47	59	91	100
Southwest.....	43	79	57	63	81	100

*The index for each area is a simple average of the relatives of the sales of each association with 1935 as 100.

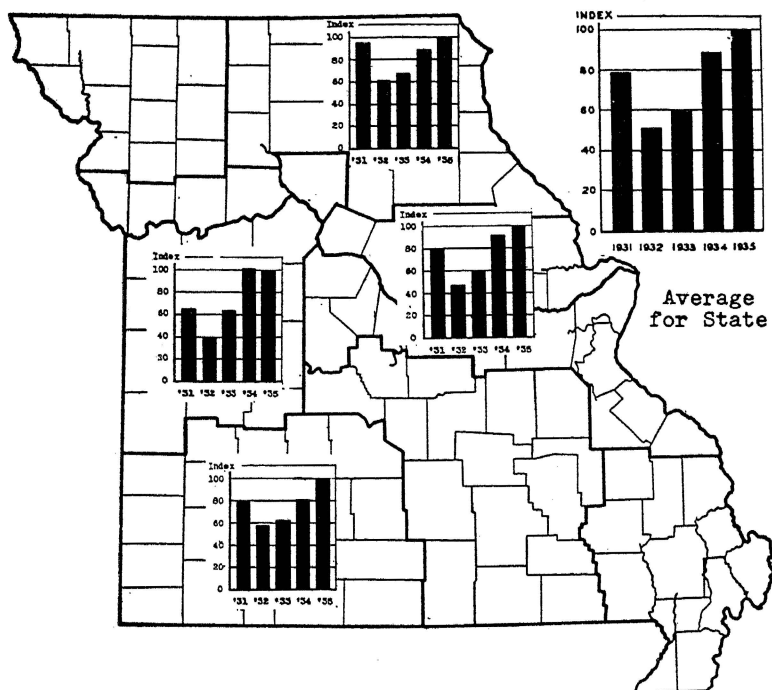


Fig. 3.—Index of Volume of Business of Associations, for the Five-Years, 1931-1935, by Areas. (Sales in 1935 = 100.)

while the business of those in the Southwestern area was largely produce and feeds. The United States farm price of grains fell 30 per cent from 1931 to 1932, while poultry products declined only 18 per cent, dairy products dropped 23 per cent, and feeds were 26 per cent lower. On the other hand, the price of grains rose 134 per cent from 1932 to 1935 while dairy products, poultry products, and feed increased only 30, 43 and 61 per cent, respectively.

Products and Supplies Handled

Although most exchanges and elevators handled a large number of commodities, commercial feeds constituted nearly one-fourth of the estimated sales of all associations, (Table 11). Corn

TABLE 11.—ESTIMATED SALES, BY COMMODITIES, 313 EXCHANGES AND ELEVATORS, MISSOURI, 1935.

Commodity	Estimated Sales, 1935		Per Cent of Total
	Total	Average	
	(Thousands of Dollars)		
Produce:			
Eggs.....	3,652	\$11,670	12.8
Poultry.....	1,950	6,229	6.8
Cream.....	1,862	5,948	6.5
Other*.....	575	1,836	2.0
Total.....	8,039	\$25,683	28.1
Grains, Feeds and Flour:			
Wheat.....	3,776	\$12,064	13.2
Corn.....	4,263	13,617	14.9
Other Grains.....	429	1,373	1.5
Commercial Feeds.....	7,103	22,694	24.8
Flour.....	875	2,796	3.1
Hay and Straw.....	110	351	0.4
Salt.....	129	412	0.4
Total.....	16,685	53,307	58.3
Petroleum Products†.....	407	1,300	1.4
Groceries.....	728	2,325	2.5
Hardware and Similar Supplies:			
Hardware and Machinery.....	135	\$432	0.5
Fencing.....	115	367	0.4
Seeds.....	849	2,713	3.0
Fuel.....	276	883	1.0
Twine.....	93	297	0.3
Fertilizer and Lime.....	236	754	0.8
Unclassified‡.....	62	199	0.2
Total.....	1,766	5,645	6.2
Miscellaneous.....	1,014	3,240	3.5
Grand Total.....	28,639	\$91,500	100.0

*Mainly wool, hides, furs and rabbits.

†A very small amount of auto supplies was included with petroleum products, mainly because they were often carried as one item on the books of associations.

‡Mainly a reported combination of items in this group.

was second in importance with 14.9 per cent; wheat, third with 13.2 per cent; and eggs, next with 12.8 per cent. By groups of commodities, grains, feeds and flour represented 58.3 per cent of total sales; produce, 28.1 per cent; and hardware and similar supplies, 6.2 per cent. Flour was included in the group with feeds and grains because in those associations not having detailed records of sales it was included with these two items rather than with groceries.

For some purposes a classification of sales as products and supplies is desirable. During 1935, the only important products sold were produce and wheat whose sales totaled \$11,815,000 or 41.3 per cent of all sales. The supply business, therefore, amounted to \$16,824,000, or 58.7 per cent of the total.

The estimates of the total value of each commodity handled were made by areas and in each, except the Southeastern, are based on detailed data from 165 associations which, in both number and volume of business, provide a substantial sample in each area, (Table 12). The sales of these exchanges and elevators as

TABLE 12.—NUMBER OF ASSOCIATIONS REPORTING DETAILED CLASSIFICATION OF COMMODITIES AND PROPORTION OF SALES REPRESENTED, BY AREAS, 313 ELEVATORS AND EXCHANGES, 1935.

Area	Number of Associations			Sales		
	Total in Area	Number Reporting	Per Cent Reporting	Total in Area	Amount Reported	Per Cent Reported
				(Thousands of Dollars)		
Northwest.....	25	10	40.0	1,970	942	47.8
Northeast.....	68	45	66.2	5,131	3,862	75.3
West Central.....	46	21	45.7	5,150	2,994	58.1
East Central.....	73	38	52.1	6,259	3,585	57.3
Southwest.....	72	40	55.5	7,851	5,297	67.5
South Central.....	27	11	40.7	2,212	1,202	54.3
Southeast.....	2	--	----	66	----	----

a proportion of total sales in each area ranged from 47.8 per cent in the northwestern part of the state to 76.3 per cent in the northeastern section. The small volume in Southeast Missouri was arbitrarily distributed since classification data for the two associations in that area were not available. The estimates for certain minor commodities may be somewhat low because associations tended to put minor commodities into a miscellaneous group when their sales were small. Thus, small volumes of minor commodities are included in the miscellaneous classification of Table 11.

As is apparent from Table 12, the associations reporting were larger than the average for the area, but this would not be expected to affect greatly the distribution of commodities, although there are some indications that the larger associations handle a somewhat wider variety of supplies.

Diversity of Business

That many exchanges and elevators handled a wide variety of products and supplies is evident from Table 13. More than 80 per cent of the associations for which detailed classification of sales was available bought eggs and poultry and sold commercial feeds and flour. Other commodities handled by at least one-half

of the associations were: cream, other produce, salt, petroleum products, and seeds. Hardware and machinery were least commonly sold.

TABLE 13.—PER CENT OF ASSOCIATIONS REPORTING THE HANDLING OF VARIOUS COMMODITIES AND THE AMOUNT HANDLED PER ASSOCIATION HANDLING THE COMMODITY, 165 EXCHANGES AND ELEVATORS, 1935.

Commodity	Average Sales for All Associations	Associations Handling Commodity		
		Number	Per Cent	Sales per Association
Eggs.....	\$14,051	144	87.3	\$16,100
Poultry.....	7,447	144	87.3	8,533
Cream.....	7,338	128	77.6	9,459
Other Produce*.....	2,360	109	66.1	3,572
Wheat.....	12,115	65	39.4	30,755
Corn.....	13,015	69	41.8	31,123
Oats.....	1,205	58	35.2	3,429
Barley.....	140	11	6.7	2,097
Commercial Feeds.....	24,928	163	98.8	25,233
Flour.....	3,058	138	83.6	3,656
Hay and Straw.....	368	43	26.1	1,413
Salt.....	446	96	58.2	767
Petroleum Products.....	1,603	100	60.6	2,645
Groceries.....	2,878	62	37.6	7,660
Hardware and Machinery.....	548	33	20.0	2,740
Fencing.....	474	35	21.2	2,246
Seeds.....	3,395	120	72.7	4,668
Fuel.....	1,324	59	35.8	3,704
Twine.....	363	66	40.0	909
Fertilizer and Lime.....	932	64	38.8	2,403

*Includes wool, hides, fur, rabbits.

Livestock is often handled by exchanges but nearly always on a commission basis. Thus it does not enter into the sales records of associations. A discussion of the handling of livestock by associations appears later under a section dealing with livestock shipping associations.

The diversification of exchanges and elevators with respect to the commodities handled is further emphasized in Table 14. For the 165 exchanges and elevators giving detailed data, produce amounted to 50 per cent or more of sales in only 30 associations, grains in 29, feeds and flour in 18, and petroleum products in 3, making a total of only 80, or 48.5 per cent, in which at least half of the business handled was of one group. Feeds and flour were most commonly handled, being sold by all but two associations. All groups of products except groceries were sold by at least one-half of the associations. These facts substantiate the statement made earlier that, because of the general character of their business, it would be difficult, if not impossible, to classify these associations into two groups; namely, exchanges and elevators.

Because all products and supplies were not handled by all associations, the average sales of each commodity by only those

TABLE 14.—NUMBER OF ASSOCIATIONS, BY COMMODITY GROUPS AND PROPORTION OF SALES REPRESENTED BY EACH GROUP, 165 EXCHANGES AND ELEVATORS, 1935.

Commodity Group	Associations Reporting No Sales*	Sales of Commodities as Per Cent of Total Sales							All
		Less than 10	10-20	20-30	30-40	40-50	50-60	60 or more	
Wheat.....	100	20	21	9	5	3	5	2	165
Grains Other Than Wheat.....	81	7	21	23	16	12	4	1	165
All Grains.....	76	9	10	14	10	17	8	21	165
Produce.....	18	10	18	26	31	32	22	8	165
Feeds and Flour.....	2	9	46	34	33	23	10	8	165
Petroleum Products.....	65	93	2	2	—	—	—	3	165
Groceries.....	103	40	11	8	3	—	—	—	165
Hardware and Similar Supplies..	21	111	27	4	2	—	—	—	165

*Although associations having more than 10 per cent of sales unclassified were not included in this study, small amounts of certain less important products may have been reported as miscellaneous sales and not sales of those products. Thus, some associations tabulated in this column probably should have been in the "less than 10 per cent" column.

associations handling it were in some instances much larger than the average sales for all associations. Associations handling wheat and corn, for example, handled more than \$30,000 of each of these products per association compared to averages of \$12,000 and \$13,000, respectively, for all associations. (Table 13). For exchanges selling groceries, sales averaged nearly \$7,700 contrasted with \$2,878 for all 165 associations reporting detailed data on sales.

Variations in Importance of Commodities by Areas

The relative importance of commodities in the sales of association varied widely among the areas. (Table 15). In the Southwest area, eggs represented 21.2 per cent of total sales, compared with 6.0 per cent in the West Central area. Produce made up more than 41 per cent of the sales of associations in the Southwestern area, while only 13.4 per cent in the West Central area. Wheat varied from 3.7 per cent of sales in the Northeastern area to 33.6 per cent in the West Central area. Corn was relatively important in the Northwest, West Central and East Central areas. Feeds accounted for a substantial part of the sales in each area but were most important in Southern Missouri where dairy and poultry farming predominate. More than three-fourths of the sales in the West Central area and 68 per cent in East Central Missouri consisted of grains, feeds, and flour. Groceries were relatively important in Northern, Southwestern, and South Central Missouri. Hardware and similar supplies made up 10.9 per cent of the sales of associations in the Northeastern area, compared with 3.1 per cent for those in the West Central area. In general, the associations in Northeastern, Southwestern, and South

TABLE 15.—SALES OF EACH COMMODITY AS PER CENT OF TOTAL SALES, BY AREAS, 165 EXCHANGES AND ELEVATORS, 1935.

Commodity	Areas					
	North-west	North-east	West Central	East Central	South-west	South Central
	(Sales as Per Cent of Total)					
Produce:						
Eggs.....	10.6	11.2	6.0	8.3	21.2	17.0
Poultry.....	5.6	6.9	4.0	5.6	9.1	9.5
Cream.....	7.6	10.1	2.5	3.5	8.9	6.7
Other.....	0.9	4.9	0.9	0.8	2.2	1.7
Total.....	24.7	33.1	13.4	18.2	41.4	34.9
Grains, Feeds and Flour:						
Wheat.....	14.0	3.7	33.6	18.4	5.2	10.9
Corn.....	24.2	11.4	24.9	23.5	4.5	4.3
Other Grains.....	1.7	1.1	1.7	3.7	0.1	0.4
Commercial Feeds.....	18.5	24.2	16.0	18.5	32.6	40.9
Flour.....	0.7	4.9	1.7	3.5	2.7	3.7
Hay and Straw.....	1.4	0.6	*	0.3	0.2	0.8
Salt.....	0.2	0.8	0.4	0.5	0.3	0.4
Total.....	60.7	46.7	78.3	68.4	45.6	51.4
Petroleum Products.....	1.0	2.5	1.3	1.9	0.6	1.1
Groceries.....	3.8	3.6	1.0	0.8	3.4	4.4
Hardware and Similar Supplies:						
Hardware and Machinery..	0.4	0.9	0.2	0.6	0.4	----
Fencing.....	0.2	1.1	0.2	0.5	0.1	----
Seeds.....	3.4	5.9	1.5	3.2	1.9	2.5
Fuel.....	3.3	1.6	0.7	1.5	*	----
Twine.....	0.3	0.4	0.3	0.4	0.2	*
Fertilizer and Lime.....	*	0.4	0.1	1.0	1.8	0.7
Unclassified.....	*	0.6	0.1	0.2	0.2	0.4
Total.....	7.6	10.9	3.1	7.4	4.6	3.6
Miscellaneous.....	2.2	3.2	2.9	3.3	4.4	4.6
Total.....	100.0	100.0	100.0	100.0	100.0	100.0

*Less than 0.05 per cent.

Central Missouri handled principally produce and feeds; those in the West Central and East Central areas dealt mainly in grains and feeds; and those in the northwestern part of the state were general stores.

Estimated sales within each area are given by groups of commodities in Table 16 and for the more important commodities in Table 17.

The effect of specialization in handling of commodities on the volume of business seems to depend on the commodities involved. Associations specializing in handling produce had a volume of business 35 per cent less than the average of all associations while those handling principally feeds and flours, as well as those handling grains chiefly, had sales of 21 and 28 per cent, respectively, above the average for all associations, (Table 18). The average sales of general exchanges and elevators, those not having as much

TABLE 16.—ESTIMATED SALES, BY GROUPS OF COMMODITIES AND BY AREAS, 313 EXCHANGES AND ELEVATORS, 1935.

Commodity Group	Area					
	North-west	North-east	West Central	East Central	South-west	South Central
	(Thousands of Dollars)					
Produce.....	487	1,704	686	1,139	3,251	772
Grains, Feeds and Flour.....	1,196	2,406	4,019	4,284	3,578	1,136
Petroleum Products.....	20	128	68	116	52	23
Groceries.....	75	188	52	50	265	98
Hardware and Similar Supplies.....	150	559	158	461	358	80
Miscellaneous.....	42	165	148	209	347	103
Total.....	1,970	5,150	5,131	6,259	7,851	2,212

TABLE 17.—ESTIMATED SALES OF IMPORTANT COMMODITIES, BY AREAS, 313 EXCHANGES AND ELEVATORS, 1935.

Product or Supply	Area					
	North-west	North-east	West Central	East Central	South-west	South Central
	(Thousands of Dollars)					
Eggs.....	209	573	307	521	1,667	376
Poultry.....	110	355	207	350	717	210
Cream.....	149	521	129	219	695	149
Wheat.....	276	191	1,721	1,154	406	21
Corn.....	476	587	1,277	1,468	354	94
Commercial Feeds.....	365	1,248	823	1,160	2,556	904
Flour.....	14	252	68	220	215	82
Seeds.....	66	304	76	198	149	56
Fuel.....	64	82	36	92	2	---

as 50 per cent of their business in any one group, were approximately the same as the average volume of business of all associations. Apparently associations only specialized when there were

TABLE 18.—AVERAGE SALES, BY TYPE OF ASSOCIATION, 165 EXCHANGES AND ELEVATORS, 1935.

Type of Business of Association	Sales per Association		
	Number of Associations	Amount	As Per Cent of Average for All
Associations in which 50 per cent or more of sales was:			
Produce.....	30	\$71,625	65.3
Grain.....	29	140,492	128.1
Feeds and Flour.....	18	132,709	121.0
Petroleum Products.....	3	24,218	22.1
Associations in which less than 50 per cent of sales was of any one commodity group.....	85	110,725	101.0
All.....	165	\$109,673	100.0

sufficient amounts of a commodity to support a specialized association.

Effect of Size of Town on Volume of Business

The average volume of business of exchanges and elevators was directly related to the size of the towns in which associations were located, being smallest in the small towns and increasing with the size of town. The average sales for 64 associations in towns of less than 250 people were \$52,463 compared with \$236,746 per association for the seven located in towns with a population of 10,000 or more, (Table 19).

TABLE 19.—NUMBER OF ASSOCIATIONS AND AVERAGE VOLUME OF BUSINESS BY SIZE OF TOWN IN WHICH ASSOCIATION OR BRANCH WAS LOCATED, 292 EXCHANGES AND ELEVATORS, 1935.

Population	Number of Associations	Sales per Association
Less than 250.....	64	\$52,463
250-500.....	82	61,332
500-750.....	31	89,259
750-1000.....	20	114,193
1000-2000.....	49	118,374
2000-5000.....	28	135,388
5000-10,000.....	11	135,460
10,000 or more.....	7	236,746
All.....	292*	\$89,645

*Branches of associations were considered as separate units in this tabulation.

Fewer associations located in small towns, therefore, were able to attain the large volumes of business more commonly enjoyed by associations in larger towns. For example, the upper limit of sales in 1935 for two-thirds of the associations was \$50,000

TABLE 20.—NUMBER OF ASSOCIATIONS AS PER CENT OF TOTAL, BY VOLUME OF BUSINESS AND BY SIZE OF TOWN, 292 EXCHANGES AND ELEVATORS, 1935.

Sales in Thousands of Dollars	Size of Town						All
	Less than 250	250-500	500-1000	1000-2000	2000-5000	5000 or more	
	(Associations as Per Cent of Total)						
Less than 25.....	26	11	4	4	--	11	11
25- 50.....	44	32	16	19	4	--	24
50- 75.....	16	24	18	12	14	--	17
75-100.....	2	12	27	14	25	11	14
100-150.....	8	16	25	21	25	39	19
150-200.....	3	5	2	16	14	6	7
200 or more.....	1	--	8	14	18	33	8
All.....	100	100	100	100	100	100	100
Number of Associations.....	64	82	51	49	28	18	292

in towns of less than 250 people, \$75,000 in the next population group, \$100,000 in towns having from 500 to 1000 inhabitants, \$150,000 in towns of 1,000 to 5,000 people and \$200,000 in the largest towns and cities, (Table 20).

Table 20 indicates that although most associations in small towns were not able to obtain relatively large sales, a few had sales of \$150,000 or more. Associations in such towns, however, should normally expect to have a relatively small business unless unusual conditions prevail and should make plans for continued small-scale operations. This applies also to new organizations being established in small towns.

This relation between size of town and volume of business apparently results from the size and quality of the trade territory which affects both the size of town and the volume of business of the association.

Number of Patrons

For 197 associations reporting a volume of business slightly above the average for all associations, the average number of patrons was 305, (Table 21). Average sales per patron were \$308. The number of patrons was estimated by the managers and, at least for purposes of comparison, are considered representative. The manager did not include in his estimate individuals making only a few small purchases during the year.

TABLE 21.—NUMBER OF PATRONS AND AVERAGE SALES PER PATRON, BY SIZE OF ASSOCIATION, 197 EXCHANGES AND ELEVATORS, 1935.

Sales in Thousands of Dollars	Number of Associations	Sales per Association		Patrons per Association		Sales per Patron	
		Amount	Index	Number	Index	Amount	Index
Less than 25-----	14	\$14,530	100	106	100	\$137	100
25- 50-----	50	38,866	267	207	195	188	137
50- 75-----	35	61,827	426	228	215	271	198
75-100-----	28	85,415	588	321	303	266	194
100-150-----	38	122,586	844	375	354	327	239
150-200-----	18	180,937	1245	449	424	403	294
200 or more-----	14	279,239	1922	641	605	436	318
All-----	197	\$94,044	647	305	288	\$308	225

Large associations were large because they not only served a large number of patrons but also handled more products and supplies per patron. Compared with the smallest associations, the largest ones had six times as many patrons and more than three times as much business per patron, resulting in 19 times the volume of business, (Table 21).

The greater number of patrons of the larger associations probably was due to the patronage of a larger proportion of the farmers in their trade areas as well as to the wider trade territories served by such associations, although data are not available

to substantiate this conclusion. The larger sales per patron probably occurred principally because the large associations were more commonly located in areas where farmers have larger cash sales and use more feed and other supplies in their farming operations. Part of it, however, may have resulted from the apparently wider variety of supplies handled by the larger associations, thereby permitting farmers to obtain from their associations more of the different articles needed on the farm.

Margins

Although many associations received some income from the use of their trucks and from patronage dividends paid by central associations, the margins taken on products and supplies handled were by far the most important source of income from which expenses were to be met. For that reason, the margins taken by exchanges and elevators are of considerable importance to them.

The gross margins taken on all commodities by the 165 exchanges and elevators from which detailed information was obtained averaged 5.9 cents per dollar of sales, (Table 22). These

TABLE 22.—GROSS MARGIN AS PER CENT OF SALES, BY COMMODITY GROUPS, 165 EXCHANGES AND ELEVATORS, 1935.

Commodity Group	Sales Reported		Gross Margin as Per Cent of Sales
	Amount	Per Cent of Total for State	
Produce.....	\$5,249,444	65.3	4.3
Grains, Feeds and Flour.....	10,299,186	61.7	6.1
Groceries.....	474,940	65.3	8.4
Hardware and Similar Supplies.....	1,158,464	65.6	8.4
Miscellaneous.....	649,495	---	---
All*.....	\$17,831,529	63.2	5.9

*Petroleum products are excluded because a number of associations kept no records of amounts used by their trucks.

associations handled \$18,000,000 of products and supplies, amounting to 63.2 per cent of the estimated sales of all exchanges and elevators in Missouri. Because the sales of associations reporting were larger than the average for all associations, the above margins may be slightly different from the average margins for all associations.

Gross Margins by Commodities.—The average margins taken on groups of commodities varied from 4.3 per cent of sales on produce to 8.4 per cent on groceries and hardware, (Table 22). The margins reported on petroleum products were higher, 13.6

per cent, but were not reliable because some associations, it was learned, used gasoline and oil in their truck without taking this into account on their books.

Among the important commodities handled, average margins ranged from 2.7 per cent on eggs, less than one cent per dozen in 1935, to 15.3 per cent on hardware and machinery. (Table 23). In addition, poultry, wheat and corn were handled on low margins whereas salt, fuel, and fertilizers were given relatively high mark-ups.

TABLE 23.—GROSS MARGIN AS PER CENT OF SALES, BY IMPORTANT COMMODITIES, 165 EXCHANGES AND ELEVATORS, 1935.

Commodity	Sales	Gross Margin as Per Cent of Sales
Eggs.....	\$2,318,450	2.7
Poultry.....	1,228,767	4.2
Cream.....	1,210,754	7.5
Wheat.....	1,999,047	4.2
Corn.....	2,147,520	4.4
Oats.....	198,871	8.9
Commercial Feeds.....	4,113,050	7.6
Flour.....	504,490	6.4
Hay and Straw.....	60,771	8.2
Salt.....	73,597	13.0
Hardware and Machinery.....	90,426	15.3
Fencing.....	78,263	6.7
Seeds.....	560,183	6.0
Fuel.....	218,527	9.7
Twine.....	59,973	4.9
Fertilizer and Lime.....	153,789	11.6

Theoretically, margins to be taken on each product should be related to the cost of handling that particular product. Practically, this is not possible for several reasons. Few associations could afford to maintain and analyze cost accounting records for the purpose of establishing proper margins. Also, the competitive situation probably would not permit the maintenance of such margins on all products. Finally, relatively low margins on certain farm products may be necessary in order to attract and keep patrons, who will buy supplies upon which margins are relatively higher.

Average Margins by Areas.—The average margins taken by exchanges and elevators varied appreciably by areas, being lowest, 4.9 per cent, in the south central area and highest, 6.9 per cent, in the east central part of the state. (Table 24). From nearly one-half to three-fourths of the estimated sales in each area was represented in these averages.

Since the variations among areas in the importance of high or low margin products and supplies has some effect on average margins, the margins taken on groups of commodities and on

TABLE 24.—GROSS MARGIN AS A PER CENT OF SALE, BY AREAS AND COMMODITIES, 165 EXCHANGES AND ELEVATORS, 1935.

Area	Number of Associations	Sales Reported		Gross Margin as Per Cent of Sales*
		Amount	Per Cent of Total for State	
Northwest.....	10	\$ 931,582	47.8	6.3
Northeast.....	45	3,818,307	76.0	6.5
West Central.....	21	2,954,148	58.3	5.7
East Central.....	38	3,675,969	59.8	6.9
Southwest.....	40	5,262,651	67.5	5.0
South Central.....	11	1,189,092	54.3	4.9
All.....	165	\$17,831,529	63.2	5.9

*Excluding petroleum products

TABLE 25.—GROSS MARGIN AS PER CENT OF SALES, BY AREAS AND COMMODITY GROUPS, 165 EXCHANGES AND ELEVATORS, 1935.

Commodity Group	Area					
	North-west	North-east	West Central	East Central	South-west	South Central
Produce.....	6.1	(Gross Margin as Per Cent of Sales)		4.4	3.4	3.0
Grains, Feeds and Flour.....	6.5	5.5	5.7	6.7	5.9	5.6
Groceries.....	4.3	6.6	5.2	8.3	8.9	7.5
Hardware and Similar Supplies..	7.0	7.9	15.1	11.5	7.7	6.8
All*.....	6.3	7.2	8.1	6.9	5.0	5.9

*Excluding petroleum products.

important individual commodities are more indicative of the differences among areas in margins taken. The associations in the Southwestern and South Central areas had low margins on produce but maintained margins similar to those in other areas on other groups of commodities, (Table 25).

Among the important commodities and supplies, margins were lowest on eggs and poultry in the Southwestern and South Central areas, on cream and wheat in the West Central region, on corn in the Northwestern and Southwestern areas, and on feeds in South Central and Southwestern Missouri (Table 26). It appears that margins generally are lowest on each commodity in the areas where it makes up a relatively large part of total sales. Competition probably is strongest in the areas where the marketings of a product or the purchases of a supply are relatively important and, as a consequence, margins are reduced to the minimum.

The margins most frequently taken on each product or supply by the associations are shown in Tables A and B of the Appendix. For three-fourths of the 292 associations reporting,

TABLE 26.—GROSS MARGIN AS PER CENT OF SALES, BY AREAS AND IMPORTANT COMMODITIES, 165 EXCHANGES AND ELEVATORS, 1935.

Commodity	Areas					South Central
	North-west	North-east	West Central	East Central	South-west	
	(Gross Margin as Per Cent of Sales)					
Eggs.....	4.6	4.0	4.6	2.8	1.9	1.7
Poultry.....	7.1	5.7	6.8	4.4	2.9	2.1
Cream.....	7.8	7.9	6.3	9.1	7.0	6.9
Wheat.....	4.7	4.2	3.5	5.2	4.4	10.0
Corn.....	2.3	6.0	4.0	5.1	3.1	9.1
Oats.....	9.8	11.3	8.0	9.1	*	*
Commercial Feeds.....	12.7	7.9	10.3	6.4	6.3	5.3
Flour.....	*	4.5	6.0	7.7	8.5	4.7
Hay and Straw.....	9.3	4.5	*	8.5	11.7	9.3
Salt.....	*	12.0	12.2	13.6	13.9	16.1
Hardware and Machinery.....	17.4	16.5	8.5	20.6	7.6	5.3
Fencing.....	*	5.9	9.0	8.1	10.9	*
Seeds.....	4.7	5.5	8.1	7.8	4.6	6.3
Fuel.....	10.4	8.6	8.4	18.6	*	*
Fertilizer and Lime.....	*	9.5	*	9.6	*	*

*Sales too small to give representative gross margin.

the margins on all commodities were between 3 and 8 per cent of sales.

The most common margin taken on eggs and poultry was 3 to 4 per cent; on cream, 7 to 8 per cent; on wheat and corn, 4 to 5 per cent; on feeds, 6 to 7 per cent; and on flour, 5 to 6 per cent, (Table B, Appendix).

Methods of Handling

In handling products and supplies, cooperative associations may either buy outright and resell, handle on commission, or pool. The method used by Missouri exchanges and elevators in handling products and supplies was almost entirely that of buying outright and reselling. By this method the association acquires title to the commodities bought and may resell them at the time, place, and price considered most desirable. The commission method is sometimes used in handling grains and livestock. Under this method, a fixed amount per bushel of grain or hundred-weight of livestock is charged by the association for its services in marketing. The pooling of orders for supplies and of products for marketing is a rare practice among exchanges and elevators.

Sources of Purchases.—When a detailed record of sales was available, the manager of the exchange or elevator gave the sources from which each product and supply was purchased and the proportion obtained from each. Naturally, these estimates are rough, but they serve as an indication of the sources of supply and the relative importance of each. The sources were classified into six groups; namely, farmers, central cooperatives, private middlemen,

manufacturers, truckers, and local cooperatives. Many small associations bought certain items delivered by rail, such as fertilizer, through larger associations so as to obtain advantage of carlot rates. In the case of purchases, the central associations are cooperative wholesalers. Purchases of an association from manufacturers on contracts made with a central cooperative were regarded as purchases from the cooperative rather than from the manufacturer. Private middlemen include wholesalers, jobbers, retailers, brokers, etc.

In 1935, nearly 45 per cent of the products and supplies, by value of purchases, was from farmers; 34.6 per cent from cooperative wholesalers, either directly or on contract with manufacturers; and approximately 14 per cent from private wholesalers, (Table 27). Manufacturers, including coal mines, accounted for 4.8 per cent of purchases; truckers for 2 per cent; and local cooperatives for the very small balance.

TABLE 27.—SOURCES FROM WHICH PRODUCTS AND SUPPLIES WERE PURCHASED, 195 EXCHANGES AND ELEVATORS, 1935.

Source of Purchase	Purchases	
	Amount	Per Cent
Farmer-Patrons.....	\$8,303,600	44.6
Central Cooperatives.....	6,447,600	34.6
Private Middlemen.....	2,576,400	13.8
Manufacturers.....	884,300	4.8
Truckers.....	371,800	2.0
Other Local Cooperatives.....	42,600	0.2
All.....	\$18,626,300	100.0

TABLE 28.—SOURCES OF PURCHASE AND PER CENT OF TOTAL FROM EACH, BY COMMODITY GROUPS, 195 EXCHANGES AND ELEVATORS, 1935.

Commodity Group	Source of Purchase						All
	Farmer-Patron	Central Cooperative	Private Middlemen	Manufacturer	Trucker	Local Cooperative	
Produce.....	97	--	(Per Cent from Each Source)				100
Grains, Feed and Flour.....	25	53	12	6	4	*	100
Petroleum Products†	--	69	11	20	--	*	100
Groceries.....	*	33	67	--	--	--	100
Hardware and Similar Supplies.....	15	41	30	14	--	--	100
Total.....	45	34	14	5	2	*	100

*Less than 0.5 per cent.

†Including a small amount of auto supplies.

The source of purchases, of course, varied with commodities. Practically all produce was purchased from farmer-patrons,

(Table 28). Grains, feeds, and flour came mainly from cooperative wholesalers and groceries from private wholesalers.

By individual commodities, eggs, poultry, cream, other produce, and wheat were almost solely purchased from farmers although some exchanges bought small amounts of produce from private grocers and produce buyers in their territories, (Table 29). Other products, of which a substantial proportion of purchases was from farmers, included hay and straw, oats, and seeds. Because of the drought in 1934, little corn was purchased from farmers and shipped out of the area where grown, during the first ten months of 1935.

TABLE 29.—SOURCES OF PURCHASE AND PER CENT OF TOTAL FROM EACH, BY SPECIFIED COMMODITIES, 195 EXCHANGES AND ELEVATORS, 1935.

Commodity	Source of Purchase						All
	Farmer-Patron	Central Cooperative	Private Middlemen	Manufacturer	Trucker	Local Cooperative	
	(Per Cent from Each Source)						
Eggs.....	95	--	5	--	--	--	100
Poultry.....	96	--	4	--	--	--	100
Cream.....	98	--	2	--	--	--	100
Other Produce†.....	100	--	*	--	--	--	100
Wheat.....	99	1	*	--	--	*	100
Corn.....	7	38	39	--	16	*	100
Oats.....	31	43	22	--	4	--	100
Commercial Feeds.....	--	82	7	11	*	*	100
Flour.....	--	81	4	15	--	*	100
Hay and Straw.....	38	25	37	--	*	--	100
Salt.....	--	81	6	13	--	--	100
Sugar.....	--	98	2	--	--	--	100
Other Groceries.....	--	18	82	--	--	--	100
Hardware and Machinery.....	--	9	23	68	--	--	100
Fencing.....	--	91	3	6	--	--	100
Seeds.....	30	27	43	--	--	--	100
Fuel.....	--	38	27	35§	--	--	100
Twine.....	--	76	13	11	--	--	100
Fertilizer and Lime.....	--	78	11	11	--	*	100

*Less than 0.5 per cent.

†Mainly wool, hides, furs and rabbits.

§Mines.

Cooperative wholesalers furnished the associations most of their commercial feeds, flour, salt, fencing, twine, fertilizer and lime, and sugar. They also were an important source of corn, oats, hay and straw, coal, and seeds.

Many of the supplies were bought from private middlemen. Much of the hay in the Southwestern Missouri area was from a large private hay dealer. Seeds were bought from seed houses and groceries from wholesalers and jobbers. Coal also was bought from middlemen in significant amounts.

Most of the machinery was bought from implement makers or handled for them on a commission basis. Considerable coal was bought from mines. Many associations, although affiliated

with the Missouri Farmers' Association and buying most of their feed and flour from its cooperative wholesaling organization, also handled feeds of private manufacturers.

Truckers peddled considerable corn and some oats to cooperative associations in 1935. Several commodities were bought by small exchanges from larger ones nearby.

Sales Outlets.—In 1935 more than one-half of the sales of the 198 exchanges and elevators, for which detailed records were available, was made to farmers; and 22 per cent, to central cooperatives, such as the creameries, produce plants, and wholesaling departments of the Missouri Farmers' Association, (Table 30). Nearly one-sixth of the total business was with private middlemen, mainly wholesalers and retailers; and 7.3 per cent with private processors, principally flour mills and creameries. Townspeople accounted for 2.5 per cent of sales and other local cooperatives for the small remainder. These figures are based on estimates by the managers of the proportion of sales made through each outlet and, consequently, are not precise but do give an indication of the relative importance of each important outlet. Each outlet accounting for a significant part of sales was reported.

TABLE 30.—SALES OUTLETS FOR PRODUCTS AND SUPPLIES, 198 EXCHANGES AND ELEVATORS, 1935.

Outlet	Sales	
	Amount	Per Cent
Farmer-Patrons.....	\$10,933,800	52.2
Central Cooperatives.....	4,672,100	22.3
Private Middlemen.....	3,275,900	15.7
Private Processors.....	1,528,100	7.3
Townspeople.....	518,600	2.5
Other Local Cooperatives.....	7,500	*
All.....	\$20,936,000	100.0

*Less than .05 per cent.

The importance of each sales outlet varied according to the commodity involved. Produce went largely to central cooperative creameries and poultry plants. For the other groups of commodities, however, sales to farmers were, by far, the most important outlet, (Table 31).

Farm products moving out from the associations went through several outlets. Approximately two-thirds of the eggs, poultry, wool, hides and furs was sold to central cooperative poultry plants, and most of the other one-third to private produce houses and other middlemen, (Table 32). Cream was almost equally divided between central cooperative creameries and private ones.

TABLE 31.—SALES OUTLETS AND PER CENT OF SALES THROUGH EACH, BY COMMODITY GROUPS, 198 EXCHANGES AND ELEVATORS, 1935.

Commodity Group	Sales Outlets						All
	Farmer-Patrons	Central Cooperatives	Private Middlemen	Private Processors	Townspople	Local Cooperatives	
Produce.....	--	63	(Per Cent Through Each Outlet)				100
Grains, Feeds and Flour.....	75	3	25	9	3	*	100
Petroleum Products.....	85	--	13	8	1	*	100
Groceries.....	89	--	12	--	3	*	100
Hardware and Similar Supplies.....	90	1	5	--	6	--	100
Hardware and Similar Supplies.....	90	1	6	--	3	*	100
All.....	52	22	16	7	3	*	100

*Less than 0.5 per cent.

TABLE 32.—SALES OUTLET AND PER CENT OF SALES THROUGH EACH, BY SPECIFIED COMMODITIES, 198 EXCHANGES AND ELEVATORS, 1935.

Commodity	Sales Outlets						All
	Farmer-Patrons	Central Cooperatives	Private Middlemen	Private Processors	Townspople	Local Cooperatives	
Eggs.....	--	68	(Per Cent Through Each Outlet)				100
Poultry.....	--	66	28	--	4	*	100
Cream.....	--	46	29	--	5	*	100
Other Produce.....	--	60	5	49	*	*	100
Wheat.....	7	8	39	*	1	*	100
Corn.....	94	4	44	41	*	*	100
Oats.....	98	--	2	--	--	--	100
Commercial Feeds.....	91	--	7	--	2	*	100
Flour.....	88	--	7	--	5	*	100
Hay and Straw.....	95	--	4	--	1	--	100
Salt.....	97	--	2	--	1	--	100
Sugar.....	60	--	13	--	27	--	100
Other Groceries.....	95	--	4	--	1	*	100
Hardware and Machinery.....	97	--	--	--	3	--	100
Fencing.....	96	--	4	--	--	--	100
Seeds.....	88	1	10	--	1	*	100
Fuel.....	79	--	6	--	15	--	100
Twine.....	99	--	1	--	--	--	100
Fertilizer and Lime.....	97	--	3	--	--	--	100

*Less than 0.5 per cent.

Wheat went largely to jobbers and commission men and to private milling companies. Local townspeople purchased appreciable quantities of poultry, eggs, flour, sugar and fuel.

A comparison of tables 29 and 32 reveals that the exchanges bought appreciable amounts of hay and straw, oats, seed, and corn from farmers and resold them to other farmer-patrons. This was true also of rye and barley. The other commodities, however, were either bought from farmers and shipped out or brought in from the outside and sold to farmers.

Methods of Transportation

With the improvement of roads and the introduction of the truck, the methods by which exchanges and elevators receive supplies and ship products to market have changed materially. Many

exchanges and elevators that formerly used rail transportation entirely, now own trucks and do practically all their hauling. More than 70 per cent of the associations owned one or more trucks. In this connection, it should be pointed out that fewer associations having a small volume of business had trucks. Only 57 per cent of the associations with less than \$50,000 of sales had trucks in 1935, whereas 80 per cent of the larger associations had delivery equipment. For the four groups of exchanges and elevators having a volume of business between \$50,000 and \$200,000 the proportion of associations using trucks was almost uniformly 80 per cent. About 95 per cent of the largest associations had trucking equipment.

Receipts of Supplies.—Approximately 55 per cent of the supplies purchased by associations having detailed records of sales was received by rail, and 22 per cent was hauled in by the associations in their own trucks, (Table 33). Associations commonly

TABLE 33.—PER CENT WHICH RECEIPTS OF SUPPLIES BY EACH CLASS OF TRANSPORTATION WERE OF TOTAL RECEIPTS, BY COMMODITIES, 181 EXCHANGES AND ELEVATORS, 1935.

Commodity	Class of Transportation				All
	Buyer's Truck	Seller's Truck	Truck Line	Railroad	
			(Per Cent by Each Class)		
Corn.....	2	28	5	65	100
Oats.....	5	12	3	80	100
Commercial Feeds.....	29	8	4	59	100
Flour.....	20	10	2	68	100
Hay and Straw.....	18	26	7	49	100
Salt.....	6	7	2	85	100
Petroleum Products.....	7	51	2	40	100
Groceries.....	38	52	5	5	100
Hardware and Machinery.....	54	9	11	26	100
Fencing.....	55	10	2	33	100
Seeds.....	40	32	10	18	100
Fuel.....	5	4	4	87	100
Twine.....	38	11	12	39	100
Fertilizers and Lime.....	12	4	3	81	100
All Supplies*.....	22	18	5	55	100

*Includes some not individually given above.

hauled livestock and other products to the central markets and brought back certain supplies. Supplies commonly hauled were: feeds, flour, hay and straw, groceries, hardware and machinery, fencing, seeds, and twine. Supplies, especially feeds, were more commonly hauled in by associations in North, West Central and Southwest Missouri, (Table 34). Railroads were used extensively for all supplies except groceries, but were most commonly used for oats, salt, fuel and fertilizers. Although trucking has increased rapidly in recent years, 59 per cent of the feeds was still being received by rail in 1935, (Table 33).

TABLE 34.—PROPORTION OF PRODUCTS SHIPPED OUT AND SUPPLIES RECEIVED, BY SPECIFIED CLASS OF TRANSPORTATION AND BY AREA, EXCHANGES AND ELEVATORS, 1935.

Area	Commodity and Class of Transportation)							
	Eggs		Poultry		Cream		Commercial Feeds	
	Buyer's Truck	Seller's Truck	Buyer's Truck	Seller's Truck	Buyer's Truck	Seller's Truck	Buyer's Truck	Railroad
	(Per Cent of Total Shipments or Receipts by Each Class of Transportation)							
Northwest.....	95	5	100		86		49	19
Northeast.....	59	40	73	26	45	41	29	55
West Central.....	67	33	86	14	80	--	37	48
East Central.....	54	27	69	15	26	4	9	81
Southwest.....	8	86	12	81	50	29	46	46
South Central.....	7	30	10	33	22	61	1	85
All.....	30	55	44	41	46	31	29	59

The seller delivered 18 per cent of the supplies to the association, most commonly delivering petroleum products and groceries. Because a considerable amount of corn was bought from truckers, the proportion of it delivered by the seller was also large. The truck line was not used extensively for the delivery of supplies.

These figures and those in the following section were derived from estimates made by managers of the proportion of the supplies received and products shipped by each indicated means of transportation. Thus, they are approximations, but undoubtedly point out the relative importance of each method of delivery or shipment.

Shipments of Products.—The shipments of products, on the other hand, were about equally divided among the railroad, the buyer's truck and the seller's truck, after the 8 per cent hauled by truck lines was excluded, (Table 35). Wheat was shipped almost entirely by rail, but most of the produce was hauled by either buyers' or sellers' trucks. In some areas, especially in Northern and Central Missouri, the central cooperative produce plants and other buyers picked up eggs and poultry from the association, but

TABLE 35.—PER CENT WHICH SHIPMENTS OF FARM PRODUCTS BY EACH CLASS OF TRANSPORTATION WERE OF TOTAL SHIPMENTS, BY PRODUCTS, 170 EXCHANGES AND ELEVATORS, 1935.

Product	Class of Transportation				All
	Seller's Truck	Buyer's Truck	Truck Line	Railroad	
	(Per Cent by Each Class)				
Eggs.....	55	30	13	2	100
Poultry.....	44	41	10	5	100
Cream.....	31	46	7	16	100
Other Produce.....	44	45	4	7	100
Wheat.....	1	1	*	98	100
All Products†.....	33	27	8	32	100

*Less than 0.5 per cent.

†Includes some not individually given above.

in others, notably Southwestern Missouri, the associations delivered these products to the plants. Such differences are brought out in Table 34.

Services Performed for Patrons

Many associations provided delivery and collection service for patrons. In addition, a large number of associations ground grains and mixed feeds for patrons and trucked livestock to market for them. Other services often included the maintenance of rooms for social and educational functions and assistance to the local farm clubs in the support of such activities.

Delivery and Collection Service.—Many associations delivered supplies to patrons and collected produce for them. In 1935, 80 per cent of the 171 associations reporting maintained delivery service and delivered about one-third of their total sales of supplies. Nearly 30 per cent of them delivered 40 per cent or more of such sales. (Table 35).

Fewer associations, only 60 per cent, collected produce and that collected amounted to only one-fourth of their purchases. Thus, only 14 per cent of the produce handled by all associations was collected. About 22 per cent of the associations collected 40 per cent or more of the produce bought, (Table 36).

TABLE 36.—NUMBER OF ASSOCIATIONS BY PER CENT OF SUPPLIES DELIVERED OR PRODUCE COLLECTED, 171 EXCHANGES AND ELEVATORS, 1935.

Per Cent Delivered or Collected	Associations Delivering Supplies		Associations Collecting Produce	
	Number	Per Cent	Number	Per Cent
None Delivered or Collected.....	32	18.7	68	39.8
Deliveries or Collections:				
Less than 10.....	17	9.9	24	14.0
10-20.....	28	16.4	28	16.4
20-40.....	44	25.7	13	7.6
40-60.....	26	15.2	19	11.1
60-80.....	16	9.4	15	8.8
80 or more.....	8	4.7	4	2.3
Total.....	171	100.0	171	100.0

Some associations charged for deliveries, especially when small orders were delivered considerable distances. Quantity discounts often were involved in the delivery policies of the associations because many associations either delivered large purchases without cost or gave discounts when the buyer did the hauling.

Quantity Discounts

About 70 per cent of the associations either gave quantity discounts on purchases of feeds in ton or larger lots, or provided free delivery for such quantities. The most common discount

was 5 cents per bag of feed. Discounts were sometimes extended to other supplies. Whether or not a discount was given often depended on whether the margin being taken was relatively high, discounts being given only on supplies having relatively high mark-ups.

Credit Policy

Since all associations sold their produce and other farm products for cash, the only credit they normally extended was that in connection with sales of supplies to patrons. The credit policies followed by exchanges and elevators in the sale of supplies varied widely. Some operated entirely on a cash basis while others sold as much as 50 per cent of their supplies on credit. More than one-half of the associations made more than 10 per cent of their sales of supplies on credit, (Table 37). Credit sales amounted to more than 50 per cent of total sales in 9 of the 248 associations for which estimates of the per cent of sales on credit were obtained from the managers.

TABLE 37.—NUMBER OF ASSOCIATIONS, BY PER CENT OF SUPPLIES SOLD TO PATRONS ON A CREDIT BASIS, 248 EXCHANGES AND ELEVATORS, 1935.

Credit Policy	Number of Associations	Per Cent	Cumulative Per Cent
No Credit Sales.....	20	8.1	8.1
Credit Sales as Per Cent of Total Sales of Supplies:			
10 or less.....	100	40.3	48.4
10-20.....	36	14.5	62.9
20-30.....	54	21.8	84.7
30-40.....	17	6.9	91.6
40-50.....	12	4.8	96.4
More than 50.....	9	3.6	100.0
All.....	248	100.0	----

In about 96 per cent of the associations granting credit, the principal basis used by the manager in determining whether to require cash or to give credit to patrons purchasing supplies was his own personal knowledge of the individuals. Less than one per cent of the managers resorted to credit rating bureaus. In the remaining three per cent of the associations, the directors determined who was to be granted credit.

Undoubtedly one of the most difficult problems confronting every association is whether or not to sell on credit. One of the questions arising in this connection is the effect of a cash or limited credit policy on sales. The managers of some associations stated that the bad account losses, resulting from credit sales, were more than offset by gains from the increased volume of sales when credit was granted. In the cost of credit, however,

not only bad debts must be taken into account, but also the extra expenses of bookkeeping, collecting, and interest on accounts outstanding. The latter three items often escape attention when the costs of credit are considered by managers and directors of associations.

A characteristic of Missouri exchanges and elevators which makes the selling of supplies on credit less risky than for specialized businesses is their diversification. Since they not only sell supplies to farmers but also buy produce and grain from them it is possible to credit at least part of the purchases on accounts as long as the debtor continues to sell his products through the association. Furthermore, a large proportion of the products bought are those which are produced throughout the year rather than seasonally so that accounts need not get very old if a satisfactory collection policy is followed.

Changes in Credit Policy.—Many managers and directors were not satisfied with the credit policies followed in 1935. According to the statements of managers, changes in terms of sale were planned in 87, or 42 per cent, of the 209 associations reporting. Of these, 10 were going on a strictly cash basis and 77 were planning to grant less credit. Some of the decisions to restrict credit in 1936, however, were based on the drought conditions which prevailed at the time this survey was made. Directors and managers were making an effort to avoid large accounts which could not be paid from the reduced farm incomes resulting from failure of crops and pastures. Whether these changes in policies were only temporary or have been made permanent has not been determined.

Collection Practice

Because most patrons visited the exchange or elevator regularly, the most common method used in collecting accounts was to see the patron personally and present him with his statement. Only 20 per cent of the associations sent regular statements by mail to charge account patrons. Associations paying patronage dividends commonly deducted old accounts from patrons' refunds and some associations took over the stock of stockholders having accounts long unpaid.

Membership

The total membership of all exchanges and elevators in Missouri was estimated at approximately 46,000 in 1935, an average of nearly 150 members per association. It is probable that these figures represent an overstatement of as much as 50 per cent be-

cause in many areas where trade territories of associations overlapped, individuals were included as members of more than one association. It is expected, however, that for purposes of comparison, these data will show relative, if not actual, differences among groups of associations.

Except in associations whose stockholders only are members, membership in capital stock cooperative associations is entirely different from that in non-stock associations. In non-stock or membership organizations, members have the control which in capital stock associations is reserved to stockholders.

Membership in Capital Stock Associations.—In Missouri, capital stock associations commonly have members as well as stockholders. This is true especially of those affiliated with the Missouri Farmers' Association, a general farm organization operating in this state only. Of the 178 capital stock associations reporting, only 38 had no members other than stockholders while 140 or 79 per cent had both members and stockholders, (Table 38). In

TABLE 38.—NUMBER AND AVERAGE SALES OF ASSOCIATIONS AND AVERAGE NUMBER OF MEMBERS AND PATRONS, BY REQUIREMENTS FOR MEMBERSHIP, 178 EXCHANGES AND ELEVATORS HAVING CAPITAL STOCK, 1935.

Requirements for Membership	Associations		Average Sales Per Association	Average Number of Patrons	Average Number of Members	Member as Per Cent of Patrons
	Number	Per Cent				
Membership Fee.....	135	75.9	\$102,330	308	157	51
Own Stock.....	38	21.3	88,318	350	133	38
Patronize Association.....	5	2.8	63,540	345	345	100
All.....	178	100.0	\$98,250	318	157	49

135 of these, a patron became a member of the association by becoming a member of the Missouri Farmers' Association. A membership fee of one dollar was paid, not to the exchange, but to the state organization. In some associations paying patronage dividends, the membership fee was deducted from the patronage dividend and each patron doing sufficient business with the association to receive one dollar in dividends became a member. In the other five associations, a farmer automatically became a member of the association when he began patronizing it.

In capital stock associations, control of the association and its policies is entirely in the hands of stockholders. Members as such have no voice in the control of these associations; their membership merely qualifies them to receive patronage refunds, if any are paid. Membership meetings in such associations, there-

fore, have to be of a social, rather than business, nature. They are usually held once a year, however, for the purpose of promoting good will and to stimulate the interest of members in their associations. Financial statements are rarely presented to members and matters of policy are seldom discussed with them.

The number of members of associations is affected greatly by membership requirements. Using the most liberal requirement, that of buying or selling through the association where all patrons were members as a basis of comparison, the requirement of a membership fee of only one dollar permitted the association to have only one-half as many members as would have been possible if all patrons were members. Membership in associations where stock ownership is necessary was equal to only 38 per cent of the patrons. (Table 38).

The proportion of members who are patrons of the association also is affected by membership requirements. This probably is largely due to the differences in time elapsed since the member last made a decision to become a member.

Most of the capital stock associations were at least ten years old, therefore, considerable time had passed since the stockholder-member joined the association by buying stock. Since then, many stockholders have died or moved away and others had sold their stock, so that many shares were in the hands of townspeople who did not patronize the associations. Other stockholders, though still in the community, have discontinued their patronage for one reason or another. As a result, only 80 per cent of the stockholder-members patronized their associations. (Table 39).

On the other hand, those who must pay an annual fee to become a member have to decide each year whether to retain membership. Thus, those not patronizing the association and receiving some direct benefit from it are not likely to renew their membership, although the membership does carry other privileges and advantages. Consequently, 96 per cent of such members were patrons, (Table 39).

Patron-Members.—Less than one-half of the patrons of the 178 associations reporting was members in 1935. This proportion ranged from 31 per cent in the associations where only stockholders were members, to 100 per cent in those where membership is contingent only on patronage, (Table 39).

The interest of patrons in their associations, judged by whether or not they were members, varies from one area of the state to the next. Relatively more patrons were members in Southwestern,

TABLE 39.—PATRON-MEMBERS AS PER CENT OF TOTAL PATRONS AND MEMBERS, BY REQUIREMENTS FOR MEMBERSHIP, 178 EXCHANGES AND ELEVATORS HAVING CAPITAL STOCK, 1935.

Requirement for Membership	Number of Associations	Average Number of Patrons	Average Number of Members	Patron-Members		
				Average Number	As Per Cent of Total Members	As Per Cent of Total Patrons
Membership Fee.....	135	308	157	151	96	49
Own Stock.....	38	350	133	107	80	31
Patronize Association.....	5	345	345	345	100	100
All.....	178	318	157	147	94	46

West Central and East Central Missouri than in the other areas, according to data from the 135 capital stock organizations having a fee for membership. Approximately 58 per cent of the patrons was members in Southwest Missouri, compared with only 36 per cent in the northeastern part of the state. (Table 40).

The payment of patronage dividends by cooperatives apparently was a strong inducement for patrons to become members of the association. Of the 135 associations having a membership fee, one-third paid patronage dividends in 1935. In these 45 associations 61 per cent of the patrons was members compared to 41 per cent for associations not paying patronage dividends.

TABLE 40.—PATRON-MEMBERS AS PER CENT OF TOTAL PATRONS, BY AREAS, 135 CAPITAL STOCK ASSOCIATIONS HAVING A MEMBERSHIP FEE, 1935.

Area	Number of Associations	Average Number of Patrons	Patron-Members	
			Average Number	As Per Cent of Total Patrons
Northwest.....	9	359	136	38
Northeast.....	12	294	105	36
West Central.....	24	379	208	55
East Central.....	33	280	148	53
Southwest.....	41	313	182	58
South Central.....	16	287	114	40
All.....	135	308	151	49

For those capital stock associations requiring a fee for membership, the proportion of patrons who were members increased with the size of the associations. In the associations with less than \$50,000 of sales, only 38 per cent of the patrons was members while 58 per cent of the patrons of the 27 largest associations was members, (Table 41). This may have been due in part of the fact that more of the larger associations paid patronage dividends, making it more attractive financially to be a member. Much of

TABLE 41.—PROPORTION OF PATRONS WHO WERE MEMBERS, BY SIZE OF BUSINESS, 135 EXCHANGES AND ELEVATORS HAVING CAPITAL STOCK AND REQUIRING A FEE FOR MEMBERSHIP, 1935.

Sales	Number of Associations	Number of Patrons	Number of Patron-Members	Patron-Members as Per Cent of Total Patrons
Less than \$50,000.....	40	197	74	38
\$50,000- 100,000.....	42	250	106	42
100,000- 150,000.....	26	346	184	53
150,000 or more.....	27	524	304	58
All.....	135	308	151	49

this relationship, however, may be attributed to the location of the larger associations in areas where conditions lead both to large associations and to a large proportion of farmers being members of cooperatives. Some of these conditions are large cash income and expenses per farm, a relatively large part of the farm income from one class of farm products, and a population similar in nationality and religion.

Proportion of Business With Members.—Based on estimates made by the managers of associations, only 68 per cent of the business of the capital stock associations was with members. This proportion was affected greatly by the membership requirement, being only 52 per cent for associations requiring that members own stock, 71 per cent for those having a membership fee, and 100 per cent for those in which every patron was a member. (Table 42).

TABLE 42.—PER CENT OF TOTAL BUSINESS WITH MEMBERS, BY REQUIREMENTS FOR MEMBERSHIP AND SIZE OF ASSOCIATION, 203 EXCHANGES AND ELEVATORS, 1935.

Sales in Thousands of Dollars	Requirement for Membership							
	Membership Fee		Own Stock		Patronize Association		All	
	Number of Associations	Per Cent of Business with Members	Number of Associations	Per Cent of Business with Members	Number of Associations	Per Cent of Business with Members	Number of Associations	Per Cent of Business with Members
Less than 50.....	41	57	17	49	2	100	60	57
50-100.....	48	64	12	46	3	100	63	62
100-150.....	33	71	8	55	1	100	42	69
150 or more.....	29	78	9	54	--	---	38	73
All.....	151	71	46	52	6	100	203	68

In 1935, 75 per cent or more of the business was with members in more than one-half of the associations requiring a membership fee, but in only 20 per cent of the associations requiring stock ownerships. (Table 43). Nearly 20 per cent of the associations with a

membership fee requirement and more than 32 per cent of stockholder-member associations did less than 50 per cent of their business with members in 1935. These latter figures are particularly significant from the standpoint of income tax exemption.

In the capital stock associations having a membership fee requirement the proportion of business done with members varied with the volume of sales. More than three-fourths of the business was with members in the largest associations compared with only 57 per cent in the smallest ones. (Table 42). There was little, if any, relationship between size and the percentage of business with members in the associations requiring members to own stock.

TABLE 43.—NUMBER OF ASSOCIATIONS AS PER CENT OF TOTAL, BY REQUIREMENTS FOR MEMBERSHIP AND PER CENT OF BUSINESS DONE WITH MEMBERS, 203 EXCHANGES AND ELEVATORS HAVING CAPITAL STOCK, 1935.

Per Cent of Business Done With Members	Requirements for Membership					
	Membership Fee		Own Stock		Buy or Sell	
	Pro-ducts	Sup-plies	Pro-ducts	Sup-plies	Pro-ducts	Sup-plies
	(Associations as Per Cent of Total)					
Less than 25.....	8.6	7.9	10.9	13.0	----	----
25- 50.....	9.3	11.3	21.7	21.7	----	----
50- 75.....	25.2	23.2	43.5	45.7	----	----
75-or more.....	56.9	57.6	23.9	19.6	100.0	100.0
All.....	100.0	100.0	100.0	100.0	100.0	100.0
Number of Associations.....	151		46		6	

Business Per Member-Patron.—The percentage of business done with members was much greater than the proportion of patrons who were members because the members in associations having both members and non-member patrons bought and sold more through their associations. The sales of capital stock associations averaged \$454 for member-patrons and \$184 for non-member patrons compared with \$309 for all. (Table 44). For associations with a membership fee requirement, the sales per

TABLE 44.—SALES PER MEMBER AND NON-MEMBER PATRON, BY MEMBERSHIP REQUIREMENTS, 178 EXCHANGES AND ELEVATORS HAVING CAPITAL STOCK, 1935.

Membership Requirement	Number of As-socia-tions	Sales Per Association			Sales Per Patron		
		Member	Non-Member	Total	Member	Non-Member	All
Membership Fee.....	135	\$72,655	\$29,676	\$102,331	\$481	\$190	\$333
Own Stock.....	38	45,925	42,393	88,318	430	174	252
Patronize Association.....	5	63,540	-----	63,540	184	----	184
All.....	178	\$66,810	\$31,440	\$98,250	\$454	\$184	\$309

member averaged \$481 compared to \$190 for non-member patrons. Whether business per patron-member was higher because the larger farmers were members or because non-members did more of their buying and selling elsewhere could not be determined from the data available.

Membership in Non-Stock Associations.—In non-stock associations, members have control similar to that of stockholders of capital stock associations. One difference, however, is that in membership associations in Missouri, each member has only one vote for any purpose whereas stockholders of capital stock associations organized under the 1919 act have one vote in the election of directors for each share of stock held. Also capital contributions are seldom, if ever, linked with control of the association.

The requirement for membership in 18 of the 19 non-stock associations reporting was a membership fee and in the other, all patrons were members. The fee was most commonly one dollar per year because of the predominance of associations affiliated with the Missouri Farmers' Association. The total membership of 18 non-stock associations was estimated at 2,050 or approximately 115 members per association. In 14 of 22 exchanges and elevators, property rights of members were equal and in the other 8 they were based on the amount of business done. In 18 of the 20 associations reporting, all property rights were forfeited upon loss of membership. Most managers remarked that the question of property rights in a membership association was one which would seldom have to be answered because few cooperative or any other kind of business enterprises go out of business before the net worth of the association has been dissipated.

The 18 non-stock associations having a membership fee requirement had an average of 218 patrons and 102 members. Patron-members averaged 92 per association and were only 42 per cent of the total patrons. Thus, control of the association was vested in less than one-half of the patrons. Because of the much greater business per member-patron, however, 84 per cent of the business was with members.

Membership Contacts.—Because of their fairly intimate personal contacts with members at the store, most managers did not use any other method of contact with members. Some, however, resorted to advertisements, news letters, newspaper articles, personal visit and even telephone calls to hold old patrons and to obtain new ones. In addition, each member of the Missouri Farm-

ers' Association with which most associations were affiliated received the periodical of that organization. The Missouri Farm Bureau newspaper reached also the members of that organization who were also members of the several service associations sponsored by the Farm Bureau.

Patronage Dividends.—The patronage dividend has been regarded by many cooperative leaders as an excellent stimulus to membership. There was considerable difference of opinion among managers of local exchanges and elevators, however, as to the relative advantages of patronage dividends over low margins as an inducement to patronage and membership. In Missouri, where patronage dividends are distributed only to members and all farmer-patrons are not members, it is more equitable to give patrons their dividends on each purchase through lower margins. An advantage of the low margin also is the smaller amount of bookkeeping required when margins are held low enough to leave nothing to distribute after operating expenses are paid.

An advantage of the patronage dividend over low margins is the assurance it gives the association of receiving enough income to meet expenses. Another is that the dividend received by a patron is likely to be large enough to point out the advantage of being a member of the association, whereas low margins, if met by competitors, may not be recognized by the patron. Many managers disagree strongly with this latter, contending that they can draw more patronage and hold it with low margins than would be possible with a patronage dividend.

Regardless of the relative merits of the two policies of operation, 29 per cent of 249 associations from which this information was obtained, paid patronage dividends in 1935. A further discussion of these refunds appears later under "Distribution of Earnings."

Stockholders

In cooperative associations having capital stock, capital contributions and control of the organization are combined. In such organizations, the stockholders determine certain broad, general policies, and elect the members of a board of directors to which is delegated authority to determine other policies and to perform other duties for the stockholders.

The number of stockholders averaged 128 per association, (Table 45). Although the number of stockholders did not increase directly with the size of associations, there was a tendency for the larger associations to have more stockholders than the smaller

ones. For example, the average number of stockholders ranged from 78 in associations with annual sales of less than \$25,000 to 163 in those with a volume of from \$150,000 to \$200,000.

TABLE 45.—PER CENT WHICH STOCKHOLDER-PATRONS WERE OF TOTAL STOCKHOLDERS AND OF TOTAL PATRONS, BY SIZE OF ASSOCIATION, 177 EXCHANGES AND ELEVATORS, 1935.

Sales in Thousands of Dollars	Average Sales	Number of Associations	Number per Association			Stockholder-Patrons as Per Cent of	
			Stockholders	Patrons	Stockholder-Patrons	Stockholders	Total Patrons
Less than 25.....	\$17,179	14	78	114	44	56	39
25-50.....	38,068	44	99	207	72	73	35
50-75.....	62,382	34	141	230	98	70	43
75-100.....	86,378	23	122	344	93	76	27
100-150.....	122,119	32	148	396	120	81	30
150-200.....	176,872	18	163	466	137	84	29
200 or more.....	282,892	12	156	706	123	79	17
All.....	\$93,273	177	128	316	96	75	30

Stockholder-Patrons.—The number of stockholders who patronized the association averaged 96 per association, making up only 30 per cent of the total patrons. Thus, on the average, the control of these associations was vested in only 30 per cent of the persons using them. The proportion of patrons who were stockholders ranged from approximately 40 per cent in the small associations to 17 per cent in the large ones. Putting the control of associations into the hands of their patrons is one of the biggest jobs facing Missouri cooperatives.

Not only are many patrons excluded from control of the association but also numerous non-patrons have a voice in determining the policies of many cooperatives. On the average, one-fourth of the stockholders was not patrons of the associations. Less than one-half of the stockholders was patrons in 6.8 per cent of these cooperatives and less than 80 per cent in nearly one-half of them. In 7.4 per cent, however, all stockholders were patrons, (Table 46). The proportion ranged from 20 to 100 per cent by associations.

There are several reasons for this situation. Many of the non-patron stockholders are no longer living in the trade territories of the associations. Others are townspeople who acquired the stock through purchase or inheritance, and still others live in the community but have quit the association for some reason and have retained their stock. Non-patron shareholders are often a handicap to the capital stock cooperative associations. They normally have little interest in their organizations, except to obtain large dividends on stock. Therefore, they usually are a threat

TABLE 46.—NUMBER OF ASSOCIATIONS, BY PER CENT OF STOCKHOLDERS WHO WERE PATRONS, 177 EXCHANGES AND ELEVATORS, 1935.

Per Cent of Stockholders Who Were Patrons	Number of Associations	Per Cent	Cumulative Per Cent
100-----	13	7.4	7.4
90-100-----	40	22.6	30.0
80- 90-----	45	25.4	55.4
70- 80-----	25	14.1	69.5
60- 70-----	22	12.4	81.9
50- 60-----	20	11.3	93.2
Less than 50-----	12	6.8	100.0
All-----	177	100.0	----

to the continuance of the organization on a cooperative basis because they expect it to be run for profit rather than in the best interest of its farmer-patrons.

There was some tendency for relatively more of the stockholders to be patrons in the larger associations than in the smaller ones, (Table 45).

It might be expected that by reducing the par value of shares, the proportion of patrons owning stock would be increased. Insofar as the \$10 and \$5 shares were concerned, this was true, since 44 per cent of the patrons was stockholders in the association having the smaller share compared to only 30 per cent for those having shares of \$10 or \$12.50 each, (Table 47). In associations having stock with a par value of more than \$12.50 per share, the proportion of patrons who owned stock did not decline significantly as the size of share was increased.

TABLE 47.—STOCKHOLDER-PATRONS AS PER CENT OF TOTAL PATRONS, BY PAR VALUE OF SHARES, 177 EXCHANGES AND ELEVATORS, 1935.

Par Value of Share	Number of Associations	Average Number of Patrons	Stockholder-Patrons	
			Average Number	As Per Cent of Total Patrons
\$5-----	14	277	122	44
10-\$12.50-----	88	303	90	30
20- 25-----	34	353	102	29
50-----	28	307	88	29
100-----	15	397	113	28
All-----	177	316	96	30

Attendance at Annual Meetings.—An annual stockholders' meeting usually is held immediately after the close of the fiscal year. At this meeting, the results of the year's operations are disclosed, matters of a broad, general nature discussed, vacancies on the board of directors filled, and certain questions of policy decided.

Relatively few stockholders attended these meetings. The average attendance for all associations at the meetings for the fiscal year, which ended during the last half of 1935 or the first half of 1936, was only 34.6 per cent. At that time, as many as 60 per cent of the stockholders attended in only 33, or 19 per cent, of the 173 associations reporting, (Table 48). Less than 40 per cent of the stockholders attended in nearly two-thirds of the associations.

TABLE 48.—NUMBER OF ASSOCIATIONS, BY PER CENT ATTENDANCE OF STOCKHOLDERS AT ANNUAL MEETINGS, 173 EXCHANGES AND ELEVATORS, 1935.

Per Cent Attendance	Number of Associations	Per Cent of Total	Cumulative Per Cent
80 or more.....	8	4.6	4.6
60-80.....	25	14.4	19.0
40-60.....	34	19.7	38.7
20-40.....	72	41.6	80.3
Less than 20.....	34	19.7	100.0
All.....	173	100.0	----

Largest Holding of Stock.—Because the 1919 Capital Stock Act under which most of the capital stock cooperatives are incorporated, and the general business corporations law under which a few are chartered, permit stockholders to vote by shares in the election of directors, a wide distribution of the stock among patrons is to be desired. Thus, the concentration of stock as shown by the largest holding of any one stockholder is of interest.

Although the 1919 Act places a limit of 10 per cent as the largest amount of stock one person may hold, the largest holding of stock in relation to that outstanding was as high as 22.5 per cent and averaged 6.3 per cent for all associations. This limit was exceeded in 25, or 14 per cent, of the 177 associations. All these latter were operating under the 1919 Act.

It is the small associations which have difficulty in keeping within this limit. Their requirements are so small that relatively few farmers can provide the capital. Even if not more than 10 per cent of the stock had been issued to one stockholder, more may have been acquired by a stockholder through purchase or inheritance, thus increasing his proportion, or some may have been retired by the association, which would have increased the proportions held by stockholders retaining their stock. In 1935, the largest holdings of stock in the smallest associations averaged 10 per cent of that outstanding, and exceeded the 10 per cent limit in six of the 14 cooperatives in this group, (Table 49). In the largest associations no stockholder held more than 10 per cent of the

TABLE 49.—AVERAGE PER CENT OF STOCK HELD BY LARGEST STOCKHOLDER, BY SIZE OF ASSOCIATION, 177 EXCHANGES AND ELEVATORS, 1935.

Sales in Thousands of Dollars	Number of Associ- ations	Average Number of Stock- holders	Stock per Stock holder	Per Cent of Stock Held by Largest Holder		Associations in Which More Than 10 Per Cent of Stock was Held by One Person	
				Range	Average	Number	Per Cent
Less than 25.....	14	78	\$59	2.7-22.5	10.0	6	43
25- 50.....	44	99	72	1.2-20.2	6.9	9	20
50- 75.....	34	141	64	2.0-13.1	5.6	3	9
75-100.....	23	122	111	1.9-21.8	6.4	2	9
100-150.....	32	148	83	1.3-19.2	5.9	4	12
150-200.....	18	163	102	0.8-10.5	4.9	1	6
200 or more.....	12	156	71	1.0- 9.9	4.6	--	--
All.....	177	128	\$81	0.8-22.5	6.3	25	14

outstanding stock. The largest associations obtain their capital from more persons as well as by selling a larger amount of stock per person.

The limitation on the amount of stock one shareholder may own, which was set up in the by-laws, corresponded with that in the 1919 Act in only 60 per cent of the 210 capital stock associations for which this information was obtained, (Table 50). The by-law limitation was less than 10 per cent in 62, or 30 per cent, of these cooperatives and exceeded 10 per cent in four others. Eight associations had no limit in their by-laws. Of course, the limits in excess of 10 per cent are unlawful, since by-laws can not set limitations in excess of those in the law under which the association is chartered.

TABLE 50.—NUMBER OF ASSOCIATIONS, BY LIMITATIONS IN BY-LAWS ON AMOUNT OF CAPITAL STOCK ONE PERSON MAY OWN, 210 EXCHANGES AND ELEVATORS, 1935.

Limitation in By-Laws as Per Cent of Stock Outstanding, 1935	Associations		Associations in Which By-Law Limit was Exceeded		Associations in Which the 10 Per Cent Limit was Exceeded	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Less than 5.....	48	23	30	62	--	--
5-10.....	14	7	5	36	--	--
10.....	126	60	18	14	18	14
More than 10.....	4	2	--	--	2	50
No limit.....	18	8	--	--	7	39
All.....	210	100	53	25	27	13

Limits of less than 10 per cent, however, were commonly exceeded. Only 38 per cent of the associations with a by-law limit of less than 5 per cent had been able to maintain that limit, although all of them had stayed under the 10 per cent limitation of the 1919 Act. Fourteen per cent of the associations having the same limit as the 1919 Act exceeded their limits, while 9 of the 22 having either a by-law limitation of more than 10 per cent or

no limitation at all, exceeded the legal limitation of 10 per cent imposed by their charter.

Directors

The stockholders of capital stock associations and the members of non-stock cooperatives delegate certain responsibilities to the boards of directors. These are the formulation of all policies not reserved by law or by-law to stockholders or members, for the proper and efficient operation of the association; the hiring of a manager to put these policies into practice by making the day-to-day decisions involving policy required in the management of a mercantile business; and the periodic checking of the effect of new policies and of the manager's effectiveness in handling the affairs of the association. The importance of directors, therefore, makes certain facts about them of interest.

Number of Directors.—The number of directors has certain effects on the association. A board too small to be representative of varied interests in the association may cause certain members to lose interest because they do not feel represented. Too many directors make for lengthy discussions and postponements in the development of policies. Large boards often elect an executive committee to meet monthly or as often as necessary, thereby making it necessary to have only a few meetings per year of the entire board. An even number of directors often causes deadlocks and delay on important matters because of tie votes.

Missouri exchanges and elevators were relatively free from these difficulties. They had small boards, for nearly 80 per cent

TABLE 51.—NUMBER OF ASSOCIATIONS, BY NUMBER OF DIRECTORS, 263 EXCHANGES AND ELEVATORS, 1935.

Number of Directors	Associations	
	Number	Per Cent
5.....	105	39.9
6.....	7	2.7
7.....	105	39.9
8.....	2	0.8
9.....	31	11.8
10 or more.....	13	4.9
All.....	263	100.0

of them had either 5 or 7 directors and only 4.9 per cent had 10 or more. (Table 51). Their territories are small so there is little variation in interests of members. Finally, only 5 per cent of the associations had an even number of directors.

TABLE 52.—NUMBER OF DIRECTORS AND AVERAGE NUMBER OF DIRECTORS' MEETINGS, BY SIZE OF ASSOCIATION, 253 EXCHANGES AND ELEVATORS, 1935.

Sales	Number of Associations	Average Number of Directors' Meetings	Number of Directors			
			5 or 6	7 or 8	9 or more	All
			(Number of Associations as Per Cent of Total)			
Less than \$25,000.....	27	8.3	52	44	4	100
\$25,000- 50,000.....	60	8.9	55	33	12	100
50,000- 75,000.....	45	11.5	47	35	18	100
75,000-100,000.....	33	10.6	40	42	18	100
100,000-150,000.....	43	10.5	30	49	21	100
150,000-200,000.....	25	11.2	24	52	24	100
200,000 or more.....	20	11.7	25	50	25	100
All.....	253	10.4	41	42	17	100

The size of the board of directors varied with the size of the association. In 1935, more than one-half of the 27 smallest associations reporting had 5 or 6 directors and only 4 per cent had as many as 9, (Table 52). On the other hand, only one-fourth of the largest associations had as few as six directors and one-fourth of them had 9 or more.

Term of Office.—The term of office of directors ranged from one to five years. In 65.5 per cent of the associations, the term was only one year; in 15.5 per cent, two years, and 16.8 per cent, three years. In the other 2.2 per cent, irregular terms varying from one to five years were found. In associations having terms of two years or more, the terms were usually staggered so that the board always had some members with experience. Even when the term was only one year, directors commonly were re-elected from year to year. Hence, an entirely inexperienced board was seldom found.

More than 98 per cent of the directors of cooperative exchanges and elevators in 1935 was farmers, thus placing control of these organizations in the hands of producers. Only three associations of the 254 reporting had as many as two board members who were not farmers. In 19 others, one member was not a farmer. These non-farmer directors were, in most instances, bankers, ex-bankers, or local merchants.

Of the 267 associations reporting, only 143, or 53.6 per cent, paid directors for their services. For the 117 associations paying their directors on a per-meeting basis, the amount varied from 50 cents to \$3.00 and averaged \$1.50 per meeting. In 16 associations, the directors were paid on an annual basis, the amount ranging from one to thirty dollars per year. Ten other associations either paid their directors mileage, actual expenses, or a specified amount

TABLE 53.—PER CENT OF ASSOCIATIONS PAYING DIRECTORS, BY SIZE OF ASSOCIATION, 267 EXCHANGES AND ELEVATORS, 1935.

Sales	Number of Associations	Associations Paying Directors	
		Number	Per Cent
Less than \$50,000.....	94	32	34.0
\$50,000- 100,000.....	79	46	58.2
100,000- 150,000.....	49	31	63.3
150,000 or more.....	45	34	75.6
All.....	267	143	53.6

per day. The compensation of directors was related to the size of association. More than three-fourths of the largest associations paid their directors compared to only 34 per cent of the smaller ones, (Table 53).

In 29 of the 267 associations the secretary received a special fee in addition to that received as a director and in nine others the secretary was the only member of the board receiving compensation.

Number of Meetings.—The number of directors' meetings in 1935 varied from none to twenty per association and averaged 10.4 meetings for all associations, (Table 52). The most common number was 12, held by 60 per cent of the associations. Other frequent numbers were 4, 6 and 8. (Table 54).

TABLE 54.—NUMBER OF ASSOCIATIONS, BY NUMBER OF DIRECTORS' MEETINGS HELD, 256 EXCHANGES AND ELEVATORS, 1935.

Number of Meetings	Associations		
	Number	Per Cent of Total	Cumulative Per Cent
4 or less.....	30	11.7	11.7
5- 7.....	24	9.4	21.1
8-10.....	22	8.6	29.7
11-13.....	163	63.7	93.4
14 or more.....	17	6.6	100.0
All.....	256	100.0	----

The average number of meetings held by associations with less than \$50,000 of sales was somewhat less than that for larger associations, averaging 8.8 compared with 11 for associations with \$50,000 or more of sales. (Table 52). Above this minimum there apparently was little tendency for the larger associations to increase the number of meetings held. Large boards, those with 11 or more members, held fewer meetings than the smaller ones, (Table 55).

TABLE 55.—AVERAGE NUMBER OF DIRECTORS' MEETINGS AND AVERAGE ATTENDANCE, BY SIZE OF BOARD OF DIRECTORS, 259 EXCHANGES AND ELEVATORS, 1935.

Number of Directors	Number of Associations	Average Number of Directors' Meetings	Per Cent Attendance at Meetings
5 or 6.....	107	10.3	93.9
7 or 8.....	109	10.5	87.8
9 or 10.....	35	10.6	88.0
11 or more.....	8	8.9	75.2
All.....	259	10.4	88.8

Attendance.—The average attendance at directors' meetings was 90 per cent, meaning that, for a five-member board, one director was absent one-half of the time. The attendance of directors on small boards, however, was somewhat better than for larger ones, being nearly 94 per cent for 5- or 6-member boards compared to less than 75 per cent for those having 11 or more members, (Table 55).

As might be expected, the attendance in associations paying their directors was higher than in those not doing so, but the difference was surprisingly small. For directors receiving pay the average attendance was 93.8 per cent as against 88 per cent for those not being compensated. The proportion of associations reporting perfect attendance of directors, however, was considerably higher for those associations which paid their directors, (Table 56).

TABLE 56.—NUMBER OF ASSOCIATIONS, BY PER CENT ATTENDANCE OF DIRECTORS AND POLICY OF ASSOCIATION REGARDING COMPENSATION OF DIRECTORS, 208 EXCHANGES AND ELEVATORS, 1935.

Per Cent Attendance At Meetings	Associations Not Paying Directors			Associations Paying Directors		
	Number	Per Cent of Total	Cumulative Per Cent	Number	Per Cent of Total	Cumulative Per Cent
100.....	37	39.8	39.8	66	57.3	57.3
90-100.....	6	6.5	46.3	11	9.6	66.9
80-90.....	27	29.0	75.3	30	26.1	93.0
70-80.....	15	16.1	91.4	7	6.1	99.1
60-70.....	7	7.5	98.9	1	0.9	100.0
Less than 60.....	1	1.1	100.0	--	---	---
All.....	93	100.0	---	115	100.0	---

The number of meetings held per year had little, if any effect, on attendance of directors.

After eliminating the effect of compensation of directors, there appeared to be no relation between size of association and

TABLE 57.—AVERAGE ATTENDANCE OF DIRECTORS, BY SIZE OF ASSOCIATION AND POLICY OF ASSOCIATION REGARDING THE PAYING OF DIRECTORS, 127 EXCHANGES AND ELEVATORS HOLDING 12 MEETINGS DURING YEAR, 1935.

Sales	Associations Not Paying Directors		Associations Paying Directors	
	Number of Associations	Per Cent Attendance of Directors	Number of Associations	Per Cent Attendance of Directors
Less than \$50,000.....	21	87.9	18	93.1
\$50,000- 100,000.....	16	90.8	26	92.7
100,000- 150,000.....	7	89.9	13	91.2
150,000 or more.....	4	87.5	22	94.2
All.....	48	89.1	79	93.0

attendance of directors, (Table 57). The better attendance of directors in the larger associations apparently resulted from the higher proportion of directors being paid rather than a greater interest of directors in the larger cooperatives.

The Manager

The board of directors delegates to a manager the responsibility for the successful operation of the association in accordance with policies established by the board. The manager, therefore, handles the buying of supplies for the association, supervises the purchase of farm products, plans the distribution of work among employees and does other work of a managerial nature. In small exchanges and elevators he also may do some of the manual tasks such as keeping records and serving patrons.

Experience.—The nature of his duties makes it desirable that the manager of a cooperative exchange or elevator have some experience in this type of business before becoming manager. Managers of exchanges and elevators in most instances were men with previous training and experience. In more than one-half of 237 associations reporting, the managers as of December 31, 1935 had been associated either with the same or another cooperative association, or with a private business of a similar nature before assum-

TABLE 58.—NUMBER OF MANAGERS, BY OCCUPATION BEFORE ACCEPTING PRESENT POSITIONS, 237 EXCHANGES AND ELEVATORS, 1935.

Occupation Prior To Present Position	Managers	
	Number	Per Cent
Helper in Same Association.....	68	28.7
Manager of Another Association.....	39	16.4
Manager of a Similar Private Business.....	21	8.9
Farmer.....	76	32.1
Other.....	33	13.9
All.....	237	100.0

ing their present positions. (Table 58). Another 32 per cent of the managers had been farming previously and the other 14 per cent had been doing some other type of work.

Because so many managers have been with the association for a long period of years, the previous occupation of managers does not give an accurate statement of their present experience. For example, 34 per cent of the 172 managers from which records of employment for the last ten years were obtained, had been managers of their present associations for the entire period, (Table 59). Previous occupation would have little to do with their pres-

TABLE 59.—DISTRIBUTION OF MANAGERS AS OF DECEMBER 31, 1935, ACCORDING TO THEIR OCCUPATIONS ON DECEMBER 31 OF EACH YEAR, 1925-35, 172 EXCHANGES AND ELEVATORS.

Year	Occupation of Manager for 1935 as of December 31 of Each Year						All
	Same Association		Manager of Another Association	In Private Mercantile Business	Farmer	Other	
	Manager	Helper					
	(Number of Managers as Per Cent of Total)						
1935-----	100	--	--	--	--	--	100
1934-----	92	3	1	--	2	2	100
1933-----	82	4	3	--	5	6	100
1932-----	76	5	5	--	7	7	100
1931-----	65	8	6	1	10	10	100
1930-----	60	9	7	1	13	10	100
1929-----	51	10	9	2	16	12	100
1928-----	47	10	9	2	20	12	100
1927-----	43	11	8	2	22	14	100
1926-----	39	11	9	2	25	14	100
1925-----	34	13	10	2	26	15	100

ent experience and training. Another 25 per cent had had ten years of experience in the mercantile business, having spent some time as manager and the remainder of the ten years either as helper in the same exchange, manager of another association, or in private business. Thus, 59 per cent of the managers had at least ten years of experience with the type of business organization they were operating. The rest had spent a part of the last ten years at farming or at other work before becoming manager. At the end of 1935, 77 per cent of the 172 managers had had at least five years of experience in handling farm products and supplies.

The previous experience of managers varied with the size of associations they managed; a larger proportion of the managers of large associations having had a long period of service in cooperative business. Nearly one-half of the managers of the largest exchanges and elevators had been with their associations at least ten years on December 31, 1935, compared with 33 per cent of

TABLE 60.—DISTRIBUTION OF MANAGERS AS OF DECEMBER 31, 1935, ACCORDING TO THEIR OCCUPATIONS ON DECEMBER 31, 1926 AND 1931, BY SIZE OF ASSOCIATION, 172 EXCHANGES AND ELEVATORS.

Sales in Thousands of Dollars	Number of As- soci- ations	Occupation of Manager on December 31 of Each Specified Year							
		Manager of Same Association		Manager of Another Association		Helper in Same Association		Farmer and Other	
		1930	1925	1930	1925	1930	1925	1930	1925
		(Number of Managers as Per Cent of Total)							
Less than 50..	58	53	33	4	7	5	3	38	57
50-100-----	52	59	31	8	10	6	13	27	46
100-150-----	33	70	37	6	9	15	24	9	30
150 or more---	29	62	48	14	17	14	14	10	21
All....	172	60	34	7	10	9	13	24	43

the managers of the smallest associations, (Table 60). At the end of 1930, only 10 per cent, and 5 years earlier, only 21 per cent of the managers of the associations handling \$150,000 or more of business in 1935 had been farming or in some other work not connected with cooperative associations. On the other hand 38 per cent and 57 per cent of the managers of associations with less than \$50,000 of sales were not working for a cooperative 5 and 10 years, respectively, prior to the end of 1935.

That the tenure of managers was long is evident from Table 59, which shows that 35 per cent of them had been with these associations for at least 10 years. Nearly 10 per cent had served their associations for 15 years or longer. Those who had been managers of other associations probably should also have been included with this group because they ordinarily move from one association to another only when it means an advancement. Large associations affiliated with the Missouri Farmers' Association often draw exceptional managers from the smaller exchanges when vacancies occur.

Salaries.—Managers commonly were paid a straight salary per month. Nearly 95 per cent of the associations had this arrangement and the other 5 per cent paid commissions or salaries and bonuses. The bonuses were usually contingent upon the making of a certain amount of net earnings above operating costs.

The salaries of managers ranged from \$30 to \$188 per month in 1935. If bonuses are included, however, the upper limit would be \$200. Average salaries increased with the size of the association from \$53 per month for those with less than \$25,000 of business to \$138 per month for the ones with sales of \$200,000 or more. (Table 61). Salaries of managers averaged \$83 per month for all associations.

TABLE 61.—AVERAGE MONTHLY SALARY OF MANAGERS AND THE PROPORTION WHICH THE MANAGER WAS OF TOTAL EMPLOYEES, BY SIZE OF ASSOCIATION, 199 EXCHANGES AND ELEVATORS, 1935.

Sales	Number of Associations	Average Number of Employees	Manager as Per Cent of Total Employees	Average Monthly Salary of Manager
Less than \$25,000.....	13	1.89	52.7	\$53
\$25,000- 50,000.....	47	2.28	43.8	62
50,000- 75,000.....	34	3.26	30.6	80
75,000-100,000.....	31	3.77	26.5	88
100,000-150,000.....	37	5.21	19.2	96
150,000-200,000.....	21	6.15	16.3	112
200,000 or more.....	16	9.37	10.7	138
All.....	199	3.55	28.1	\$86

Duties.—In the small associations, the manager spent considerable time at duties which in larger exchanges and elevators were assigned to other employees. One of these, particularly, was book-keeping. Information from 234 associations indicates that in 1935 the manager was also bookkeeper in 43 per cent of the exchanges and elevators. (Table 62). The manager did the record keeping, however, in only 9.5 per cent of the largest associations compared with 64 per cent of the smallest ones.

TABLE 62.—PROPORTION OF ASSOCIATIONS IN WHICH THE MANAGER KEPT THE RECORDS, BY SIZE OF ASSOCIATIONS, 243 EXCHANGES AND ELEVATORS, 1935.

Sales	Number of Associations	Associations in Which Manager Kept Records	
		Number	Per Cent
Less than \$25,000.....	25	16	64.0
\$25,000- 50,000.....	57	33	57.9
50,000- 75,000.....	41	21	51.2
75,000-100,000.....	32	16	50.0
100,000-150,000.....	46	12	26.1
150,000-200,000.....	21	5	23.8
200,000 or more.....	21	2	9.5
All.....	243	105	43.2

Another indication of the nature of the manager's duties was the proportion which he was of total employees. The manager and other employees worked an average of 42.6 months per association for the 199 associations giving detailed data on employees. This was equivalent to 3.55 employees for one year and thus the manager, on the average, was 28 per cent of the total employees. This percentage varied with the size of the association. The manager amounted to more than one-half of the employees in the smallest associations and only slightly more than 10 per cent in those having the largest volume of sales, (Table 61). From this, it is quite evident that the manager did more work not of a managerial type in small associations than the large ones.

If the manager is to receive the fullest cooperation from his employees, it is highly desirable that he be given the authority to hire and fire those working under him. This power is not always given him. The manager had complete charge of the personnel of his association in only 45 per cent of the associations reporting. In 41 per cent of the instances the board of directors had complete charge, and, in the remaining 14 per cent, the board and manager were jointly responsible for hiring and discharging employees.

Financial Condition

Although many are inclined to judge the success of any business organization by the strength displayed in its financial statements and by its record of earnings, these are not good measures for a cooperative association. The success of a farmer's cooperative business association should be measured by its savings to the farmers it serves. A cooperative association is not organized to make profits, but to provide at the lowest possible cost certain services desired by its members, such as the marketing of their products and purchase of needed supplies for them. If it has considerable earnings left after a reasonable hire has been paid for capital, it turns part of them back to members as patronage refunds rather than retaining all as surplus. Undoubtedly the financial position of some associations is not as strong as that of others, because they return more of their earnings to members rather than putting them into surplus and reserves.

Statements of Condition.—That cooperative exchanges and elevators emerged from the depression in good financial condition is indicated by the average statement of condition for 250 of these associations. (Table 63). Land, buildings, and equipment accounted for nearly one-half and inventories for one-fourth of the total assets. Receivables were 15 per cent of the total and cash, 10 per cent. Nearly three-fourths of the capital from which these assets were financed was in the form of net worth, 10 per cent had been obtained by borrowing on notes and 8 per cent on mortgages. Accounts payable and consignment drafts accounted for only 6 per cent of the total liabilities and net worth.

The fact that the associations owned three-fourths of their assets denotes a particularly strong position, especially when 10 per cent of the assets was in cash and an additional 25 per cent in inventories which were extremely liquid. Another point of note is that surplus and reserves amounted to one-fourth of the net worth.

TABLE 63.—AVERAGE STATEMENT OF CONDITION, 250 EXCHANGES AND ELEVATORS, DECEMBER 31, 1935.*

ASSETS			
	Amount		Per Cent
Current Assets:			
Cash.....	\$1,680		10.0
Accounts Receivable.....	2,234		13.2
Notes Receivable.....	337		2.0
Merchandise Inventory.....	4,326		25.7
Other.....	190	\$8,767	1.1 52.0
Fixed Assets:			
Land, Buildings and Equipment.....	\$6,956		41.3
Delivery Equipment.....	535	7,491	3.1 44.4
Investments.....		257	1.5
Other Assets.....		347	2.1
Total.....		\$16,862	100.0
LIABILITIES AND NET WORTH			
	Amount		Per Cent
Current Liabilities:			
Accounts Payable.....	\$885		5.2
Consignment Drafts.....	152		0.9
Notes Payable.....	1,646		9.8
Accrued Expenses.....	223		1.3
Other.....	269	\$3,175	1.6 18.8
Fixed Liabilities:			
Mortgages Payable.....	\$1,341		8.0
Other.....	7	1,348	† 8.0
Net Worth:			
Capital Stock or Certificates of Indebtedness.....	\$9,254		54.9
Surplus and Reserves.....	3,085	12,339	18.3 73.2
Total.....		\$16,862	100.0

*Includes a relatively few associations with fiscal years ending between August 1, 1935 and July 31, 1936, but not on December 31, 1935.

†Less than .05 per cent.

Other current liabilities were largely undistributed patronage and stocks dividends. Other fixed liabilities chiefly were funds of inactive livestock shipping associations which had been turned over to the exchanges and elevators. Certificates of indebtedness were included with capital stock because they were membership contributions to capital and commonly had neither fixed interest rates nor definite dates of payment. In fact, they might well have been classified as certificates of interest in many instances.

The total assets of associations increased rapidly with the size of the associations but not as rapidly as sales. The smallest associations required nearly \$5400 of property in their operations while those selling \$200,000 or more of products and supplies used only \$39,000 of capital. Sales, however, increased from \$16,000 to \$282,000, respectively. Thus the capital turnover, the ratio of sales to capital, was 7.2 in the largest associations compared to 3.0 in the smallest ones. (Table 64).

The distribution of the assets among the various classes of property remained remarkably uniform as the size of the association

TABLE 64.—CAPITAL TURNOVER, BY SIZE OF ASSOCIATION, 250 EXCHANGES AND ELEVATORS, 1935.

Sales in Thousands of Dollars	Number of Associations	Assets per Association	Sales per Association	Capital Turnover
Less than 25-----	20	\$5,397	\$16,333	3.0
25- 50-----	61	8,604	38,792	4.5
50- 75-----	43	12,974	62,228	4.8
75-100-----	35	17,383	86,387	5.0
100-150-----	46	19,579	122,173	6.2
150-200-----	23	28,431	177,794	6.3
200 or more-----	22	39,175	281,538	7.2
All-----	250	\$16,862	\$97,182	5.8

increased, (Table 65). On the other hand, there was a tendency for surplus and reserves to increase and liabilities to decline relative to total liabilities and net worth as the associations became larger, (Table 66).

Average statements of condition for each group of associations by volume of sales appear in Table C of the Appendix.

TABLE 65.—CLASSES OF ASSETS AS PER CENT OF TOTAL, BY SIZE OF ASSOCIATION, 250 EXCHANGES AND ELEVATORS, DECEMBER 31, 1935.

Sales in Thousands of Dollars	Number of Associations	Class of Asset						Total
		Cash	Receivables			Fixed Assets	Other	
			Accounts	Notes	Inventory			
Less than 25----	20	8.3	17.2	5.3	18.9	47.8	2.5	100
25- 50-----	61	11.4	12.7	1.4	23.7	47.4	3.4	100
50- 75-----	43	8.2	17.8	2.2	24.3	44.5	3.0	100
75-100-----	35	7.8	11.5	3.0	24.9	48.5	4.3	100
100-150-----	46	8.8	12.4	2.2	27.3	46.5	2.8	100
150-200-----	23	14.8	14.1	1.4	27.3	39.5	2.9	100
200 or more-----	22	9.5	11.5	1.3	26.1	41.0	10.6	100
All-----	250	10.0	13.2	2.0	25.7	44.4	4.7	100

TABLE 66.—CLASSES OF LIABILITIES AND NET WORTH AS PER CENT OF TOTAL, BY SIZE OF ASSOCIATION, 250 EXCHANGES AND ELEVATORS, DECEMBER 31, 1935.

Sales in Thousands of Dollars	Liabilities						Net Worth		
	Accounts Payable	Consignments Drafts	Notes Payable	Other Current	(Class as Per Cent of Total)		Capital Stock or Certificates of Indebtedness	Surplus or Reserves	Total
					Fixed	Total			
Less than 25--	5.4	----	29.5	2.5	11.4	48.8	59.4	*8.2	51.2
25- 50-----	5.2	----	13.6	2.4	6.4	27.6	68.9	3.5	72.4
50- 75-----	4.1	----	8.6	1.8	6.5	21.0	63.7	15.3	79.0
75-100-----	5.3	----	11.3	2.0	6.3	24.9	66.6	8.5	75.1
100-150-----	5.7	0.5	8.8	2.0	8.6	25.6	57.8	16.6	74.4
150-200-----	2.7	0.8	5.6	3.8	4.2	17.1	52.5	30.4	82.9
200 or more--	7.5	3.2	8.9	4.9	13.0	37.5	30.5	32.0	62.5
All-----	5.2	0.9	9.8	2.9	8.0	26.8	54.9	18.3	73.2

*Deficit

In general, the values at which assets were set forth in the statements of conditions were conservative. Inventories were valued at cost or market, whichever was lower. Allowances for depreciation and bad debts were liberal. Associations commonly depreciated buildings at 3 to 5 per cent of their original cost, office and plant equipment and machinery at 10 per cent and delivery equipment at 25 per cent per year. Many associations had one-half to two-thirds of their fixed assets charged off through depreciation by the end of 1935. Managers and directors of associations commonly considered each account or note individually to determine allowances for bad debts.

Much of the conservatism among the exchanges and elevators affiliated with the Missouri Farmers' Association probably is due to the auditing service made available at less than cost to such associations. These auditors have been responsible in most instances for establishing rates of depreciation, for scrutiny of accounts and for establishing values of inventories.

Auditing

Although the 1919 Act under which most cooperatives in Missouri were incorporated requires the audit of each association annually, 47, or 22 per cent of 217 capital stock associations, reported no audit for the year, 1935. Of the 170 having audits, 111, or 65 per cent, were audited by the auditing service of the Missouri Farmers' Association, 36 by other accountants, 2 by committees of boards of directors and 21 by local bankers and other local individuals.

In addition, 26 of the 34 associations set up under the Non-Stock Act and general business corporations law were audited in 1935, 20 of them being audited by the Missouri Farmers' Association.

Relatively more of the larger associations than the smaller ones had been audited for 1935. All of the largest associations were

TABLE 67.—PER CENT OF ASSOCIATIONS AUDITED, BY SIZE OF ASSOCIATION, 251 EXCHANGES AND ELEVATORS, 1935.

Sales	Number of Associations	Associations Audited	
		Number	Per Cent
Less than \$25,000.....	27	14	52
\$25,000-50,000.....	58	37	64
50,000-75,000.....	41	34	83
75,000-100,000.....	35	29	83
100,000-150,000.....	47	43	91
150,000-200,000.....	22	18	82
200,000 or more.....	21	21	100
All.....	251	196	78

audited but only one-half of the smallest ones. (Table 67). There is a tendency for small associations to avoid any expense not of a productive nature and auditing is often foregone as a means of economy. In general, it was observed that the records of associations increased in adequacy, detail, and completeness as the size of associations increased.

Distribution of Earnings

After operating expenses have been met, a capital stock association operating under the provisions of the 1919 Act must first set aside 10 per cent of its net earnings as reserves. After this has been done, it may pay stock dividends not to exceed 10 per cent and distribute the balance as patronage dividends. Although certificates of indebtedness usually have fixed rates of interest and the interest paid on them is commonly classified as an operating expense, some non-stock associations paid interest on them only if earned and varied the rate according to earnings as they would have with capital stock. Earnings above interest on certificates may all be distributed as patronage refunds although many associations retain part as surplus. Associations set up under the general business corporations law have only self-imposed limitations on the rate of dividend paid on stock.

According to data from 268 associations, 151, or 56 per cent, paid dividends on capital stock, or interest on certificates of indebtedness, for the year 1935 and 74, or 28 per cent, paid patronage dividends on one of several different bases. This means that approximately 44 per cent of the associations paid no dividends since in almost every instance those paying patronage dividends also paid interest on stock or certificates.

The proportion of associations making some distribution of earnings increased with the size of associations. Only 19 per cent of the smallest associations paid patronage dividends and only 23 per cent paid interest on stock or certificates for 1935. (Table 68). In contrast, 55 per cent of the largest associations refunded part of earnings to member-patrons on the basis of their business and 73 per cent declared dividends on capital stock or paid interest on certificates.

The payment of dividends is contingent on the earnings of the association and its financial condition. Although complete data relative to the first was not obtained, the effect of financial condition alone, as measured by surplus, on the policy regarding dividends, is striking. Only 16 per cent of the associations with

TABLE 68.—PER CENT OF ASSOCIATIONS PAYING STOCK AND PATRONAGE DIVIDENDS, BY SIZE OF ASSOCIATION, 268 EXCHANGES AND ELEVATORS, 1935.

Sales in Thousands of Dollars	Number of Associations	Associations Paying Stock Dividends		Associations Paying Patronage Dividends	
		Number	Per Cent	Number	Per Cent
Less than 25.....	31	7	23	6	19
25- 50.....	64	32	50	12	19
50- 75.....	43	25	58	7	16
75-100.....	36	20	56	9	25
100-150.....	49	32	65	17	35
150-200.....	23	19	83	11	48
200 or more.....	22	16	73	12	55
All.....	268	151	56	74	28

deficits paid interest on capital stock or certificates of indebtedness and only 3 per cent made patronage refunds (Table 69). On the other hand, these percentages were 78 and 72, respectively, for associations with surpluses amounting to 60 per cent or more of total capital. It is surprising, however, that any associations with deficits would pay dividends.

TABLE 69.—NUMBER OF ASSOCIATIONS PAYING STOCK DIVIDENDS OR INTEREST ON CERTIFICATES OF INDEBTEDNESS AND PATRONAGE DIVIDENDS AS PER CENT OF THE TOTAL, BY FINANCIAL STATUS OF ASSOCIATION, 249 EXCHANGES AND ELEVATORS, 1935.

Surplus or Deficit as Per Cent of Total Assets	Number of Associations	Associations Paying Interest on Capital Stock or Certificates of Indebtedness			Associations Paying Patronage Dividends	
		Number	Per Cent	Average Rate	Number	Per Cent
Deficit:				(per cent)		
40 or more.....	26	3	12	5.7	1	4
Less than 40.....	38	7	18	5.8	1	3
Surplus:						
Less than 20.....	65	36	55	6.0	14	22
20-40.....	74	58	78	6.7	28	38
40-60.....	28	28	100	7.6	15	54
60 or more.....	18	14	78	7.5	13	72
All.....	249	146	59	6.7	72	29

Dividends on Capital Stock.—Although the 1919 Capital Stock Act permits the payment of dividends at a rate as high as 10 per cent, nearly 95 per cent of the 226 capital stock associations report-

TABLE 70.—NUMBER AND PER CENT OF ASSOCIATIONS, BY LIMITATION ON STOCK DIVIDENDS IN PER CENT, 226 EXCHANGES AND ELEVATORS, 1935.

Dividend Limitation in Per Cent	Number of Associations	Per Cent	Cumulative Per Cent
5.....	2	0.9	0.9
7.....	3	1.3	2.2
8.....	209	92.5	94.7
10.....	3	1.3	96.0
12.....	1	0.4	96.4
No Limit.....	8	3.6	100.0
All.....	226	100.0	-----

ing had a lower limitation in their by-laws (Table 70). The most common limit was 8 per cent, the legal rate of interest in this state. The one association having a limit in excess of 10 per cent and the 8 reporting no limitation, are bound by their charters to a limit of 10 per cent.

The average rate of dividend for associations declaring dividends for the year 1935 was 6.7 per cent. There was also a tendency for the financially strong associations to pay a higher rate of dividend than the weaker ones, as well as for relatively more of them to pay dividends. The average rate varied from 5.8 per cent for those with deficits to 7.6 per cent for associations with surpluses equal to 40 per cent or more of total assets. (Table 69).

TABLE 71.—NUMBER OF ASSOCIATIONS, BY RATE OF DIVIDENDS PAID ON CAPITAL STOCK AND BY YEARS, 196 EXCHANGES AND ELEVATORS, 1931-1935.

Rate of Dividends (Per Cent)	Per Cent of Associations by Years				
	1931	1932	1933	1934	1935
None.....	53.8	54.8	53.8	45.9	43.2
2-4.....	---	3.3	4.5	7.1	7.0
5.....	2.2	2.2	2.0	4.1	2.8
6.....	6.6	7.5	12.1	10.7	15.9
7.....	3.8	3.2	1.5	4.1	4.2
8.....	33.1	28.5	25.1	27.6	26.4
9 or more.....	0.5	0.5	1.0	0.5	0.5
All.....	100.0	100.0	100.0	100.0	100.0

Information from 196 associations on dividends for the five years, 1931-1935, indicates that the proportion paying dividends on stock increased from 45 per cent for 1932 to 57 per cent for 1935. (Table 71). Another interesting fact is that although the number paying dividends increased, the number paying a rate of 8 per cent declined from 33 per cent in 1931 to 26 per cent in 1935, while the number paying 6 per cent or less increased.

Judging from the rates of interest paid on funds invested elsewhere, few financially strong cooperatives that have continuously paid dividends are justified in paying stockholders as much as 8 per cent on their capital stock each year. Dividends ordinarily should not exceed the rate at which farmer-stockholders can obtain short-term loans. Large earnings of cooperatives which result from margins that were relatively higher than expenses, should not be used to pay excessive rates of interest on capital but should be refunded to members on the basis of patronage.

Interest on Certificates of Indebtedness.—The average rate of interest paid on certificates of indebtedness for those associations paying interest, was 6.7 per cent, the same as the average rate

paid on capital stock by capital stock associations. The proportion of associations paying interest on certificates, however, decreased from 75 per cent in 1932 to 55 per cent in 1935 (Table 72). There was a tendency, also, for relatively more of the associations paying interest to pay at lower rates.

TABLE 72.—NUMBER OF ASSOCIATIONS AS PER CENT OF TOTAL, BY RATES OF INTEREST ON CERTIFICATES OF INDEBTEDNESS AND BY YEARS, 20 EXCHANGES AND ELEVATORS, 1931-35.

Rate of Interest(Per Cent)	1931	Years			
		1932	1933	1934	1935
None.....	30.0	25.0	25.0	41.2	45.0
2-5.....	20.0	8.3	16.6	11.8	15.0
6.....	20.0	16.7	16.7	5.9	5.0
8.....	50.0	50.0	41.7	41.1	35.0
All.....	100.0	100.0	100.0	100.0	100.0

Patronage Dividends.—The method of paying patronage dividends varied widely as to whom, on what products, and at what rates they were paid. In practically all exchanges and elevators paying patronage dividends for 1935, only members were eligible to receive such dividends, and as pointed out earlier, many patrons of associations were not members and hence were not eligible for patronage refunds. Also, there were very few instances in which patronage dividends were paid on the entire product and supply business of an association. Usually these refunds were made only on certain commodities handled, such as poultry and eggs, feed or butterfat. Often the patronage dividend received from a central cooperative was passed on to member-patrons as a dividend only on the products or supplies handled by that central organization. In some associations the amount of patronage refund varied by types of commodities. The products on which dividends were most frequently paid were poultry, eggs and butterfat.

LOCAL CREAMERIES

In addition to that sold through exchanges and elevators, approximately \$600,000 of cream was marketed through eight local cooperative creameries operating in Missouri in 1935. Seven of these creameries were engaged primarily in the manufacture of butter and the other in the production of sweet cream. Four of these cooperatives were located within a small area of Lafayette and Saline counties, but the other four were widely separated, each being located in a different corner of the state, (Figure 4).

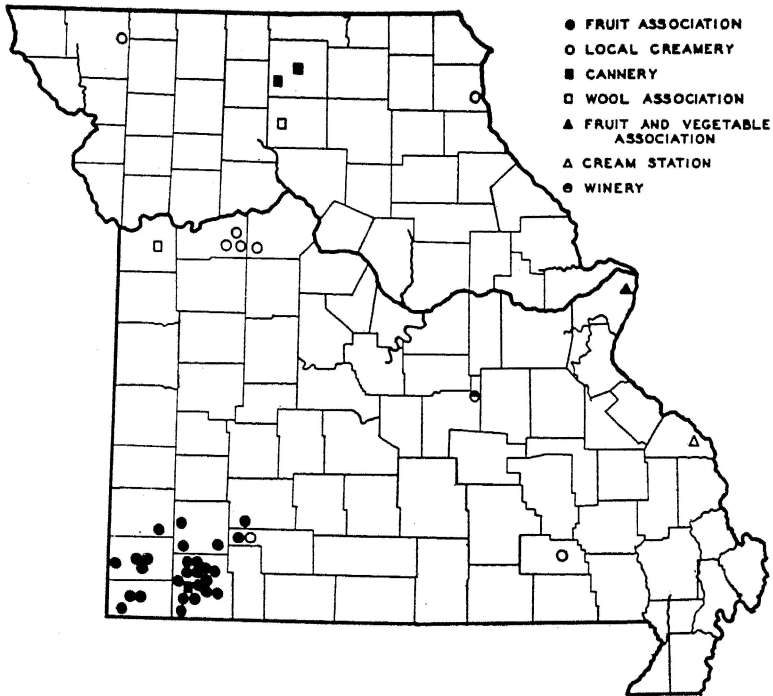


Fig. 4—Location of Cooperative Fruit Associations, Local Creameries, and Miscellaneous Local Associations.

Although the areas served were relatively small, the volume of business of the eight creameries totaled \$659,000. It ranged from \$65,455 to \$128,700 per plant and averaged \$82,331. In terms of butter, this amounted to more than 2,200,000 pounds, or an average of approximately 300,000 pounds each, for the seven making butter.

TABLE 73.—DATES OF INCORPORATION AND LAW UNDER WHICH INCORPORATED, 8 LOCAL CREAMERIES, 1935.

Date of Incorporation	Law Under Which Incorporated	
	General Business	1923 Non-Profit
1892.....	1	--
1899.....	1	--
1900.....	1	--
1908.....	1	--
1927.....	--	2
1928.....	--	2
All.....	4	4

Local creameries were the oldest type of marketing cooperative operating in Missouri in 1935, four having been in existence since 1908 or earlier, (Table 73). Although only four of these were incorporated under a cooperative law, the other four being organized under General Corporation Law, their methods of operation were very similar, since the pooling of butterfat purchases was common to all.

The pools operated by these creameries were either on a two-week or a monthly basis, so that producers were paid for their cream every two weeks or once a month. The amount and grade of the products of each producer were determined at the time of delivery, and after the association deducted an amount sufficient to cover operating costs and small reserves from the gross receipts of the sales of butter from each pool, the remainder was returned to the producer on the basis of the quantity and quality of the cream delivered. In most of these associations, advances at the time of delivery usually were made if the producer needed his money at once. These advances commonly amounted to 50 per cent of the value of the product, but in some instances were larger.

TABLE 74.—AVERAGE VOLUME OF BUSINESS, BY YEARS, 7 LOCAL CREAMERIES, 1931-1935.

Year	Volume of Business	
	Range	Average
1931.....	\$40,465-\$222,073	\$85,060
1932.....	32,710- 188,666	68,757
1933.....	39,703- 125,605	65,421
1934.....	51,715- 114,185	74,031
1935.....	67,252- 128,698	84,742
All.....	\$32,710-\$222,073	\$75,602

Although the range in sales of these creameries for the five years, 1931 to 1935 varied rather widely, \$32,710 to \$222,073 per

plant, the average volume for the seven creameries reporting for the five years, 1931-1935, ranged from \$65,421 to \$85,060. The average sales of these plants for the five years was \$75,602 each, (Table 74). Most of the fluctuations in the sales of individual creameries was due to changes in prices and changes in production of butterfat due to weather conditions.

Although the margins taken were relatively small, 12.9 cents per dollar of sales on the average, the financial condition of these creameries was excellent. This is evidenced by the fact that as of December 31, 1935, their net worth was equal to 76.5 per cent and surplus and reserves to 35.3 per cent of total assets.

LIVESTOCK SHIPPING ASSOCIATIONS

In 1935 there were fifty-four cooperative livestock shipping associations operating in Missouri. Their total sales was estimated at more than \$1,000,000, an average of approximately \$21,000 per association. In addition, forty-three exchanges and elevators handled about \$450,000 of livestock. Thus, the total sales of livestock marketed through local cooperative channels amounted to more than \$1,500,000 in 1935. The figures for exchanges and elevators include only the livestock handled in the name of the association and not that merely hauled for farmers.

Although livestock shipping associations and exchanges and elevators handling livestock were not uniformly distributed throughout the state, they did extend over a rather wide area. (Figure 5).

The shipping associations in most instances were unincorporated organizations serving a rather small area. Their requirements for membership usually were merely that of selling through the association. Likewise their financial organization was very simple, their only assets in many instances being cash held as a reserve fund for insurance.

In handling livestock, shipping associations most frequently charged either a fixed amount per hundred-weight or a certain per cent of gross sales on all livestock marketed. The amount retained was used to pay handling charges, manager's commission if any, and to provide insurance on livestock in transit. In some associations the manager paid all expenses of handling the livestock, including insurance, out of his commission and no additional charges were made. In most instances this commission was a very nominal one and in some associations usually under the

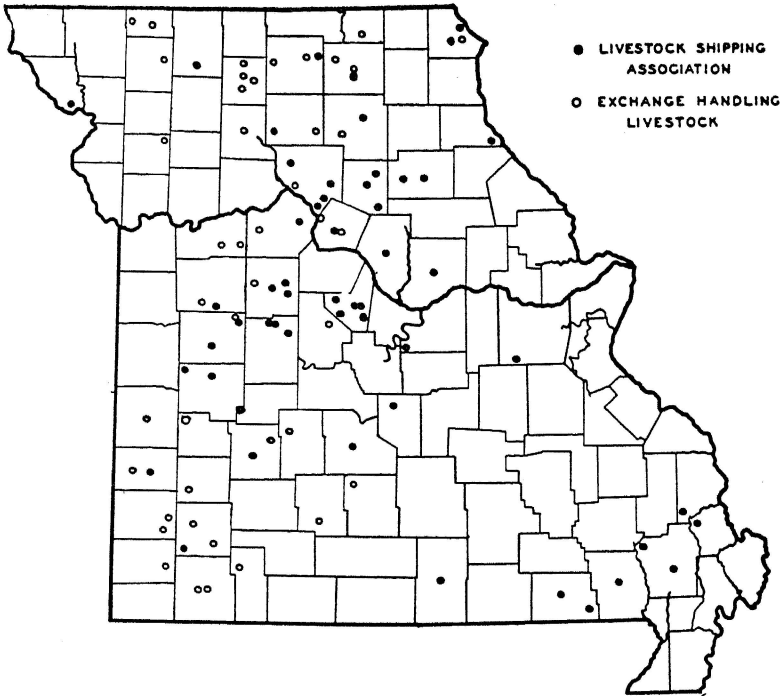


Fig. 5—Location of Livestock Shipping Associations and Exchanges Handling Livestock.

management of an exchange or elevator no charge was made by the manager for services.

As the volume of business of a livestock shipping association became too small to support a manager, the exchange or elevator in the area often took over its functions. Thus livestock was handled by exchanges and elevators in a manner very similar to that used by shipping associations except that a manager's commission was not charged. Many of the exchanges and elevators also used their own trucks in hauling livestock to market and were thus able, by charging the prevailing rate for trucking, to reduce transportation costs to a minimum on feeds and other supplies brought back on the return trip.

The decline in the number of livestock shipping associations is probably unparalleled by any other type of cooperative marketing or purchasing association. According to available data³ there

3. Missouri Agricultural Experiment Station Bulletin 253, p. 17.

were 463 livestock shipping associations in Missouri in 1925 compared to only 54 ten years later.

The most important reason for this decline undoubtedly has been the introduction of the truck. Another has been a reduction in the cost of shipping small lots by rail, as a result of railroad regulations which makes it possible for farmers to ship, under certain conditions, less-than-carlots of livestock at carlot rates.

FRUIT ASSOCIATIONS

Twenty-seven local cooperative fruit associations operated in Missouri in 1935. Twenty of these handled strawberries; three, grapes; two, both strawberries and grapes; and one, apples. Their sales totaled \$380,000 and averaged \$14,000 per association. They had about 2400 members, an average of 88 members each.

As practically all handled strawberries, the associations were concentrated in southwest Missouri, where a large part of the commercial strawberry crop is grown, fourteen being located in Barry County and the other thirteen in adjoining counties, (Figure 4). In 1935, the 25 associations handling strawberries marketed 58.7 per cent of the entire commercial crop produced in the counties in which they were located, and 44.9 per cent of all the strawberries marketed in Missouri.

The method most commonly used by these associations in marketing their products was that of a one-day pool. Under this method all fruit received by the association was graded and each grower was given a receipt stating the quantity and quality of fruit delivered. When the returns from each day's shipments were received, the association retained a certain per cent of gross sales to cover inspection, handling charges, and manager's commission and returned the rest to the grower. As these associations required very little capital, only a few associations retained any of the receipts for surplus and reserves and even in such, the portion retained was very small.

In addition to the marketing of fruit, many associations furnished their members crates and other containers on a cost basis. In some instances members also received valuable advice in regard to cultural practices from the manager of their association.

As in the case of livestock shipping associations, the number of associations handling fruit has declined in recent years. This decline was due partially to the severe droughts in the years immediately preceding this survey and in part to the use of the truck. In many areas in southwest Missouri adverse seasons had

eliminated a large part of the strawberry acreage, and hence, the need for an association. The truck also had contributed to this decline in that it provided a method of transportation permitting growers to market their products individually to a much greater advantage than had previously been the case when transportation by rail was the only method available for long-distance shipments.

In all probability several of the associations not operating in the year for which this study was made will resume operations when production again becomes normal.

LARGE-SCALE CENTRAL ASSOCIATIONS

In 1935 there were 32 cooperative large-scale central associations serving Missouri farmers, 29 of which were located in the state and the remaining three in adjoining states. This included eight central produce plants, seven terminal livestock marketing associations, five purchasing associations, three central creameries,

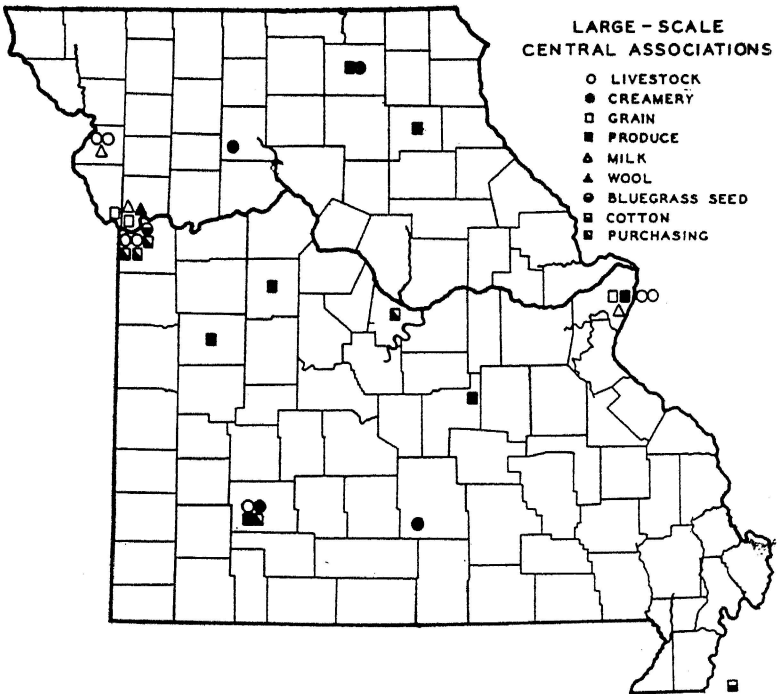


Fig. 6—Location of Large-Scale Central Associations.

three fluid milk associations, three grain associations, one wool association, one bluegrass seed association, and a cotton association. The location of these associations is shown in Figure 6.

MISCELLANEOUS LOCAL ASSOCIATIONS

There were eight miscellaneous local cooperative associations operating in Missouri in 1935. These were three canneries, two wool pools, one cream station, one fruit and vegetable association, and a winery. The average volume of business of these associations was approximately \$32,100 each, or a total of \$257,000 for all. All products marketed were handled either on a pool or a commission basis. The location of these associations is shown in Figure 4.

APPENDIX

TABLE A.—NUMBER OF ASSOCIATIONS AS A PER CENT OF TOTAL, BY GROSS MARGINS AND COMMODITY GROUPS, EXCHANGES AND ELEVATORS, 1935.

Gross Margin in Per Cent of Sales	Produce	Grains, Feeds, and Flour	Petroleum Products	Groceries	Hardware and Similar Supplies	All
Loss.....	1	*	(Number as per cent of Total)			
Gain:			11	6	10	--
Less than 1.....	3	1	2	--	1	*
1-2.....	6	2	2	4	3	1
2-3.....	10	4	3	3	3	2
3-4.....	13	7	3	6	4	10
4-5.....	23	15	5	15	4	13
5-6.....	17	15	2	7	9	19
6-7.....	15	19	3	8	9	18
7-8.....	5	11	3	6	8	15
8-9.....	4	9	4	8	10	5
9-10.....	1	5	10	3	10	7
10-11.....	1	5	8	13	8	4
11-12.....	1	2	7	2	4	1
12-13.....	--	2	10	4	3	1
13-14.....	--	1	2	2	3	*
14-15.....	--	1	4	--	2	1
15-16.....	--	1	1	3	3	*
16 or more.....	--	*	20	10	6	3
All.....	100	100	100	100	100	100
Number of Associations.....	180	189	96	67	156	259

*Less than 0.5 per cent.

TABLE B.—NUMBER OF ASSOCIATIONS AS A PER CENT OF TOTAL, BY GROSS MARGINS TAKEN ON IMPORTANT PRODUCTS, EXCHANGES AND ELEVATORS, 1935.

Gross Margin in Per Cent of Sales	Eggs	Poultry	Cream	Other Produce	Wheat	Corn
	(Number as per cent of Total)					
Loss.....	5	7	2	2	4	5
Gain:						
Less than 1.....	6	6	-	1	1	3
1-2.....	15	5	-1	7	10	7
2-3.....	17	9	2	3	10	8
3-4.....	20	15	5	10	7	14
4-5.....	11	11	8	9	16	20
5-6.....	15	13	7	12	13	16
6-7.....	4	7	12	12	10	9
7-8.....	3	7	20	10	9	8
8-9.....	1	7	12	5	3	4
9-10.....	1	6	11	5	3	3
10-11.....	1	2	5	3	4	1
11-12.....	--	1	5	5	1	--
12-13.....	--	--	2	2	1	-1
13-14.....	--	-2	1	3	1	1
14-15.....	--	1	1	3	1	--
15-16.....	--	-1	1	1	--	--
16 or more.....	1	-1	2	7	6	--
All.....	100	100	100	100	100	100
Number of Associations.....	176	174	153	121	71	76

Gross Margin in Per Cent of Sales	Oats	Commer- cial Feeds	Flour	Hay and Straw	Salt	Sugar	Pota- toes
	(Number as per cent of Total)						
Loss.....	10	--	5	5	2	5	4
Gain:							
Less than 1.....	--	2	2	--	--	--	--
1-2.....	1	2	2	5	2	5	4
2-3.....	5	2	5	5	--	15	--
3-4.....	3	2	7	3	-1	30	8
4-5.....	5	10	11	8	6	10	8
5-6.....	6	10	16	10	1	10	--
6-7.....	10	14	14	3	8	15	11
7-8.....	11	7	9	3	7	5	4
8-9.....	5	13	7	3	5	--	--
9-10.....	5	11	7	8	6	--	8
10-11.....	11	4	3	8	2	--	11
11-12.....	5	3	2	8	2	--	--
12-13.....	5	3	6	10	5	--	4
13-14.....	8	3	1	7	8	--	4
14-15.....	1	2	--	--	11	--	4
15-16.....	1	2	-1	-2	9	--	15
16 or more.....	10	5	2	12	25	5	15
All.....	100	100	100	100	100	100	100
Number of Associa- tions.....	63	165	148	39	87	20	28

TABLE B.—NUMBER OF ASSOCIATIONS AS A PER CENT OF TOTAL, BY GROSS MARGINS TAKEN ON IMPORTANT PRODUCTS, EXCHANGES AND ELEVATORS, 1935—
(Continued).

Gross Margin in Per Cent of Sales	Hard- ware and Machin- ery	Fencing	Seeds	Fuel	Twine	Fertil- izer and Lime	
Loss.....	3	3	8	6	3	--	
Gain:			(Number as per cent of Total)				
Less than 1.....	--	--	2	3	4	2	
1-2.....	6	5	4	6	4	--	
2-3.....	--	6	2	2	4	3	
3-4.....	--	6	13	--	7	--	
4-5.....	3	--	5	2	9	5	
5-6.....	12	6	11	2	8	6	
6-7.....	--	6	6	3	12	2	
7-8.....	12	9	10	11	12	6	
8-9.....	6	9	5	7	12	12	
9-10.....	--	6	8	10	7	15	
10-11.....	3	6	8	--	4	14	
11-12.....	9	9	4	5	2	18	
12-13.....	6	6	3	6	4	3	
13-14.....	3	14	3	6	3	3	
14-15.....	3	--	2	2	3	5	
15-16.....	--	--	3	7	--	3	
16 or more.....	34	9	3	22	2	3	
All.....	100	100	100	100	100	100	
Number of Associations.....	33	34	115	62	68	65	

TABLE C.—AVERAGE STATEMENTS OF CONDITION BY SIZE OF ASSOCIATION, 250 EXCHANGES AND ELEVATORS, DECEMBER 31, 1935.

Item	Sales per Association in Thousands of Dollars						
	Less than 25	25-50	50-75	75-100	100-150	150-200	200 or more
Assets							
Current Assets:							
Cash.....	\$ 449	\$ 984	\$1,062	\$1,349	\$1,726	\$4,199	\$3,729
Accounts Receivable.....	928	1,095	2,312	2,008	2,434	4,013	4,513
Notes Receivable.....	285	122	286	529	423	403	521
Merchandise Inventory.....	1,022	2,038	3,158	4,330	5,350	7,753	10,226
Other.....	7	64	31	285	65	311	1,002
Total.....	\$2,691	\$4,303	\$6,849	\$8,501	\$9,998	\$16,679	\$19,991
Fixed Assets.....	2,577	4,076	5,767	8,422	9,092	11,232	16,057
Investments.....	80	57	187	213	324	241	1,056
Other.....	49	168	171	247	165	279	2,071
Total.....	\$5,397	\$8,604	\$12,974	\$17,383	\$19,579	\$28,431	\$39,175
LIABILITIES AND NET WORTH							
Current Liabilities:							
Accounts Payable.....	\$ 290	\$ 449	\$ 523	\$ 925	\$1,108	\$ 778	\$2,933
Consignment Drafts.....	--	--	--	4	106	226	1,264
Notes Payable.....	1,591	1,168	1,109	1,961	1,714	1,590	3,488
Other.....	135	209	239	350	388	1,061	1,933
Total.....	\$2,016	\$1,826	\$1,871	\$3,240	\$3,316	\$3,655	\$9,618
Fixed Liabilities.....	620	549	850	1,089	1,683	1,187	5,071
Net Worth:							
Capital Stock or Certificates of Indebtedness.....	\$3,206	\$5,931	\$8,259	\$11,576	\$11,321	\$14,940	\$11,948
Surplus and Reserve.....	445*	298	1,994	1,478	3,259	8,649	12,538
Total.....	2,761	6,229	10,253	13,054	14,580	23,589	24,486
Total.....	\$5,397	\$8,604	\$12,974	\$17,383	\$19,579	\$28,431	\$39,175

*Deficit.