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Farmers' Purchasing Associations in Wisconsin

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FARM CREDIT ADMINISTRATION

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Summary

FARMERS' cooperative purchasing associations have operated for many years in Wisconsin, but the movement gained little headway until after 1900. In fact, nearly all of the 271 local purchasing associations that were active in the summer of 1935 had been organized since 1910. These cooperatives handled in 1934 approximately 15 percent of the farm supplies purchased in the State, supplies with a retail value of some \$14,000,000. The associations are located in all parts of the State, but are most numerous in the main agricultural sections.

Development of cooperative purchasing among Wisconsin farmers has been encouraged and assisted by general farm organizations, State and Federal agricultural agencies, and wholesale cooperative purchasing associations. Several large-scale purchasing associations perform wholesale service for farmers' local purchasing groups.

The local purchasing associations in Wisconsin may be classified according to type in four main groups: Petroleum, warehouse, general-store, and combination associations. In addition, a number of cooperative marketing associations engage in the cooperative purchase of farm supplies.

Of these local purchasing associations, 15 percent had in 1934 a total business per association of \$100,000 or more; 37 percent had \$40,000 to \$100,000; and 48 percent had less than \$40,000.

Forty-seven percent of the total value of farm supplies distributed by Wisconsin cooperatives in 1934 consisted of such general production essentials as feed, seed, binder twine, and fertilizer. Petroleum products represented 33 percent; hardware, machinery, and building materials 6 percent; and household supplies 10 percent of the total. Approximately 87 percent of the total business was with farmers.

Analysis of the operating statements for the associations of each type indicated that there was a tendency for unit expenses to decrease with increased volume of business. It appeared, however, that other factors—managerial efficiency, for example—had a greater influence on operating expense than had volume.

Financial position, on the whole, was satisfactory. Thirty-eight percent of the associations had \$5 or more in current assets for each dollar of current liabilities; 8 percent, however, had less than \$1.

Comparison of the balance sheets and operating statements for groups of selected "good" and "poor" associations of each type showed that generally the good associations had (1) larger volumes of business,

(2) lower operating margins, (3) lower operating expenses per dollar of sales, and (4) larger net incomes than either the poor associations or the average associations of each type. It is believed that these average financial statements can be used to advantage by the associations as standards for measuring their own efficiency.

It was found that many of the associations needed to give more attention to credit extension and collection policies. Many could profitably improve their methods of service and their accounting and auditing practices. It was apparent that some of the local associations had a serious membership problem in that many patrons were not active members.

Some differences in operating efficiency according to type are suggested by the average net incomes per dollar of sales, which were as follows: Petroleum associations, 7.79 cents; warehouse associations, 1.39 cents; general stores, 1.01 cents; and combination associations, 3.51 cents. The higher net income of the petroleum associations was largely because of the higher gross margins obtaining on petroleum products.

More than half of the local purchasing associations in Wisconsin are being served by large-scale associations which provide an economical source of good-quality supplies at wholesale. Moreover, these wholesale associations have assisted the local associations in their efforts to raise standards of service and operating efficiency.

Farmers' Purchasing Associations in Wisconsin

FOR NEARLY a century Wisconsin farmers have cooperated in purchasing supplies for farm and home use. The extent and importance of this activity have not been commonly known and appreciated, since generally the organizations engaged in cooperative purchasing have been overshadowed by those engaged in cooperative marketing. The present study indicates that in 1934 there were 271 local purchasing associations in Wisconsin which handled farm supplies as a major activity, and that the total retail value of the supplies distributed during that year amounted to approximately 14 million dollars. These local associations are served by several wholesale associations with headquarters either in Wisconsin or Minnesota.

Scope and Method of Study

THE AIM of this study is to provide information on the development, present status, and operations of the farmers' cooperative purchasing associations in Wisconsin, as a means of showing the nature, extent, efficiency, and problems of this type of cooperative activity in the State. Many of the problems of Wisconsin purchasing associations are typical of those met by such associations in other States. The fact that Wisconsin has long been associated with cooperative effort, both in marketing and purchasing, makes it possible to give the study a longer historical perspective than would be possible for a similar study in most other areas.

In the course of this study, data were obtained from practically all cooperative associations handling farm and farm-home supplies in the State. In the summer of 1935 direct visits were made to all known local and wholesale farmers' purchasing associations operating

NOTE.—Martin A. Abrahamson and Wion F. Finner, assistants in the department of agricultural economics, University of Wisconsin, gathered much of the information for this study and aided materially in the analysis of the data.

in Wisconsin. The records of many of the local associations were not complete, or were not comparable with similar data from other associations. For that reason some of the tables and charts cover a smaller number of associations than were actually visited. An effort has been made to present the comparable information in such a manner as to show the range and grouping of the associations with respect to each problem analyzed. It is believed that in each case the number of associations analyzed is sufficient to be representative of the various types.

Economic Influence of Agricultural Conditions

A brief description of Wisconsin agriculture is essential to an understanding of the Wisconsin farmers' buying problem.¹ According to the 1935 Census of Agriculture,² there were 199,877 farms in Wisconsin with an average size of 117 acres and an average value of land and buildings of \$6,238 per farm. The total cash farm income for the State amounted to \$251,151,000 in 1935.

TABLE 1.—LAND USE IN WISCONSIN, 1934¹

Use of land	Area utilized	Percentage of all farm land
	<i>Acres</i>	<i>Percent</i>
Pasture land.....	8,068,887	34.4
Land in hay.....	3,202,612	13.6
Oats, barley, and corn.....	5,461,125	23.3
Other crop land.....	4,043,486	17.3
Forest and other land in farms.....	2,683,093	11.4
Total.....	23,459,203	100.0
Approximate area of State.....	35,363,840

¹ Based on data from U. S. Department of Commerce, Census of Agriculture, 1935.

Wisconsin agriculture is largely organized to produce milk and live-stock. In 1935 these commodities accounted for 87.4 percent of the total cash farm income of the State. The emphasis on the production of milk and livestock explains the utilization of Wisconsin farm land and to some extent the nature of the farm-supply business in the State. Almost half of the farm land in Wisconsin in 1935 was devoted to

¹ For further information on this subject see: McNall, P. E., and Roth, W. J. FORCES AFFECTING WISCONSIN AGRICULTURE WITH RESULTING TYPES OF FARMING; Wis. Agr. Expt. Sta. Res. Bull. 131, 41 pp. 1935; and Ebling, W. H., and others. WISCONSIN AGRICULTURE. Wis. Crop and Livestock Reporting Service. Bull. 140, 148 pp. illus. 1932.

² U. S. Department of Commerce, Census of Agriculture 1935, v. 1.

pasture and hay crops (table 1), and approximately another third to the production of the three major feed crops—oats, corn, and barley.

The farming operations carried on by Wisconsin farmers require considerable expenditures for such farm supplies as petroleum products, feed, seed, fertilizer, farm machinery, and dairy equipment. Unfortunately, statistics are not available to show the amount of these annual expenditures. Some indication of their importance, however, may be had from the 1930 census data³ which show that farmers' purchases of feed in 1929 amounted to \$31,086,790, and those for fertilizer, to \$2,133,377. The 1930 census figures show that farmers operated in that year 50,200 tractors, 51,800 trucks, and 176,800 farm automobiles. On the basis of these figures and estimates of farmers as to the quantity of petroleum products used per farm, the annual expenditures for petroleum products can be estimated at approximately \$25,000,000. When one also takes into consideration farmers' expenditures for seed, binder twine, farm implements, farm machinery, equipment, insecticides, fence and fence posts, cement, paint, salt, and other supplies required in the operation of a farm, the total annual expenditure for farm supplies probably amounts to about \$75,000,000.⁴

On the basis of the information obtainable, it is estimated that about 15 percent of the farm supplies in the State were purchased cooperatively in 1935, although the total supplies handled at retail by cooperatives represented about 19 percent of the annual expenditure indicated above for farm supplies in the State. Some of these associations, however, handle household as well as farm supplies, and a limited amount of business is carried on with patrons who are not farmers.

The relative position of cooperative purchasing associations in the handling of specific products not used solely for agricultural production purposes would vary considerably from the above estimate. The most authentic figures covering this point are probably for petroleum products. Cooperative associations handled 5.1 percent of all the gasoline shipped into Wisconsin during the fiscal year 1935-36. In 25 rural counties the cooperatives handled over 10 percent of the gasoline, and in 3 of these the proportion handled by cooperatives was from 20 to 30 percent of the total. In several communities, cooperative purchasing associations are the leading retail agencies for particular types of supplies.

³ U. S. Department of Commerce. FIFTEENTH CENSUS OF THE UNITED STATES 1930. AGRICULTURE, V. 4.

⁴ For estimates of annual purchases of selected commodities for a Wisconsin farm, see table 81 of WISCONSIN AGRICULTURE, cited in footnote 1.

Development of Cooperative Purchasing in Wisconsin

THE FIRST definite attempt to develop cooperative purchasing in Wisconsin started as early as 1844 with the establishment in Fond du Lac County of the Wisconsin Phalanx, a society motivated by the cooperative idealism of Robert Owen, Charles Francois Fourier, and Horace Greeley. The Wisconsin Phalanx undertook to establish a system of cooperative living, with all members of the community working on a profit-sharing basis. This group colonized a 2,000-acre tract of land and constructed community lodges, a sawmill, and a gristmill, and purchased cooperatively supplies incidental to the general farming operations. The society had 157 members at the end of 1847, but was dissolved in 1850, because some of its members preferred to carry on their economic activities unencumbered by its rules and regulations.⁵

Numerous farmers' clubs were started in Wisconsin about 1850. Many of these endeavored to provide farmers with an economical source of farm supplies, but they were for the most part loosely organized and poorly financed.

Influence of General Farm Organizations

The development of cooperative purchasing in Wisconsin has been greatly encouraged by general farm organizations. The National Grange of the Patrons of Husbandry, the Farmers' Alliance, the Wisconsin Society of Equity, the American Farm Bureau Federation, and the Farmers Educational and Cooperative Union of America have all sponsored cooperative purchasing as a means of improving farm conditions.

The Grange

The Grange gave direction to the first State-wide attempt to purchase farm supplies on a cooperative basis. The first grange in Wisconsin was organized in Adams County in January 1871. The movement spread rapidly, with the formation of the Wisconsin State Grange in June 1871. By January 1875 there were 505 granges in the State. By July 1, 1876, however, the number had fallen to 294.⁶

⁵ For a full discussion of this interesting experiment and the reasons for its failure, see: *State of Wisconsin. SECOND BIENNIAL REPORT OF THE BUREAU OF LABOR AND INDUSTRIAL STATISTICS, 1885-1886.* 822 pp. 1886. See pp. 193-206.

⁶ Buck, S. J. *THE GRANGER MOVEMENT.* 384 pp., illus. Cambridge, Mass. 1912. (*Harvard Hist. Studies, v. 19*.) Table insert, p. 56.

These local granges customarily undertook to enable their members to buy and sell to advantage. At first the granges endeavored to have their members patronize certain dealers who would agree to give a discount to grange members. This practice usually worked for a short period, but other merchants soon offered grange members the same discounts, and this caused the members to distribute their patronage. This so-called "boycott" plan, therefore, soon proved impractical since it was difficult to keep grangers together in dealing with the selected firms. Many of the granges endeavored to overcome the disadvantages of the boycott plan by establishing business agents. The business agents assembled orders for supplies needed by granges. They then arranged with manufacturers or city wholesalers to fill these orders. Oftentimes the grange agent had no place of business other than his home. This system was of only temporary benefit, and it did not provide the basis for a permanent business system.

Although at first the National Grange had taken only a minor interest in the business aspects of the granger movement, it soon became apparent that such activities could be developed only with the adoption of a definite plan. After extended study and discussion, the National Grange, therefore, in 1875 recommended a plan of setting up cooperative associations according to the Rochdale principles of cooperation.⁷ A number of the Wisconsin granges, many of which had been operating on an agency basis, thereupon organized cooperative stores on the general pattern suggested by the National Grange. The Brandon Cooperative Mercantile Association⁸ in Fond du Lac County, which was established in 1877, affords an illustration of how grange stores were organized and operated. This store had 50 initial stockholders. The authorized capital was \$10,000, with shares of stock valued at \$5 each. The association provided for the payment of "10 percent interest on capital, payable in new stock," and for distribution of any balance of net income to stockholders in the form of stock in proportion to the amount of goods bought during the year.

The Wisconsin State Grange had appointed a State agent in 1871 for the purpose of making contracts and generally supervising the business features of the order. In 1875 this service was placed on a better business basis with the establishment of a regular business agency in Milwaukee. For several years this agency provided grange agents, grange cooperative stores, and individual farmers with an extensive buying service. Work of the State agency was described

⁷ See: National Grange of the Patrons of Husbandry; PROCEEDINGS OF THE NINTH ANNUAL SESSION, 1875, pp. 93-100; PROCEEDINGS OF THE TENTH ANNUAL SESSION, 1876, pp. 144-162; and PROCEEDINGS OF THE SEVENTEENTH ANNUAL SESSION, 1883, pp. 18-20. See also Knapp, J. G., and Lister, J. H., COOPERATIVE PURCHASING OF FARM SUPPLIES. Farm Credit Administration, Cooperative Division, Bull. 1, 92 pp. illus. 1935. See pp. 9-12.

⁸ See reference cited in footnote 5, pp. 208-209.

by the State agent in 1886.⁹ He reported that the agency attempted to make large bulk purchases for distribution among its members, and that annual sales at that time amounted to about \$100,000. Considerable savings had resulted from the handling of binder twine, barbed wire, "land plaster," and other goods largely used by farmers.

Although the early cooperative effort of the Grange subsided about 1885, this activity demonstrated that the Rochdale type of cooperative association (which provided for the sale of goods at prevailing prices and the distribution of savings according to patronage) offered the most promising basis for further cooperative effort. While the Grange has not continued to play a conspicuous role in the development of cooperative purchasing in Wisconsin, it has never ceased to advocate cooperation as a means of improving agricultural conditions, and has given support to the formation of local farmers' purchasing associations whether or not affiliated with the Grange.

In some counties the Grange still plays an active role in assisting farmers to buy supplies cooperatively. The 1932 proceedings of the Wisconsin State Grange¹⁰ carried reports of 40 local, or subordinate, granges which indicated that they handled farm supplies. The reports of 18 other local granges made no mention of this type of business. Supplies handled consisted mostly of twine purchased through the business department of the State Grange. This agency pooled the orders for 600,000 pounds of binder twine in 1935. Cedar posts are also being handled in considerable volume through the Grange business departments. The reports of many of the local granges indicated that contracts were made with private dealers, calling for discounts on gasoline and oil and, to a lesser extent, on feed and fertilizer. The volume of such business handled was generally small, seldom exceeding a few thousand dollars annually. These local granges operate largely as buying clubs rather than as typical supply associations.

Wisconsin Society of Equity

The next major impetus to cooperative purchasing in Wisconsin was given by the Wisconsin Society of Equity, which was organized in 1902.¹¹ This society was a member of the American Society of Equity which was active in several Midwestern States at that time.¹² The

⁹ See reference cited in footnote 6, pp. 210-211 and 248-249.

¹⁰ Wisconsin State Grange. JOURNAL OF PROCEEDINGS OF THE SIXTY-FIRST ANNUAL SESSION. 104 pp. 1932.

¹¹ Although the Farmers' Alliance functioned in Wisconsin from about 1886 to 1906 and gave some encouragement to agricultural cooperation, its influence on the development of cooperative purchasing was of minor significance when compared with the efforts of the Grange and the Equity in the State. In general, it encouraged farmers to deal through agents in the way described above for the Grange.

¹² For further information see: West, E. AGRICULTURAL ORGANIZATION IN THE UNITED STATES. 618 pp., illus. 1923. (Ky. Univ. Studies Econ. and Soc. v. 2.) See pp. 524-532.

efforts of the Wisconsin Society of Equity were at first directed principally toward the organization of cooperative associations for handling livestock, grain, potatoes, and general produce. Many of these cooperative marketing associations soon began to handle farm supplies as a supplementary activity, which for some of them developed in a few years into their major or sole activity.

As cooperative activity grew, the Wisconsin Society of Equity organized the Wisconsin State Union of the American Society of Equity. The Wisconsin State Union endeavored to serve as a broker or central purchasing agency for the sale of produce and for the purchase of supplies for the local Equity organizations. Arrangements were made with wholesale agencies to ship such supplies as seed, feed, flour, twine, and coal direct to the local Equity exchanges. The Wisconsin Society of Equity, moreover, was largely responsible for the establishment in 1911 of the binder-twine plant in connection with the State Prison at Waupun. The price of binder twine was greatly reduced through the operation of this plant.

The period of high prices following the War caused the Equity to overexpand its business operations with the result that the organization accumulated considerable indebtedness which seriously threatened its future. This caused a general curtailment of activity, for this indebtedness was not recorded as paid until 1924. Moreover, the Equity, like the Grange, found it difficult to harmonize the efforts of its business undertakings with its general interests, and with this program of retrenchment, many of these local business associations withdrew from the parent organization. The membership of the Wisconsin Society of Equity declined rapidly after 1920; in 1919 the society claimed a membership of 40,000, but by 1927 it had declined to 4,200, and by 1934 to 1,700. In 1934 the organization combined with the Farmers' Union under the name, "The Farmers' Educational and Equity Union of America, Wisconsin Division."¹³

The extent to which the Equity organizations influenced the development of cooperative purchasing in Wisconsin can scarcely be overemphasized. While the early granger movement in Wisconsin had encouraged the development of cooperatives to purchase supplies, the Wisconsin Society of Equity gave more attention to the formation of associations which could be used for marketing such products as livestock, grain, and potatoes, as well as for the purchase of basic farm-production supplies. It is significant that 25 percent of the supply associations operating in Wisconsin in 1935 showed definite signs of Equity influence during their early periods of operation. For illustration, 31 general warehouses, 22 combination associations, 7 petroleum,

¹³ The Farmers' Educational and Equity Union does not directly carry on cooperative purchasing activity but it sponsors the work of the Farmers Union Central Exchange in Wisconsin. See p. 10.

2 general-store, and 3 marketing and purchasing associations, operating in 1935, started as Equity organizations.

Wisconsin Farm Bureau Federation (Cooperative)

The Wisconsin Farm Bureau Federation (Cooperative) of Madison, Wis., has also contributed significantly to the development of cooperative purchasing in Wisconsin. This organization was established in 1921 with the declared intention of improving methods of producing and distributing farm products. Throughout its existence it has striven to help farmers obtain supplies of good quality at satisfactory prices. At first the Farm Bureau encouraged groups of its members to make arrangements with local dealers to obtain standard articles at a discount. Later, the members were encouraged to pool orders for supplies and purchase them on a car-door delivery basis. Such informal methods of cooperative purchasing were gradually superseded by the establishment of warehouses in the southern and central portions of the State, where the Farm Bureau members were largely concentrated. This development encouraged the Wisconsin Farm Bureau Federation (Cooperative) to provide wholesale service for these warehouses, and such sales since 1934 have averaged over \$200,000 a year. Feed, seed, twine, fertilizer, and petroleum products have been the principal commodities handled.

In February 1937, the cooperative purchasing work of the Wisconsin Farm Bureau Federation (Cooperative) was transferred to the Wisconsin Cooperative Farm Supply Co., which was established to serve as a wholesale source of supply for local Farm Bureau purchasing associations. For further information see pages 106-109.

Influence of Cooperative Wholesale Associations

A second major impetus to cooperative purchasing in Wisconsin during the last 20 years has been the development of large-scale associations expressly to provide wholesale service for local cooperatives. Many local associations have been organized with the advice, encouragement, and assistance of these wholesale organizations, which afford an economical source of supplies on a cooperative basis. The major organizations of this type have been the Central Cooperative Wholesale, the Midland Cooperative Wholesale, and the Farmers Union Central Exchange. Wholesale service has also been provided by Land O'Lakes Creameries, Inc., and other associations which are briefly described here.

Central Cooperative Wholesale

The Central Cooperative Wholesale, of Superior, Wis., was started in 1917 as a central cooperative purchasing agency to serve cooperative associations located in northern Minnesota, Wisconsin, and

Michigan. Its business has expanded until it has become the largest general-store cooperative wholesale in the United States. In 1936 it provided wholesale service for 106 affiliated cooperative associations, which operate largely as local cooperative retail stores, and for some 70 nonmember local associations. In addition to farm supplies and petroleum products, it handles groceries, bakery goods, work clothing, hardware, building material, store fixtures, and other general merchandise. The aggregate value of these supplies handled in 1936 was \$2,845,741. Only 18 of its member retail associations are located in northern Wisconsin. These associations purchased \$389,841 worth of supplies from the Central Cooperative Wholesale in 1936. A number of local Wisconsin cooperative associations not directly affiliated with the Central Cooperative Wholesale also obtained supplies through it; these sales amounted to \$17,419 in 1936. It is of interest that joint studies have been initiated by the Central Cooperative Wholesale, the Midland Cooperative Wholesale, and the Farmers Union Central Exchange for the purpose of considering the possible cooperation of these three wholesales, and perhaps other groups, in the establishment of regional warehouses or branch wholesales in other parts of Wisconsin and Minnesota. (For further information see pages 82-87.)

Midland Cooperative Wholesale

The Midland Cooperative Wholesale, with headquarters in Minneapolis, was organized in 1926 as the Minnesota Cooperative Oil Co. The Midland has the distinction of being the first cooperative wholesale association established in the United States to deal primarily in petroleum products.¹⁴ It confined its business largely to Minnesota until 1928, when it began to distribute petroleum products extensively in Wisconsin. It adopted the name Midland Cooperative Oil Association in 1930 to indicate that its activity was not exclusively in the State of Minnesota. In 1934 the name of the organization was changed to its present form, Midland Cooperative Wholesale, in order to indicate further that its business is not limited to petroleum supplies.

The Midland Cooperative Wholesale at the end of 1936 served as a wholesale purchasing association for 148 retail member cooperative associations, 65 of which were located in Wisconsin. In addition approximately 30 nonmember cooperative associations purchased supplies from the Midland. The total value of supplies distributed by the Midland to these Wisconsin associations during 1936 amounted to \$1,115,591. This was approximately 37 percent of Midland's total business in 1936. The major supplies distributed by the organization have been petroleum products. In addition, it handles automotive

¹⁴ The early history of the Midland Cooperative Wholesale is given by Froker, R. K., and Price, H. B. ORGANIZATION AND MANAGEMENT PROBLEMS OF COOPERATIVE OIL ASSOCIATIONS IN MINNESOTA. U. S. Dept. Agr. Circ. 90, 46 pp. 1929.

accessories, equipment, steel and wire, paint, radios, and electrical supplies and appliances. (For further information see pages 87-94.)

Farmers Union Central Exchange

The Farmers Union Central Exchange, with headquarters in St. Paul, Minn., was organized in 1927, under the name Farmers Union Exchange, as a subsidiary of the Farmers Union Terminal Association—a regional cooperative grain-marketing agency affiliated with the Farmers' Educational and Cooperative Union of America. The Exchange was placed on a more definite cooperative basis by a reorganization in 1931, when it was incorporated with its present name under the Minnesota Cooperative Law. The reorganization plan provided for distribution of petroleum and other supplies through local cooperative associations and branch agencies. At the end of the fiscal year 1936, the Farmers Union Central Exchange was serving 233 local cooperative associations and 9 local branch agencies. At that time 36 of the cooperative associations and 3 of the branch agencies were located in Wisconsin. The total value of supplies distributed by the Farmers Union Central Exchange in 1936 amounted to \$3,783,992, and of this, \$1,144,403 represented sales made to the local associations and branch agencies in Wisconsin. The supplies distributed by the Farmers Union Central Exchange have been mainly petroleum products, and in addition, automotive accessories, farm machinery, feed, flour, and twine. (For further information, see pages 94-102.)

Land O'Lakes Creameries, Inc.

Land O'Lakes Creameries, Inc., with headquarters in Minneapolis, operates primarily as a marketing federation for cooperative creameries located in Minnesota, Wisconsin, and a few other nearby States. In 1923, the Land O'Lakes established a creamery-machinery and supply department in order to enable its member creameries to purchase supplies needed in the manufacture of butter and other dairy products at the lowest price and in the most economical manner. This department has grown until it is the largest single distributor of creamery machinery and supplies in the Central West. Its volume of supply business in 1936 reached a total value of \$1,619,342. Approximately 194 Wisconsin creameries made use of the service in 1936, obtaining through it supplies valued at \$251,860.

In 1930 Land O'Lakes Creameries, Inc., established a feed department to provide a source of feed to be distributed by creameries and elevators. This department handled in 1936 commercial feeds, fertilizers, seeds, and other farm supplies, having a total value of \$962,718. Approximately 10 percent of these supplies were distributed to local creameries and elevators in Wisconsin. (For further information see pp. 102-106.)

Other Large-Scale Cooperative Purchasing

In addition to the above large-scale associations, there are several district cooperative groups which handle farm supplies. The South-eastern Wisconsin Fruit Growers Cooperative, with headquarters in Waukesha, serves as sales and supply-purchasing agent for five county units. The principal supplies handled are cartons and boxes, insecticides, and nursery stock. The net sales of these commodities amounted to \$14,509 in 1936. The Wisconsin Cranberry Sales Co., at Wisconsin Rapids, which markets approximately 85 percent of the cranberries grown in Wisconsin, furnished its members with boxes, insecticides, weed killer, and labels, with a total value of \$36,850 in 1936. The Fruit Growers Cooperative, with headquarters at Sturgeon Bay, in addition to serving as a marketing agency, furnished growers with supplies valued at \$35,402 in 1936, for use in the production of fruit. The Wisconsin Cooperative Creamery Association provides local creameries in western Wisconsin with such supplies as neutralizer, washing powder, cans, and salt. The wholesale value of supplies so distributed amounted to approximately \$25,000 in 1936. The Progressive Farmers of Wisconsin Cooperatives, established in 1930, is a federation of seven local associations in east central Wisconsin. The local associations generally handle petroleum products and other farm supplies, and sell these supplies to members on a cost-of-goods-plus-expense basis. The Progressive Farmers of Wisconsin Cooperatives has served mainly to coordinate the activities of the local associations by affording an opportunity for discussion of common problems. It does not provide business service for its affiliated local associations.

In three other instances general warehouse associations have combined to obtain the advantages of quantity buying. In western Marathon County an informal organization of nine associations purchases binder twine and other articles in bulk quantities. The Central Cooperative Warehouse Association serves in a somewhat similar manner 12 general warehouse cooperatives located in Sauk, Juneau, Monroe, and Vernon Counties. The managers meet monthly to discuss general operating problems and to pool carload orders for supplies that cannot be purchased advantageously by single associations. Likewise, a group of local purchasing associations has been buying supplies collectively in the vicinity of Appleton. During the fiscal year 1936-37 this organization handled under the name Fox River Co-op Wholesale \$93,000 worth of supplies for its member locals.

Assistance by Governmental Agencies

Cooperative purchasing associations in Wisconsin, as well as other types of cooperatives, have for many years had the assistance of

governmental agencies. In 1885 Frank A. Flower, the Wisconsin Commissioner of Labor and Industrial Statistics, prepared a comprehensive report on cooperation in the United States and in Wisconsin.¹⁴ Although he was primarily interested in industrial forms of cooperation, he also directed attention to the formation of cooperative associations by farmers. Largely through the efforts of Mr. Flower, the first Wisconsin cooperative law was enacted in 1887.

The College of Agriculture of the University of Wisconsin has long aided cooperative associations through its department of agricultural economics and its agricultural extension division and through county agents and extension specialists. Through the Agricultural Experiment Station it has studied the activities of cooperative associations, and has used the findings thus obtained to guide the efforts of the Agricultural Extension Service staff in giving direct educational aid to groups of farmers in the organization and operation of cooperatives, of both the purchasing and the selling types. Beginning in 1913 the College of Agriculture has given courses in principles and practices of agricultural cooperation.

Since 1919 the Wisconsin Department of Agriculture and Markets has assisted cooperative associations in their organization, legal, and accounting problems. This department has provided, on a fee basis, an auditing service which in 1935 was used by approximately 25 percent of the farmers' local purchasing associations in the State. The Department of Agriculture and Markets, as an administrative body, is authorized to hold hearings at the request of farmers' organizations and issue orders relating to trade practices.

Services of the Federal Government have likewise been available to agricultural cooperative associations in Wisconsin. The Cooperative Marketing Act, passed in 1926, provided for research, service, and educational work relating to agricultural cooperatives which engage in marketing, purchasing, or in rendering other services to farmers. The Farm Credit Act of 1933 provided for the establishment of a Central Bank for Cooperatives and 12 regional banks, which make loans to cooperative associations of agricultural producers.¹⁵

It is difficult to measure the effect of the encouragement or assistance of general farm organizations, large-scale purchasing associations, or Government and educational agencies on the development of local purchasing associations. Undoubtedly, however, local needs and conditions have been the major factor in the formation of such associations. The particular significance of the activities of these general agencies has been to accelerate the development of cooperatives and give them general direction.

¹⁴ See reference cited in footnote 5.

¹⁵ The St. Paul Bank for Cooperatives serves associations in Wisconsin.

Legal Basis of Cooperative Purchasing in Wisconsin

EARLY cooperative purchasing associations established by the Grange were handicapped by the lack of a law which specifically recognized the cooperative form of business enterprise. Corporations organized under the State corporation acts were required to give each person the right to vote in proportion to the number of shares of stock owned. This provision caused many of the early incorporated cooperative associations to gradually assume the characteristics of private corporations, since it was not possible to vest control in the membership irrespective of their stock holdings. A Wisconsin law was enacted in 1887 to meet the specific needs of cooperative associations. The essential characteristics of this law have been described by Nourse:¹⁷

It provided for carrying on "any trade or business" on the "mutual, reciprocal, or cooperative plan," and required that no member should hold more than one office at a given time. It had a limited-liability provision, required sales to nonmembers to be for cash, and provided that one association might own shares in other similar associations, but that such holdings might not exceed a one-third interest, nor might the owner associations have more than one vote. There was also a provision that "never under any circumstances" might the association contract debts in excess of two-thirds of its paid-up capital. Its voting clause said: "Members and not shares of stock shall vote in electing officers and transacting any business of the association of whatsoever nature, but no proxies shall be allowed."

While the act of 1887 provided a basis for cooperative incorporation, it did not fully meet the needs of farmers since it was designed primarily to serve as a basis for the formation of industrial cooperatives. The cash requirement in sales to nonmembers and the provision that an association could not contract debts in excess of two-thirds of its paid-up capital did not work out satisfactorily in actual experience. With the development of the Equity movement after 1907, a strong sentiment developed for a cooperative act which would be better adapted to the needs of agricultural marketing and purchasing associations. Under the influence of the Equity and the Right Relationship League¹⁸ the act of 1887 was repealed in 1909 and replaced in 1911 by a more comprehensive cooperative law which

¹⁷ Nourse, E. G., *THE LEGAL STATUS OF AGRICULTURAL COOPERATION*, 555 pp., August 1927, N. Y. pp. 42, 128.

¹⁸ The Right Relationship League was an organization primarily concerned with the promotion of all types of cooperative enterprise in Minnesota and Wisconsin. It was active for several years after 1906.

long served as a model for cooperative laws in a number of other States.

The Wisconsin cooperative law of 1911 specifically recognized limitation of capital holdings, democratic voting, and distribution of earnings on a patronage basis—three fundamental principles of Rochdale cooperation. This law has been amended in some particular in practically every session of the State legislature since its enactment, and the total effect of such amendments has been to materially modify and enlarge its main provisions.¹⁹

Furthermore, the State of Wisconsin gave special recognition to cooperation in 1929 when it established a Division of Cooperative Marketing within the State Department of Agriculture and Markets. Another Wisconsin act in 1935 is of special importance since it gives further recognition to cooperation as a matter of public policy. This act makes the teaching of cooperation mandatory in the public schools of the State, and is unique in that it is the first law of this type to be enacted in the United States. It provides that "every high school and vocational school shall prescribe adequate and essential instruction in cooperative marketing and consumers' cooperatives," and that "the governing boards of the university, State teachers' colleges, and county normal schools, shall provide in their respective institutions adequate and essential instruction in cooperative marketing and consumers' cooperation".²⁰

The effect of State legislation passed since 1887 has been to provide a sound legal and educational basis for cooperative purchasing associations. These associations now have few legal problems in their operations that are not common to other forms of business organization, since they generally conduct business on an ordinary purchase-and-sale basis without resort to membership contracts. Like other business organizations, cooperative purchasing associations must comply with State and Federal regulations relating to such matters as workmen's compensation, social security, unemployment insurance, and the payment of property taxes. As noted later, farmers' cooperative purchasing associations which comply with certain conditions may receive exemption from the payment of income taxes.

The legal status of cooperative purchasing associations in Wisconsin has been further strengthened by Federal laws which have favored agricultural cooperative associations as a matter of public policy. Among laws of this type reference should be made to the Capper-Volstead Act of 1922, which clearly established the legality of agricultural cooperative associations; the Cooperative Marketing Act of 1926,

¹⁹ Copies of the Wisconsin statutes pertaining to the cooperatives may be obtained from the Secretary of State, or the Department of Agriculture and Markets, State Capitol, Madison, Wis.

²⁰ As noted above, p. 12, the Wisconsin College of Agriculture for many years has provided instruction in agricultural cooperation.

which provided for educational and research work related to agricultural cooperative associations; the Agricultural Marketing Act of 1929, which created the Federal Farm Board and authorized and directed it to "encourage the organization, improvement in methods, and development of effective cooperative associations"; and the Farm Credit Act of 1933, as amended, which provided for the establishment of the banks for cooperatives, and authorized them to make loans to cooperative associations of agricultural producers which comply with one or both of the following requirements:

First.—That no member of the association is allowed more than one vote because of the amount of stock or membership capital he may own therein; and

Second.—That the association does not pay dividends on stock or membership capital in excess of 8 percent per annum.

In any case the following is required:

Third.—That the association shall not deal in farm products, farm supplies, and farm business services with or for nonmembers in an amount greater in value than the total amount of such business transacted by it with or for members. All business transacted by any cooperative association for or on behalf of the United States or any agency or instrumentality thereof shall be disregarded in determining the volume of member and nonmember business transacted by such association.

The legal status of cooperative purchasing associations in Wisconsin has also been recognized by Federal and Wisconsin revenue laws, under which eligible farmers' cooperative associations have obtained exemption from the payment of Federal and State income taxes. In order to secure exemption from the payment of Federal income tax, an association must comply with the following conditions:²¹

1. The associations must be both organized and operated on a cooperative basis for the purpose of marketing products and returning the proceeds, less necessary expenses, to the producers on the basis of either quantity or value of the products marketed; or for the purpose of distributing supplies to farmers at cost plus necessary expenses. One association, of course, may engage in both activities.

2. Substantially all of the stock (except nonvoting stock, entitled only to fixed dividends and to redemption at the price for which issued) or of the voting memberships in nonstock corporations, must be owned by producers who patronize the association.

3. In regard to an association's marketing business, producers who are members and producers who are nonmembers must be

²¹ See Knapp, J. G., and Lister, J. H., COOPERATIVE PURCHASING OF FARM SUPPLIES. Farm Credit Administration, Cooperative Division, Bull. 1, 92 pp. illus. 1935, p. 89.

The average amount of income tax paid by the 68 associations of all types, which paid income tax, amounted to \$174 per association. Information gathered in this study suggests that most of the associations which paid Federal or State income tax in 1934 could probably secure exemption by making a few changes in their methods of organization or operation. The importance of making such changes is indicated by the amount of average income-tax payments made by the associations which had not secured exemption.

TABLE 2.—NUMBER AND PERCENTAGE OF 149 FARMERS' LOCAL PURCHASING ASSOCIATIONS IN WISCONSIN, WITH NET INCOMES IN 1933, PAYING FEDERAL OR STATE INCOME TAXES IN 1934

Type of association ¹	Total associations reporting	Associations reporting payment of—					Percentage of associations paying income tax
		Federal income tax only	State income tax only	Federal and State income tax	Any form of income tax	No income tax	
	Number	Number	Number	Number	Number	Number	Percent
Petroleum.....	49	16	None	7	23	26	47
Warehouse.....	34	14	None	4	18	16	53
General-store.....	11	2	None	1	3	8	27
Combination.....	50	15	None	8	23	27	46
Marketing.....	5	1	None	0	1	4	20
All.....	149	48	None	20	68	81	46

¹ For description of types, see pages 16-19.

Type and Location of Local Purchasing Associations in Wisconsin

FARMERS' local purchasing associations in Wisconsin can be classified for general purposes in four main groups or types: (1) Petroleum associations, which handle primarily petroleum products such as gasoline, kerosene, distillate, lubricating oil, and grease; (2) warehouse associations, which operate warehouses for the sale of

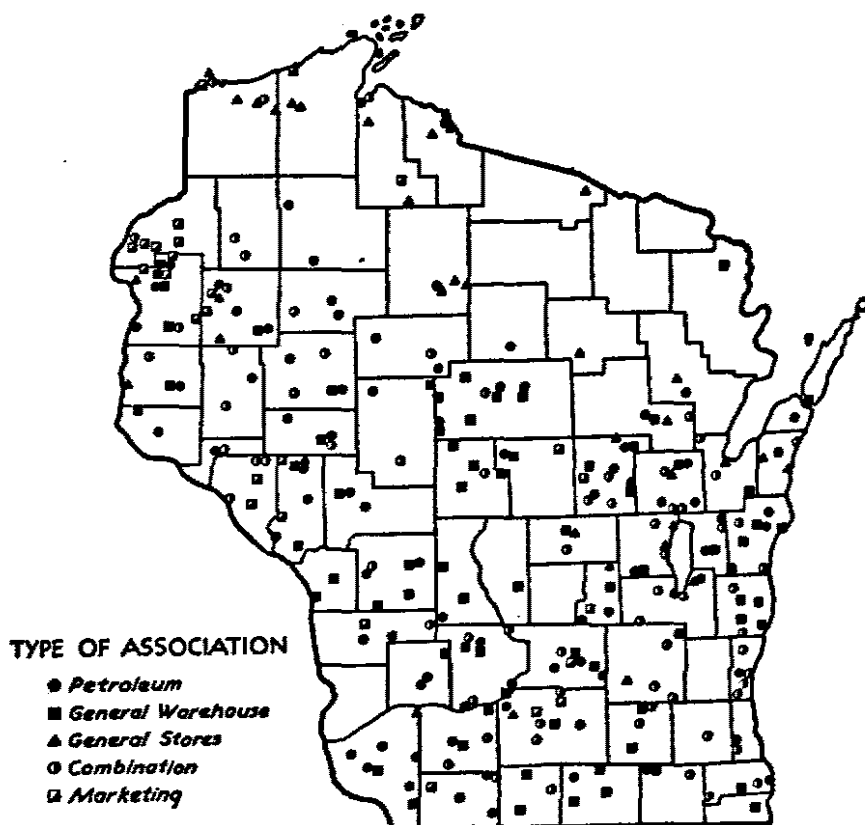


FIGURE 1.—LOCATION OF FARMERS' LOCAL PURCHASING ASSOCIATIONS IN WISCONSIN, 1935.

Although the farm-supply associations are distributed generally throughout the State, they are most common in the main crop-producing areas; that is, the southern two-thirds of the State.

feed, seed, and other general farm supplies, and which frequently grind and mix feed and conduct an ordinary grain-elevator business; (3) general-store associations, which handle staple household supplies and limited lines of such items as feed, seed, and twine; and (4) combination associations, which combine the handling of petroleum products with a warehouse farm-supply business. The associations which fall into the fourth class are not so clear-cut, with reference to type of service provided or commodities handled, as the associations of the first three types.

In addition, farm supplies are sometimes handled by farmers' marketing associations, and by buying clubs which are usually loosely organized unincorporated associations with little or no capital or facilities. The location of the local associations in Wisconsin, according to type, is shown in figure 1. Illustrations of representative associations of each of the four types appear in figure 2.

The cooperative purchasing associations are quite generally distributed throughout the State, although they are most numerous in the main crop-producing areas. While the oil associations are located throughout the State, the general-store associations are found largely in the northwestern and east central parts; and the warehouse and combination associations in the southern and west central sections. The cooperative marketing associations which handle farm supplies are mostly creameries located largely in Burnett, Polk, Barron, and Trempealeau Counties in northwestern Wisconsin.

Amount of Supply Business, by Type of Association

In table 3, farmers' local purchasing associations totaling 271, are classified according to the value of their annual sales. It will be noted that 25 percent of the associations had annual sales of less than \$20,000, and that 42 percent had annual sales ranging from \$20,000 to \$60,000. Only 15 percent had sales greater than \$100,000 per year. Only nine associations had annual sales in excess of \$200,000. It is significant that the associations with the largest volume of sales were generally of the warehouse or combination type. One-third of the general-store associations had sales of less than \$20,000, and about three-fifths of the petroleum associations had sales of less than \$40,000.

The 271 local associations studied handled a total retail supply business of \$13,914,000 ²² in 1934 (table 4). The amount of supply

²² This figure does not include sales of farm products marketed by these associations, which amounted to \$4,892,000 in 1934.

TABLE 3.—TOTAL ANNUAL SALES OF 271 FARMERS' LOCAL PURCHASING ASSOCIATIONS BY TYPE OF ASSOCIATION, 1934

Annual sales	Number of associations					
	Petro- leum ¹	Ware- house ¹	General- store ¹	Combi- nation ¹	Market- ing ²	All types
Under \$20,000.....	20	11	12	8	17	68
\$20,000—\$39,999.....	23	17	5	12	6	63
\$40,000—\$59,999.....	14	10	9	18	1	52
\$60,000—\$79,999.....	3	9	3	8	1	24
\$80,000—\$99,999.....	6	6	3	8		23
\$100,000—\$149,999.....	3	9	3	9		24
\$150,000—\$199,999.....		4		4		8
\$200,000 and over.....		5	1	3		9
Total.....	69	71	36	70	25	271

¹ Includes both sales of supplies and sales of products marketed.

² Includes only sales of supplies.

business done by these associations according to type was as follows:

Petroleum.....	\$2, 931, 000
Warehouse.....	4, 249, 000
General-store.....	1, 786, 000
Combination.....	4, 521, 000
Marketing, with purchasing side line.....	427, 000

Except for petroleum associations, the records did not provide sufficient information to permit a complete classification of the supply sales by principal products handled. The sales are classified in table 4, therefore, so far as actual classification could be made, for the associations of each type. As might have been expected, nearly all (98.2 percent) of the supply sales of the petroleum associations consisted of petroleum and related products. Of the sales of warehouse associations, 81.7 percent consisted of general farm supplies. While household supplies represented 75.6 percent of the sales of the general-store associations, general farm supplies and petroleum products together represented 87.4 percent of the sales of associations of the combination type. The bulk of the supplies handled by the marketing associations as side lines could be classed as general farm supplies. For the 271 associations combined, approximately one-third of the supply business consisted of petroleum products; one-half, of general farm supplies; and 10 percent, of household supplies.

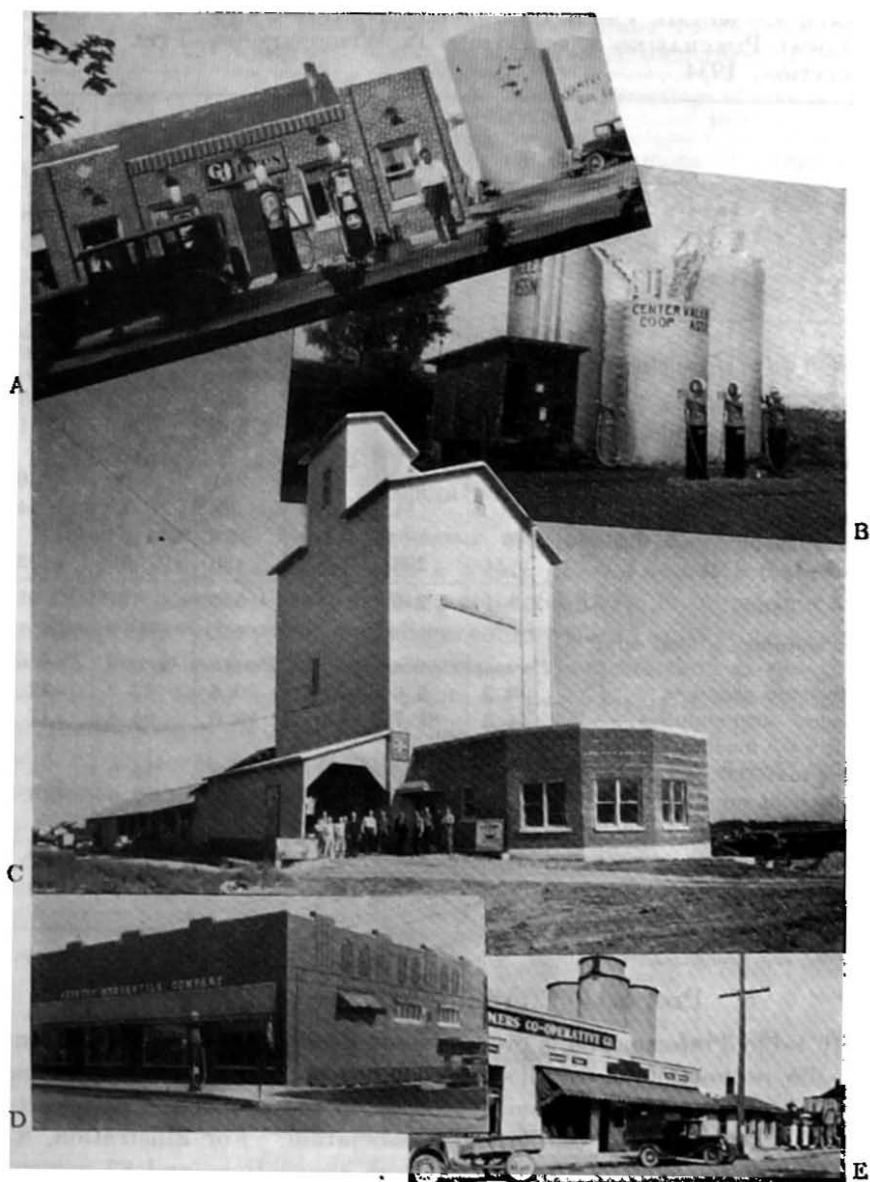


FIGURE 2.—TYPES OF FARMERS' LOCAL PURCHASING ASSOCIATIONS IN WISCONSIN.

A. Service station and bulk plant of Farmers Cooperative Oil Co., New London. B. Economical "layout" of facilities belonging to Center Valley Cooperative Association, Black Creek, showing bulk tanks and service station on railroad siding. C. Warehouse-type facilities operated by Valders Elevator Co., Valders. D. Home of oldest farmers' general-store cooperative in State, Black Earth. E. Sales and display rooms, feed elevator and service station of a combination association operated by Algoma Farmers' Cooperative Co., Algoma.

Operating Record of Local Purchasing Cooperatives

Date of Incorporation

THE DATES of incorporation for 416 farmers' local purchasing associations and their operating status in 1935 appear in table 7. These data do not include unincorporated associations of the buying-club type, most of which have passed out of existence, nor the early associations which were organized under private corporation laws. It is believed that the information for these 416 associations is reasonably complete for the period since 1910. Only fragmentary data are available with respect to the number and kind of supply associations which were organized prior to that date. Information is not included for the marketing associations which handle or have handled farm supplies. Most of the associations operating in this manner are creameries which have taken on the supply business since 1930.

Fully 45 percent of the local supply associations organized since 1910 were formed during the 6 years 1918-21 and 1930-31. All of the active petroleum associations in the State have been organized since 1920, and the majority of them since 1930.

The age of these associations varied greatly with the type of association. About 90 percent of the general-store associations were incorporated during the 11 years, 1911-21.²⁶ On the other hand, it was not until 1921 that the first cooperative petroleum associations were organized in the State, and such associations did not become general until about 1930. Approximately 40 percent of the general-warehouse and 45 percent of the combination associations were organized during the 3 years 1918-20.

It will be noted (table 7) that 154, or 37 percent, of the 416 associations, were not active in 1935. Of these 154 inactive associations, 79 were of the general-store type. Of the 115 general-store associations organized, only 36 were active in 1935. However, 73 of the 116 combination associations, 84 of the 92 petroleum associations, and 69 of the 93 warehouse associations organized were active in 1935.

²⁶ The oldest general-store association active in 1935, the Patrons Mercantile Co. of Black Earth, was incorporated in 1886. This association has operated continuously for a period of 50 years. (See figure 1, p. 21.)

TABLE 7.—YEAR OF INCORPORATION AND OPERATING STATUS IN 1935 FOR 416 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION ¹

Year incorporated	Associations reporting			Petroleum associations			Warehouse associations			General-store associations			Combination associations		
	Number organized	Status in 1935		Number organized	Status in 1935		Number organized	Status in 1935		Number organized	Status in 1935		Number organized	Status in 1935	
		Active	Inactive		Active	Inactive		Active	Inactive		Active	Inactive		Active	Inactive
Prior to 1910.....	13	11	2				5	4	1	4	3	1	4	4	0
1910.....	1	1	0				0	0	0	0	0	0	1	1	0
1911.....	12	2	10				1	1	0	9	0	9	2	1	1
1912.....	20	5	15				6	5	1	13	0	13	1	0	1
1913.....	9	3	6				1	0	1	7	2	5	1	1	0
1914.....	16	5	11				4	2	2	9	2	7	3	1	2
1915.....	8	4	4				3	3	0	4	1	3	1	0	1
1916.....	10	3	7				2	2	0	3	1	2	5	0	5
1917.....	13	6	7				4	2	2	5	1	4	4	3	1
1918.....	25	11	14				9	6	3	6	2	4	10	3	7
1919.....	52	26	26	*1	0	1	11	7	4	16	5	11	24	14	10
1920.....	52	24	28				17	11	6	17	5	12	18	8	10
1921.....	24	17	7	4	3	1	5	3	2	10	7	3	5	4	1
1922.....	11	8	3	6	4	2	4	3	1	0	0	0	1	1	0
1923.....	3	2	1	0	0	0	1	1	0	0	0	0	2	1	1
1924.....	10	8	2	1	0	1	1	1	0	4	3	1	4	4	0
1925.....	7	5	2	1	1	0	1	1	0	2	1	1	3	2	1
1926.....	8	8	0	2	2	0	4	4	0	0	0	0	2	2	0
1927.....	9	8	1	6	5	1	1	1	0	2	2	0	0	0	0
1928.....	16	13	3	4	3	1	2	1	1	1	0	1	9	9	0
1929.....	8	6	2	2	2	0	4	4	0	1	0	1	1	9	1
1930.....	21	18	3	9	8	1	6	6	0	2	1	1	4	3	1
1931.....	28	28	0	19	19	0	1	1	0	0	0	0	8	8	0
1932.....	10	10	0	9	9	0	0	0	0	0	0	0	1	1	0
1933.....	9	9	0	8	8	0	0	0	0	0	0	0	1	1	0
1934.....	11	11	0	10	10	0	0	0	0	0	0	0	1	1	0
1935.....	10	10	0	10	10	0	0	0	0	0	0	0	0	0	0
Total.....	416	262	154	92	84	8	93	69	24	115	36	79	116	73	48

¹ Little information is available for supply associations organized prior to 1910, except for the few which were still operating in 1935. This table does not include unincorporated associations or 40 associations which were incorporated but which never actively engaged in business operations. Some associations were, no doubt, missed because there was no separate cooperative classification during the early years of incorporation. Data for this table were obtained from the Secretary of State's incorporation files and from field data.

* Did not handle petroleum products until 1921.

Age of Active Associations

The 262 farmers' local purchasing associations found active in 1935 were classified according to number of years of operation (table 8). Nearly all the active petroleum associations have operated 10 years or less. This is not an indication of weakness in this type of organization, since cooperative petroleum associations have developed generally in this area only within the last decade. Many of the general-

warehouse, general-store, and combination-type associations have operated for more than 10 years, and 25 of these associations have operated more than 20 years. Cooperative purchasing associations have achieved a relatively permanent position in many communities in the State.

TABLE 8.—YEARS OF OPERATION FOR 262 FARMERS' LOCAL PURCHASING ASSOCIATIONS WHICH WERE ACTIVE IN 1935, BY TYPE OF ASSOCIATION

Type of association	Number reporting	Number of associations operating				
		1-5 years	6-10 years	11-15 years	16-20 years	Over 20 years
Petroleum.....	84	66	13	5	0	0
Warehouse.....	69	7	11	19	20	12
General-store.....	36	1	6	17	7	5
Combination.....	73	14	13	19	19	8
Total.....	262	88	43	60	46	25

Record of Association Terminations

The study disclosed that one or more local supply associations had terminated business operations in each year since 1913. Information concerning the dates of termination for the 154 associations which had ceased operations since 1910 (table 9) shows that, although there is some tendency for failures to predominate during and immediately following business depressions, termination of business has by no means been limited to such unfavorable economic periods.

The 154 "terminated" associations are grouped in table 10 according to the number of years they operated. More than one-half of these associations ceased business operations within 5 years, and more than 75 percent within 10 years after they were organized. This condition suggests that associations must have membership support, sound organization structure, and sound operating policies in order to survive the difficulties which arise during the first few years of operation.

In connection with this study an endeavor was made to obtain information as to the reasons why certain associations had ceased operations. Usually the failure of individual associations was attributed to premature organization, insufficient volume of business, inadequate financing, inefficient management resulting from incompetent and poorly trained managers or from activities of directors who were unfamiliar with the supply business. In a few cases it was claimed that improvement in service of competing agencies or changes in the agricultural industry of the locality had lessened the

need for the cooperative. Some associations had apparently been dissolved because of a loss of interest subsequent to the retirement of the principal leaders who had given their support to the association. A few successful associations were dissolved by stockholders who wished to divide the reserves which had been built up by the association.

General-store associations had the largest proportion of terminations. Seventy-nine of the 115 associations which were incorporated were no longer active in 1935. In addition, 18 general-store associations were incorporated but were never actively engaged in business. The majority of those discontinuing business either sold the business to former managers or reorganized as private stock companies.

TABLE 9.—YEARS DURING WHICH 154 FARMERS' LOCAL PURCHASING ASSOCIATIONS TERMINATED BUSINESS ACTIVITY, BY TYPE OF ASSOCIATION, 1911-34

Year of termination	Number of associations closed				
	All types	Petroleum	Warehouse	General-store	Combination
1911.....	1			1	
1912.....					
1913.....	1			1	
1914.....	4		1	3	
1915.....	4			4	
1916.....	6			5	1
1917.....	6			4	2
1918.....	8		1	5	2
1919.....	8			4	4
1920.....	8			7	1
1921.....	13		3	4	6
1922.....	12		1	6	5
1923.....	12		1	8	3
1924.....	10	1	1	3	5
1925.....	5		2	1	2
1926.....	5		3	1	1
1927.....	5		1	3	1
1928.....	5	1	1	2	1
1929.....	9		1	6	2
1930.....	10	2	2	4	2
1931.....	7	1	1	3	2
1932.....	4	1	2		1
1933.....	8		2	4	2
1934.....	3	2	1		
Total.....	154	8	24	79	43

In practice a large proportion of the patrons of cooperative purchasing associations in Wisconsin are nonmembers. In fact, only 4 percent of the associations included in this survey reported that business was confined exclusively to members. This condition is caused by several factors. In many cases, these enterprises do not provide sufficient inducement to members over nonmembers—in the form of low prices, patronage dividends, quality or service—to persuade patrons to become members. Furthermore, many associations do not actively encourage patrons to become members. Such associations are often content to operate as small businesses and are more or less indifferent as to whether the patron is a member or a nonmember. Some associations encourage nonmember business in order to increase volume and thereby obtain larger savings for the members. In areas where a lack of cooperative interest exists, the cooperative association is looked upon by many patrons as just another agency through which supplies may be purchased.

Estimates of the number of member and nonmember patrons of 144 farmers' local purchasing associations in Wisconsin are shown in table 11. This table indicates that on the average each of these associations had 504 patrons, of which number only 176, or 35 percent, met the full requirements of membership. Many of the patrons, however, were in the process of becoming members through the application of patronage dividends toward the purchase of stock. These "part members" have not been included here as "members," since they do not legally have member's rights until the required amount of stock has been issued to them. The general-store and general-warehouse associations had larger proportions of members, but even in these associations the majority of the patrons were legally nonmembers.

Although the number of nonmember patrons generally exceeded the number of member patrons in the average Wisconsin association, it was found that member patrons bought, on the average, larger quantities of supplies than nonmember patrons. Although only a few associations kept sales records from which it was possible to determine readily what proportion of the business was done with members and nonmembers, estimates of a considerable number of managers of associations of all types indicated that approximately 60 percent of the business was done with members and 40 percent with nonmembers.

Many associations have a considerable proportion of members who do not actively patronize their association (table 12). Of 201 associations, for which such data for 1934 were available, the average association had 233 members, of whom only 203, or 86 percent, were active. Two reasons largely account for the fact that the petroleum associations had the largest percentage of active members. In the

TABLE 11.—ESTIMATED NUMBER OF MEMBER AND NONMEMBER PATRONS OF 144 FARMERS' LOCAL PURCHASING ASSOCIATIONS, 1934¹

Type of association	Associations reporting	Average number of patrons			Percentage of patrons who were members	Percentage of patrons who were nonmembers ²
		Member	Non-member ²	Total		
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Percent</i>	<i>Percent</i>
Petroleum.....	51	229	428	657	35	65
Warehouse.....	32	142	224	366	39	61
General-store.....	12	144	200	344	42	58
Combination.....	44	158	338	496	32	68
Marketing.....	5	92	189	281	33	67
Average for 144 associations.....		176	328	504	35	65

¹ Estimates for each association were made by its manager or secretary. Only associations doing business with both members and nonmembers are included in this table.

² Includes patrons having made part payments on shares of stock for membership.

TABLE 12.—MEMBERSHIP AND ESTIMATED NUMBER OF ACTIVE AND INACTIVE MEMBERS FOR 201 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1934

Type of association	Associations reporting	Average membership ¹			Percentage of members who were active	Percentage of members who were inactive
		Active	Inactive	Total		
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Percent</i>	<i>Percent</i>
Petroleum.....	67	286	24	310	92	8
Warehouse.....	50	138	32	170	81	19
General-store.....	17	166	41	207	80	20
Combination.....	62	184	30	214	86	14
Marketing with purchasing ²	5	119	24	143	83	17
Average for 201 associations.....		203	30	233	86	14

¹ Estimates for each association were made by its manager or secretary. Active members are those who are actively patronizing their respective associations.

² Refers only to purchasing operations carried on by these associations.

first place, these associations usually had been able to return greater savings than associations of other types. Furthermore, these associations had generally operated for shorter periods, and consequently the original members were more likely to be still active. As an association grows older, a larger percentage of the members may become inactive unless a genuine effort is made to retire them from membership when they cease to be patrons.

Arrangements for Management

The active management of a cooperative association is largely vested by its members in the directors and officers. The members are responsible for the selection of competent directors, and the directors are, in turn, responsible for the selection of dependable and capable officers and employees. The employees are responsible to the manager, he to the directors, and they to the members. Under this method of representation and management, the members have the initial and the final control over affairs of the association, and the directors, officers, and employees are simply agents for carrying out the will of the members.

From a business operating standpoint, however, the manager is largely responsible for conducting the day-to-day affairs of the association. He has direct supervision over the employed personnel and handles the general and routine affairs of the business. The manager may thus be considered as the operating agent of the board of directors.

Directors of the local Wisconsin associations are usually elected at the annual meeting. They are generally required to be land owners or actively engaged in farming. Nominations for directors are customarily made from the floor, although occasionally the names are presented by a nominating committee. Voting is usually by ballot.²⁷

The average size of the board of directors for 266 Wisconsin supply associations, according to type of organization, is shown in table 13. About one-half of the associations had boards of five members, about one-third had six or seven directors, and the remainder had eight or more. There was no great variation in the size of the board by type of association.

In general, the officers of a local association are authorized to act as an executive committee between meetings of the full board of directors. These officers, customarily a president, vice president, secretary, and treasurer (or usually a secretary-treasurer), are elected by the directors from among their own number after the annual meeting.

More than half of the associations provide for the election of all directors each year. Customarily, the majority of the old directors

²⁷ Proxy voting is prohibited by Wisconsin cooperative statutes.

are reelected, and this results in a high degree of continuity in the membership of the board. On the other hand, many associations provide for the election of only part of the board of directors each year, in order to avoid any drastic change in policy by newly elected directors unacquainted with the business or personnel of the association. For example, 76 associations reported that directors hold office for 3 years and that only one-third of the number are elected each year. Twenty-two other associations reported that they elected directors for 2-year periods, so that only one-half of the number need be elected each year.

TABLE 13.—SIZE OF BOARD OF DIRECTORS FOR 266 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1935

Type of association	Associa- tions re- porting	Number of associations having—			
		5 directors ¹	6-7 di- rectors	8-9 di- rectors	10-17 di- rectors
Petroleum.....	85	46	30	6	3
Warehouse.....	70	33	26	9	2
General-store.....	34	19	8	6	1
Combination.....	77	32	23	16	6
Total.....	266	130	87	37	12

¹ Includes 3 associations with 3 directors each, which were incorporated under private corporation laws but were operating on a cooperative basis.

Of 225 local purchasing associations reporting, 102 held board meetings monthly, 8 held meetings every 2 months, and 60 every 3 months (table 14). Fifty-five associations, however, held board meetings infrequently or upon call by the president. According to the data in table 14, the frequency of directors' meetings does not vary greatly among the associations of different types.

Membership on a board of directors is usually considered a community honor, and members are generally glad to serve in this capacity. For this reason the compensation of directors is usually small and seldom constitutes a major item of expense in the operation of an association. In most instances directors are paid a flat fee for each board meeting attended and often receive, in addition, mileage expense—customarily 5 cents per mile—for distances traveled in attending meetings. Of 215 associations reporting on rates of compensation to directors, 2 paid directors 50 cents per meeting, 44 paid \$1 per meeting, 26 paid \$1.50 per meeting, 79 paid \$2 per meeting, 3 paid \$2.50 per meeting, 33 paid \$3 per meeting, and 12 had rates higher than \$3 per meeting. Directors of 16 associations served without

compensation, and a few others were paid an annual fee. In some associations the secretary and the president received additional compensation for extra duties required by their offices.

TABLE 14.—NUMBER OF MEETINGS PER YEAR HELD BY BOARDS OF DIRECTORS OF 225 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1934

Type of association	Number reporting	Associations meeting—				
		12 times a year	6 times a year	4 times a year	3 times or less a year	On call only
Petroleum.....	72	40	3	16	2	11
Warehouse.....	61	25	2	19		15
General-store.....	25	14	1	5	1	4
Combination.....	67	23	2	20	2	20
Total.....	225	102	8	60	5	50

The total yearly compensation to boards of directors for 111 local purchasing associations of various types for 1934 was as follows:

Total amount paid directors in 1934:	Number of associations
\$0-\$100.....	48
\$101-\$200.....	48
\$201-\$300.....	7
\$301-\$400.....	3
\$401-\$500.....	3
Over \$500.....	2
Total.....	111

It will be noted that 48 of these associations had directors' expense totaling less than \$100 per year, while for 48 others this item ranged from \$100 to \$200. The directors' expense for the associations reported in this table ranged from \$7 to \$641 per year, the average being \$134. The average directors' expense for 43 oil associations included in this table was \$164 per year; that for 28 general-warehouse associations was \$105 and that for 28 combination associations, \$128.

The previous training and experience of managers of 194 local purchasing associations is shown in table 15. It will be observed that the greater number of managers had previous training in cooperative or general business enterprises, although a considerable number had only farm training. Of the 71 managers of cooperative oil associations 13 had had previous experience as managers of private oil companies; 7 other petroleum-association managers had come up from the ranks of tank-truck operators. Ten managers of general-warehouse associations had either owned or managed private feed stores.

TABLE 15.—PRINCIPAL BUSINESS EXPERIENCE OF MANAGERS OF 194 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1934

Type of association	Associa- tions reporting	Associations whose managers had—			
		Farm experience	Coopera- tive experience	General business experience	No busi- ness experience
Petroleum.....	71	30	9	22	10
Warehouse.....	56	20	13	15	8
General-store.....	14	1	13	-----	-----
Combination.....	53	23	16	14	-----
Total.....	194	74	51	51	18

The majority of the cooperative managers reported that they engaged in no other business activity. Of 199 managers interviewed on this question, 137 reported no other business connection, while 53 owned or operated farms. Only nine were directly interested in other business concerns.

Years of tenure of managers of 158 local associations appear in table 16. According to the data shown, 85, or more than half, of the managers had served in this capacity for periods of 5 years or longer. Forty-three of this group had been managers for 10 years or longer. The table indicates that present managers of petroleum associations have been employed for shorter periods than managers of other associations. It will be recalled that the majority of the petroleum associations had not been operated so long as the majority of associations of other types.

TABLE 16.—TENURE OF MANAGERS OF 158 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1934

Type of association	Associa- tions reporting	Number of managers in present position—							
		Less than 1 year	1 year	2 years	3 years	4 years	5 years	6-10 years	More than 10 years
Petroleum.....	37	4	12	6	4	2	2	4	3
Warehouse.....	54	5	4	4	-----	4	4	13	20
General-store.....	19	1	1	2	3	1	2	2	7
Combination.....	48	4	-----	6	6	4	6	9	13
Total.....	158	14	17	18	13	11	14	28	43

Although many of the associations have retained the same manager for a number of years (table 16), some indicated that it was difficult to obtain and hold good managers. One of the larger local associations, for example, had changed managers 8 times during the last 10 years. Many associations have difficulty in retaining good managers partly because they do not realize that it is necessary to pay a salary commensurate with the position. This is a lesson which has been generally learned by private commercial concerns. Although it is true that many competent managers are willing to serve cooperative associations for less than they could obtain from other employment, it is not good policy to demand a sacrifice of this sort. Another obstacle to competent management is the fact that members often feel that either they or some of their relatives should serve as manager. Such candidates may offer to serve at reduced rates of pay in order to get the position. To avoid this difficulty many associations have found it desirable to include in their bylaws provisions which prohibit employment of directors or their relatives.

In table 17 the total amount of salaries and commissions paid to managers in 1934 is reported for 116 associations. This table indicates that 30 of these associations paid annual salaries of less than \$1,000 for managerial service, while 76, or 65 percent of the total number, paid from \$1,000 to \$2,000. Only 10 of the reporting associations paid more than \$2,000 for managerial services; these were usually of the warehouse or the combination type.

TABLE 17.—SALARIES AND COMMISSIONS PAID MANAGERS OF 116 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1934¹

Annual salary	Associations reporting	Number of associations of each type			
		Petroleum	Warehouse	General store	Combination
Under \$500.....	9	3	3	—	3
\$500—\$999.....	21	3	8	3	7
\$1,000—\$1,499.....	41	5	15	5	16
\$1,500—\$1,999.....	35	2	14	7	12
\$2,000—\$2,499.....	5	—	1	1	3
\$2,500—\$2,999.....	2	—	2	—	—
\$3,000 and over.....	3	—	1	—	2
Total.....	116	13	44	16	43

¹ Does not include salaries and commissions of managers who furnish equipment or render delivery service on a commission basis, which is common among petroleum associations.

Financial Policies

Cooperative purchasing associations in Wisconsin have generally obtained initial capital through the sale of capital stock.²⁸ The par value of this stock ranged from \$5 to \$100 per share; \$10 and \$25 values were most common. While preferred stock has been issued in some instances, it is of relatively minor importance. The minimum capital needed for establishing an association has depended upon the range and character of supplies handled, the type and location of local facilities required or desired, and the ability of the association to borrow initial capital or to obtain goods on mercantile credit. Where associations have been able to rent facilities and obtain a line of goods on credit, the need for initial capital from the sale of stock has been materially reduced. Several wholesale purchasing associations have furnished much of the initial capital for local associations, and supplied goods on credit in order to get them established. This practice has sometimes resulted in the starting of cooperatives with capital insufficient for sound operation.

The members' investment in capital stock at the end of 1934, for typical associations of each of the four types, is shown in table 18.²⁹ On the average, the petroleum associations had smaller amounts of capital stock outstanding than associations of the warehouse, general-store, or combination types. Also the amount of preferred stock outstanding for associations of all types was very small compared with the amount of common stock.

TABLE 18.—AVERAGE AMOUNT OF CAPITAL STOCK OUTSTANDING FOR 207 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1934

Type of association	Associa- tions re- porting	Amount outstanding		Total
		Common stock	Preferred stock	
	<i>Number</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
Petroleum.....	62	5, 797	88	5, 885
Warehouse.....	57	10, 989	307	11, 296
General-store.....	29	12, 849	56	12, 905
Combination.....	59	11, 248	163	11, 411

Practically all purchasing associations in the State have, at times, found it necessary to borrow money to carry on their operations.

²⁸ Membership associations in Wisconsin generally operate on an informal basis without facilities and require little initial capital investment.

²⁹ The table here shown is constructed from the average financial statements for the four types of association. (See p. 54.)

Table 19 shows the customary sources of loans for 178 associations in 1935. Of these associations, 121 customarily borrowed from local banks and 73 from individuals. Seventeen associations obtained loans through wholesale cooperative associations and 11 from the St. Paul Bank for Cooperatives which was established late in 1933 and was not authorized to make loans to purchasing associations to finance facilities until June 3, 1935. Records of the St. Paul bank indicate that 35 local associations in Wisconsin, on December 31, 1936, were borrowing funds to finance purchasing operations.

TABLE 19.—SOURCES FROM WHICH OUTSTANDING LOANS WERE OBTAINED BY 178 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1935

Type of association	Associa- tions report- ing ¹	Number of associations obtaining loans from—				
		Local banks	Indi- viduals ²	Wholesale cooper- atives	District bank for cooper- atives	Local cooper- atives
Petroleum.....	57	29	20	7	4	4
Warehouse.....	52	44	23	3	3	3
General-store.....	21	12	11	3	1	1
Combination.....	42	31	19	6	3	3
Marketing.....	6	5	1	1	3	3
All.....	178	121	73	17	11	4

¹ Several associations obtained loans from more than 1 source.

² Includes 5 associations which obtained loans from individual members, 4 which borrowed from their managers, and 3 which borrowed from individual directors.

In table 20 are shown the rates of interest paid for money borrowed by 152 local purchasing associations in Wisconsin in 1934. Thirty-one of these associations paid from 3 to 5 percent, 116 paid 6 percent, and 50 paid 7 or 8 percent interest. It is significant that the rate of interest of the St. Paul Bank for Cooperatives during 1934 on loans for operating purposes ranged from 3 to 4 percent.³⁰ Since June 1935 the rate of interest of this bank has been 3 percent for loans for operating purposes and 4 percent for loans for the financing of facilities.

It is generally considered unsound financial practice for associations to borrow funds on the personal liability of directors or officers. Nevertheless, this practice has been extensively followed in Wisconsin. This survey indicated that 44 of these associations had in the summer

³⁰ The rate was 4 percent on January 1, 1934, but was reduced to 3½ percent on Mar. 16, 1934, and to 3 percent on May 16, 1934. As noted above, loans on facilities were not made prior to 1935.

of 1935 outstanding indebtedness for which directors were personally liable, amounting to more than \$233,000, or an average of \$5,300 for the 44 associations. Table 21 shows that of 162 associations 101, or 62 percent, had borrowed money upon the personal endorsement of the directors. It is evident, moreover, that associations of all types have occasionally followed this practice, but it appears that the practice has been most common among general-warehouse and general-store associations.

TABLE 20.—INTEREST RATES PAID 152 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1934 ¹

Type of association	Associations reporting ¹	Number of associations paying interest at the rate of—				
		3 to 4 percent	5 percent	6 percent	7 percent	8 percent
Petroleum.....	41	1	4	32	10	4
Warehouse.....	47	3	5	38	11	4
General-store.....	21	4	4	12	5	3
Combination.....	37	-----	7	31	9	2
Marketing.....	6	3	-----	3	2	-----
All.....	152	11	20	116	37	13

¹ These data do not include 1 association which paid no interest on money borrowed from a member of the association, 1 which paid 10 percent interest, and 1 which paid 12 percent interest.

² Some of these associations had 2 or 3 loans at different rates of interest. 107 loans were recorded for the 152 associations.

TABLE 21.—EXTENT OF PERSONAL ENDORSEMENT OF LOANS BY DIRECTORS OF 162 WISCONSIN FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION

Type of association	Associations reporting	Using personal endorsement	Using no personal endorsement	Percentage using personal endorsement
	Number	Number	Number	Percent
Petroleum.....	62	29	33	47
Warehouse.....	49	38	11	78
General-store.....	22	19	3	86
Combination.....	27	13	14	48
Marketing.....	2	2	0	100
Total or average.....	162	101	61	62

Operating Methods of Farmers' Local Purchasing Associations

METHODS of operation of farmers' associations are, in general, similar to those of other retail establishments engaged in the farm-supply business, subject to qualifications arising from the cooperative character of these associations. The particular operating methods of local farm-supply associations in Wisconsin may be discussed under the following headings: (1) Selecting the line of supplies; (2) purchasing methods; (3) price and patronage-dividend policies; (4) selling and service methods; (5) credit extension and control; (6) methods of inventory control; (7) methods of accounting and auditing.

Selecting the Line of Supplies

The selection of a stock of supplies is one of the major problems confronting a local farm-supply association. Most of the local Wisconsin associations leave this matter in the hands of the local managers, subject to review by the board of directors.

Several associations have found it desirable to confine their operations to one major group of staple supplies which can be handled largely in bulk, with the same facilities for distribution. For example, petroleum associations commonly limit their business to petroleum products and related supplies that can be distributed by tank trucks or at service stations; warehouse associations generally limit their business to feed, seed, twine, and fertilizer, and other supplies that can be distributed conveniently through a general warehouse. Some associations have undertaken to handle two or more major kinds of supplies; for example, both petroleum products and supplies of the warehouse type. While this practice may enable the members to obtain more of their requirements from one cooperative source, it may also result in overextension of operations with consequent loss of efficiency.

An association must also determine what products should be handled in connection with a general line of supplies. A petroleum association, for example, must decide whether it should handle tires, batteries, and similar supplies in connection with gasoline, kerosene, distillate, lubricating oils, and grease. An association specializing in the handling of feed, seed, and petroleum must determine whether it should also handle machinery, coal, hardware, and similar products. Furthermore, an association must determine how many grades and brands of each item should be handled. It is possible to handle many grades and brands of such commodities as feed or fertilizer, but, gen-

erally, the associations have confined their operations to standard grades and brands. Many of the petroleum associations handle only two grades of gasoline—"regular" and "competitive."

Many supplies are used largely at certain periods of the year (table 22). Most of such supplies as seed, twine, fertilizer, farm machinery, and coal are sold in a few months of the year; feed and general-store merchandise and most petroleum products are sold more regularly throughout the year. This seasonal character of demand for certain farm supplies makes it desirable for associations to handle a range of supplies that will permit continuous employment of plant, personnel, and operating capital. For this reason, many associations in recent years have increased the number of commodities handled. This desire to better utilize facilities, personnel, and capital has also caused purchasing associations to provide a cooperative marketing service and marketing associations to engage in cooperative purchasing.

In general the associations have endeavored to handle supply items on which considerable saving could be made. Unfortunately, few associations keep records that enable them to determine the amount of savings made on different supply items, though more and more are maintaining records which show the gross income from handling certain supplies. With this information, the management can allocate expenses and determine for practical purposes the extent of net savings.

Some associations have for years handled certain supplies on which no substantial savings were made. This procedure may be justified to the extent that it enables an association to give a better or more complete service, provided that the cost of rendering this service is not greater than the benefits derived.

Quality must be considered in selection of the items to be handled. In general, the quality of supplies must be determined in accordance with the wishes of members. An association must decide whether it should endeavor to handle supplies of a higher or lower quality than those offered by competitors, or whether it should simply endeavor to provide supplies similar in quality to those of competitors. While there is much to be said in favor of high quality, it is true that over-emphasis on quality may result in unit prices higher than those of competitors. On the other hand, if patrons favor such a policy and are willing to support it, business volume may be sufficiently increased to keep down the additional cost through reducing per-unit overhead and operating expense. If an association decides to operate on a high-quality basis, it is desirable to carry on an educational program to acquaint its members with the advantages of using supplies of superior quality. Otherwise, there is danger that the members will not appreciate the efforts of the association in this direction.

TABLE 22.—MONTHLY DISTRIBUTION OF SALES OF IMPORTANT SUPPLIES HANDLED BY FARMERS' LOCAL PURCHASING ASSOCIATIONS, 1934

Supply item	Associations reporting	Percentage of annual sales made each month												Total
		January	February	March	April	May	June	July	August	September	October	November	December	
	<i>Number</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Feed.....	18	8	8	10	13	10	10	8	6	6	7	6	8	100
Bulk grain.....	4	3	5	7	14	12	14	10	8	7	11	5	4	100
Seed.....	11	1	1	5	54	15	7	3	5	4	3	2	0	100
Fertilizer.....	4	0	0	1	9	56	20	12	2	0	0	0	0	100
Salt.....	4	10	5	8	11	8	7	9	9	9	10	6	8	100
Twine.....	4	0	0	0	0	0	1	44	21	21	3	10	0	100
Farm machinery..	9	2	2	3	11	11	16	13	11	10	11	5	5	100
Coal.....	8	12	11	7	4	2	4	4	8	13	9	9	17	100
Gen. merchandise.	5	6	7	10	10	10	11	8	8	8	7	6	9	100
Gasoline.....	22	6	6	8	8	9	9	9	11	9	10	8	7	100
Kerosene.....	19	6	6	6	10	10	7	8	11	9	10	9	8	100
Distillate.....	10	9	8	8	11	8	4	5	9	8	10	10	10	100
Lubricating oil..	15	3	4	7	12	10	9	9	11	9	11	8	7	100
Grease.....	14	3	3	5	12	13	11	9	14	9	10	6	4	100

Scientific comparison of the quality of supplies handled by the cooperatives and by private agencies was not attempted in this study since it was impractical to assemble adequate data for this purpose. Throughout the study, however, attention was given to this question. Managers of the local associations were asked to compare the quality of the supplies which they handled with that of competitors' products. In general, the managers maintained that they handled supplies which compared well in quality with those handled by competitors. A number of the managers indicated that they relied upon cooperative wholesale associations to furnish them with supplies of dependable quality. Although it is believed that the views of the managers indicate that the quality of supplies handled by local associations was comparable with supplies handled by private agencies, it was evident that the importance of handling supplies of known and dependable quality was not fully recognized by the associations as a group.

Purchasing Methods

The Wisconsin local associations obtain their supplies for resale either from cooperative wholesale associations or from private commercial wholesale concerns. On the basis of information developed during this study, it is estimated that not more than 20 percent of the commodities purchased by these local associations was obtained from cooperative wholesale associations in 1934. However, there was considerable variation in the quantities of supplies purchased from cooperative wholesale sources by the associations of various types. Approximately 65 percent of the petroleum associations purchased all or a large part of their supplies in this way. A much smaller percentage of the warehouse associations handled feed, seed, fertilizer, and similar supplies, obtained from cooperative wholesale associations. It is estimated that less than 10 percent of the quantity of supplies handled by such associations was purchased from cooperative wholesale associations in 1934. The general-store associations in the northern part of the State, which are affiliated with the Central Cooperative Wholesale, obtained about one-third of their supplies from this source in 1935.³¹ Other general-store associations in the State have obtained practically all their supplies from private wholesale concerns.

Supplies were usually purchased on the basis of customary trade discounts for cash and quantity, whether from cooperative wholesale or private concerns. A large percentage of the local associations, however, did not take full advantage of these discounts. In general, the local associations which were members of wholesale purchasing cooperatives took advantage of these discounts to a greater extent

³¹ Based on data given in 1936 Year Book of the Central Cooperative Wholesale, p. 48.

than associations which purchased supplies from other sources. The cooperative wholesale associations have given considerable encouragement to this practice, and in some cases have discounted the trade acceptances of local associations to provide the necessary cash. This practice is an advantage to the local associations as long as the amount saved through the discounts is greater than the interest paid on the trade acceptances.

Price and Patronage Dividend Policies

The local farmers' supply associations in Wisconsin varied considerably in their price and patronage-dividend policies. Some associations handled supplies on a cost-plus-handling-charge basis. In other words, they endeavored to sell at prices which would simply cover the cost of supplies and current operating expenses. The majority of the associations, however, operate on a competitive-price basis whereby any savings may be returned to patrons in the form of patronage dividends. Particularly in handling petroleum products, the trade practice of following prices established by major companies has been adhered to. This basis of operations has been favored as a way of avoiding disastrous price wars.

The general pricing methods followed by the associations in 1934 are indicated by table 23, in which are summarized the answers of managers and secretaries of 186 associations to the question, "How do prices charged by your association compare with prices charged for similar goods by competitors?"

TABLE 23.—COMPARISON OF PRICES CHARGED BY 186 FARMERS' LOCAL PURCHASING ASSOCIATIONS IN 1935 WITH COMPETITIVE PRICES, BY TYPE OF ASSOCIATION ¹

Type of association	Associa- tions re- porting	Cooperative prices as compared with others		
		Same	Lower	Higher
Petroleum.....	64	56	5	3
Warehouse.....	53	40	13	0
General-store.....	18	11	6	1
Combination.....	51	36	13	2
Total.....	186	142	37	6

¹ Based on reports of managers or secretaries.

Approximately 70 percent of the managers or secretaries of associations of all types indicated that supplies were sold at competitive prices; approximately 26 percent stated that their prices were lower than competitive prices; and 4 percent expressed the opinion that their prices were higher than those of competitors. These percentages do not seem particularly significant except that they indicate, in a general way, how cooperative prices compared with prices of competing agencies. A scientific comparison of prices charged by cooperatives and others (noncooperative prices) would require a careful analysis of prices for the same items of supply with due consideration for quality, service, and time of sale. It would be extremely difficult to make this price comparison, since local associations often handle items which are not identical in all respects with those handled by competitors. Furthermore, it would be difficult to compare such prices on the basis of quality and service, since these factors are somewhat intangible in nature.

While the payment of patronage dividends is generally looked upon as a distinctive feature of cooperative enterprises, such dividends can only be paid by associations out of net income.³² The survey indicated that only 172 of the 204 local associations with complete operating statements showed net income for the year 1934, and that only 76 of these associations reported the payment of patronage dividends. Of the 76 associations paying patronage dividends, 41 were of the petroleum type.³³ This was, no doubt, because gross margins were considerably larger on petroleum supplies than on most other supply items. (See page 63.) Furthermore, the petroleum associations, as a group, have been better able to standardize operating methods and service in order to obtain the advantages from handling large volumes.

Patronage dividends were generally distributed in proportion to the value of each member's total purchases from the association during the operating period. Only a few associations attempted to distribute patronage dividends on the basis of net savings by commodities. However, a number of associations paid special patronage dividends on one or two major commodities which were handled in large quantities and in special ways, since net savings in handling these commodities could be estimated in a fairly satisfactory manner.³⁴ This practice has the advantage of returning to the member his share

³² Patronage dividends can be paid only by associations operating on a competitive-price basis, since generally, no surpluses for distribution are built up by associations which price goods on a cost-plus-handling-charge basis.

³³ Not all associations which had net income distributed patronage dividends. Many associations retained the net savings as reserves or surplus for operating purposes.

³⁴ Many petroleum associations, for illustration, pay dividends only on petroleum business. Other associations pay dividends at different rates on service-station and bulk truck sales.

of the earnings on a more equitable basis, although it involves added bookkeeping expense. Most of the associations, however, maintain that it is fair to pay patronage dividends at the same rate on most commodities since members tend to buy about the same proportion of the various commodities handled by the association. Paying patronage dividends on this basis encourages members to purchase all supplies from the association, rather than only those supplies which show the largest margins of savings.

With reference to the distribution of patronage dividends, it is significant that the cooperative statutes of Wisconsin require the apportionment by directors of the net proceeds of associations organized with capital stock at least once annually in the following manner:²⁸

The directors in any association organized with capital stock shall apportion the net proceeds of the business at least once annually by first setting aside such an amount for a reserve fund as they see fit or none, in their discretion: *Provided*, That any reserve for depreciation, if reasonable in amount or for any other purpose which may properly constitute an expense, is to be figured before computation of net proceeds. The directors may then declare a dividend upon the paid-up capital stock at a rate per annum not to exceed 8 percent: *Provided*, That no such dividend upon common stock shall be cumulative. The directors may then set aside not to exceed 5 percent of the remaining net proceeds as an educational fund to be used in teaching co-operation. The directors may then grant a bonus to employes who are in the employ of the association at the time of the apportionment of proceeds, which bonus shall be based in amount upon the amount of compensation received by said employes during the year at a rate not to exceed the rate of patronage distribution hereinafter described. The directors may then employ a part or all of the remaining net proceeds for the general welfare of the members of the association. The directors may distribute all remaining net proceeds uniformly to stockholders of the association, in proportion to the volume of business conducted by such stockholders with the association: *Provided*, That the directors may at their discretion include nonstockholders, at the same or lesser rate than the distribution to stockholders: *Provided further*, That any such distribution to a nonstockholder may be in the form of capital stock, until the amount thereof equals the par value of one share of the association's stock, distribution thereafter to such patron being made in the same manner as distribution to all stockholders: *Provided further*, That such a distribution to nonstockholder, if it is less in amount than the par value of one share, shall be credited to the nonstockholder's capital stock account during the first year and the second year but may revert to the reserve fund if, after 2 years, an amount less than the par value of one share has accumulated.

While the above provision permits a distribution of the net income for six general uses, it is significant that most farmers' purchasing associations have distributed net income in only three ways: (1) Through the establishment of reserves and surplus; (2) through the payment of dividends on stock; and (3) through the payment of patronage dividends.

²⁸ Statutes of Wisconsin relating to cooperative associations, 1925, sec. 185.16.

Selling and Service Methods

The selling and service methods of local supply associations in Wisconsin did not differ materially from the selling and service methods of other retail agencies. Stock of merchandise was customarily displayed and made available to the members at a warehouse, store, or service station. With the exception of associations handling petroleum products, few provided any delivery service. Practically all associations which handled petroleum products operated tank trucks to deliver supplies from bulk stations to farms, and many such associations distributed the major part of their supplies in this way. A large number, however, operated retail service stations, and many distributed supplies through private-dealer agents.

The local purchasing associations in Wisconsin did not advertise extensively. Many took the position that advertising was unnecessary, since members were well informed regarding the services available through the association. Since competitive agencies are constantly striving to obtain customers for their products, it is believed that many associations did not provide members with adequate information relating to the kinds and quality of supplies handled.

In carrying on the field work for this survey, attention was given to the type of selling service provided by local associations. Generally, it appeared that more attention might be given to the rendering of alert and helpful service. It was observed that some retail establishments were not made attractive to customers and that frequently the facilities for displaying and handling supplies were either inadequate or improperly arranged. Sometimes the stock was not well kept, with the result that members could not be promptly served. In other instances, the associations were undesirably located from the standpoint of members' convenience. Many of the Wisconsin associations have demonstrated that building up the good will of the member through satisfactory service increases the volume of supplies handled, with the result that unit operating costs can be reduced, savings increased, and members given greater satisfaction.

Credit Extension and Control

Only a small percentage of local associations in Wisconsin operated on a strictly cash basis, although this is an accepted principle of efficient cooperative business. Analysis of 149 of these associations in 1935 (table 24) indicates that cash sales, including sales paid for during the month of sale, represented only 70 percent of total sales. This analysis also indicated that petroleum associations had the largest percentage of credit sales. The wider operating margins on petroleum products have, no doubt, made possible the less strict

credit policies of petroleum associations. Also, the method of distributing petroleum products directly to the farm is responsible for a certain amount of credit since it is often inconvenient to make collection at time of delivery.

TABLE 24.—TIME OF PAYMENT FOR SUPPLIES SOLD BY 149 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1934 ¹

Type of association	Associa- tions reporting	Percentage of sales paid for during month of sale	Percentage of sales not paid for dur- ing month of sale
	<i>Number</i>	<i>Percent</i>	<i>Percent</i>
Petroleum.....	52	65	35
Warehouse.....	46	75	25
General-store.....	11	73	27
Combination.....	35	70	30
Marketing.....	5	81	19
Total.....	149	70	30

¹ Based on estimates by managers or secretaries. Few associations operated on a strictly cash basis; that is, all sales paid for in cash at time of delivery of merchandise.

TABLE 25.—ACCOUNTS AND NOTES RECEIVABLE AS A PERCENTAGE OF ANNUAL SALES FOR 202 FARMERS' LOCAL PURCHASING ASSOCIATIONS AT THE END OF THE FISCAL YEAR 1934

Percentage of sales	Number reporting indicated percentage				
	Petroleum associa- tions	Warehouse associa- tions	General- store asso- ciations	Combina- tion asso- ciations	Total
0-4.9 percent.....	22	14	7	17	60
5-9.9 percent.....	19	17	6	13	55
10-14.9 percent.....	12	4	6	7	29
15-19.9 percent.....	5	9	4	5	23
20-24.9 percent.....	2	6	3	4	15
25 percent and over.....	5	5	2	8	20
Total.....	65	55	28	54	202

The percentage of annual sales in the form of accounts and notes receivable at the end of the 1934 fiscal year is shown for 202 associations in table 25. This table indicates that 52 of these associations had receivables amounting to from 10 to 20 percent of annual sales,

while 35 associations had receivables representing 20 or more percent of the annual sales. In this latter group of 35 associations, the sales for 2½ months or more were thus represented in the form of unpaid accounts.

Credit practices were found to vary greatly among the associations. Some have endeavored to limit credit to a selected list of patrons. Others have endeavored to limit the amount of credit business by giving a discount for cash payment or by charging interest on past-due accounts. Some managers, or other employees, were held personally accountable for all losses from extended credit. The experience of the associations indicates that no method of controlling credit has given complete satisfaction. For that reason, it seems that the associations should make a greater effort to operate on a strictly cash basis. The extension of credit necessarily involves risk of loss, reduces available operating capital, and results in added expense for bookkeeping and collection. Furthermore, the extension of credit and later collections are likely to cause dissatisfaction among the members. Under a cash policy every member is dealt with on the same basis, and there is no later collection problem.

Methods of Inventory Control

Efficient merchandising for a cooperative purchasing association requires an adequate stock of supplies to meet the needs of members. It also requires a prompt turn-over of the supplies on hand. The stock of supplies represents an investment in operating capital, and it is essential that this investment be kept as low as possible without restricting the services provided by the association.

The local associations vary greatly in their methods of stock control. Some associations follow no definite procedure in keeping account of supplies on hand and stock needed. As a result, many have allowed themselves to become overstocked with large inventories of slow-moving supply items. Other associations have found it desirable to maintain stock records as a basis for keeping supplies in line with member demands. Some associations encourage members to order supplies in advance of their needs so that requirements may be more accurately anticipated.³⁵

Stock record systems not only enable an association to maintain a stock of supplies in line with the needs of members; they also make it possible to determine more effectively the rate of turn-over. Turn-over figures for various commodities can be used to better plan the

³⁵ At one time a large amount of cooperative purchasing in Wisconsin was conducted on a car-door basis. Under this system of purchasing, farmers made up orders for carloads of feed, fertilizer, and other supplies and took delivery at the car door. As long as purchasing was done on this basis, there was no serious problem of stock control.

purchasing and selling program and further more efficient use of operating capital.³⁷

In general, the associations did not keep their records in such a way as to permit of accurate measurement of turn-over. Commodity turn-over figures computed for a few associations suggested, however, that some turned over the same item much more rapidly than other associations. The figures also indicated that the rate of turn-over tended to vary for the different commodities handled, depending upon the conditions of local demand. For example, petroleum products tended to have a fairly high turn-over, since the demand was relatively even throughout the year, and storage was undertaken only for current needs. In order to keep commodity turn-over figures high, it is necessary to order stock in the light of the expected demand and to sell the stock on hand expeditiously.

Carefully kept stock records are also of great value in keeping a check on inventory and shrinkage. The data gathered in this study indicated that a number of Wisconsin associations lost considerable quantities of supplies through carelessness or dishonesty on the part of employees. Without question, many losses of this kind can be avoided by using a stock-record system that enables the management to keep strict account of supplies purchased and sold.

The records of the associations did not permit an analysis of the extent of inventory shrinkage except for petroleum products. Shrinkage figures for a group of associations handling petroleum products in 1934 are summarized in table 26. There was considerable variation in the shrinkage figures for different associations. It will also be noted that a considerable number of associations had a shrinkage for these products of over 3 percent. Associations whose shrinkage loss is not reasonably low in comparison with the data shown in this table should give careful consideration to ways and means of controlling this item of loss. While a certain amount of normal shrinkage is to be expected in handling a commodity like gasoline—through evaporation, spillage, and handling loss—there is little justification even here for a shrinkage figure as high as 2 percent. The maximum shrinkage on kerosene, distillate, and other petroleum products should run considerably lower.

Accounting and Auditing

The accounting of local purchasing associations in Wisconsin varied from simple sets of records to specially devised double-entry book-

³⁷ The annual turn-over for any commodity can be computed by dividing the average monthly inventory of the commodity into the figure for the cost of the supplies sold annually. A merchandise turn-over of 12, figured on this basis, indicates that the stock of a commodity is renewed approximately every month, while a merchandise turn-over of 6 would indicate that the stock of a commodity is renewed approximately every 2 months. Obviously, these turn-over figures must be used with judgment as a rough indication of the way in which a supply flows through the association during a year's period, since most farm supplies move more rapidly at certain seasons of the year than at others.

keeping systems. The accounting systems used by many of the associations were patterned on those recommended by the Wisconsin Department of Agriculture and Markets or by cooperative wholesale associations.

TABLE 26.—SHRINKAGE AND OVERAGE OF PETROLEUM PRODUCTS OF FARMERS' LOCAL PURCHASING ASSOCIATIONS, 1934¹

Percentage of shrinkage or overage	Number of associations showing indicated shrinkage of—			
	Gasoline	Kerosene and distillate	Lubricating oil	Grease
Overage.....	0	0	5	5
Shrinkage:				
0-0.99 percent.....	2	12	5	2
1-1.99 percent.....	8	13	14	4
2-2.99 percent.....	23	11	4	4
3-3.99 percent.....	9	3	1	5
4-4.99 percent.....	2	1	2	2
5 percent and over.....	1	1	4	5
Total.....	45	41	35	27

¹ Shrinkage calculated as a percentage of volume sold.

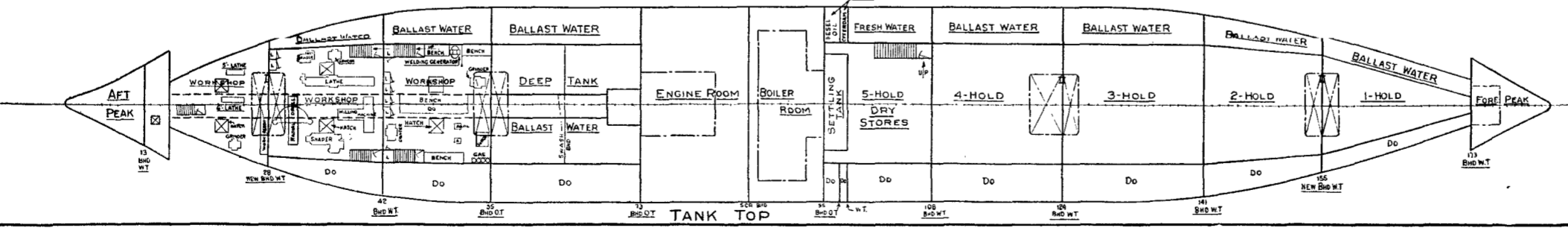
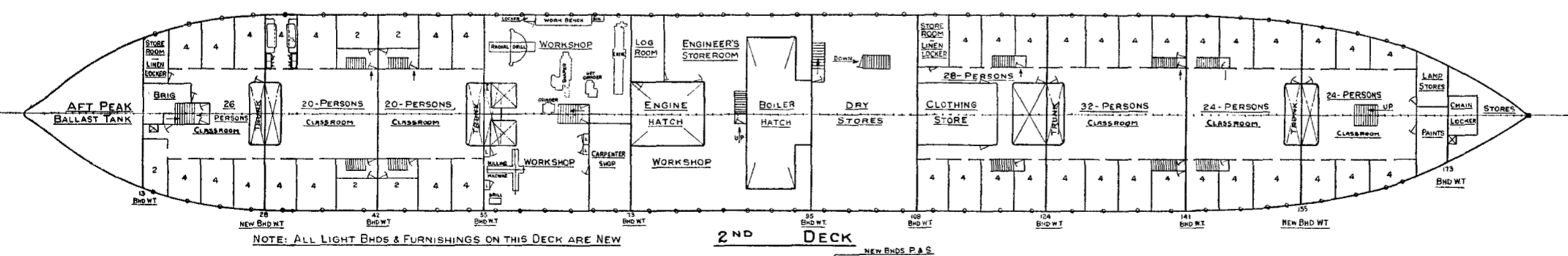
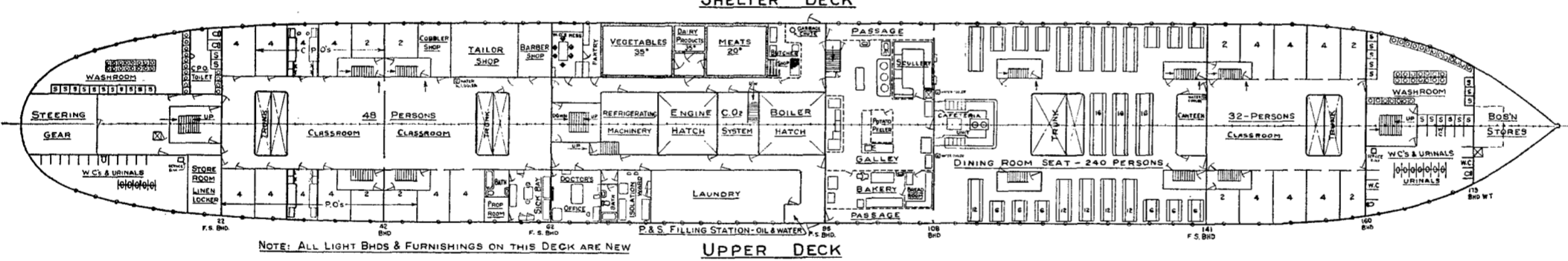
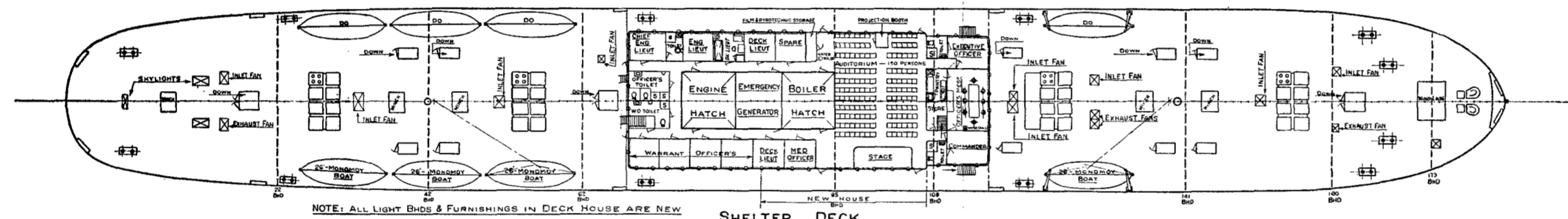
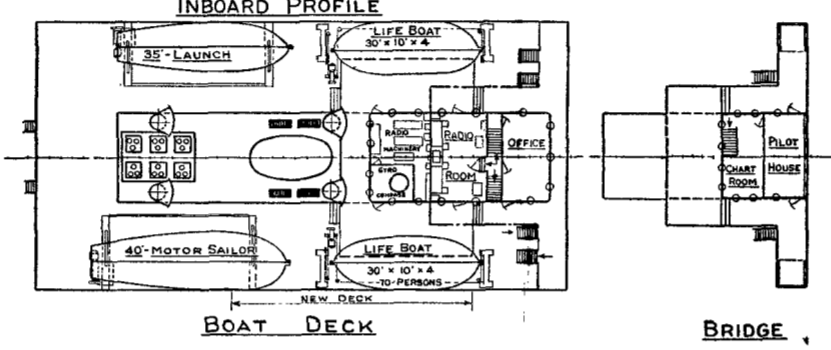
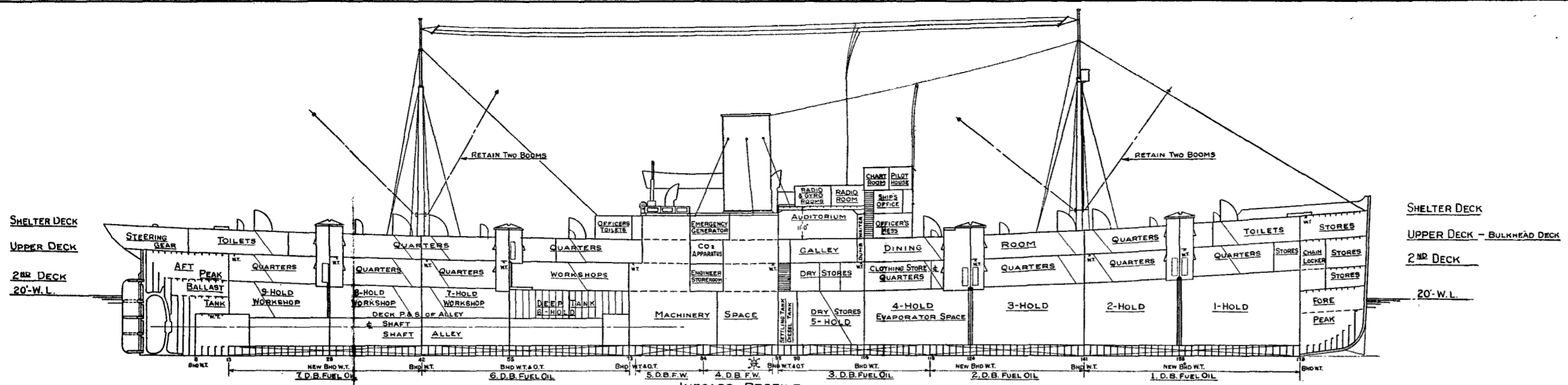
There was also considerable variation in bookkeeping methods. About one-third of the associations employed trained bookkeepers. In the remaining associations bookkeeping was done by the manager or other employees. This plan seldom proved satisfactory, since good bookkeeping requires technically trained and experienced personnel. Furthermore, it is difficult for employees whose major duties are other than bookkeeping to give adequate attention to this important part of the business.

Of the 262 associations included in this study, only 201 provided for an annual audit in 1934. Table 27 shows the number of associations of each type audited by different types of auditing agencies. Of these 201 associations, 70 were audited by the Wisconsin Department of Agriculture and Markets, 44 by private professional auditors, 43 by cooperative auditing agencies, and 44 by local boards of directors. This latter method cannot be recommended, since auditing requires technical ability and a detached interest in the business. Directors are seldom qualified for this kind of work and, furthermore, they are directly interested in having the association make a favorable showing.

While many of the audit reports made available to those conducting the survey appeared to be adequate for the purposes of the local associations, a large number could be criticised as entirely too general in nature. Much of the inadequacy of these audits could be traced directly to the unsatisfactory nature of the accounting data from which the audits were made. Furthermore, some associations did not appear to realize the importance of having a comprehensive audit and were thus unwilling to assume the expense which an audit of this type would require.

TABLE 27.—AGENCIES AUDITING THE RECORDS AND ACCOUNTS OF 201 FARMERS' LOCAL PURCHASING ASSOCIATIONS, 1934

Type of association	Number of associations audited by—				
	Department of agriculture and markets	Private professional auditors	Cooperative agencies	Directors	Total
Petroleum.....	23	13	21	10	67
Warehouse.....	23	14	1	15	53
General-store.....	4	6	10	3	23
Combination.....	20	11	11	16	58
Total.....	70	44	43	44	201

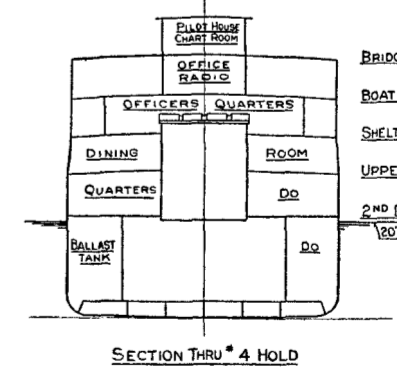


SHELTER DECK
UPPER DECK - BULKHEAD DECK
2ND DECK
20'-W.L.

REVISED - AUGUST 11, 1938 A.G.H.

S.S. AMERICAN SEAMAN

COMPLEMENT	
COMMISSIONED OFFICERS	8
WARRANT	4
CHIEF PETTY	14
PETTY	20
NON RATED MEN	78
ENGINEER	78
STEWARD	64
TOTAL	266



410' x 54' x 29'-9" - UPPER DECK, 31'9" SHELTER DECK

TRAINING SHIP

UNITED STATES MARITIME COMMISSION
WASHINGTON, D. C.

E.S. Rand
ENGINEER

TITLE: ARRANGEMENT OF HOLDS, DECKS & PROFILE

SCALE: 1/8" = 1'-0" DATE: 12-6-37

DRAWN BY: J.M.W. APPROVED BY: *[Signature]* CHIEF ENGINEER

TRACED BY: J.E.W. APPROVED BY: *[Signature]* CHIEF OF DESIGN

CHECKED BY: J.M.W. APPROVED BY: *[Signature]* ASST. TO CHIEF ENGINEER

APPROVED BY: *[Signature]* ASST. TO CHIEF ENGINEER

CONTRACT NO. HULL NO.

PLAN NO. TS-1-S9-1

It will be noticed, furthermore, that the petroleum associations had the smallest average percentage of total assets in the form of current assets, and the highest percentage in the form of fixed assets. The percentage of assets in the form of cash was distinctly higher, and the inventories distinctly lower, for petroleum associations than for other types.

TABLE 28.—AVERAGE BALANCE SHEETS FOR FARMERS' LOCAL PURCHASING ASSOCIATIONS OF EACH TYPE, 1934

Item	Average for 61 petroleum associations		Average for 57 warehouse associations		Average for 29 general-store associations		Average for 80 combination associations	
	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total
<i>Assets</i>								
<i>Current assets:</i>	<i>Dollars</i>	<i>Percent</i>	<i>Dollars</i>	<i>Percent</i>	<i>Dollars</i>	<i>Percent</i>	<i>Dollars</i>	<i>Percent</i>
Cash.....	2,095	13.36	2,318	8.21	1,447	5.20	2,018	6.67
Accounts and notes receivable.....	3,378	21.64	7,852	27.81	4,089	16.78	7,532	24.80
Inventories.....	3,402	21.99	8,465	29.98	10,236	36.79	9,466	31.28
Other.....	10	.06	169	.60	83	.30	100	.33
Total current assets.....	8,885	56.65	18,804	66.60	16,435	59.07	19,176	62.37
<i>Fixed assets:</i>								
Land.....	245	1.66	1,138	4.06	1,098	3.95	947	3.12
Buildings and equipment.....	5,417	34.54	7,669	27.23	8,027	28.85	9,408	31.09
Total fixed assets.....	5,662	36.16	8,806	31.26	9,125	32.78	10,355	34.22
<i>Other assets.....</i>	<i>1,127</i>	<i>7.25</i>	<i>604</i>	<i>2.14</i>	<i>2,296</i>	<i>8.15</i>	<i>729</i>	<i>2.41</i>
Total assets.....	15,684	100.00	28,234	100.00	27,823	100.00	30,260	100.00
<i>Liabilities and net worth</i>								
<i>Current liabilities:</i>								
Accounts payable.....	1,517	9.67	1,793	6.36	2,137	7.68	1,442	4.80
Notes payable.....	931	5.94	5,782	20.41	4,143	14.89	4,645	15.35
Other.....	723	4.61	624	2.21	670	2.41	321	1.06
Total current liabilities.....	3,171	20.22	8,179	28.97	6,950	24.98	6,418	21.21
<i>Noncurrent liabilities.....</i>	<i>1,567</i>	<i>9.99</i>	<i>2,954</i>	<i>10.46</i>	<i>1,939</i>	<i>6.97</i>	<i>2,720</i>	<i>8.98</i>
Total liabilities.....	4,738	30.21	11,133	39.43	8,889	31.95	9,138	29.89
<i>Net worth:</i>								
Capital stock.....	5,885	37.52	11,206	40.01	12,905	46.38	11,411	37.71
Reserves, surplus, and undistributed net income.....	5,061	32.27	5,806	20.58	4,920	17.67	9,711	32.00
Total net worth.....	10,946	69.79	17,191	60.57	15,934	56.66	21,122	69.31
Total liabilities and net worth.....	15,684	100.00	28,234	100.00	27,823	100.00	30,260	100.00

Comparison of the average liabilities for the associations of each type indicates that the average petroleum association had the smallest percentage of total liabilities and net worth in the form of current liabilities. It is also of interest that the average general-store association had the smallest percentage of total liabilities and net worth in the form of noncurrent liabilities.

There was some variation among the average associations of each type in the proportion of total liabilities and net worth represented by stock, reserves, and surplus. The average combination association had the highest percentage of total liabilities and net worth represented by these items. Furthermore, the average petroleum association had 16.32 percent of its total liabilities and net worth in the form of undistributed net income, while the average general-store association had only 2.83 percent of its total liabilities and net worth in this form. It will be noted that there was no great difference in the relative proportions of net worth for the average petroleum, general-store, and combination types association. The average warehouse association, however, had a considerably lower proportion of net worth.

Comparison of Average Operating Statements for Associations of Each Type

The average operating statements, as shown in table 29, also differed considerably for the associations of different types. While the average sales ⁴⁰ of the petroleum associations amounted to \$42,211, the average sales of the warehouse and combination associations were almost twice as large. Although the average sales of the general-store associations were somewhat larger than those of the petroleum associations, they were much smaller than those of the warehouse or combination associations. The average gross trading margin of the petroleum associations was 24.15 cents per dollar of sales, as compared with 13.50 cents for the warehouse associations; 13.40 cents, for the general-store associations; and 14.28 cents, for the combination associations. It will also be noted that the total operating expense for the petroleum association was comparatively large—16.32 percent of sales, as compared with 11.23 percent for the warehouse associations, 12.22 percent for the general-store associations, and 10.54 percent for the combination associations. Expenses for the petroleum associations were higher largely because of the extensive service involved in the retail distribution of petroleum products.

⁴⁰ The sales figures here and in subsequent tables cover both supply sales and sales of products marketed, since the records did not permit separate classification.

TABLE 29.—AVERAGE OPERATING STATEMENTS FOR FARMERS' LOCAL PURCHASING ASSOCIATIONS OF EACH TYPE, 1934

Item	61 petroleum associations		57 warehouse associations		31 general-store associations		57 combination associations	
	Amount	Percentage of sales	Amount	Percentage of sales	Amount	Percentage of sales	Amount	Percentage of sales
Sales.....	Dollars 42, 211	Percent 100.00	Dollars 81, 699	100.00	Dollars 54, 264	100.00	Dollars 82, 694	100.00
Cost of goods.....	32, 017	76.85	71, 078	87.01	47, 160	86.99	71, 366	86.18
Gross trading income.....	10, 194	24.15	10, 611	12.99	7, 114	13.11	11, 497	13.87
Other operating income.....			417	.51	157	.29	340	.41
Total gross operating income.....	10, 194	24.15	11, 028	13.50	7, 271	13.40	11, 837	14.28
Operating expense:								
Salaries and commission.....	4, 804	11.38	4, 281	5.24	3, 533	6.51	4, 775	5.75
Directors' fees.....	122	.29	253	.31	54	.10	75	.09
Travel.....	21	.05	8	.01	22	.04	17	.02
Taxes.....	177	.42	482	.59	353	.65	406	.49
Insurance.....	162	.38	408	.50	266	.49	323	.39
Rent.....	186	.44	65	.08	125	.23	153	.18
Depreciation.....	435	1.03	703	.86	559	1.03	698	.85
Repairs.....	97	.23	278	.34	168	.30	199	.24
Supplies.....	148	.35	294	.36	190	.35	174	.21
Heat, light, and power.....	131	.31	376	.46	271	.50	331	.40
Telephone and telegraph.....	46	.11	98	.12	71	.13	99	.12
Legal.....	9	.02	8	.01	5	.01		
Audit.....	42	.10	41	.05	78	.14	86	.08
Advertising and donations.....	80	.19	82	.10	136	.25	108	.13
Collection and bad debts.....	80	.19	654	.80	141	.26	431	.52
Truck expense.....	127	.30	155	.19	184	.34	464	.56
Miscellaneous.....	232	.55	988	1.21	537	.99	446	.54
Total operating expense.....	6, 889	16.32	9, 174	11.23	6, 631	12.22	8, 737	10.54
Net operating income.....	3, 305	7.83	1, 854	2.27	640	1.18	3, 100	3.74
Other income.....	215	.51	281	.32	391	.72	498	.60
Other deductions.....	232	.55	980	1.20	483	.90	689	.83
Total net income.....	3, 288	7.79	1, 135	1.39	548	1.01	2, 910	3.51

The average petroleum association had a net income of 7.79 percent of sales, a much larger percentage than the average association of any other type, even though the total operating expense for petroleum associations represented a larger percentage of sales. In other words, the larger trading income of petroleum associations more than counterbalanced the higher operating expense.

Average Operating Ratios for Associations of each Type

For further analysis, average operating ratios for the associations of each type constructed from the balance sheets, and profit and loss

statements shown in tables 28 and 29, are presented in table 30. The amount of current assets per dollar of current liabilities did not differ greatly among the associations of each type. All had between \$2 and \$3 in current assets for each dollar of current liabilities.

The amount of working capital—the amount of current assets in excess of current liabilities—per dollar of total assets shows more variation among the associations. The general-store associations had 34 cents in working capital for each dollar of total assets; whereas, the combination associations averaged 42 cents. The significance of the ratio of working capital to total assets depends largely, however, on the turn-over, or liquidity of current assets. Although this ratio was higher for the combination association than for the petroleum association, the latter had a larger percentage of its current assets in the form of cash and a smaller proportion in the form of receivables and inventories.

TABLE 30.—AVERAGE OPERATING RATIOS FOR FARMERS' LOCAL PURCHASING ASSOCIATIONS OF EACH TYPE, 1934¹

Ratio	Average for associations in group			
	Petroleum associations	Warehouse associations	General-store associations	Combination associations
Current assets per dollar of current liabilities.....	\$2. 80	\$2. 30	\$2. 36	\$2. 99
Working capital per dollar of total assets.....	. 36	. 38	. 34	. 42
Accounts and notes receivable per dollar of net sales.....	. 08	. 10	. 09	. 09
Net worth per dollar of total liabilities.....	2. 31	1. 54	2. 13	2. 31
Net worth per dollar of fixed assets.....	1. 93	1. 94	2. 08	2. 04
Net worth per dollar of total assets.....	. 70	. 61	. 68	. 70
Sales per dollar of total assets.....	2. 69	2. 89	1. 95	2. 74
Net income per dollar of total assets.....	. 21	. 04	. 02	. 10
Net income per dollar of net worth.....	. 30	. 07	. 03	. 14

¹ Based on the data in tables 28 and 29.

The average associations of the several types had about the same amount of accounts and notes receivable for each dollar of net sales, the accounts receivable amounting to approximately one-twelfth of the year's sales.

The amount of net worth for each dollar of total liabilities was considerably lower for the average warehouse association than for the other associations. The average association of the petroleum, general-store, and combination types had over \$2 in net worth for each dollar owed to creditors. There was little difference in the amount of net worth for each dollar of fixed assets, which was approximately \$2 for associations of all types. The average amount of net worth for each dollar of total assets was lowest for the warehouse associations. This ratio indicates that the members of the petroleum, general-store, and combination associations, in comparison with the members of the average warehouse association, had a larger percentage of equity in the total assets. However, even the warehouse associations had on the average 61 cents in net worth for each dollar of total assets.

The amount of sales for each dollar of total assets was considerably lower for the average general-store association than for the petroleum, warehouse, and combination types. There was a great difference in returns on all capital employed by the associations, as shown by the amount of net income per dollar of total assets. For example, the average petroleum association had a net income of 21 cents for each dollar of total assets, while the average general-store association had a net income of only 2 cents for each dollar of total assets. Furthermore, the average petroleum association had a net income of 30 cents for each dollar of net worth as compared with 3 cents for the average general-store association, 7 cents for the average general-warehouse association, and 14 cents for the average combination association.

Individual Variations in Financial and Operating Condition

The average balance sheets and operating statements show the general financial and operating results for each type of local association. Naturally, the financial and operating data varied among the associations of different types, and these variations afford further insight into the characteristics of each type of association.

In table 31, local associations are grouped according to the variations in the bases of the average ratios shown in table 30. Of the 62 petroleum associations 26 had total assets of less than \$10,000 and 29 had assets of between \$10,000 and \$20,000. On the other hand, of the 55 general-warehouse associations, only 23 had total assets of less than \$20,000. Only 4 of the petroleum associations as contrasted to 14 of the general-warehouse associations, had total assets greater than \$40,000. Total assets of 5 general-store associations and 21 combination associations were greater than \$40,000.

Table 31 also shows 199 local purchasing associations classified to show the amount of current assets for each dollar of current liabilities. Of these associations 16 had less than \$1 in current assets for each

dollar of current liabilities, while 57 associations had \$1 to \$2. The remainder, 126 associations, had over \$2 in current assets for each dollar of current liabilities. Seventy-one associations had current assets of from \$2 to \$5 for each dollar of current liabilities; 55 had over \$5; and 35 associations had \$10 or more. The associations of each type were distributed in about the same proportion with regard to the current assets for each dollar of current liabilities. In other words, there were associations of each type with small, medium, and large proportions of current assets to current liabilities. However, most of the associations in each group had between \$1 and \$5 worth of current assets for each dollar of current liabilities. Table 31, therefore, shows a considerable variation in the condition of these associations as indicated by this measure of operating liquidity.⁴¹

TABLE 31.—DISTRIBUTION OF ASSOCIATIONS OF EACH TYPE ACCORDING TO SELECTED OPERATING COMPARISONS

Operating comparisons	Number of associations				
	Petro- leum	Ware- house	General- store	Combi- nation	All types
Total assets:					
\$0-\$9,999.....	26	10	4	5	45
\$10,000-\$19,999.....	23	13	6	20	62
\$20,000-\$29,999.....	6	10	9	8	33
\$30,000-\$39,999.....	3	8	5	5	21
\$40,000-\$49,999.....	3	7	2	6	18
\$50,000-\$59,999.....	1	1	1	7	10
\$60,000-\$69,999.....		5		4	9
\$70,000-\$79,999.....				3	3
\$80,000 and over.....		1	2	1	4
Total.....	62	55	29	59	205
Current assets per dollar of cur- rent liabilities:					
\$0-\$0.99.....	7	5	2	2	16
\$1-\$1.99.....	16	15	7	19	57
\$2-\$4.99.....	21	19	14	17	71
\$5-\$9.99.....	7	7	1	5	20
\$10 and over.....	8	11	4	12	35
Total.....	59	57	28	55	199

⁴¹ While the authors do not believe that this ratio of current assets to current liabilities, or for that matter, any one of the financial ratios can be used with complete confidence for measuring operating condition; they are of the opinion that an association should strive to have at least \$2 in current assets for each dollar in current liabilities.

TABLE 31.—DISTRIBUTION OF ASSOCIATIONS OF EACH TYPE ACCORDING TO SELECTED OPERATING COMPARISONS—Continued

Operating comparisons	Number of associations				
	Petro- leum	Ware- house	General- store	Combi- nation	All types
Gross income in percentage of sales:					
Under 3.9 percent.....		6	1		7
4-7.9 percent.....		6	1	3	10
8-11.9 percent.....	3	19	11	18	51
12-15.9 percent.....	1	18	12	21	52
16-19.9 percent.....	5	7	5	12	29
20-23.9 percent.....	14	1		3	18
24-27.9 percent.....	22		1	1	24
28-31.9 percent.....	14			1	15
Total.....	59	57	31	59	206
Operating expense in percentage of sales:					
Under 3.9 percent.....	2	5		2	9
4-7.9 percent.....	2	22	4	16	44
8-11.9 percent.....	2	25	14	30	71
12-15.9 percent.....	19	4	9	4	36
16-19.9 percent.....	28		4	4	36
20-23.9 percent.....	5		2	1	8
24-27.9 percent.....	3				3
28 percent and over.....		1			1
Total.....	61	57	33	57	208
Salaries, wages, and commissions in percentage of sales:					
0-1.9 percent.....	6	2	0	3	11
2-3.9 percent.....	4	24	0	16	44
4-5.9 percent.....	2	19	10	25	56
6-7.9 percent.....	4	11	8	10	33
8-9.9 percent.....	6	2	6	2	16
10-11.9 percent.....	14	0	1	1	16
12-13.9 percent.....	13	0	1	1	15
14-15.9 percent.....	11	1	1	0	13
16 percent and over.....	2	0	1	0	3
Total.....	62	59	28	58	207

TABLE 31.—DISTRIBUTION OF ASSOCIATIONS OF EACH TYPE ACCORDING TO SELECTED OPERATING COMPARISONS—Continued

Operating comparisons	Number of associations				
	Petro- leum	Ware- house	General- store	Combi- nation	All types
Managers' salaries and commissions:					
0-0.9 percent.....	1	1	1	2	5
1-1.9 percent.....	6	15	4	20	45
2-2.9 percent.....	5	14	4	13	36
3-3.9 percent.....	1	8	1	4	14
4-4.9 percent.....		4	2	5	11
5-5.9 percent.....		4			4
6 percent and over.....		3	2	2	7
Total.....	13	49	14	46	122
Net income as a percentage of sales:					
14 percent and over.....	5				5
12-13.9 percent.....	3				3
10-11.9 percent.....	6				6
8-9.9 percent.....	16	1		4	21
6-7.9 percent.....	12	4	1	3	20
4-5.9 percent.....	10	11	6	11	38
2-3.9 percent.....	5	11	6	23	45
0-1.9 percent.....	2	18	10	8	38
Loss.....	2	11	8	5	26
Total.....	61	56	31	54	202
Net income as a percentage of net worth:					
70 percent and over.....	5	3		1	9
60-69.9 percent.....	2			1	3
50-59.9 percent.....	5				5
40-49.9 percent.....	7	6		3	16
30-39.9 percent.....	19	5	1	9	34
20-29.9 percent.....	9	7	2	10	28
10-19.9 percent.....	7	8	5	6	26
0-9.9 percent.....	5	14	13	19	51
Loss.....	2	10	5	4	21
Total.....	61	53	26	53	193

Local associations were also grouped according to gross income as a percentage of sales. Although the gross income for most petroleum associations ranged from 20 to 32 percent of sales, the gross income of other local associations ranged considerably lower. The variation in gross income for the local associations of different types can be explained largely by the type of commodities handled, since gross margins varied widely for different products. This condition is illustrated by table 32, which shows the gross margins received by local associations for handling certain supplies. It will be noted that gross margins for gasoline, kerosene, and similar products tended to range from 20 to 40 cents per dollar of sales, while gross margins for feed, salt, twine, seed, and similar commodities tended to range from 5 to 15 cents per dollar of sales. However, not all the differences in gross income between associations can be explained by type of business and amount of various commodities handled. Some associations prefer to operate on smaller gross margins in order to sell supplies at a lower price. Other associations have larger gross margins because the volume of their operations enables them to buy supplies at lower cost. In some areas severe competition materially limits the amount of gross margin obtainable by all distributors affected.

The associations also varied considerably in total operating expense as a percentage of sales (table 31). Most of the petroleum associations had total operating expenses ranging from 12 to 20 percent of sales, while the total operating expenses for most of the associations of the other types ranged from 4 to 12 percent of sales.

The variation in total operating expenses for the associations of each type can be partly explained by the differences in services and methods of operation. For illustration, it costs more to provide a diversified service than a service limited to a few major items. Furthermore, costs vary with the amount of credit or delivery service. The degree of operating efficiency also explains part of the difference among associations in the amount of total expense per dollar of sales. In other words, an association with a competent manager will tend to have lower operating expense.

One of the most important factors influencing the variations in operating expense is volume of business. This is indicated to some extent by table 33, which shows the average operating expense per dollar of sales for the associations of each type classified according to amount of annual sales. It will be noted that the associations of each type with annual sales of over \$80,000, had considerably smaller average operating expenses per dollar of sales than associations with annual sales of less than \$40,000. It is significant, however, that the associations of the petroleum and combination types with annual sales of less than \$40,000 had lower operating expense per dollar of sales

TABLE 32.—GROSS OPERATING INCOME ON VARIOUS COMMODITIES HANDLED, AS REPORTED BY FARMERS' LOCAL PURCHASING ASSOCIATIONS OF ALL TYPES, 1934

Commodity	Associations reporting	Gross margin per dollar of sales										
		Loss	0-4.9 cents	5-9.9 cents	10-14.9 cents	15-19.9 cents	20-24.9 cents	25-29.9 cents	30-34.9 cents	35-39.9 cents	40-44.9 cents	Over 45 cents
Feed.....	38	0	9	8	15	4	1	1	0	0	0	0
Grain.....	12	0	2	5	3	0	1	1	0	0	0	0
Flour.....	24	2	5	10	6	1	0	0	0	0	0	0
Salt.....	10	0	2	2	3	3	0	0	0	0	0	0
Twine.....	21	0	7	7	4	0	1	2	0	0	0	0
Seed.....	21	2	1	1	10	3	3	1	0	0	0	0
Coal.....	17	0	0	2	4	6	4	1	0	0	0	0
Machinery.....	7	1	0	1	2	0	2	1	0	0	0	0
Fertilizer.....	9	0	3	2	3	0	1	0	0	0	0	0
Hardware.....	6	0	0	1	2	1	1	1	0	0	0	0
Groceries.....	6	0	2	1	2	1	0	0	0	0	0	0
Fly spray.....	14	0	0	0	1	0	0	1	1	2	5	4
Wire.....	5	0	0	1	2	1	0	1	0	0	0	0
Glycerine.....	14	0	1	2	2	2	3	1	3	0	0	0
Tires and batteries.....	28	0	0	3	5	8	10	2	0	0	0	0
Regular gasoline.....	67	0	0	2	1	8	15	19	20	2	0	0
Kerosene and distillate.....	70	0	0	1	2	2	4	17	20	21	2	1
Lubricating oil.....	69	0	2	0	1	6	11	17	19	11	2	0
Grease.....	55	0	0	0	2	1	2	5	18	14	6	7

TABLE 33.—AVERAGE OPERATING EXPENSE PER DOLLAR OF SALES FOR 204 FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1934

Annual sales	Petroleum associations		Warehouse associations		General-store associations		Combination associations	
	Records taken	Expense per dollar of sales	Records taken	Expense per dollar of sales	Records taken	Expense per dollar of sales	Records taken	Expense per dollar of sales
	Number	Cents	Number	Cents	Number	Cents	Number	Cents
Under \$40,000.....	36	16.25	20	16.10	12	13.69	11	10.88
\$40,000—\$79,999.....	17	16.99	16	9.63	10	10.92	25	11.83
\$80,000 and over.....	8	15.17	21	7.80	7	11.56	21	8.92
Total.....	61	16.32	57	11.23	29	12.22	57	10.54

than such associations with annual sales of \$40,000 to \$80,000. Moreover, the general-store associations with annual sales of over \$80,000 showed higher operating expense per dollar of sales than such associations with sales of \$40,000 to \$80,000.

The relationship of operating expenses to volume of sales for each type of purchasing association is shown in figure 3. It will be noted that operating expenses per dollar of sales tended to decrease with increasing volume of sales. However, the scatter of the dots representing the operating expense per dollar of sales and the value of sales for given associations indicates that the degree of relationship is not of major significance for any type of local association. There are many individual associations with small annual sales and relatively low operating expenses per dollar of sales and many associations with large annual sales and relatively high operating expenses per dollar of sales.

Since salaries, wages, and commissions are the largest single group of expense items in the operation of a farmers' local purchasing association, the associations are classified in table 31 (pp. 59-61) according to the amount of these combined expenses per dollar of sales. It will be noted that these expenses for the petroleum associations ranged from 10 to 16 cents per dollar of sales, while most of the associations of the other types had expenses for this purpose ranging from 2 to 10 cents. The higher expense for salaries, wages, and commissions for associations of the petroleum type can be partly explained by the added costs incurred by these associations in delivering the products to the

RELATIONSHIP OF OPERATING EXPENSES PER DOLLAR OF SALES TO VOLUME OF SALES,
FOR FOUR TYPES OF LOCAL FARMERS' PURCHASING ASSOCIATIONS IN WISCONSIN, 1934

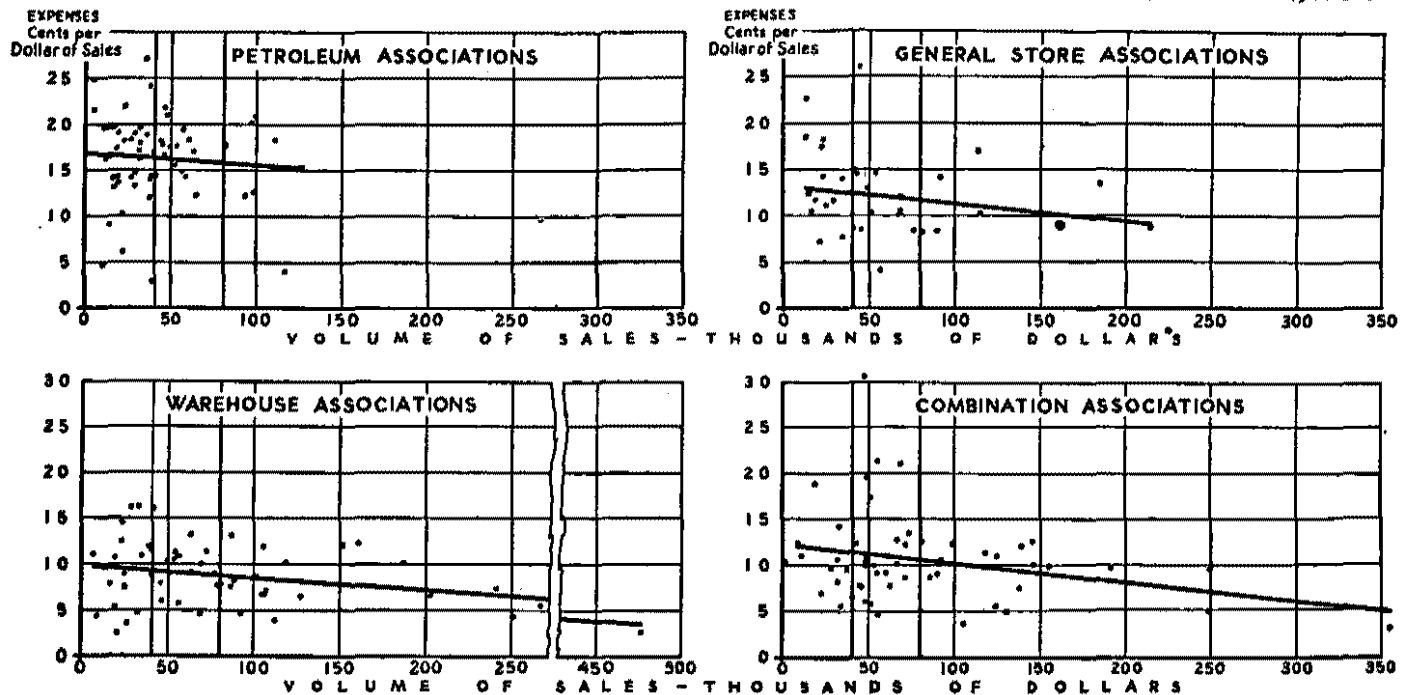


FIGURE 3.

Operating expenses per dollar of sales showed a slight tendency to decrease with increase in volume for associations of each type.

farmer. In general, these associations required truck drivers to provide truck equipment, and it was customary to reimburse them for their investments in the form of salaries and commissions paid for sales and delivery service.

While the data in table 31 show that the petroleum associations tended to have much higher total expense for salaries, wages, and commissions, it was maintained that this was largely because of the extra personnel service required in operating a petroleum association. Table 31 also indicates that petroleum associations do not tend to have a higher expense per dollar of sales for managers' salaries and commissions. As a matter of fact, a higher proportion of the associations of the other types tended to have a higher expense per dollar of sales for managerial services.

Table 34 indicates the monthly wage payments to 224 employees other than managers of cooperative purchasing associations of the various types. It will be noted that 30 such employees received less than \$50 per month, while 84 received from \$50 to \$69, and 92 received from \$70 to \$99 per month. Only 18 employees received \$100 or more per month. The monthly wage rates were apparently determined largely by local employment conditions and the personal efficiency of the worker rather than by type of association.

TABLE 34.—MONTHLY WAGES PAID FULL-TIME EMPLOYEES OTHER THAN MANAGERS FOR 224 EMPLOYEES OF FARMERS' LOCAL PURCHASING ASSOCIATIONS, BY TYPE OF ASSOCIATION, 1934¹

Monthly salary	Number of employees according to type of service									
	Total	Petroleum association			Warehouse association		General-store association		Combination association	
		Station	Delivery	Office	Warehouse	Office	Store	Office	Warehouse	Office
Under \$50.....	30	1	1	7	2	3	9	0	3	4
\$50-\$69.....	84	9	2	3	20	5	11	3	24	7
\$70-\$99.....	92	7	9	2	28	3	13	1	21	8
\$100 and over..	18	2	0	1	4	1	1	1	6	2
Total.....	224	19	12	13	54	12	34	5	54	21

¹ Does not include employees paid on a commission basis, a practice which is common among petroleum associations

Net income or loss per dollar of sales also varied widely for the local associations of different types (table 31, p. 61). The table indicates that

26 of the 202 associations included in this table, or about 13 percent, suffered a net loss. A significantly smaller percentage of the petroleum associations, however, had a net loss compared with the other three types of association. The data indicate furthermore, that the petroleum associations tended to have higher net incomes per dollar of sales than the other associations. Of the 61 petroleum associations, 52 had net incomes of more than 4 percent of sales, while 30 had net incomes of more than 8 percent. Of the 56 general-warehouse associations 11 showed a loss, while only 16 showed net incomes greater than 4 percent of sales. It will be noticed that most of the general-store associations, likewise, had small net incomes. Of the 31 associations of this type only 13 had net incomes over 2 percent of sales, while 8 reported a loss. The combination associations tended to have a higher net income per dollar of sales than the warehouse and general-store associations. Of the 54 combination associations, 34 had net incomes ranging from 2 to 6 percent of sales, and 7 had net incomes of from 6 to 10 percent of sales, whereas 5 showed a loss.

The amount of net income for the associations of each type is classified in table 31 in percentages of net worth. Of the 193 associations of all types, 21 had operating losses, while 51 had net incomes ranging from 0 to 10 percent of net worth, and 121 incomes of more than 10 percent of net worth.

Comparative Standards for Measuring Operating Efficiency

AVERAGE financial and operating statements for some of the best and some of the poorest associations of each type are shown in tables 35 to 42. These average statements can be used by individual local associations as a rough basis for measuring their organization stability, and operating performance with that of associations which are better or poorer than the average. In order to facilitate comparison, the figures in the financial statements have been calculated in percentage of total assets—that is, cents per dollar of total assets and the figures in the operating statements in percentage of sales—that is, cents per dollar of sales.

Since the associations in each group are not strictly homogeneous, the average figures should be used with consideration, as a basis for comparison with a given association.⁴² Associations of each type operate under varying local conditions, are of different ages and sizes, handle different proportions of various commodities, and operate in different ways with varying degrees of competition. It is believed, however, that even when all these factors are considered, there is considerable value in such average figures as a general basis for studying operating efficiency. The associations which are here designated as "good" or "poor" have been selected to take into account such factors as: (1) Ability of the association to make a saving; (2) members' support and relative permanence in the community; (3) ability to keep operating expenses low; and (4) type of service rendered. In other words, in classifying the associations consideration was given not only to facts disclosed by the financial and operating statements, but also to facts obtained through personal inspection of the associations as going concerns.

Petroleum Associations

Average financial statements for 61 petroleum associations and for 10 "good" and 10 "poor" associations of the same type, appear in table 35. It will be noted that total assets averaged \$18,165 for the good associations, and \$15,315 for the poor associations.

⁴² Since every association operates under its own given set of conditions and circumstances, there may be excellent reasons why the operating and financial statements of a given association vary from those of other associations of the same type. For that reason, each association should make year-to-year comparisons of its own financial and operating statements as a basis for determining whether it is improving its operating efficiency. For discussion of methods for studying operating efficiency, see Knapp, J. G., *YARDSTICKS OF EFFICIENCY FOR COOPERATIVE PURCHASING ASSOCIATIONS*. *Amer. Cooperation*, 1936: 504-517.

TABLE 35.—AVERAGE BALANCE SHEETS SHOWN IN PERCENTAGES OF TOTAL ASSETS, FOR 61 PETROLEUM ASSOCIATIONS AND FOR 10 SELECTED "GOOD" AND 10 SELECTED "POOR" PETROLEUM ASSOCIATIONS, 1934

Item	Average percentage of total assets		
	61 associations	10 "good" associations	10 "poor" associations
<i>Assets</i>			
Current assets:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Cash.....	13.36	9.21	7.49
Accounts and notes receivable.....	21.54	18.44	24.18
Inventories.....	21.69	24.56	17.83
Other.....	.06	-----	.06
Total current assets.....	56.65	52.21	49.56
Fixed assets:			
Land.....	1.56	2.01	2.15
Buildings and equipment.....	34.54	34.34	38.67
Total fixed assets.....	36.10	36.35	40.82
Other assets.....	7.25	11.44	9.62
Total assets.....	100.00	100.00	100.00
<i>Liabilities and net worth</i>			
Current liabilities:			
Accounts payable.....	9.67	12.73	6.43
Notes payable.....	5.94	6.26	10.14
Other.....	4.61	4.14	5.14
Total current liabilities.....	20.22	23.13	21.71
Noncurrent liabilities.....	9.99	7.70	22.23
Total liabilities.....	30.21	30.83	43.94
Net worth:			
Capital stock.....	37.52	32.66	27.14
Reserves, surplus, and undistributed net income.....	32.27	36.51	28.92
Total net worth.....	69.79	69.17	56.06
Total liabilities and net worth.....	100.00	100.00	100.00
Average amount of total assets.....	<i>Dollars</i> 15,684	<i>Dollars</i> 18,165	<i>Dollars</i> 15,315

The good associations had slightly larger proportions of total assets in the form of current assets, largely because larger proportions were in the form of cash and inventories. The poor associations had appreciably larger proportions of their total assets in the form of accounts and notes receivable. The average petroleum association had a larger proportion of its total assets in the form of cash and receivables than the average good association and a smaller proportion of its total assets in the form of inventories.

The average total current liabilities for the 61 petroleum associations was slightly lower than the average for the poor associations and also lower than the average for the good associations. The average total noncurrent liabilities for the good associations was only 7.70 cents per dollar of total liabilities and net worth as compared with 22.23 cents for the poor associations, and 9.99 cents for the 61 associations. Total liabilities for the good associations averaged 30.83 cents per dollar of total liabilities and net worth as compared with an average of 43.94 cents for the poor associations. The good associations had, therefore, 69.17 cents of net worth for every dollar of total assets as compared with 56.06 cents for the poor associations. This difference between the good and poor associations was largely the result of the higher average undistributed net income for the former group. The average undistributed net income for the good associations was 24.84 cents per dollar of total assets as compared with 12.91 cents for the poor associations.

Operating statements for 61 petroleum associations and for the 10 good and the 10 poor associations of this type are shown in table 36. It will be noted that average sales were \$42,211 for the 61 associations, \$56,083 for the good associations, and \$29,512 for the poor associations.

The average gross trading income was 24.04 cents per dollar of sales for the good associations and 27.43 cents for the poor associations.⁴³ In other words, the good associations tended to operate on lower margins. The average good petroleum association had total operating expenses of 14.46 cents per dollar of sales, the average poor association 20.96 cents. The higher operating expenses of the poor associations resulted in net income of 6.09 cents per dollar of sales for that group as compared with 9.59 cents per dollar of sales for the good associations. Since the average sales of the good associations were considerably larger than those of the poor associations, the lower expenses per dollar of sales of the former group were, no doubt, partly because of the advantages of large-scale operation. A detailed inspection of expenses shows that salaries, directors' fees, travel, insurance,

⁴³ A few petroleum associations were operating in communities where there were minor local price wars part of the year. These associations were excluded from both the good and the poor groups. There were, however, variations in the relative amounts of tank-truck and service-station sales which could not be taken into account in selecting the two groups. The authors do not believe that the variations in trading margins for these associations are significant with respect to the results achieved.

rent, depreciation, heat, light, and power—when measured as a percentage of sales—tended to be considerably lower for the good associations. Such overhead expenses per unit tend to fall with an increased volume of business.

TABLE 36.—AVERAGE OPERATING STATEMENTS SHOWN IN PERCENTAGE OF SALES FOR 61 PETROLEUM ASSOCIATIONS AND FOR 10 SELECTED "GOOD" AND 10 SELECTED "POOR" PETROLEUM ASSOCIATIONS, 1934

Item	Average percentage of sales		
	61 associations	10 "good" associations	10 "poor" associations
Sales and gross income:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Sales.....	100.00	100.00	100.00
Cost of goods.....	75.85	75.96	72.57
Total gross trading income.....	24.15	24.04	27.43
Operating expense:			
Salaries and commissions.....	11.38	10.29	13.56
Directors' fees.....	.29	.23	.43
Travel.....	.05	.06	.10
Taxes.....	.42	.38	.39
Insurance.....	.36	.36	.44
Rent.....	.44	.33	.94
Depreciation.....	1.03	.81	1.52
Repairs.....	.23	.35	.22
Supplies.....	.35	.34	.42
Heat, light, and power.....	.31	.16	.59
Telephone and telegraph.....	.11	.12	.13
Advertising and donations.....	.19	.21	.28
Audit.....	.10	.03	.17
Collection of bad debts.....	.19	.03	.28
Other expense.....	.87	.76	1.49
Total operating expense.....	16.32	14.46	20.96
Net operating income.....	7.83	9.58	6.47
Other income.....	.51	.40	.91
Other deductions.....	.55	.39	1.29
Total net income.....	7.79	9.59	6.09
Net sales.....	<i>Dollars</i> 42,211	<i>Dollars</i> 56,083	<i>Dollars</i> 29,512

Warehouse Associations

In table 37 are presented average balance sheets for 57 warehouse associations and for 10 good and 10 poor associations of this type. The average total assets were \$28,234 for the 57 associations, \$30,187 for the good associations, and \$22,466 for the poor associations.

While the average good warehouse association had 78.07 cents per dollar of total assets in current assets, the average poor association had only 49.66 cents. Cash amounted to 11.77 cents per dollar of total assets for the good associations as compared with 2.95 cents for the poor associations. However, the average good associations had approximately twice as large a proportion of total assets in the form of inventories as did the poor associations.

The average total current liabilities amounted to 41.34 cents per dollar of total assets for the good associations as compared with 37.51 cents for the poor associations. However, in the case of the good associations current assets were approximately twice as large as current liabilities, while for the poor associations current assets were only about one-third larger than current liabilities. The good associations were, therefore, in a much more liquid position than the poor associations. As to noncurrent liabilities those of the good associations amounted to only 3.12 cents per dollar of total liabilities and net worth, while those of the average poor association amounted to 19.21 cents for each dollar of total liabilities and net worth. Incidentally, mortgages and long-term notes for the poor associations were approximately 38 percent of the fixed assets of those associations.

While the good associations had 24.33 cents in capital stock for each dollar of total assets, the poor associations had 59.35 cents. The good associations, however, had 23.23 cents of reserves and surplus and 7.98 cents of undistributed net income for each dollar of total assets, while the poor associations had a general deficit of 14.73 cents and a net loss for the last operating period amounting to 1.34 cents per dollar of total assets.

Average operating statements shown in percentage of sales for the 57 warehouse associations and for the 10 good and 10 poor warehouse associations appear in table 38. It will be noted that the sales of the good associations were more than four times as large as those of the poor associations, and that the gross trading income per dollar of sales was 7.84 cents for the good associations and 15.28 cents for the poor associations. The total operating expense per dollar of sales was 4.91 cents for the good associations as compared with 17.79 cents for the poor associations. The net operating income of the good associations, therefore, averaged 3.45 cents per dollar of sales, while the poor associations operated at a loss of 1.81 cents per dollar of sales. The larger scale of operations for the good associations was, no doubt, an important factor in keeping down expenses. This table demon-

strates that it is not necessary to have high gross operating income in order to operate profitably. It also suggests that the good associations were able to keep prices down by moving a large quantity of goods at a lower expense per dollar of sales.

TABLE 37.—AVERAGE BALANCE SHEETS SHOWN IN PERCENTAGE OF TOTAL ASSETS, FOR 57 WAREHOUSE ASSOCIATIONS AND FOR 10 SELECTED "GOOD" AND 10 SELECTED "POOR" WAREHOUSE ASSOCIATIONS, 1934

Item	Average percentage of total assets		
	57 associations	10 "good" associations	10 "poor" associations
<i>Assets</i>			
Current assets:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Cash.....	8. 21	11. 77	2. 95
Accounts and notes receivable.....	27. 81	27. 65	27. 79
Inventories.....	29. 98	38. 65	18. 92
Other.....	. 60		
Total current assets.....	66. 60	78. 07	49. 66
Fixed assets:			
Land.....	4. 03	1. 76	6. 99
Buildings and equipment.....	27. 23	19. 11	41. 91
Total fixed assets.....	31. 26	20. 87	48. 90
Other assets.....	2. 14	1. 06	1. 44
Total assets.....	100. 00	100. 00	100. 00
<i>Liabilities and net worth</i>			
Current liabilities:			
Accounts payable.....	6. 35	14. 38	3. 06
Notes payable.....	20. 41	23. 61	31. 66
Other.....	2. 21	3. 35	2. 79
Total current liabilities.....	28. 97	41. 34	37. 51
Noncurrent liabilities.....	10. 46	3. 12	19. 21
Total liabilities.....	39. 43	44. 46	56. 72
Net worth:			
Capital stock.....	40. 01	24. 33	59. 35
Reserves, surplus, and undistributed net income.....	20. 56	31. 21	—16. 07
Total net worth.....	60. 57	55. 54	43. 28
Total liabilities and net worth.....	100. 00	100. 00	100. 00
Average amount of total assets.....	<i>Dollars</i> 28, 234	<i>Dollars</i> 30, 187	<i>Dollars</i> 22, 466

TABLE 38.—AVERAGE OPERATING STATEMENTS SHOWN IN PERCENTAGE OF SALES FOR 57 WAREHOUSE ASSOCIATIONS AND FOR 10 SELECTED "GOOD" AND 10 SELECTED "POOR" WAREHOUSE ASSOCIATIONS, 1934

Item	Average percentage of sales		
	57 associations	10 "good" associations	10 "poor" associations
Sales and gross income:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Sales.....	100.00	100.00	100.00
Cost of goods.....	87.01	92.16	84.72
Gross trading income.....	12.99	7.84	15.28
Other operating income.....	.51	.52	.70
Total gross operating income.....	13.50	8.36	15.98
Operating expense:			
Salaries and commissions.....	5.24	2.86	7.38
Directors' fees.....	.31	.06	.10
Travel.....	.01		.01
Taxes.....	.59	.24	1.06
Insurance.....	.50	.24	.62
Rent.....	.08	.17	.06
Depreciation.....	.86	.34	2.55
Repairs.....	.34	.12	.34
Supplies.....	.36	.06	1.04
Heat, light, and power.....	.46	.13	.94
Telephone and telegraph.....	.12	.09	.28
Advertising and donations.....	.10	.02	.08
Audit.....	.05	.03	.11
Collection of bad debts.....	.80	.22	1.53
Other expense.....	1.41	.33	1.69
Total operating expense.....	11.23	4.91	17.79
Net operating income.....	2.27	3.45	-1.81
Other income.....	.32	.13	.14
Other deductions.....	1.20	.35	2.03
Total net income.....	1.39	3.23	-3.70
Net sales.....	<i>Dollars</i> 81,689	<i>Dollars</i> 152,913	<i>Dollars</i> 34,368

General-Store Associations

Average financial statements for 29 general-store associations and for 5 good and 5 poor associations of this type are presented in table 39. The average total assets of the good associations amounted to \$54,787; those of the poor, to \$13,607. The good associations had a slightly higher proportion of total assets in the form of current assets. The good associations had 8.27 cents in cash for every dollar of total assets, while the poor associations had 4.58 cents. The good associations had inventories of only 29.54 cents for every dollar of total assets, the poor associations 34.83 cents. The total current liabilities amounted to 14.85 cents per dollar of total assets for the good associations and 31.49 cents for the poor associations. The good associations, therefore, had 3.86 cents in current assets for each dollar in current liabilities, while the poor associations had 1.70 cents. The total net worth amounted to 81.68 cents per dollar of total assets for the good associations and 65.85 cents for the poor ones. It is significant that reserves, surplus, and undistributed net income amounted to 52.03 cents per dollar of total assets for the good associations and only 8.45 cents for the poor ones.

Average operating statements for the general-store associations are shown in table 40. The gross operating income of the good associations was 11.62 cents per dollar of sales, that of the poor associations 15.12 cents. It will also be seen that the total operating expenses for the good associations amounted to 7.65 cents per dollar of sales; whereas, the average operating expense for the poor associations amounted to 18.86 cents per dollar of sales. The good associations, therefore, were able to show a net income of 4.23 cents per dollar of sales, while the poor associations showed a loss of 3.84 cents. The fact that the good associations had average sales of \$103,400, while the poor associations had only \$37,086, no doubt accounted for much of the good associations' lower expense per dollar of sales.

Combination Associations

Average balance sheets, shown in percentage of total assets, for 57 combination-type associations and for 10 good and 10 poor associations of this type are presented in table 41. The average total assets for the 57 associations amounted to \$30,260; the average for the good associations was \$37,700, and for the poor associations \$38,136.

TABLE 39.—AVERAGE BALANCE SHEETS SHOWN IN PERCENTAGE OF TOTAL ASSETS, FOR 29 GENERAL-STORE ASSOCIATIONS AND FOR 5 SELECTED "GOOD" AND 5 SELECTED "POOR" GENERAL-STORE ASSOCIATIONS, 1934

Item	Average percentage of total assets		
	29 associations	5 "good" associations	5 "poor" associations
<i>Assets</i>			
Current assets:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Cash.....	5.20	8.27	4.58
Accounts and notes receivable.....	16.78	18.43	14.13
Inventories.....	36.79	29.54	34.83
Other.....	.30	1.12	.01
Total current assets.....	59.07	57.36	53.55
Fixed assets:			
Land.....	3.93	1.73	3.36
Buildings and equipment.....	28.85	30.83	32.36
Total fixed assets.....	32.78	32.56	35.72
Other assets.....	8.15	10.08	10.73
Total assets.....	100.00	100.00	100.00
<i>Liabilities and net worth</i>			
Current liabilities:			
Accounts payable.....	7.68	4.41	5.55
Notes payable.....	14.89	9.27	22.64
Other.....	2.41	1.17	3.30
Total current liabilities.....	24.98	14.85	31.49
Noncurrent liabilities.....	6.97	3.47	2.66
Total liabilities.....	31.95	18.32	34.15
Net worth:			
Capital stock.....	46.38	29.65	57.40
Reserves, surplus, and undistributed net income.....	21.67	52.03	8.45
Total net worth.....	68.05	81.68	65.85
Total liabilities and net worth.....	100.00	100.00	100.00
Average amount of total assets.....	<i>Dollars</i> 27,823	<i>Dollars</i> 54,787	<i>Dollars</i> 13,607

TABLE 40.—AVERAGE OPERATING STATEMENTS SHOWN IN PERCENTAGE OF SALES FOR 29 GENERAL-STORE ASSOCIATIONS AND FOR 5 SELECTED "GOOD" AND 5 SELECTED "POOR" GENERAL-STORE ASSOCIATIONS, 1934

Item	Average percentage of sales		
	29 associations	5 "good" associations	5 "poor" associations
Sales and gross income:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Sales.....	100. 00	100. 00	100. 00
Cost of goods.....	86. 89	88. 51	85. 72
Gross trading income.....	13. 11	11. 49	14. 28
Other operating income.....	. 29	. 13	. 84
Total gross operating income.....	13. 40	11. 62	15. 12
Operating expense:			
Salaries and commissions.....	6. 51	4. 70	10. 04
Directors' fees.....	. 10	. 12	. 18
Travel.....	. 04		
Taxes.....	. 65	. 45	1. 04
Insurance.....	. 49	. 35	. 60
Rent.....	. 23	. 12	. 92
Depreciation.....	1. 03	. 55	1. 90
Repairs.....	. 20	. 06	. 08
Supplies.....	. 35	. 18	. 58
Heat, light, and power.....	. 50	. 24	1. 12
Telephone and telegraph.....	. 13	. 09	. 26
Advertising and donations.....	. 25	. 17	. 34
Audit.....	. 14	. 06	. 20
Collection of bad debts.....	. 26	. 20	. 02
Other expense.....	1. 34	. 36	1. 58
Total operating expense.....	12. 22	7. 65	18. 86
Net operating income.....	1. 18	3. 97	-3. 74
Other income.....	. 72	. 54	1. 34
Other deductions.....	. 89	. 28	1. 44
Total net income.....	1. 01	4. 23	-3. 84
Net sales.....	<i>Dollars</i> 54, 264	<i>Dollars</i> 103, 400	<i>Dollars</i> 37, 086

TABLE 41.—AVERAGE BALANCE SHEETS SHOWN IN PERCENTAGE OF TOTAL ASSETS, FOR 57 COMBINATION ASSOCIATIONS AND FOR 10 SELECTED "GOOD" AND 10 SELECTED "POOR" COMBINATION ASSOCIATIONS, 1934

Item	Average percentage of total assets		
	57 associations	10 "good" associations	10 "poor" associations
<i>Assets</i>			
Current assets:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Cash.....	6.67	8.28	7.15
Accounts and notes receivable.....	24.89	26.04	26.23
Inventories.....	31.28	31.92	24.43
Other.....	.53	.80	1.53
Total current assets.....	63.37	67.04	59.34
Fixed assets:			
Land.....	3.13	3.59	5.04
Buildings and equipment.....	31.09	26.71	32.52
Total fixed assets.....	34.22	30.30	37.56
Other assets.....	2.41	2.66	3.10
Total assets.....	100.00	100.00	100.00
<i>Liabilities and net worth</i>			
Current liabilities:			
Accounts payable.....	4.80	5.62	3.06
Notes payable.....	15.35	14.72	27.77
Other.....	1.06	2.34	.81
Total current liabilities.....	21.21	22.68	31.64
Noncurrent liabilities.....	8.48	7.25	9.16
Total liabilities.....	29.69	29.93	40.80
Net worth:			
Capital stock.....	37.71	27.33	46.09
Reserves, surplus, and undistributed net income.....	32.60	42.74	13.11
Total net worth.....	70.31	70.07	59.20
Total liabilities and net worth.....	100.00	100.00	100.00
Average amount of total assets.....	<i>Dollars</i> 30,260	<i>Dollars</i> 37,700	<i>Dollars</i> 38,136

Current assets formed a larger part of the total assets of the good associations than of the poor associations, because the inventories of the good ones were larger in proportion to total assets. Fixed assets for the good associations amounted to 30.30 cents per dollar of total assets as compared with 37.56 cents for the poor associations. This indicates that the good associations had greater portions of their assets in saleable goods and less in facilities. The good associations had current liabilities of 22.68 cents per dollar of total assets; the poor associations, 31.64 cents. The good associations had approximately \$3 in current assets for every \$1 of current liabilities; the poor associations had approximately \$2. Analysis of the net worth items indicates that members of the good associations had an average equity of approximately 70 cents per dollar of total assets as compared with approximately 59 cents for the poor associations. The good associations had 29.67 cents in reserves and surplus for each dollar of total assets; the poor associations, only 11.45 cents. The net worth of the good associations included 13.07 cents of undistributed net income for each dollar of total assets; that of the poor associations showed only 1.66 cents.

Average operating statements for the 57 combination-type associations and for 10 good and 10 poor associations of this type appear in table 42. The data indicate that the good associations operated with a considerably lower trading income per dollar of sales than did the poor associations. This suggests that the good associations tended to sell supplies at lower prices or to purchase better or higher-cost supplies. Total operating expense per dollar of sales was significantly less for the good associations than for the poor associations. This was attributable in part to the larger volume of sales of the good associations, and in part to the more efficient operation of the good associations. While the poor associations showed an average net income of only 1.10 cents per dollar of sales, the good associations had 5.29 cents.

The above comparison of balance sheets indicates that, on the average, good associations of each type had a larger proportion of current assets for each dollar of current liabilities and a larger ratio of net worth to total assets. The comparison of the operating statements indicates that the good associations of each type had a larger volume of business, a smaller gross operating income per dollar of sales, lower expenses per dollar of sales, and a higher net income per dollar of sales than either the poor or the average associations. This condition is shown clearly in figure 4.

TABLE 42.—AVERAGE OPERATING STATEMENTS SHOWN IN PERCENTAGE OF SALES FOR 57 COMBINATION ASSOCIATIONS AND FOR 10 SELECTED "GOOD" AND 10 SELECTED "POOR" COMBINATION ASSOCIATIONS, 1934

Item	Average percentage of sales		
	57 associations	10 "good" associations	10 "poor" associations
Sales and gross income:	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Sales.....	100.00	100.00	100.00
Cost of goods.....	86.13	89.27	83.27
Gross trading income.....	13.87	10.73	16.73
Other operating income.....	.41	.23	1.90
Total gross operating income.....	14.28	10.96	18.63
Operating expense:			
Salaries and commissions.....	5.76	3.61	8.90
Directors' fees.....	.09	.04	.12
Travel.....	.02	.01	.06
Taxes.....	.49	.21	.90
Insurance.....	.39	.20	.74
Rent.....	.16	.01	.13
Depreciation.....	.83	.40	1.23
Repairs.....	.24	.08	.21
Supplies.....	.21	.15	.29
Heat, light, and power.....	.40	.11	1.41
Telephone and telegraph.....	.12	.04	.21
Advertising and donations.....	.13	.06	.27
Audit.....	.08	.02	.14
Collection of bad debts.....	.52	.13	.87
Other expense.....	1.10	.46	2.01
Total operating expense.....	10.54	5.53	17.49
Net operating income.....	3.74	5.43	1.14
Other income.....	.60	.10	2.04
Other deductions.....	.83	.24	2.08
Total net income.....	3.51	5.29	1.10
Net sales.....	<i>Dollars</i> 82,894	<i>Dollars</i> 143,303	<i>Dollars</i> 56,417

COMPARISON OF AVERAGE GROSS INCOME, OPERATING EXPENSE, AND NET INCOME PER DOLLAR OF SALES, AND VOLUME OF BUSINESS FOR TYPES OF LOCAL WISCONSIN PURCHASING ASSOCIATIONS, 1934

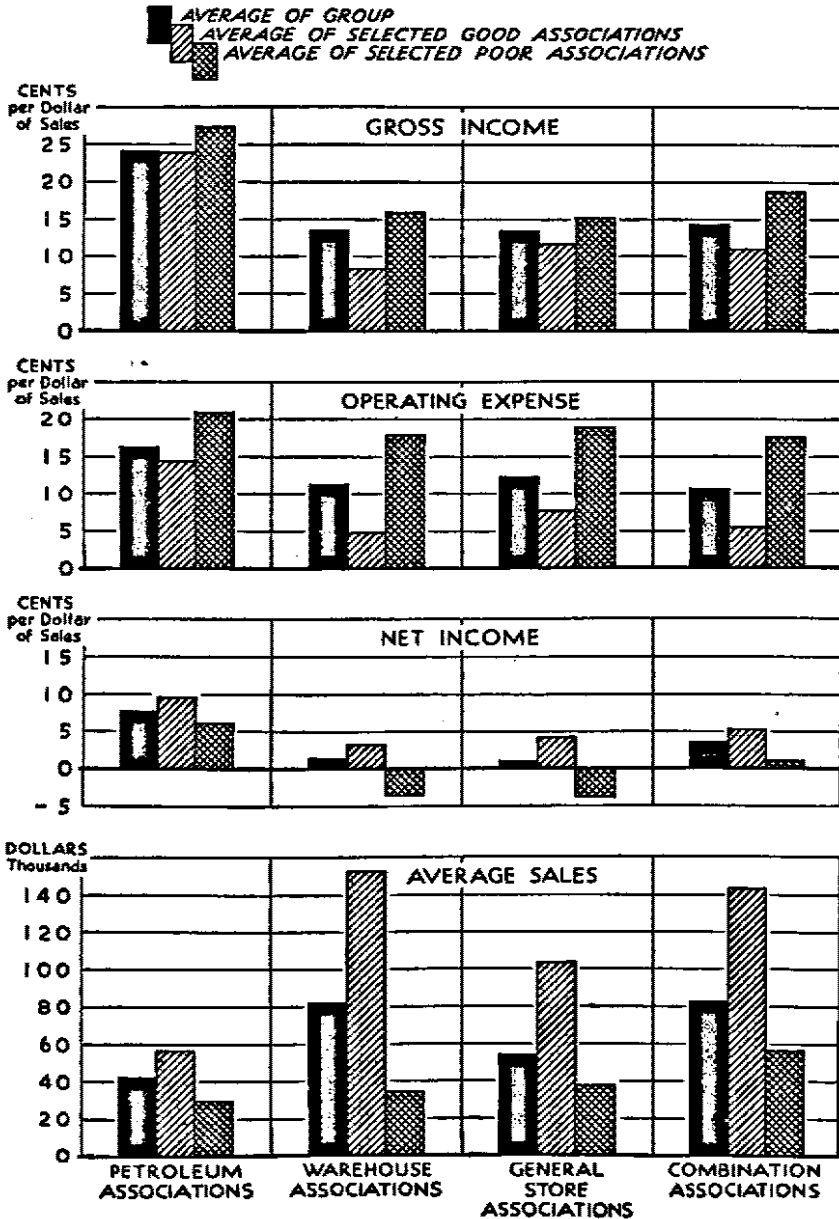


FIGURE 4.

The selected good associations of each type had a larger volume of business, a smaller gross income per dollar of sales, lower expenses per dollar of sales, and a higher net income per dollar of sales than either the poor or the average associations.

Structure, Methods, and Operations of Large-Scale Purchasing Associations

The large-scale purchasing associations serving local purchasing associations in Wisconsin have been briefly discussed on pages 8-11. In the present section information on the organization structure and operating methods of the five major large-scale associations and the scope and character of their operations will be outlined. The local member associations served by these organizations are shown in figure 5. In addition to these, the large-scale associations also serve some nonmember cooperative associations.

Central Cooperative Wholesale

The Central Cooperative Wholesale of Superior, Wis., provides a wholesale service for approximately 100 member cooperative associations and approximately 70 nonmember cooperative associations located in northern Wisconsin, northeastern Minnesota, and northwestern Michigan. Its purpose and field of activity are set forth as follows in the bylaws (art. II, sec. 1):

To obtain and furnish commodities or necessities of life for societies affiliated with it by arranging and providing for joint purchases in accordance with orders furnished by the affiliated societies; to manufacture and sell all kinds of bakery products primarily for and to the affiliated societies; to establish a wholesale and warehouses and depots needed in connection with it, as well as productive establishments, as the need may be; to buy, sell, and job at prevailing market prices agricultural products, particularly when offered for sale by or through the affiliated societies; also to provide or furnish implements and supplies needed in agriculture and other branches of production, such as agricultural machinery, tools, seed, pure-bred stock, etc.; to cooperate with other American cooperative wholesale societies and cooperative establishments of production and to enter into agreements with them or through them concerning the supplying of goods or the selling of products.

It is among the duties of the Central Cooperative Wholesale also to supervise the internal development of societies affiliated with it, to enlarge their field of activity and to help them in every manner. Similarly also to organize and to carry on cooperative propaganda and advisory work in general; this work to be taken care of and to be supervised by a special educational department in accordance with the decisions of the general meetings and the Board of Directors.

Any cooperative association or organization which is operating in accordance with cooperative principles and agrees to comply with the

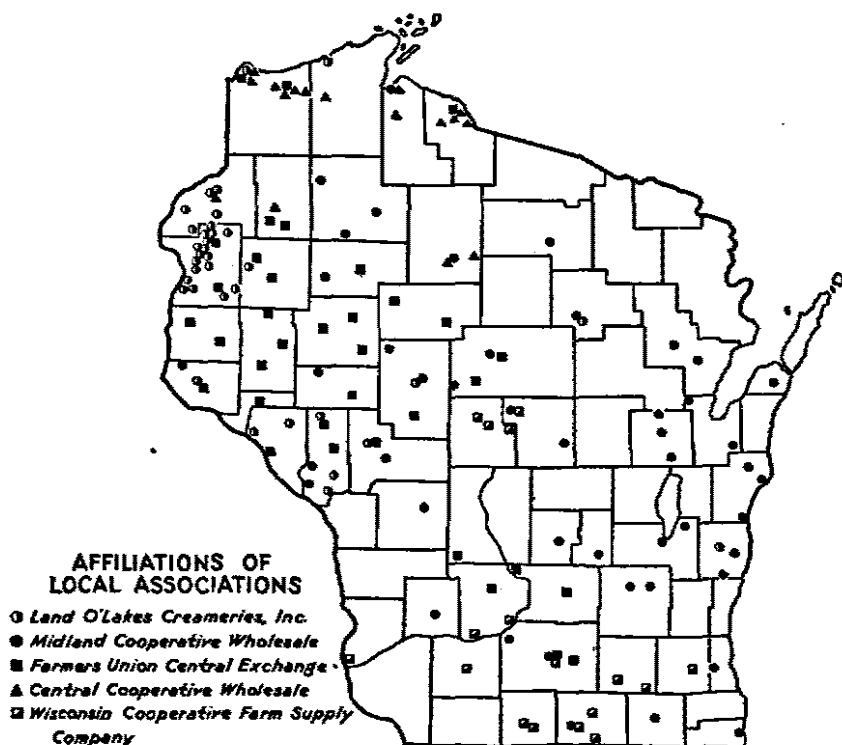


FIGURE 5.—LOCATION OF MEMBER ASSOCIATIONS OF FIVE LARGE-SCALE PURCHASING ASSOCIATIONS OPERATING IN WISCONSIN, 1937.

The five leading large-scale purchasing associations and their members together serve almost all parts of Wisconsin.

articles of incorporation, bylaws, and resolutions of the Central Cooperative Wholesale may be admitted to membership by the executive committee upon acquisition of at least one share of stock. A member association may purchase one additional share of stock in the Central Cooperative Wholesale for each 50 of its members. The Central Cooperative Wholesale has an authorized capital of \$250,000 divided into 2,500 shares of common stock with a par value of \$100 per share. An association may acquire stock either through direct purchase or through the application of patronage dividends. On December 31, 1936, the outstanding common stock and payments on shares of common stock amounted to \$183,292. Approximately one-half of the shares were held by local associations in Minnesota, about 30 percent by associations in Michigan, and around 20 percent by associations in Wisconsin.

The management of the Central Cooperative Wholesale is vested in a board of 15 directors, 5 of whom are elected at each annual

meeting for a term of 3 years. Nominees are selected by districts. Provision is also made for the annual election of alternate directors to take the place of any director who may move away, die, or be removed by the association before the expiration of his term of office.

The method to be used in distributing surplus savings is set forth in the following bylaw (art. V, secs. 1 and 2):

Unless the annual meeting decides otherwise, from the net surplus savings shown by the balance sheet for the fiscal year, at least 10 percent must be transferred to the reserve fund until such reserve fund is equivalent to 30 percent of the fully paid-in capital stock; not more than 6 percent interest dividend upon the paid-in capital stock may be paid by decision of the Board of Directors and the annual meeting; the remainder of the net surplus shall be used in accordance with the decisions of the annual meeting upon the basis of the recommendations of the Board of Directors. *Provided, however,* That all trade rebates, payable from surplus to any member society whose investment in the shares of the Wholesale is equal to or exceeds \$10 for each individual member, or a total of \$20,000 shall be in cash, or, subject to the consent of the recipient association, in certificates of indebtedness of the Wholesale, as may be decided in the annual meeting.

Any part of the net income or other amounts carried to the reserve fund or other reserves from operations of any year shall be allocated on the books of the Wholesale on a patronage basis for that year, or, in lieu thereof, the books and records of the Wholesale shall afford a means for doing so at any time, so that in the event of dissolution, or earlier if deemed advisable, such reserves may be returned to the patrons who have contributed the same.

The Central Cooperative Wholesale handles a reasonably complete line of groceries and bakery products, except for fresh fruits, fresh vegetables, and fresh meats. It carries a limited line of work clothing, rubber footwear, and some women's and children's drygoods. It also distributes considerable quantities of feed, flour, gasoline, lubricating oil, grease, twine, batteries, hardware, paints, and building supplies.

This cooperative distributes approximately 60 percent of its merchandise through its four-story warehouse and headquarters building at Superior, Wis. Considerable merchandise is also delivered from manufacturers or dealers direct to the member associations, according to the instructions of the Central Cooperative Wholesale. Petroleum products are largely handled in this way.

Most supplies distributed by the Central Cooperative Wholesale are bought from manufacturers and jobbers, on the basis of the cooperative's own specifications, and packaged under the association's registered "CO-OP" label. Furthermore, the Central Cooperative Wholesale, as a member of the National Cooperatives, Inc., takes advantage of master contracts negotiated by that agency for such supplies as gasoline and automobile accessories. The Central obtains its lubricating oils from the Farmers Union Central Exchange, of South St. Paul, on a cost-of-manufacturing basis.

The Central Cooperative Wholesale has also carried on manufacturing operations when it has appeared that an assured demand guaranteed the success of the venture. In accordance with this policy, a bakery department was established on October 10, 1919. The heavy consumption of coffee in the area served by the Central caused it to establish its own coffee-roasting department in 1935.

Particular emphasis is placed on the quality of supplies distributed by the Central. To this end, all contracts with manufacturers or dealers provide for the rejection of supplies which do not fully meet specifications. In order to make this policy effective, the cooperative sends samples of merchandise to a consulting chemist for analysis. Member associations are encouraged to further the quality program by reporting all cases of merchandise which fails to meet specifications or to give satisfaction.

The Central Cooperative Wholesale has endeavored to operate on a cash basis ever since it was organized in 1917. To encourage prompt payment, cash discounts are generally given on invoices that are dated from the first to the fifteenth of any month and paid by the twenty-fifth of the same month, and on invoices that are dated from the sixteenth to the thirty-first of any month and paid by the tenth of the following month. These terms allow the local associations an average of 17 days to discount an invoice. The discounts allowed vary in accordance with the cash discounts that are common in the trade for the commodity. The most usual cash discount is 2 percent. The Central estimates that 95 percent of the cash discounts so offered are taken by the member associations. Furthermore, to encourage prompt payments the Central requires member associations to give promissory notes on overdue items. The interest rate on these notes ranges from 5 to 7 percent, depending upon local circumstances and the nature of the transaction. The credit extended to local associations results in very little loss from bad debts; for the year ending December 31, 1936, the total was only \$539, or approximately 0.02 percent of total sales.

In selling supplies to local associations the Central Cooperative Wholesale, as a general rule, gives no quantity discounts. The Central maintains that its advantages in quantity buying are obtained through pooling the purchases of local associations and that these advantages should, therefore, accrue to all local associations that contribute to the total quantity of merchandise purchased. It is held that this procedure gives every association the benefit of the pooled buying power of all the associations, in the form of lower prices charged for merchandise or in patronage dividends. This policy seems to have met with the general approval of the local associations.

The Central has endeavored to improve the business methods of its affiliated member associations by advising them on organization

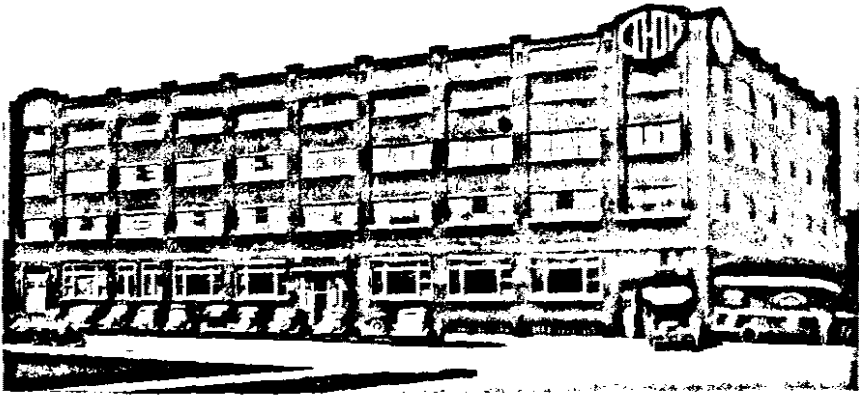


FIGURE 6.—HEADQUARTERS AND WAREHOUSE OF CENTRAL COOPERATIVE WHOLESALE, SUPERIOR, WIS.

This plant serves farmers' local purchasing associations in northern Wisconsin, Minnesota, and Michigan.

and operating problems. For illustration, it has encouraged uniform bookkeeping practices through the operation of an auditing department, which audits the records and accounts of local associations on a cost basis. The auditing department has also been able to give the member associations valuable assistance in connection with Federal-income-tax problems. In turn, the improvement in records through the efforts of the auditing department has enabled the Central to obtain for the member associations comparative business statistics which can be used as a guide for improving their own operating efficiency. Such services have tended to build a close relationship between the local associations and the Central Cooperative Wholesale.

Through its educational department, the Central Cooperative Wholesale has carried on a broad program of cooperative education, which has proved of much value in building membership support for the cooperatives served. Field representatives of this department have worked with local associations to build up interest and to improve operating efficiency; have distributed literature relating to the activities of the association and the general principles and practices of cooperation; have sponsored women's cooperative guilds and cooperative youth leagues for furthering understanding of sound cooperative principles in the areas served; and have conducted cooperative training schools for managers and other employees. These schools have been helpful in improving the efficiency of the personnel of both the Central Cooperative Wholesale and its member associations.

Publishing activities were carried on by the educational department until 1933, when the Central organized a cooperative publishing association to take over this work. The publishing association issues two

TABLE 43.—SALES, NET INCOME, NET WORTH, AND NUMBER OF LOCAL ASSOCIATIONS OF CENTRAL COOPERATIVE WHOLESALE FOR THE FISCAL YEARS ENDING DEC. 31, 1917-36

Year	Total sales	Net income	Net income as a percentage of sales	Net worth	Local member associations ¹
	<i>Dollars</i>	<i>Dollars</i>	<i>Percent</i>	<i>Dollars</i>	<i>Number</i>
1917.....	25, 574	268	1. 05	748	15
1918.....	132, 423	2, 063	1. 56	6, 351	25
1919.....	313, 664	7, 330	2. 34	15, 436	40
1920.....	409, 591	6, 798	1. 66	21, 911	48
1921.....	312, 347	3, 499	1. 12	23, 348	56
1922.....	337, 567	1, 183	. 35	22, 280	56
1923.....	504, 177	5, 181	1. 03	28, 250	56
1924.....	613, 215	5, 973	. 97	33, 370	60
1925.....	835, 532	8, 869	1. 06	42, 998	65
1926.....	1, 048, 293	11, 648	1. 11	57, 398	74
1927.....	1, 255, 676	18, 335	1. 46	77, 803	76
1928.....	1, 517, 813	23, 894	1. 57	102, 193	84
1929.....	1, 755, 627	35, 798	2. 04	134, 413	90
1930.....	1, 767, 760	29, 735	1. 68	159, 156	97
1931.....	1, 509, 752	12, 035	. 80	169, 235	99
1932.....	1, 309, 698	9, 091	. 69	174, 377	98
1933.....	1, 383, 290	13, 133	. 95	182, 852	97
1934.....	1, 787, 556	31, 696	1. 77	208, 922	97
1935.....	2, 185, 245	37, 027	1. 69	227, 494	99
1936.....	2, 845, 741	57, 107	2. 01	263, 184	106

¹Does not include local nonmember associations which obtain part of their supplies through the Central. In 1936 the total number of associations served by the Central was approximately 176.

TABLE 44.—SALES OF MAJOR COMMODITIES BY CENTRAL COOPERATIVE WHOLESALE, 1935 AND 1936

Commodity	1935		1936	
	Total sales	Percentage of sales	Total sales	Percentage of sales
General merchandise (groceries, clothing, hardware, etc.)	<i>Dollars</i> 1, 377, 968	<i>Percent</i> 63. 4	<i>Dollars</i> 1, 817, 767	<i>Percent</i> 64. 2
Petroleum products and accessories	202, 704	9. 3	287, 247	10. 1
Feed, flour, seed, insecticides, fungicides, and barn equipment	594, 500	27. 3	729, 003	25. 7
Total	2, 175, 172	100. 0	2, 834, 017	100. 0

weekly magazines—The Cooperative Builder, which serves as the official organ for the Central Cooperative Wholesale, the Northern States Cooperative League, and the Central Cooperative League, and, in Finnish, the Finnish Cooperative Weekly.

The growth of the Central Cooperative Wholesale, since its organization, is illustrated in table 43. These figures, on the whole, show a gradual growth over this 20-year period in volume of business, net worth, and number of member associations served. Net income fell in the depression years, 1931, 1932, and 1933, with decreased sales, but increased rapidly, with expanding sales, after 1934.

The value of sales of major groups of supplies for the years 1935 and 1936 appears in table 44. It will be noted that the sales of each group of supplies increased materially in 1936 over 1935. Also the sales of each group of supplies handled comprised about the same proportion of the total sales of supplies for each of the 2 years.

Midland Cooperative Wholesale

The Midland Cooperative Wholesale is organized to serve as a wholesale agency for its 148 member cooperative associations, 65 of which are located in Wisconsin and 83 in Minnesota. The headquarters building in Minneapolis houses the central office and warehouse and the compounding and blending plant for lubricating oils. A second warehouse and blending plant is located in Milwaukee to provide facilities for distributing supplies in eastern and southern Wisconsin. The major commodities distributed by the Midland Cooperative Wholesale are gasoline, kerosene, and distillate, lubricating oils and grease, tires, accessories, batteries, antifreeze compounds, fly sprays, coal, paint, twine, steel and wire products, radios, bulk and service station equipment, and electrical supplies and appliances.

The general purpose of the association as set forth in its articles of incorporation (art. II), is "to conduct a wholesale enterprise on a cooperative plan for the buying, selling, and distributing of such commodities as are required in the business of operating and maintaining gasoline service stations and oil truck services." Moreover, the association is also empowered to engage "in mercantile, jobbing, wholesale, retail, mining, manufacturing, or mechanical business on the cooperative plan." The articles further state that "the general nature of its business shall be to act as purchasing agent for the members and patrons of this association, to contract for the members and patrons thereof such petroleum, petroleum products, oils, gasoline, kerosene, greases, oil products, and byproducts, gasoline station equipment, goods, supplies, and other forms of merchandise as are necessary in the operation of their business; and to promote and protect the interests of the constituent members of the association."

The articles of incorporation of the Midland Cooperative Wholesale provide for a capitalization of \$250,000 in the form of 1,300 shares of preferred stock, and 1,200 shares of common stock, each having a par value per share of \$100. As of December 31, 1936, the outstanding common stock of the association amounted to \$83,400, and the outstanding preferred stock to \$31,700.

The common stock can be held only by associations which are members of the Midland Cooperative Wholesale. However, any cooperative association may become a member by agreeing to comply with the articles of incorporation and bylaws and by buying at least one share of common stock. Shares may be paid for in cash or through patronage dividends. Practically all outstanding stock has been paid for through dividends. When the credits amount to at least the value of one share of common stock, the associations may become members simply by agreeing to abide by the requirements of the articles of incorporation and bylaws. Shares of common stock are transferable only by, and with the consent of, the Midland Cooperative Wholesale. In case of expulsion shareholder associations must surrender their common stock within 1 year thereafter and accept its actual book value as determined by the board of directors.

According to the articles, each member association is entitled to only one vote irrespective of the number of shares of common stock held, and interest paid on common stock may not exceed 5 percent. In order to meet in a measure the criticism that associations doing little business with the Wholesale have equal voting privilege with those doing large amounts of business, a plan was adopted in 1937 whereby local associations have voting rights within the organization, based in part on volume of business. One vote is allowed for membership and one additional vote for each \$50,000 worth of purchases during the preceding year, or major fraction thereof.

The preferred stock, which may be held by any bona fide cooperative association or a member thereof, entitles its holder to receive noncumulative dividends not to exceed 5 percent per annum. The articles of incorporation (art. V) stipulate, however, that "at no time shall more than 40 percent of the outstanding preferred stock be held by persons, firms, or corporations other than common stockholders." The preferred stock does not entitle its holder to any voting power except on questions of change in the rights of holders of such stock.

The bylaws provide for division of the territory of the Midland Cooperative Wholesale into districts, according to volume of business, and for representation by a director from each district. There are now 10 districts, 4 of which are located in Wisconsin. Each director is nominated at a district meeting, at least 30 days previous to the annual meeting of the central association. The name of the nominee



FIGURE 7.—HEADQUARTERS AND PLANTS OF THE MIDLAND COOPERATIVE WHOLESALE.

A. Main office and plant at Minneapolis, Minn. B. Plant and office at Milwaukee, Wis., which was recently acquired to serve local associations in southern and eastern Wisconsin.

is then presented at an annual meeting, attended by delegates from each member association, where it is customary to elect the district nominee as the director for that particular district. The associations are also grouped into district units which have their own bylaws providing for boards of five directors and for district meetings at quarterly intervals.

The Midland Cooperative Wholesale has encouraged each district organization to have a board of directors that is organized on a functional basis. For illustration, the Midland favors district boards of directors made up of five representatives. Each director takes responsibility for particular phases of the cooperative program, and the chairman serves as the director for the district on the Midland's board. In this way each district board of directors covers the same problems that are covered for all districts by the Midland's board of directors, and the district and general boards are interrelated through the fact that the chairman of the district board is the director for the district on the general board of the Midland. Other members

of the district boards are members of central boards which direct insurance, rural electrification, educational, and other activities sponsored by the Midland.

Under the terms of the bylaws, the net income of the Midland Cooperative Wholesale is distributed on the basis of patronage after adequate provision has been made for reserves and surplus. The bylaws provide (art. V) that "There shall be no discrimination as between members and nonmembers in the payment of patronage dividends or in any other manner." It is provided, however, that the amount of patronage dividends due to a nonmember association is to be credited to its individual account until such credit equals the value of a share of stock. Furthermore, patronage dividends are credited to member associations toward the payment of shares of common stock until the association has at least 5 shares and, thereafter, to additional shares of common stock until there is 1 share for every 50 members or major fraction thereof.

A 5-year revolving plan for financing the Midland Cooperative Wholesale was adopted at the annual meeting of the association in June 1936. Under this plan, as soon as a member association has acquired the amount of common stock required by the bylaws and patronage dividends in the form of preferred stock have accumulated for a 5-year period, the preferred stock issued during the first year of the period is to be retired by cash payment. Thereafter, patronage dividends for each year are to be paid in preferred stock and the preferred stock issued 5 years earlier is to be retired by cash payment. This scheme, in effect, delays the payment of patronage dividends in cash for a 5-year period and provides a method whereby the activities of the Midland association are financed by those associations which are active members in proportion to their business with the association.

The net worth of the Midland Cooperative Wholesale, which is being built up by the accumulation of reserves and by the issuance of patronage dividends in the form of stock, amounted to \$262,341 on December 31, 1936.

Patronage dividends are distributed to each association on the basis of gross operating margins on the total quantity of each major commodity purchased by the local association. In determining the amount of patronage dividends to be paid, expenses are also allocated in proportion to each association's contribution to total gross margins. An exception is made with regard to cost of operating the blending plant, which is not so allocated, as such costs are included in the price of oil sold to the local associations.

The Midland Cooperative Wholesale obtains its petroleum supplies on the basis of joint contracts negotiated by the National Cooperatives,

Inc.⁴⁴ These supplies are handled on a brokerage basis in accordance with sales contracts between the Midland Cooperative Wholesale and the member associations. This contract provides a price guarantee which assures the local association a minimum operating margin. This protection has proved of much benefit to a number of local associations confronted with price wars. Supplies other than petroleum products have been handled on a purchase-and-sale basis. In some cases the commodities have not been stocked in the Midland Cooperative Wholesale's warehouses, but have been shipped from the manufacturer direct to the local association.

The Midland Cooperative Wholesale has endeavored to supply commodities of high quality. Practically all the supplies sold carry the brand name of the association.

In order to help the local associations finance the cost of supplies, the Midland has undertaken to discount their trade acceptances. This has been a great convenience to many local associations which have been unable to build up adequate capital resources to finance their current operation.

Since 1935 the Midland has encouraged its local member associations to organize credit unions among their patrons to enable members to buy a larger part of their supplies on a cash basis. There were on January 1, 1937, 40 credit unions serving the patrons of member associations. These associations had outstanding loans on December 31, 1936, of approximately \$75,000.

The Midland Cooperative Wholesale employs field men to aid the local associations in problems of organization and operation, to acquaint them with the range and quality of supplies handled by their wholesale association, and to encourage member associations to develop adequate and uniform accounting records. In 1935 the Midland, in cooperation with Land O'Lakes Creameries, Inc., established a cooperative auditing service to serve the needs of the local associations. The Midland has used these audits to make studies of operating efficiency of its local associations. In carrying on its broad educational policy, the Midland has conducted managers' schools and conferences, short courses for the training of executives, summer school camps for youths, and numerous other conferences. In furthering the general activities of the associations, the Midland issues monthly the *Midland Cooperator*, which has a circulation of 45,000, as well as a smaller monthly publication for employees and directors of member associations containing information intended to improve merchandising service.

⁴⁴ In February 1937, the Midland and three other regional cooperative wholesale associations entered into a contract by which they will obtain a large part of their gasoline requirements from a refinery in Oklahoma. Under the terms of this contract, regional cooperatives will have a direct control over the quality of the gasoline which is produced, and they will share equally with the refinery in any profits which result from the operations of the refinery.

In addition to its supply-distributing activities, the Midland has encouraged the development of a mutual automobile-insurance company which operates in Minnesota and Wisconsin. An arrangement has been made whereby local member associations act as agents for the insurance company. The Midland Cooperative Wholesale has also sponsored a rural-electrification program in Minnesota by giving assistance in the formation of the Minnesota Federated Electric Cooperative.

The growth and development of the Midland Cooperative Wholesale for the 10-year period, 1927-36, is shown in table 45. There has been a continuous expansion in sales, net worth, and number of associations served. Net income as a percentage of sales, which averaged for the period 2.46 percent, has shown little variation since 1933. The higher margins obtaining in the petroleum industry largely explain the higher percentage of net income in 1931 and 1932.

The value of the major supplies sold by the Midland for the 3 years 1934, 1935, and 1936, is shown in table 46. Sales of all classes of supplies tended to increase during this 3-year period, with the exception of equipment for handling petroleum products. However, the sales of lubricating oil and grease tended to decline as a percentage of total sales, while sales of miscellaneous products showed a tendency to increase.

TABLE 45.—SALES, NET INCOME, NET WORTH, AND NUMBER OF LOCAL ASSOCIATIONS OF MIDLAND COOPERATIVE WHOLESALE FOR THE FISCAL YEARS ENDING DEC. 31, 1927-36

Year	Total sales	Net income	Net income as a percentage of sales	Net worth	Local member associations ¹
	<i>Dollars</i>	<i>Dollars</i>	<i>Percent</i>	<i>Dollars</i>	<i>Number</i>
1927.....	269, 863	3, 473	1. 29	3, 473	37
1928.....	417, 956	3, 926	. 94	7, 363	38
1929.....	448, 012	7, 798	1. 74	15, 135	40
1930.....	598, 751	14, 804	2. 47	26, 503	62
1931.....	615, 388	21, 163	3. 44	47, 273	77
1932.....	883, 736	26, 906	3. 04	74, 047	92
1933.....	1, 073, 567	25, 465	2. 37	99, 292	103
1934.....	1, 751, 007	44, 799	2. 56	142, 871	120
1935.....	2, 423, 106	63, 441	2. 62	201, 089	137
1936.....	3, 033, 080	71, 574	2. 36	262, 341	148
Total or average.....	11, 514, 466	283, 349	2. 46	-----	-----

¹ Does not include local nonmember associations which obtain part of their supplies through the Midland. In 1936 the total number of associations served by the Midland was approximately 178.

TABLE 46.—SALES OF MAJOR COMMODITIES BY MIDLAND COOPERATIVE WHOLESALE, 1934-36

Commodity	1934		1935		1936	
	Total sales	Per-centage of all sales	Total sales	Per-centage of all sales	Total sales	Per-centage of all sales
Gasoline, kerosene, dis- tillate.....	<i>Dollars</i> 2, 312, 857	<i>Percent</i> 78. 3	<i>Dollars</i> 1, 841, 272	<i>Percent</i> 76. 0	<i>Dollars</i> 1, 280, 392	<i>Percent</i> 73. 1
Lubricating oil and grease.....	249, 307	8. 2	245, 581	10. 1	210, 387	12. 0
Batteries.....	21, 460	. 7	15, 172	. 6	12, 252	. 7
Tires and tubes.....	71, 070	2. 3	48, 562	2. 0	48, 615	2. 8
Equipment.....	48, 586	1. 6	81, 077	3. 4	80, 847	4. 6
Paint.....	22, 299	. 7	5, 758	. 2
Coal.....	50, 238	1. 7	32, 531	1. 4
Miscellaneous.....	257, 263	8. 5	153, 154	6. 3	118, 514	6. 8
Total.....	3, 033, 080	100. 0	2, 423, 107	100. 0	1, 751, 007	100. 0

¹ Includes wholesale sales of miscellaneous merchandise and retail sales of petroleum products.

Farmers' Union Central Exchange

The Farmers Union Central Exchange provides a wholesale service for 233 affiliated local cooperative associations and branch retail stations, distributed as follows: Wisconsin 36, Minnesota 36, North Dakota 92, Montana 68, and Michigan 1. The main office of the Exchange is located at South St. Paul in a specially constructed building designed to house the oil-compounding plant and to provide office and warehouse space (fig. 8).⁴⁵ The major supplies distributed are gasoline, tractor fuel, lubricating oil, tires and tubes, automotive accessories, tractors, farm implements, binder twine, coal, paint, and feeds.

In its articles of incorporation (art. II, sec. 2), the purposes of the Farmers Union Central Exchange are fully set forth. The Exchange is organized for the purpose of—

Transacting business with or for its members and others, individually or collectively, for mutual benefit and in a cooperative manner;

Engaging in the business of buying, selling, marketing, manufacturing, handling, and dealing in any and all products produced or consumed in the general business and occupation of agriculture in the broadest acceptance of the term;

⁴⁵ This building also serves as headquarters for the Farmers Union Terminal Association.

Engaging in any activity in connection with the purchasing, hiring, or use by members of supplies, machinery, equipment, and other articles of commerce;

Doing all other acts and things that a natural person may lawfully do in manufacturing, buying, selling, and dealing in any agricultural products or any merchandise consumed or used by men engaged in agriculture.

The value of the outstanding shares of capital stock and part payments on shares of stock amounted to \$223,278 at the end of the 1936 fiscal year. Shares of both common and preferred stock have a par value of \$25 per share, and dividends are limited to 4 percent per annum, noncumulative. The two kinds of stock are similar in all



FIGURE 8.—HEADQUARTERS, OIL BLENDING PLANT, AND WAREHOUSE OF FARMERS UNION CENTRAL EXCHANGE, SOUTH ST. PAUL, MINN.

These facilities serve local Farmers Union associations in several North Central States, including Wisconsin.

respects except in voting, which is restricted to owners of common stock.

The articles of incorporation provide (art. V, sec. 7) that common stock can be sold or issued only to (a) Farmers Union cooperative associations or corporations, (b) members in good standing and subscribers eligible to membership in the Farmers Educational and Cooperative Union of America, and (c) cooperative associations recognized and approved by a majority of the stockholders present at the annual meeting of the Farmers Union Central Exchange. This last group consists of cooperative associations which may be unable or unwilling to meet the qualifications necessary for membership in the Farmers Union. To become a "qualified" Farmers Union cooperative, an association must have in its bylaws a provision that its common stock be held only by subscribers eligible to membership in a State

unit of the Farmers Educational and Cooperative Union of America. Common stockholders of such "qualified" Farmers Union associations must also agree to permit deductions for unpaid local and State Farmers Union membership dues to be made by the association out of any savings payable in patronage dividends.

Preferred stock in the Farmers Union Central Exchange can be issued to subscribers who are not eligible to membership in the Farmers Educational and Cooperative Union of America, but such stockholders can have no vote or control in the affairs of the Exchange.

By a resolution of the board of directors in 1933, cooperative associations which hold common stock are entitled to 1 vote for every 100 of the association's own stockholders at any annual or special meeting of the Farmers Union Central Exchange.⁴⁶ Most of the common stock held by individual Farmers Union members was issued in connection with the organization of retail branches, since it was the policy of the Exchange to require, as a basis for the establishment of a branch, an investment of local capital in the form of common stock adequate to meet the cost of plant and fixed assets. These individual holders of common stock are grouped together and are entitled to 1 vote in any annual or special meeting for every 100 stockholders. The individual stockholders who are served by branches thus have about the same basis of representation in the affairs of the Exchange as the stockholders of affiliated cooperative associations.

The management of the Farmers Union Central Exchange is vested in a board of nine directors, three of whom are elected each year at the annual stockholders' meeting. Each director holds office for a term of 3 years, or until a successor is selected and qualified.

For administrative purposes, the business of the Farmers Union Central Exchange is divided into two departments—wholesale and retail.

Operations of the Retail Department

The retail department is in direct charge of the nine retail branches, three of which are located in Wisconsin and six in North Dakota. Each branch is managed on an independent basis. After deductions have been made for permanent surplus, educational fund, and interest on share capital, all net income attributable to the operations of a branch is distributed to its individual patrons on a patronage-dividend basis either in stock or in cash.⁴⁷

⁴⁶ This number was fixed by resolution of the board of directors in 1933 in accordance with art. I, sec. 4, of the bylaws.

⁴⁷ Stock patronage dividends are paid to the nonstockholder patrons in the form of credits on a share of common stock provided that such nonstockholder patrons are eligible and willing to subscribe for such stock. When these patronage-dividend credits equal the book value of a share of stock, such nonstockholder patrons become stockholders. Nonstockholder patrons, who are not willing or eligible to become members may be paid stock dividends in the form of preferred stock. Cash dividends are distributed on the same basis to all patrons.

Compared with the wholesale department, the retail department is now of minor importance. The sales of the retail department amounted to \$335,667 for the fiscal year 1936, net income to \$18,542, and net worth to \$85,126.

In recent years the Exchange has adopted the policy of gradually converting all branches into affiliated cooperative associations. When a branch is converted into a local association, the assets of the branch, which consist of plant and equipment, accounts receivable, and merchandise, are sold to the local company at the book value. The Exchange then retires the capital stock and partial payments on capital stock for the branch and applies the proceeds against the price to be paid by the local association for the properties. Furthermore, the branch is allowed credits for any surplus or reserves set up out of its earnings. The new association then provides each individual stockholder with common stock equal to the credited value of his stock and reserves shown on the books of the Central at the time of transfer.

Operations of the Wholesale Department

The wholesale department performs a wholesale service for both local associations and retail branches. Its gross income consists primarily of the margins on the supplies sold to the local associations and branches. The procedure in distributing the annual gross income is set out in considerable detail in the bylaws (art. V, secs. 23 and 24). In the first place, "the costs of operation of the company and reasonable and adequate reserves for depreciation of physical properties and against other possible losses" are deducted. An amount is then deducted to pay interest for the year on the paid-up capital stock of the company, at such rate as may be determined by the board of directors. In addition, the directors are authorized to "deduct and set aside such amounts as may be required to provide for the erection of new or additional buildings, or for additional machinery or equipment." Any balance of gross income, after the above deductions, is designated as "net income." Ten percent of the annual net income must be set aside for marketing and reserve funds, to be used in the general business of the association, until an amount equal to 50 percent of the paid-up capital stock has been accumulated. The bylaws also empower the stockholders to set aside all net earnings for the first 2 fiscal years of the Exchange. After the creation of the reserve fund, the directors are instructed (bylaws, art. V, sec. 25) to set aside a sum equal to 5 percent of the annual net profits as an educational fund to be used in teaching cooperation.

When these deductions have been made, the balance of "net income" for any fiscal year is termed "undivided surplus" and becomes available for distribution to members and patrons on the basis

of patronage. It is further required that such amounts carried to reserve and not distributed in the form of patronage dividends for such year must be "allocated on the books of the association," or stock must "be issued therefor on a patronage basis for that year or in lieu thereof the books and records of the Exchange" must "afford a means for so doing at any time so that in the event of dissolution, or earlier, if deemed advisable, such reserves may be returned to the patrons who have contributed the same." Patronage dividends may be paid either in stock or in cash. So far the Exchange has paid all patronage dividends to affiliated stockholder associations in the form of capital stock, in accordance with the provisions in the bylaws (art. V, sec. 28) which require that "all affiliated companies shall own stock in the Central Exchange up to 20 percent of their paid-in capital stock, before they shall receive any cash patronage dividends, and thereafter patronage dividends shall be paid to such affiliated companies in cash or stock at the discretion of the board of directors."

In case a patronage dividend is declared payable in stock, common stock is issued to the cooperatives which are qualified to hold common stock, and preferred stock is issued to the "nonqualified" cooperatives. No distinction is made between qualified and nonqualified cooperatives in the case of cash patronage dividends, except that, as above noted, no qualified cooperative can be paid a cash patronage dividend until it holds common stock in the Exchange equal to 20 percent of its own outstanding common stock.

Wherever possible, the Farmers Union Central Exchange handles supplies under its own Farmers Union brand. The Exchange takes the position that it is not desirable to handle private brands of merchandise, since this results in popularizing the name of the manufacturers' product and makes difficult any change in source of supply. For that reason, the Exchange is having considerable merchandise manufactured for it under Farmers Union brand names. This policy gives greater control over quality, and since it affords a special merchandising outlet for manufacturers, results in favorable price quotations. The major item on which the Exchange performs a manufacturing service is oil blended in the association's compounding plant. The Exchange plant blends previously refined products to make proper grades of lubricating oils for various uses. The blending operations of the Exchange have not only provided a product of dependable quality, but have resulted in considerable savings. In the fiscal year 1936, savings resulting from the lower cost to the association of supplying its own oil, as compared with the cost of buying the oil already blended for resale, were estimated at \$19,808.

With the exception of oil, which is distributed direct from the association's plant, the supplies distributed by the Farmers Union Central Exchange are generally handled on a brokerage basis. The local asso-

ciation customarily sends its orders for supplies to the Central Exchange, which instructs the refiner or manufacturer to make shipment to the local association and charge to the account of the Exchange. The Central office, in turn, bills the local association for the shipment. The Central Exchange also purchases outright a number of supplies for resale to the local associations. These supplies are warehoused either at the South St. Paul plant or at six branch wholesale warehouses located throughout the operating territory.

Early in 1936 the Exchange organized a machinery department. The major item handled thus far has been the "Co-op" tractor, which has been manufactured under a "cost-plus" contract for the Exchange and other farmers' wholesale purchasing associations in accordance with their specifications.⁴⁶ The Central Exchange handles tractors under a credit arrangement, which enables the local association to sell them to farmers on the basis of a cash-down payment and installment credit terms. In its machinery program, the Exchange has adopted the policy of carrying only items that can be handled by the local associations with a minimum of expense and experience; such as plows, crop cultivators, spring-tooth harrows, disc harrows, wood- and steel-bar harrows, grain drills and seeders, corn planters, manure spreaders, cream separators, barn equipment, and replacement parts. The Exchange maintains that an effective machinery program requires facilities for housing and display, salesmen who understand machinery, and adequate capital.

In connection with the machinery program, local associations are requested by the Exchange to enter into an agreement which provides for uniform methods of paying patronage dividends and of building capital to finance the development of the program. In the agreement, the local association agrees to endeavor to hold its expenses in reselling machinery down to a maximum of 10 percent of the selling price and to pay to the ultimate purchaser patronage dividends as large as possible, after setting aside required reserves. A provision of the agreement—to the effect that the local association's machinery salesman is to receive the 10 percent selling expense as a sales commission and that he is to finance all second-hand machinery traded in out of this commission—is designed to keep local associations from tying up operating capital in second-hand machinery. As far as possible the Central Exchange and the local associations are now participating in this machinery program.

Although the Exchange endeavors to handle supplies largely on a cash basis, it has been necessary to grant considerable credit to the local associations. This situation has been aggravated by the

⁴⁶ This tractor is manufactured in three sizes; it has five speeds, is equipped with rubber tires, self-starter, generator, and battery ignition. It can be used for plowing, planting, and cultivating operations. It can also be used for roadway hauling since it can maintain a speed of 25 to 30 miles per hour.

drought conditions in the Northwest during recent years. In order to encourage cash business, the Exchange has customarily granted discounts for payments within a fixed period. In a number of instances, sales have been made to local associations on the basis of trade acceptances.

The Farmers Union Central Exchange employs six field-service representatives, one of whom serves Wisconsin, to assist member associations in their operating and policy problems. These representatives also carry on educational work among employees, designed to improve the operating efficiency of the member associations. Special attention has been given to the improvement of accounting records and audits. The field men also provide member associations with information concerning the quality and use of supplies handled by the Farmers Union Central Exchange.

Since 1932 the Farmers Union Central Exchange, in conjunction with the Northern States Cooperative League, has sponsored "short course" cooperative-management schools. These schools are intended to give general information on cooperative principles and methods, and special training in technical problems. The schools have been attended by employees of the cooperative associations and those interested in qualifying for positions with cooperatives, and have proved valuable in building up trained personnel for the member associations.

TABLE 47.—SALES, NET INCOME, NET WORTH, AND NUMBER OF LOCAL ASSOCIATIONS OF FARMERS UNION CENTRAL EXCHANGE WHOLESALE DEPARTMENT, FOR THE FISCAL YEARS ENDING OCT. 31, 1931-36

Year	Total sales	Net income	Net income as a percentage of sales	Net worth	Local associations served
	<i>Dollars</i>	<i>Dollars</i>	<i>Percent</i>	<i>Dollars</i>	<i>Number</i>
1931.....	906, 272	4, 959	0. 55		91
1932.....	1, 678, 346	24, 014	1. 43		156
1933.....	1, 549, 223	22, 066	1. 42	74, 348	172
1934.....	2, 615, 519	55, 468	2. 12	136, 067	211
1935.....	4, 028, 086	101, 309	2. 52	233, 972	227
1936.....	3, 783, 992	66, 699	1. 76	292, 476	223
Total or average.....	14, 561, 438	274, 515	1. 89		

The general educational program of the Farmers Union Central Exchange is conducted largely by the State Farmers Union organizations in the territory served. In 1935, however, the Farmers Union Central Exchange, in cooperation with the Farmers Union Terminal Association and the Farmers Union Livestock Commission Co., established an agency known as the Farmers Union Cooperative Education Service, with an annual budget of \$5,000. During 1936, the Cooperative Education Service prepared and published Farmers Union cooperative literature for use in public schools and home-study clubs. The Cooperative Education Service is now sponsoring a 3-week cooperative institute in each State served by the Farmers Union Central Exchange. These institutes offer courses of study in such subjects as cooperative history and methods, cooperative economics, business practices, public speaking, and parliamentary law. The Cooperative Education Service also sponsors essay contests, county rallies, and summer camps for boys and girls where educational work in cooperation is carried on.

The Exchange uses as an official house organ the Farmers Union Herald, which goes to all Farmers Union members in its territory. This monthly publication now has a distribution of 111,000 copies.

TABLE 48.—SALES OF MAJOR COMMODITIES BY FARMERS UNION CENTRAL EXCHANGE WHOLESALE DEPARTMENT, FOR THE FISCAL YEARS ENDING OCT. 31, 1934-36

Commodity	1934		1935		1936	
	Total sales	Per-centage of all sales	Total sales	Per-centage of all sales	Total sales	Per-centage of all sales
	Dollars	Percent	Dollars	Percent	Dollars	Percent
Gasoline, kerosene, distillate.....	1, 605, 457	61. 4	2, 703, 408	67. 1	2, 541, 008	67. 2
Lubricating oil and grease.....	413, 464	15. 8	559, 476	13. 9	481, 680	12. 7
Oil equipment.....	102, 278	3. 9	113, 737	2. 8	39, 453	1. 0
Tires, tubes, batteries.....	94, 808	3. 6	187, 419	4. 7	189, 402	5. 0
Flour and feed.....	293, 675	11. 2	234, 274	5. 8	168, 758	4. 5
Twine.....	66, 272	2. 6	174, 772	4. 3	88, 294	2. 3
Farm machinery.....					134, 182	3. 6
Miscellaneous.....	39, 565	1. 5	55, 000	1. 4	141, 215	3. 7
Total.....	2, 615, 519	100. 0	4, 028, 086	100. 0	3, 783, 992	100. 0

Growth of the wholesale department since it was reorganized in 1931 to 1936, is shown in table 47. These figures show that, except

for 1936, when drouth conditions in part of the area served by the Exchange greatly curtailed farmers' expenditures, the Exchange has had a continuous growth in sales and net income. The yearly increases in net worth have been largely the result of policies of setting up liberal reserves and of paying patronage dividends in the form of stock. The gradual extension of service is indicated by the fact that the Exchange served 233 local units in 1936 as compared with 91 local units in 1931.

The supplies distributed by the wholesale department of the Farmers Union Central Exchange for the fiscal years 1934, 1935, and 1936 are shown in table 48. Petroleum supplies represented about 80 percent of the total sales for each of the 3 years. The year-to-year changes in the value of various supplies sold were largely the result of changes in the economic condition and requirements of farmers. The decline in sales of oil equipment in 1936 is accounted for by the decrease in the number of new stations. It is significant that sales of the new farm-machinery department represented 3.6 percent of all sales in 1936.

Purchasing Departments of Land O'Lakes Creameries, Inc.

Land O'Lakes Creameries, Inc., with headquarters in Minneapolis (fig. 9), is primarily a federated marketing association for approximately 400 cooperative creameries located in Minnesota, Wisconsin, and other nearby States. The member creameries hold all the common stock of Land O'Lakes Creameries, Inc. Preferred stock, which bears interest at 6 percent, is not restricted as to ownership.

The territory of Land O'Lakes Creameries, Inc., is divided into 21 districts, which form the basis of representation in the central association. Two of these districts represent the 25 member creameries located in Wisconsin. The member associations in each district nominate the director for the district prior to the annual meeting of the association. At the annual meeting each member association has one vote in the election of directors and in the affairs of the association.

The purchasing service of Land O'Lakes Creameries, Inc., is conducted by two departments—the Creamery Machinery and Supply Department, and the Feed Department.

Creamery Machinery and Supply Department

The Creamery Machinery and Supply Department serves as a wholesale agency through which cooperative creameries and their members may purchase needed machinery and supplies. The services of this department are not restricted to member associations, but are available to any creamery. More than 50 percent of the business is done, however, with member cooperatives. The major products

handled are butter tubs, package materials, and such equipment as pumps, coolers, tanks, and evaporators.

This department may be described as a cooperatively operated jobbing agency. Orders received from creameries are either filled at the warehouse or forwarded to the manufacturers to be shipped direct. About one-half of the supplies, in terms of value, are handled on a jobbing basis from Land O'Lakes stocks. Heavy equipment and supplies bought by creameries in carload lots are ordered shipped direct from the factory to the creamery, the invoices being sent by the manufacturer to the Machinery and Supply Department. All invoices are submitted to the local associations, which make all payments to the department. The supplies handled are sold to creameries at regular competitive prices, as listed in a catalog which is revised as conditions require.

Patronage-refund payments, made at the end of each year, represent the difference between the price which the department charges the creameries for each supply item sold and the total cost to the department. In effect, this method for determining patronage has required the Machinery and Supply Department to operate a simple perpetual system of recording itemized costs and prices on each purchaser's transactions in a separate account. At the end of the year the total cost of supplies sold and the total selling price charged can be computed for each purchaser. Then after a general deduction is made to cover the operating costs of the department, the balance is distributed to the purchasers. Patronage dividends may be paid either in stock or in cash, although for some years such refunds have been made in cash. This method of paying patronage dividends is well adapted for the business handled, since there is much variation in operating margins. For example, the average gross margin on machinery has been about 20 percent, while that on butter tubs has been about 4 percent.

Theoretically it might be contended that this method of paying patronage refunds is not equitable, since it does not take into account the cost of selling different units of merchandise. For example, in selling some supplies a certain amount of solicitation expense is incurred, which is unnecessary for other supplies. Practically, however, the point is not particularly important, for over a long period of time purchasers tend to buy supplies of all types.

The Creamery Machinery and Supply Department deals with purchasers on the same credit terms allowed by manufacturers on the supplies handled. The credit discounts for the various commodities range from one-half of 1 percent to 5 percent for cash payment in 10 days. In 1934 Land O'Lakes earned cash discounts amounting to \$11,000. This represented all discounts offered, while the cash discounts to purchasers amounted to only \$8,000. The Land O'Lakes

credit department must approve all sales before they are made. If a purchaser is indebted to the association when patronage dividends are declared, the dividend is credited to his account rather than paid in cash.

The Machinery and Supply Department is an integral part of Land O'Lakes Creameries, Inc., and is served by its field representatives. The department, however, provides special assistance to creameries in developing plans for the installation of machinery and in installing and servicing machinery. The department endeavors to assist in the quality program of Land O'Lakes Creameries, Inc., by encouraging the member creameries to use equipment and supplies which will enable them to produce high-quality dairy products.

Sales and patronage dividends of the Machinery and Supply Department since it was established in 1923 are summarized in table 49.

TABLE 49.—VALUE OF SALES AND PATRONAGE DIVIDENDS PAID BY MACHINERY AND SUPPLY DEPARTMENT OF LAND O'LAKE CREAMERIES, INC., 1923-36

Year	Sales	Patronage dividends	Patronage dividends as a percentage of sales
	<i>Dollars</i>	<i>Dollars</i>	<i>Percent</i>
1923.....	608, 979	39, 462	6. 5
1924.....	1, 206, 915	88, 767	7. 4
1925.....	1, 523, 136	110, 310	7. 2
1926.....	1, 662, 053	123, 167	7. 4
1927.....	1, 543, 135	106, 930	6. 9
1928.....	1, 921, 051	134, 702	7. 0
1929.....	2, 131, 996	151, 731	7. 1
1930.....	2, 148, 220	117, 553	5. 5
1931.....	1, 828, 320	97, 674	5. 3
1932.....	1, 312, 938	44, 268	3. 4
1933.....	1, 325, 560	50, 305	3. 8
1934.....	1, 429, 487	44, 305	3. 1
1935.....	1, 381, 060	49, 572	3. 6
1936.....	¹ 1, 619, 342	60, 106	3. 7

¹ Total sales in Wisconsin in 1936 amounted to \$251,500.

The Feed Department

The Feed Department of Land O'Lakes Creameries, Inc., which was established in 1929, provides primarily for cooperative creameries and elevators a wholesale service on feeds, flour, fertilizers, seeds, twine, and similar supplies not directly related to dairy-manufacturing operations. Most of this business is carried on through the central office in the Land O'Lakes plant in Minneapolis, but branch ware-

FARMERS' PURCHASING ASSOCIATIONS IN WISCONSIN

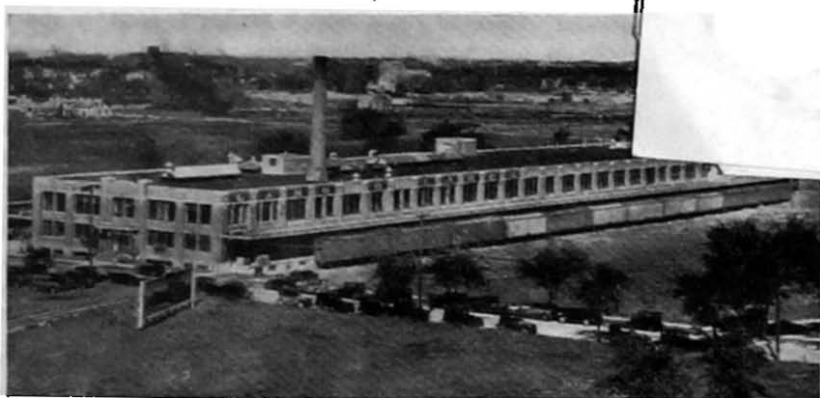


FIGURE 9.—HEADQUARTERS AND PLANT OF LAND O'LAKE'S CREAMERIES, INC., MINNEAPOLIS, MINN.

The supply departments of this association serve creameries and farmers' local purchasing associations in Wisconsin and other North Central States.

houses are operated at Albert Lea, Thief River Falls, and Winona, Minn.

Like the Creamery Machinery and Supply Department, the Feed Department makes its services available to all purchasers, although most sales are made to cooperative associations. The supplies handled by the Feed Department, with the exception of standard mill feeds, are manufactured for the department according to its specifications and under its supervision and are sold under Land O'Lakes brands and formulas. Supplies are usually shipped on the order of the Feed Department from the manufacturing plant to the local association. The department, however, sends all invoices to the local association.

Supplies are sold at prevailing wholesale prices. Weekly price lists are sent out to customers, usually with a letter commenting on market conditions.

About 50 percent of the total sales of the Feed Department are distributed in carload lots. During fall and winter months most of the purchases are on a carload basis, whereas in the summer most of the purchases are moved by truck in less than carload lots. Part of the feed which is shipped by truck to local associations is moved by trucks owned by Land O'Lakes, which also haul butter and milk from the central warehouse in Minneapolis. Two of the Land O'Lakes districts have organized their own trucking associations for this purpose.

Practically all supplies are handled by the Feed Department on a cash basis. Accounts must be approved by the Land O'Lakes credit department. In 1936 losses from bad debts amounted to less than 0.25 percent of total sales.

FARM CREDIT ADMINISTRATION

to promote the general welfare of the members of this association and to provide better methods of processing, purchasing, and distributing such merchandise; to either own or lease and to operate plants, warehouses, bulk plants, retail stores and service stations for the manufacture, storage, handling, processing, and distributing of such merchandise and equipment; to buy and sell or act as agent to buy and sell such merchandise and equipment; and to have and exercise all the rights and powers necessary to carry into effect the above-named purposes and activities incident thereto, including the power to buy, lease, sell, or otherwise acquire and dispose of such real and personal property as may be necessary or useful in the performance of the above-named purposes; and to do all things necessary or incident to the transaction of the business of this association.

The Wisconsin Cooperative Farm Supply Co. is organized on a capital-stock basis with an authorized capital of \$25,000, comprised of 245 shares of preferred stock with a par value of \$100 per share, and 100 shares of common stock with a par value of \$5 per share. The common stock can be issued "only to the Wisconsin Farm Bureau Federation (Cooperative) and to incorporated cooperative associations affiliated with, or whose members are affiliated with, the Wisconsin Farm Bureau Federation (Cooperative), which are organized and operated primarily for the purpose of cooperative warehousing, purchasing, or distributing of machinery, equipment, petroleum products, and supplies by or on behalf of members of the Wisconsin Farm Bureau Federation (Cooperative)." The associations which hold the common stock are entitled to representation in proportion to the number of their members. This voting method (Articles of Incorporation, art. V) is roughly designed to give each member of a local association an equal voting right in the affairs of the Wisconsin Cooperative Farm Supply Co. The articles of incorporation provide for a board of nine directors elected annually, and further stipulate that the directors "shall be chosen from among the officers or directors of the Wisconsin Farm Bureau Federation (Cooperative) or its affiliated associations which are members of this association."

Financial and Operating Analysis for Three Major Wholesale Associations ⁴⁹

The balance sheets of the Midland Cooperative Wholesale, the Farmers Union Central Exchange, and the Central Cooperative Wholesale were analyzed for the fiscal years 1935 and 1936. It was observed that the character of assets and liabilities varied considerably among these associations for the 2 years. This can be explained largely by differences in commodities handled and methods of operation. For

⁴⁹ The financial and operating statements for the purchasing departments of Land O'Lakes Creameries, Inc., could not be included in this analysis since Land O'Lakes Creameries, Inc. does not have departmental financial statements. Statements of the Wisconsin Farm Bureau Federation (Cooperative) were also not included in this analysis, since this organization operated on a much smaller scale and as a general farmers' organization.

The value of various farm supplies distributed by the Wisconsin Farm Bureau Federation (Cooperative) for the fiscal years 1932 to 1936, inclusive, is shown in table 51. It will be noted that feed and seed represented a large part of the supplies handled during this period. These supplies were distributed either through local farm-bureau cooperative associations or through commercial distributors who obtained their supplies outright from the federation at wholesale terms and prices.

TABLE 51.—VALUE OF SUPPLIES DISTRIBUTED BY THE WISCONSIN FARM BUREAU FEDERATION (COOPERATIVE) FOR THE FISCAL YEARS ENDING OCT. 31, 1932-36

Supply item	Sales value				
	1932	1933	1934	1935	1936
	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
Feed.....	63, 885	51, 085	40, 433	91, 854	137, 243
Fertilizer.....	7, 792	13, 378	12, 420	13, 445	15, 999
Seeds and inoculation.....	20, 709	76, 700	72, 536	74, 428	72, 298
Petroleum products.....	8, 328	9, 019	10, 243	14, 100	7, 591
Twine.....	2, 339	48, 833	33, 704	44, 637	19, 997
Weed-killer and insecti- cides.....	17, 277	13, 069	7, 286	10, 940	7, 382
Miscellaneous.....	8, 304	2, 580	712	386	882
Total.....	128, 634	214, 664	177, 334	249, 790	261, 392

The Wisconsin Farm Bureau Federation (Cooperative) purchased a large part of the supplies distributed, through contracts arranged by the Farm Bureau Milling Co., which serves as a bargaining agency for farm-bureau purchasing associations in Michigan, Indiana, Ohio, West Virginia, and Pennsylvania. The federation distributed fertilizer mixed by the Minnesota Farm Bureau Service Co. until 1935 when the directors authorized the installation of machinery for mixing fertilizer and made a contract with the Minnesota Farm Bureau Service Co. for the use of its brands and formulas.

The purposes of the newly organized Wisconsin Cooperative Farm Supply Co. are set forth as follows in its articles of incorporation:

The business and purposes of the association shall be cooperatively to purchase and distribute for its members and members of Wisconsin Farm Bureau Federation (Cooperative) and other farmers of the State of Wisconsin, oil, machinery, feed, fertilizer, seed, equipment, and other merchandise used or useful either in the production of agricultural commodities, or by farmers and members of farmers' families for any purpose, and to provide means of cooperatively handling the purchase and sale of the same; generally,

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The Feed Department has adopted a nonspeculative policy in its feed-buying operations. Feed is bought as needed for immediate delivery. The department does not employ its own field men, but uses the services of the regular Land O'Lakes field men. In computing expenses for the department, as a basis for determining savings, a portion of the general office and field expenses of Land O'Lakes Creameries, Inc., is charged against the department. The direct expense attributable to the Feed Department consists largely of salaries and other office expense.

Net savings made by the Feed Department are distributed as patronage dividends according to the various commodities handled. The value of business done by the Feed Department since its organization in 1929 is shown in table 50.

TABLE 50.—VALUE OF SALES OF THE FEED DEPARTMENT OF LAND O'LAKES CREAMERIES, INC., 1930-36

Year	Value of sales	Savings effected	Savings distributed as patronage dividends
	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
1930.....	218, 433		
1931.....	259, 640		
1932.....	281, 838		
1933.....	355, 801	20, 185	5, 853
1934.....	670, 490	17, 441	5, 592
1935.....	931, 928	25, 298	7, 947
1936 ¹	960, 133	29, 745	14, 424

¹ The total sales in Wisconsin amounted to approximately \$96,271 in 1936.

Wisconsin Farm Bureau Federation (Cooperative)

Until the Wisconsin Cooperative Farm Supply Co. was established in February 1937, the Wisconsin Farm Bureau Federation (Cooperative) performed the functions of a wholesale farm-supply distributing agency in connection with its activities as a general farm organization. The voting membership of the Wisconsin Farm Bureau Federation (Cooperative) is restricted to persons, partnerships, or corporations engaged in the production of agricultural products, who have paid annual dues of \$3.50. Voting in membership meetings is restricted to delegates elected by county farm bureau organizations. Each county farm bureau having 25 members is entitled to one voting delegate and an additional delegate for each 100 members in good standing. These delegates elect nine directors for a 3-year period, three directors being elected each year. The board of directors elects officers and employees, or authorizes the employment of all employees.

illustration, in both years inventory represented a much larger portion of the total assets for the Central Cooperative Wholesale than for the other two associations, no doubt, because the Central Cooperative Wholesale warehouses a much larger proportion of the supplies it distributes. In both years fixed assets comprised a much larger percentage of total assets for the Central Cooperative Wholesale than for the other two associations. This was because of the larger investment in warehouse and operating facilities required by the Central Cooperative Wholesale method of distribution.

The three associations also varied considerably in the character of their liabilities. Capital stock, for example, represented over 38 percent of the total liabilities and net worth of the Central Cooperative Wholesale in 1936, as compared with approximately 27 percent for the Farmers Union and 26 percent for the Midland. The Midland and the Farmers Union, in comparison with the Central Cooperative Wholesale, had a considerably larger percentage of total liabilities and net worth in the form of reserves and surplus. The total net worth for the three associations combined represented 54 percent of total liabilities and net worth.

The operating statements for these three associations for the fiscal years 1935 and 1936 were also studied. The net income for the three averaged over 2 percent of sales for each of these years. The 1936 decline in operating income and net income for the Farmers Union Central Exchange was caused largely by drought conditions in the territory served by this organization.

Table 52 shows a number of operating ratios prepared from the financial and operating data. These ratios afford a general picture of the financial condition of these three associations rather than a basis for measuring their comparative operating efficiency. As indicated above, the associations are not strictly comparable in their methods of organization and operation, and for this reason it would be improper to use the ratios of any one association as a standard for comparison.

The amount of current assets per dollar of current liabilities provides a general indication of the operating liquidity of a business concern. The current assets for these three associations combined amounted to \$2 in 1936 and \$2.27 in 1935 for every dollar of current liabilities.⁵⁰

The amount of working capital—the excess of current assets over current liabilities—for the three associations combined, amounted to 37 cents in 1936 and 40 cents in 1935, for each dollar of total assets. This ratio shows the degree to which the total assets are liquid.

Receivables of the three associations combined amounted to 85 cents in 1936 and 94 cents in 1935, for each dollar of working capital. When this ratio for an association declines, it indicates that a smaller

⁵⁰ A ratio of \$2 in current assets for each dollar of current liabilities is generally considered satisfactory, provided that current assets are liquid in character.

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TABLE 52.—SELECTED OPERATING RATIOS FOR THREE MAJOR WHOLESALE ASSOCIATIONS SERVING FARMERS' LOCAL PURCHASING ASSOCIATIONS IN WISCONSIN, 1936 AND 1935

Ratio	Year	Midland Cooper- ative Wholesale	Farmers Union Central Ex- change	Central Cooper- ative Wholesale	Total for three associa- tions
Current assets per dollar of current liabilities.....	1936	\$1. 84	\$2. 13	\$2. 02	\$2. 00
	1935	2. 40	2. 32	2. 07	2. 27
Working capital per dollar of total assets.....	1936	. 37	. 42	. 31	. 37
	1935	. 51	. 42	. 29	. 40
Receivables per dollar of working capital.....	1936	1. 34	. 76	. 42	. 85
	1935	1. 21	. 99	. 50	. 94
Receivables per dollar of sales..	1936	. 08	. 05	. 02	. 05
	1935	. 08	. 05	. 03	. 05
Net worth per dollar of total assets.....	1936	. 54	. 46	. 55	. 51
	1935	. 63	. 48	. 55	. 54
Net worth per dollar of total liabilities.....	1936	1. 19	. 84	1. 22	1. 04
	1935	1. 71	. 91	1. 23	1. 19
Net worth per dollar of fixed assets.....	1936	4. 18	2. 43	1. 81	2. 36
	1935	5. 75	1. 97	1. 49	2. 15
Sales per dollar of total assets..	1936	6. 28	5. 92	5. 93	6. 03
	1935	7. 61	8. 22	5. 28	7. 07
Net income per dollar of total assets.....	1936	. 15	. 10	. 12	. 12
	1935	. 20	. 21	. 09	. 17

proportion of its working capital is tied up in receivables. There was a considerable variation in this ratio among the three associations.

The receivables for the three associations amounted to 5 cents for every dollar of sales in both 1936 and in 1935. In other words, 5 percent of the sales had not been paid for at the end of the operating period. The Central Cooperative Wholesale, at the end of 1936, had only 2 cents in receivables for every dollar of goods sold in 1936.

Net worth of the three associations combined was 51 cents in 1936 and 54 cents in 1935, for every dollar of total assets. This ratio indicates that the investment of members in the associations was greater than that of creditors. This condition is also evidenced by the fact that the net worth for the three associations combined amounted to \$1.04 in 1936 and \$1.19 in 1935, for every dollar of total liabilities.

The three associations combined had \$2.36 in net worth in 1936 and \$2.15 in 1935, for every dollar of fixed assets. This ratio indicates that the capital provided by members of the associations was more than adequate to cover the investment in fixed assets. For example, the Midland Cooperative Wholesale, with a relatively modest invest-

ment in fixed assets, had \$4.18 in net worth for each dollar of its fixed assets in 1936; while the Central Cooperative Wholesale, with a larger investment in plant and facilities, had only \$1.61 in net worth for every dollar of fixed assets.

Sales for the three associations combined amounted to \$6.03 in 1936 and \$7.07 in 1935 for each dollar of total assets. This ratio is of significance in that it indicates the rapidity of capital turn-over. Although the net income of the three associations combined, as shown by the profit and loss statement, amounted to 2.03 cents per dollar of sales in 1936 and 2.34 cents per dollar of sales in 1935, the rapidity of capital turn-over resulted in a net income for the three associations of 12 cents in 1936 and 17 cents in 1935, for each dollar of capital invested in the business by members and creditors.

Conclusions and Recommendations

COOPERATIVE purchasing by farmers in Wisconsin has been sponsored by the Grange, the Equity, the Farmers Union, the Farm Bureau, and other general farm organizations. Since the World War large-scale purchasing associations have been formed which have provided local cooperatives with a wholesale source of supplies and with assistance in organization work. Not all the local purchasing associations in Wisconsin, however, have been an outgrowth of the promotional efforts of general farm organizations or large-scale purchasing associations. Many such associations have been set up by farmers because of local needs and without outside assistance.

Farmers' cooperative purchasing associations have been officially recognized in Wisconsin since the first State cooperative statute was passed in 1887. Since that time, further legislation, both State and Federal, has aided in establishing their legal status. For many years the State of Wisconsin has encouraged this type of cooperation through the activities of the State Department of Agriculture and Markets and the Wisconsin College of Agriculture. The Federal Government also, under authority of legislation, has assisted purchasing associations through research and educational work and credit service.

Local supply associations in Wisconsin are distributed rather generally throughout the State but are most numerous in the western, southern, and eastern sections.

Purchases by farmers represented approximately 87 percent of the supplies distributed. Petroleum and general-store associations had the largest percentage of sales to nonfarmers, probably because these associations handled supplies not strictly limited to farm use. Even these associations, as a group, however, made less than one-fifth of their sales to nonfarmers.

Local purchasing associations may be classified into five main types according to the general nature of their business and the principal supplies handled. On this basis, the 69 associations which specialize in petroleum products and related supplies were classified as petroleum associations; 71 as warehouse associations, since they sell mostly in bulk quantities from warehouses such supplies as feed, seed, fertilizer, twine, and farm machinery; 36 as general-store associations, since they operate general stores and handle considerable quantities of household merchandise; and 70 as combination associations, since they combine warehouse and petroleum operations. Twenty-five associations were primarily marketing associations which handled farm supplies as a side-line activity.

Many of the associations which were active in 1935 were organized from 1918 to 1921 and from 1930 to 1931. The active petroleum associations have all been organized since 1920. In fact, 64 of the 84 petroleum associations which were active in 1935 had been organized since 1930. Of the 71 associations which had operated over 16 years, 32 were of the warehouse type, 12 were of the general-store type, and 27 were of the combination type. Since 1930 most of the associations organized have been of the petroleum and combination types. It is significant that none of these recently organized associations have become inactive, although about 40 percent of all associations organized since 1910 had ceased to operate by 1935. Since dissolutions among these local associations have not been limited to depression periods, it appears that they were attributable more to internal operating difficulties than to severe economic conditions.

The average net worth per dollar of total assets varied little among types of associations; the average was about 70 cents for petroleum associations, 61 cents for warehouse associations, 68 cents for general-store associations, and 70 cents for combination associations. These ratios indicate that, in general, the members have a strong financial interest in their associations.

Comparison of groups of selected "good" and selected "poor" local purchasing associations of each type indicated that the good associations tended to operate on a smaller gross margin per dollar of sales. The fact that their operating expenses were lower per dollar of sales indicated that the selected good associations operated with greater efficiency. It also appeared that the operating expense per dollar of sales for the better associations was lower because of the greater volume handled. The larger associations were, no doubt, able to utilize to better advantage facilities and personnel. Furthermore, the good associations had more advantageous credit and sales policies.

It is believed that managers and directors can profitably compare their gross margins, operating expense, and net income figures with those of the selected "good" associations of their type as guides or standards for improving their operating efficiency (see tables 35-42 and fig. 4).

The average net income per dollar of sales for 1934, was 7.79 cents for petroleum associations, 1.39 cents for warehouse associations, 1.01 cents for general-store associations, and 3.51 cents for combination associations. Comparison of the net income for a selected group of the best associations with that of a selected group of the poorest associations of each type indicated that there was considerable variation in operating efficiency among individual associations of the same type. The good petroleum associations had net income of 9.59 cents per dollar of sales, while the poor petroleum associations had net income of only 6.09 cents per dollar of sales. Significant variation for

the good and poor associations of the other types was attributed partly to the fact that the volume of sales averaged larger for the selected good associations, and partly to local competitive conditions, but more probably to comparative efficiency of operation.

Comparison of the average balance sheets for the associations of each type for 1934 also indicated that petroleum associations tended to operate with the smallest total assets. The average total assets for these associations amounted to \$15,684 as compared with \$28,234 for warehouse associations, \$27,823 for general-store associations, and \$30,260 for combination associations.

The study disclosed that local associations, in general, were weak in membership and organization work. In some instances the number of nonmembers served exceeded the number of members, and the members did not appear to be actively interested in the work of their association. It was also apparent that directors and managers had not always provided members with sufficient information concerning the operations of their association or a definite program for bringing nonmember patrons into membership.

It was indicated that many associations have failed to realize the importance of direction and management. Many managers lacked training, experience, or general adaptability. Other managers were not given proper encouragement for good work in the form of adequate pay. Too often the directors took no active interest in supervising the management, with the result that the manager came to look upon himself as the sole proprietor. Comparison of the net income for the good and poor associations indicates that there is a great opportunity for improvement in management. This was also apparent in the shrinkage figures for the petroleum associations. While some of the associations were able to handle petroleum products with a shrinkage loss of less than 1 percent of sales, many had shrinkage losses far in excess of that figure.

The service of many of the local associations could be fairly criticized as lacking the promptness, efficiency, and congeniality that is desirable in retail trade. It is not suggested that more service in the form of credit and delivery should be offered, since farmers usually prefer savings to such services.

Many associations fail to give members sufficient aid in selecting supplies adapted to their individual needs. Although it appears that there is a wide opportunity for cooperative purchasing associations to serve their members in this way, such assistance requires that employees be technically trained to give this service.

Only a few of the associations in Wisconsin sold supplies on a strictly cash basis. While many of the associations have extended credit with due care, there were also many which had serious credit problems. Of 202 associations, 87 had, at the end of 1934, accounts

and notes receivable representing more than 10 percent of the annual sales. It would appear that stricter policies with respect to credit extension need to be established and followed by many of the local associations. This is highly essential because careless extension of credit involves costs in collecting accounts and losses from bad debts; and, furthermore, ties up in accounts receivable capital which would otherwise be used for other general operating purposes. For these reasons, it is desirable that associations either endeavor to operate on a cash basis or follow firm policies with respect to credit.

The extent to which the associations paid patronage dividends depended upon their pricing policies and ability to develop net savings, as well as upon reserve policies. Of the 204 local purchasing associations included in the operating analysis, 76 reported the payment of patronage dividends. A much higher proportion of the petroleum associations paid patronage dividends. On the other hand many associations retained their earnings in surplus and reserves, in order to strengthen their financial condition. In this connection, it is significant that much of the net worth of the local associations has been built up out of retained savings.

Many of the associations did not have proper records. In some cases the accounting systems were apparently inadequate, while in other cases they were fairly suitable but were improperly or carelessly kept. Many of the associations did not provide for proper audits. Auditing was frequently left in the hands of directors who, as a rule, were not fully qualified for this work. Although the cooperative auditing services, offered by the large-scale associations have tended to improve accounting methods, it appears that many associations should take steps to improve their accounting practices and provide periodically for comprehensive audits. Good audits properly interpreted would facilitate good management and build up the confidence of members. In this connection it seems desirable to have the auditor explain the audit report to the full board of directors.

The large-scale purchasing associations have endeavored to assist the local purchasing groups along sound lines. In general they have provided an economical source of supply; they have rendered valuable assistance in organization and operating problems, and in educational work among members; and played an important role in improving the quality of supplies handled and the character of service offered by the local associations. While creditable work has been done to assist local associations in their membership and operating problems, it is believed that more of the general field service work might be directed toward technical business and operating problems of the locals.

Of the five leading large-scale purchasing associations which provide wholesale service for approximately one-half of the local associations operating in Wisconsin, three—the Central Cooperative Wholesale,

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Cooperative Purchasing of Farm Supplies

Bulletin No. 1, *Joseph G. Knapp and John H. Lister*

Accounting Principles for Cooperative Cotton Gin Associations

Bulletin No. 2, *Otis T. Weaver*

Cooperative Marketing of Agricultural Products

Bulletin No. 3, *Ward W. Fetrow*

Cooperation in Agriculture, a Selected and Annotated Bibliography, Bulletin No. 4, *Chastina Gardner*

Organization and Operation of the Illinois Livestock Marketing Association, Bulletin No. 5, *H. H. Hulbert*

Statistics of Farmers' Cooperative Business Organizations, 1920-1935, Bulletin No. 6, *R. H. Elsworth*

Cooperative Marketing of Range Livestock

Bulletin No. 7, *L. B. Mann*

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Business Analysis of the Utah Poultry Producers' Association

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Early Developments in Cooperative Cotton Marketing

Circular No. C-101, *O. W. Herrmann and Chastina Gardner*

Organization and Operation of Cooperative Irrigation Companies

Circular No. C-102, *Wells A. Hutchins*

Western Cattle and Sheep Areas, Circular No. C-103, *L. B. Mann*

Economic Analysis of Bargaining Problems of Milk Cooperatives

Circular C-104, *T. G. Stitts and Wm. C. Welden*

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