

A BUSINESS ANALYSIS OF THE FARMERS COOPERATIVE
ASSOCIATION OF ALVA, OKLAHOMA

STRATHMORE PARCHMENT

100% RAG U.S.A.

A BUSINESS ANALYSIS OF THE FARMERS COOPERATIVE
ASSOCIATION OF ALVA, OKLAHOMA

By

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Bachelor of Science

Oklahoma Agricultural and Mechanical College

Stillwater, Oklahoma

1943

Submitted to the Department of Agricultural Economics

Oklahoma Agricultural and Mechanical College

In Partial Fulfillment of the Requirements

for the Degree of

MASTER OF SCIENCE

1948

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ACKNOWLEDGEMENT

Acknowledgement and appreciation is expressed to the Department of Agricultural Economics, Oklahoma Agricultural and Mechanical College, for the opportunity of making this study. Special recognition and thanks are due Dr. Adlowe L. Larson, Professor of Agricultural Economics, for the supervision, helpful suggestions, and considerate assistance which he contributed.

The writer extends special thanks to Mr. J. H. Whitney, Manager of the Farmers Cooperative Association of Alva, for his cooperation in making this study possible. Through his efforts the necessary data and information for this study were made available. Appreciation is also expressed for his able advice and suggestions as the study progressed.

Thanks are due Mr. Leo V. Blakley, Assistant Economist, for assistance and consultation and for correction of the manuscript.

Appreciation is expressed to Miss Tyana Marshall for her aid in preparing the manuscript for presentation.

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INTRODUCTION

The success of the cooperative movement depends primarily upon the successful and efficient operation of local associations. Farmers compose the membership of these local cooperatives and have been the principal group participating in the cooperative movement in the United States. The expression of their faith in cooperation is manifested through their patronage and support of their local organizations. The local cooperatives in most cases own overhead organizations which have aided in strengthening and developing the local associations. On the other hand, the success of the overhead cooperatives will depend to a great extent upon the quality of the local associations. The local cooperatives, therefore, are an important segment of the cooperative movement.

Purpose of Study

The purpose of this study is to analyze the business operations of the Farmers Cooperative Association of Alva to determine the factors which have resulted in its success or failure as a cooperative enterprise. The historical information presented serves as a background for a more complete understanding of the analysis of the current operations. By analyzing the operations of this local cooperative for a five-year period, an endeavor was made to determine the basic relationships existing between the elements composing the balance sheets and operating statements of the association as a unit, to determine the operating efficiency of the individual departments, and to describe the membership and management structure of the cooperative.

Method of Procedure

The information presented in section one was primary data obtained from the minutes of stockholders and board of directors meetings, interviews

with the manager, and personal knowledge of the association. An attempt was made to record the historical information in chronological order from the date of organization to the present time. Additional clarification of various points was desired, however, the limited information available in many cases made this impossible. The material presented in the discussion of the growth of the organization was obtained primarily from interviews with the manager. Data from the annual audits of 1921 through 1946 served as the basis for the comparison of volume and membership.

An effort was made in section two to analyze the financial conditions and operations of the association as a whole and the operations of the departments as individual units. The data for an analysis of the financial conditions were obtained from the annual audits of the association for the five-year period from 1942 through 1946. A percentage analysis of the various items composing the balance sheet to total assets was made. The same source of data and method of analysis were used for the various elements composing the operating statement. By expressing the relationship of the operating statement items to the total sales as percentages, various conclusions could be made concerning the annual operations of the association as a unit.

An analysis of the departments as individual units was then made to ascertain the efficiency of the various departments. Since the association uses a general accounting system it was necessary to allocate the operating expenses on a departmental basis before a comprehensive analysis could be made. The chief guides for the expense distribution were the annual expense ledgers for the five-year period and the advice and estimates of the manager. The salaries and wages, which compose the chief items of operating expenses, were more accurately allocated by addition of individual salaries in each department. The allocation of the remainder of the expenses presented the

necessity for a greater degree of arbitrary estimates. By analysis of the expense ledgers and familiarity with the firm, estimated departmental percentages were made for each expense item. These percentages were then referred to the manager for the corrections he deemed necessary. In the case of several minor items of expense it was concluded that an accurate basis for departmental distribution could not be made. The actual benefit received by each department, as a result of the occurrence of this particular expense, could not be ascertained. In such cases the expense was allocated in its entirety to office expense. After all expenses were distributed the office expense was allocated to the five departments on an ability-to-pay basis. The basis used was the annual gross operating earnings of each of the departments.

In the computation of the theoretical interest it was necessary to arrive at the annual capital investment in each department. The value of total assets accountable to each department was first calculated. The value of net worth for each department was then obtained by subtracting the portion of the total liabilities accountable to each department from the department assets. The department net worth was used as the base and was divided into facility, operating, and commodity capital for interest computation. The prevailing rates of the Wichita Bank for Cooperatives were then applied to the three types of capital in each department and the departmental interest value was computed.

The general ledger of the association served as the source of data for the seasonal variation of the various commodities handled. The monthly volume of purchases and sales for the major commodities in each of the departments was tabulated and an average monthly volume was computed. In the case of the merchandise department, the multiplicity of the commodities handled

prompted the use of the monthly dollar value of purchases and sales. A mean monthly volume for the five-year period for purchases of each commodity was computed and this amount was designated as 100 percent. The same procedure was used for sales. The average monthly volume was then expressed as a percentage of the mean monthly volume for the period for each of the major commodities. This permitted the plotting of the seasonal variation of the commodities with unlike units of measurement on the same figure.

The final part of section two is a ratio analysis attempting to determine the basic relationship of balance sheet and operating statement items. The five-year average of the various items included in the ratios served as a base for computing the ratios. These averages were common arithmetic means obtained from the five annual values of the items taken from the annual audits of the association. Since only one organization was included in this study it is necessary to refer to previous studies to obtain comparative data. The differences in the periods of time and types of organizations included in other studies, weaken the reliability of any conclusions made by use of a comparative study. Although definite assumptions cannot be made, a ratio analysis of this type does serve as an indicator of the strength or weakness of the financial structure of the association.

The information presented in the final section of this study was obtained primarily from the by-laws of the association and from interviews with the manager. An endeavor has been made to combine the information available and to describe the operating structure of membership and management.

THE DEVELOPMENT OF THE ASSOCIATION

Since the opening of the Cherokee Strip in 1893 for settlement and agricultural production, wheat has been the major crop produced in Woods County. The continued success of wheat production depended primarily upon the maintenance of a favorable market for the wheat produced in the area. Price discrimination and various other adverse conditions led to the organization of a farmers' elevator in Alva in 1898. The organization was successful in decreasing margins and increasing the price received by the farmers. For example, immediately after the organization of the association the price paid to the farmers for wheat increased approximately five cents per bushel.^{1/} As a result of the instability of the organization, business operations were terminated in 1916. The reoccurrence of discriminatory practices existing prior to the establishment of the first farmers' elevator resulted in the organization of the present association.

The History of the Organization

Operations from 1917 to 1920. The Farmers Cooperative Association of Alva was organized and began business in April, 1917. It was originally incorporated for \$15,000 with stock at \$100 par value. At the time of incorporation there were 52 stockholders. The association began operation at its present location at Santa Fe and Fifth in Alva, with the purchase of an elevator and fixtures from the Woods County Grain and Broom Corn Company. The firm was organized primarily as a wheat marketing organization; however, coal and feed were inaugurated from the outset as a sideline business. Provisions

^{1/} Carl Williams, "Getting The Farmers' Crop to Market," The Oklahoma Farmer-Stockman, Vol. 29 (June, 1916), p. 5.

were made for the firm to handle products of the Alva Roller Mills and the Red Star Milling Company. A decision was made by the Board of Directors that the firm would charge two cents per bushel for handling charges and shippers would stand all shrinkage on wheat until the 1917 crop was ready for market.

Mr. C. A. Buchanan, member of the Board of Directors, directed the activities of the association for the first month of its operation. In May of 1917 C. P. Clark was hired as manager of the cooperative and continued in this position for six months. He was succeeded as manager by S. Shelly in September of 1917. Two additions were made to the physical plant in 1917. An office building was moved to the firm's location and additional granary space was added to the elevator. As a result of the successful operation of the association during its initial year, a 10 percent dividend on each share of stock was declared by the Board of Directors at its last regular meeting prior to the annual meeting of the stockholders.

At the outset of their second year of operation, the cooperative purchased a large stone building which was adjacent to their lots on the west to be used as a warehouse for the sale of feeds and seeds. Additional lots were also purchased across the street for use as a feed and wagon yard. During the year, consideration was given to proposals to purchase various items desired by members in carload lots. Among those taken into consideration were alfalfa hay, potatoes, apples, and posts.

In 1919 two important expansion moves were made which extended the market area and the influence of the association. An elevator was purchased from the Marcus Grain Company at Hopeton, Oklahoma, and another from the Johnson-Douglas Company at Noel, Oklahoma. With the extension of the market area, the capital stock was increased from \$15,000 to \$40,000 to allow

greater participation in the association by the farmers in the Hopeton and Noel areas and to aid in financing the purchase of the two elevators. A petition signed by three-fourths of the stockholders was presented to the Board of Directors who, in turn, secured the increase in the capital stock. Further evidence of expansion was also noted in the annual meeting when authority was given the Board of Directors to extend the business of the association by increasing the stock of goods available for sale to the members.

Operations from 1920 to 1930. With the additional growth of the association the need for a full-time bookkeeper and a standardized accounting system was realized by the Board of Directors. They directed the manager upon the instigation of the system to prepare a report of each month's business to be submitted to the Board at their regular monthly meeting. The Board also instructed the manager to provide a system whereby a complete record of all purchases and sales to stockholders could be maintained. The position of the association was further strengthened as a result of a petition circulated at the annual meeting of the stockholders in January, 1921. This petition authorized the Board of Directors to incorporate under the 1919 Oklahoma Co-operative Law. Prior to this time the association was an ordinary stock company and dividends had been paid each year on a stock basis. The first dividend declared by the Board of Directors in conformity with the 1919 law was in 1922. In declaring the dividend, the Board provided that 8 percent was to be paid on stock and the remainder of the dividend was to be paid on a patronage basis. The same policy concerning dividends was in effect for the remainder of the twenties.

The first three years of the twenties were marked by a period of rapid turn-over in the management of the association. In 1920 a change in manager and bookkeeper was approved by the Board of Directors. In May,

E. O. Calhoun succeeded S. Shelly as manager and J. H. Whitney, present manager and then president of the Board, resigned from the Board and assumed the duties as bookkeeper in September of the same year. In February, 1922, Mr. Calhoun submitted his resignation to the Board and Mr. Whitney was selected as his successor. Mr. Whitney managed the association for one year; however, in January, 1923, he resigned and was replaced by J. S. Heasley.

In 1921 the association made an agreement with the National Wheat Growers Association and the United States Grain Growers, Incorporated, for the handling of their members' wheat. An attempt was made at the annual meeting in January, 1924, to grant the same patronage dividend to the members of these organizations as was given the stockholders of the cooperative. The advocates of this plan were unsuccessful in obtaining this concession. Prior to the marketing of the 1924 crop, the Board of Directors adopted a flat rate of three cents per bushel on all wheat marketed by the Wheat Growers Association.^{2/}

During the first few years that the association operated, the credit policy to be maintained was under discussion on various occasions. In March, 1918, the Board of Directors instructed the manager to collect accounts past due and not to allow accounts to run for more than 30 days. An unsuccessful attempt was made at the annual meeting in January, 1920, to limit the credit of one individual to \$200 and after 60 days to charge 10 percent interest. If these measures were not successful in attaining collection, it was further suggested that after six months' time the individual be

^{2/} Due to the lack of information available, a more accurate interpretation cannot be made.

required to give a bankable note. In May, 1920, the Board instructed the management to secure 10 percent interest-bearing notes from all purchasers for credit sales of twenty-five dollars or more. It was further provided that individuals holding accounts of twenty-five dollars or more be solicited for personal notes. This credit system was suspended indefinitely in November, 1920, and an intensive effort was made to collect all book accounts. In April of the following year, the Board of Directors instructed the manager to place the sale of all commodities on a cash basis. A few months later statements of all book accounts and notes due were sent to individuals informing them if accounts and notes were not paid by September 15, they would be placed in the hands of an attorney for collection. At the annual meeting in January, 1922, an attempt was made to establish a new credit policy; however, it was finally decided that the direction of the cash and credit system would be left to the discretion of the Board of Directors. The association, also, adopted the policy of applying dividends in payment of book accounts.

During the four-year period from 1924 to 1928 there were only minor changes in the activities of the association. Two additions were made on the physical plant in 1924. In May a concrete block garage was built to house the delivery truck. In December the office building was enlarged to furnish a room for Board meetings and space for storage of supplies and records. Attention was again given to carload lot purchases. The Board gave the manager authority to purchase carload lots of oats and corn at Hopeton and a carload of fence posts for delivery at Alva. A proposed change in the method of electing the Board of Directors was advanced at the annual meeting in January, 1925. The new plan advocated a system of electing two board members for three years, two for two years, and one for one year. At the expiration of their

terms each group would be elected for a three-year term. The passage of the plan was unsuccessful and the old plan of electing the entire board annually was continued. In the latter part of 1926 the association became a member of the Farmers Cooperative Grain Dealers Association of Oklahoma. An item of importance which occurred in June, 1927 was a proposed division of purchasing wheat at Hopeton. A representative of the Enid Milling Company met with the Board of Directors to discuss a plan for dividing the wheat purchased among the elevators at Hopeton according to some plan.^{3/} The Board rejected the proposition on the grounds that the association desired to remain independent at all times.

Further expansion of the association was made in 1928 with the purchase of the Farmers Elevator at Ashley, Oklahoma. Negotiations had been started in the latter part of 1927. At the annual meeting in January, 1928, the stockholders instructed the new Board of Directors to continue negotiations and purchase the elevator at their own discretion. Final settlement was made in January, 1928. A new residence for the manager of the Ashley station was constructed in February, 1929.

Various weaknesses in the management of the association became apparent to the Board in the latter part of 1928. As a result the Board assumed active management of the Alva firm with J. H. Whitney, President of the Board, in charge. In December of the same year, Lester Bloyd was hired as bookkeeper and the following January, M. S. Mercer, who was formerly assistant manager, assumed the duties of manager.

Operations from 1930 to 1940. The first three years of the thirties were marked by several items of importance. A more desirable outlet

^{3/} Details of this plan are not available.

for the sale of wheat was assured for the association when it became a member of the Union Equity Cooperative Exchange of Enid in 1930. During the same year an amendment was added to the by-laws. The amendment provided that the association shall not deal in products of non-members to an amount greater in value than those handled for its members. This amendment was in accordance with the provisions of the Capper-Volstead Act passed in 1922.^{4/} One of the principal items under consideration during 1930 was the building of a new frame elevator at Alva. The old elevator had been completely destroyed by fire in December of the previous year.

An important advancement made in 1932 was the purchase of the facilities for the manufacture of poultry feeds and mash. Prior to this time the cooperative had handled various commercial products. With the purchase of a feed mixer, an additional grinder, and the required ingredients they began the manufacturing of their own poultry feeds and mash in the warehouse at a reduced cost to the members of the cooperative. Another item of importance which occurred in 1932 was a proposal made by the Union Equity Cooperative Exchange to construct a 250,000 bushel terminal elevator in Alva. A representative of the Union Equity met with the Board of Directors of the Alva association to discuss the proposed terminal. After a great deal of discussion and consideration of the proposition, a negative decision was reached.

A change of managers occurred at the outset of 1933. Mr. Mercer handed the Board his resignation in February to become effective on March 1. Orvel Pfiefer, manager of the Hopeton station, was selected as his successor and remained in this position until his death in 1936. During the three-year

^{4/} Cited in L. S. Hulbert, Legal Phases of Cooperative Association, p. 213.

period that the management of the association was under the direction of Mr. Pfeifer, several changes and advancements were made. Plans were started in March of 1934 for the construction of additional elevator space in Alva. The construction of a 100,000 bushel concrete structure was the decision of the Board of Directors and a contract was signed with the Chalmers and Borton Construction Company to begin work immediately. The construction of the elevator was completed in June, 1934. Another expansion move made in 1935 was the addition of a produce department. A large brick building adjacent to the cooperative property on the west housed a produce station owned and operated by Armour and Company. The cooperative leased the facilities and building and began the operation of its own produce station for the purchase of cream, eggs, and poultry. An agreement was made then to market the majority of the produce with Armour and Company. The market area of the association was further extended with the purchase of an elevator at Capron, Oklahoma, in May, 1935. A warehouse was constructed at Capron in September of the same year to enable the association to handle feed and farm supplies at the newly acquired station.

The three-year period under discussion was marked by several changes in the general business structure of the association. New by-laws were submitted and adopted by the stockholders at their annual meeting in January, 1934. At the same annual meeting the method of electing the Board of Directors was changed in conformity with the new by-laws. Two members were elected for three years, two for two years, and one for one year. At the expiration of their respective terms each group would be elected for three years. During the same year a stock agreement or note plan was instigated whereby a prospective stockholder signed an agreement or note agreeing to turn his entire dividend to the cooperative until such time as his share of

stock was paid in full. One other item of importance was a decision made at the annual meeting in January, 1935 to increase the capitalization of the association from \$40,000 to \$75,000 to aid in financing the expansion of facilities.

The necessity for a new manager arose in June, 1936, as the result of the death of Mr. Pfeifer. J. H. Whitney, former board member and manager, became the new manager and is still serving in this position. The remainder of the thirties was marked by two important developments by the association. In January, 1939, the cooperative severed all connections with Armour and Company, regarding the handling of produce. The following month the Armour building was purchased by the cooperative and in October of the same year the building was remodeled to permit better handling of the produce business. At the time these improvements were made, the basement was remodeled to serve as a room for the annual stockholders and various group meetings. The second major development in the late thirties was the necessity for the construction of a new elevator at Capron. The cooperative had purchased a second elevator at Capron in March, 1937. A tornado in March of 1939 caused partial damage to this elevator and completely destroyed the elevator and office acquired in 1935. Immediately, the Board of Directors decided to sign a contract with Chalmers and Borton for the construction of a new 80,000 bushel concrete elevator and use the material available in the elevator still standing for the construction of a new office and warehouse. During this same period of time additional stock was purchased in the Union Equity Cooperative Exchange. Stock was also purchased in the Consumers Cooperative Association, which became the chief source of purchase of various items of merchandise desired by the members. To insure a satisfactory sales outlet for cream, the association, also, became a stockholder of the Enid Cooperative Creamery Association.

Operations from 1940 through 1946. The association had gone through the depression maintaining a sound financial position and had expanded even further during the thirties. The increased volume of agricultural commodities which was produced as a result of the war, necessitated further growth and expansion of the association during the forties. In 1940 a great deal of attention was directed to the question of wheat storage. The government price support policy and government loans caused the storage of wheat to become a major problem of all grain marketing firms. The Alva association decided to charge a maximum storage fee of eight cents per bushel plus turning and treating charges annually.

Further growth of the association resulted from the addition of a petroleum department in 1940. The Farmers Independent Oil Company had been operating in Alva for several years. An unsuccessful attempt had been made in 1938 to consolidate the two cooperatives since many farmers were stockholders of both organizations. Finally in 1940 the Farmers Cooperative Association purchased the property and facilities of the cooperative oil company and added a new department to the association. The petroleum department was further enlarged in 1942 with the purchase of the Blue Oil Company at Capron.

At the annual meeting in January, 1941, the Board was directed to incorporate the cooperative under the 1937 Oklahoma Cooperative Law. The constitution and by-laws was rewritten to make necessary changes in conformity with the new law. At the same meeting the Board of Directors was authorized to increase the capital stock from \$75,000 to \$100,000.

The building of additional facilities for grain storage was the principal problem confronting the Board and management in 1944. The building of one elevator in Alva was given consideration in March, 1944. It was

finally decided, however, that a greater number of members would be rendered better handling facilities by increasing the capacity of the Ashley and Hopeton elevators. The question then arose as to the method of financing the new construction. The Board after full consideration of the various ways, including the possibilities of retaining a larger percentage of the dividends, were unanimous in the decision that the only safe and sound method would be the sale of additional stock. A special meeting of the stockholders was called in October, 1944, for the purpose of obtaining the opinion of the stockholders relative to the building of new elevators and to the determination of a method for financing the new construction. The stockholders authorized an increase in capital stock to permit the sale of sufficient stock to build the facilities and suggested that members be solicited to increase their stock subscriptions in accordance with the by-laws. In the regular annual meeting two months later the authorized capital stock was increased from \$100,000 to \$200,000. Contracts were signed with Chalmers and Borton and work began immediately on a 100,000 bushel elevator at each of the two stations.

Another station was added to the association in 1945. In March, 1944, a group from the Avard community met with the Board and presented a list of farmers in their community who would subscribe for stock in the Alva cooperative if an elevator could be purchased in Avard. In December, 1945, the association purchased the property and facilities of the General Grain Company. Plans were then discussed for building a 100,000 bushel elevator in Avard. After additional stock was sold in the Avard community as prescribed by the Board, a contract was signed with Chalmers and Borton and work began on the new elevator. It was completed in September, 1946.

In February, 1947, plans were outlined for rebuilding the petroleum station at Alva. The facilities were moved from the location at Barnes and Fourth to a location which had been formerly occupied by the Farmers Union station. The building was razed and at the time of writing a new two-story brick building was under construction. Upon completion, the building will house the petroleum station, a farm supply and appliance store, and the association offices.

The Growth of the Organization

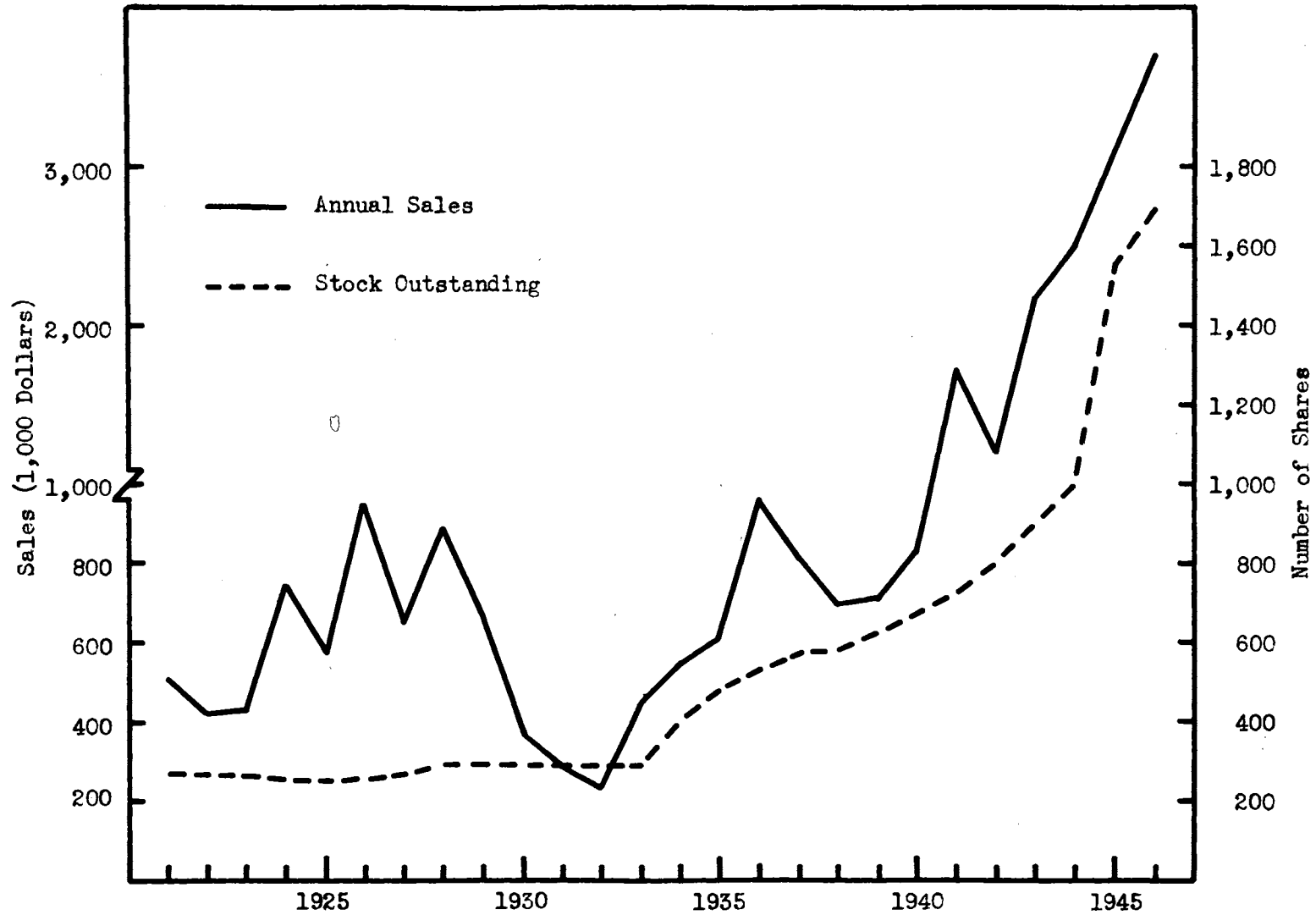
The history portrayed the growth of the association from a single-unit organization through 30 years of development and advancement to its present status as one of the most successful marketing and purchasing associations in Oklahoma. The market area and influence of the organization have been extended by the transition from a single unit operating in Alva to a multiple-unit organization with facilities at Ashley, Avard, Capron, Hopeton, and Noel. With the addition of each station, the membership and volume of business was increased as a result of additional participation by farmers located in the vicinity of the newly acquired station. The growth of the association was not limited to the external aspect. During the entire period of its establishment the cooperative advanced internally as well. The three original departments expanded as demand necessitated. Additional elevator space was constructed to insure more satisfactory handling of the wheat produced by the members of the association. The merchandise department did not maintain a static position, but increased the volume and number of items available for sale. The addition of the produce and petroleum departments widened the scope of services rendered for the benefit of the association members. As a result of the internal growth the association is now composed of five departments: Wheat, coal, merchandise, produce, and petroleum.

Volume and Membership. The growth of the association can best be illustrated by a comparison of the volume of business and membership. The most satisfactory measure for volume of business is the annual gross sales. In the case of membership, outstanding stock is not completely accurate because all shares of stock do not denote active patrons of the association. However, in consideration of information available, outstanding stock serves as the most consistent measure of membership. The total annual sales of the organization have maintained a comparative position with the general business trend (Figure 1). The decrease in 1942 may be attributed to a decrease in total volume of wheat sold and to a decrease in the merchandise department resulting from the smaller volume of merchandise available for sale as a result of the war. However, over the twenty-seven-year period for which records were available both the volume of business and membership increased approximately six-fold.

Physical Facilities. During the entire growth of the association, physical facilities have been planned and constructed to increase the services rendered to the members of the cooperative. The needs and demands of the members have served as the guide for all expansion moves made by the association. This type of development program has resulted in a well-balanced physical plant and has minimized excessive and unprofitable expansion and construction. At the present time facilities are available for handling wheat at all of the cooperative stations with a total elevator capacity of 547,000 bushels. The distribution of the elevator capacity is as follows:

Alva	135,000 bushels
Ashley	110,000 bushels
Avard	100,000 bushels
Capron	80,000 bushels
Hopeton	110,000 bushels
Noel	12,000 bushels

Figure 1. Sales and Outstanding Stock of the Farmers
Cooperative Association, From 1921 Through 1946



SOURCE: Table 15, page 95.

In the case of Hopeton and Ashley, the frame elevators which were in use prior to the construction of the concrete houses are now being used for additional storage space. All of the stations operate during the entire year except Noel, which is open only during the harvest season. Additional facilities are available for the sale of merchandise at all of the stations except Noel and coal facilities are located at Alva, Ashley, and Hopeton. Produce facilities are operated in Alva and Avard. An independent buyer in Avard handles produce on a commission basis for the cooperative. Petroleum stations are located in Alva and Capron. At the present time the petroleum station in Alva is inadequate, pending the completion of the new station under construction.

Market Area. The factors which have contributed to the growth of the organization have aided in establishing a stable market area for the association. The market area of this organization is determined primarily by the location of the farms of members and the proximity of competing facilities for marketing agricultural commodities in neighboring towns. Since approximately 90 percent of the business of the cooperative is member business, the location of the farms of members is the most important element in defining the extent of the market area. With the addition of each station, the market area has been extended to include farmers within the vicinity of the newly acquired station. At present with stations located in each direction from Alva, the market area forms a fairly well defined circle around Alva (Figure 2). The proximity and availability of competing facilities in neighboring towns also are influential as a determinant of the association's market area. The facilities which compose the Alva cooperative are available in a majority of the adjacent towns (Table 1). The size, number, and type of facilities in each town aid in determining the line of division of patronage

Figure 2. Location of the Stations and Market Area of the Farmers Cooperative Association

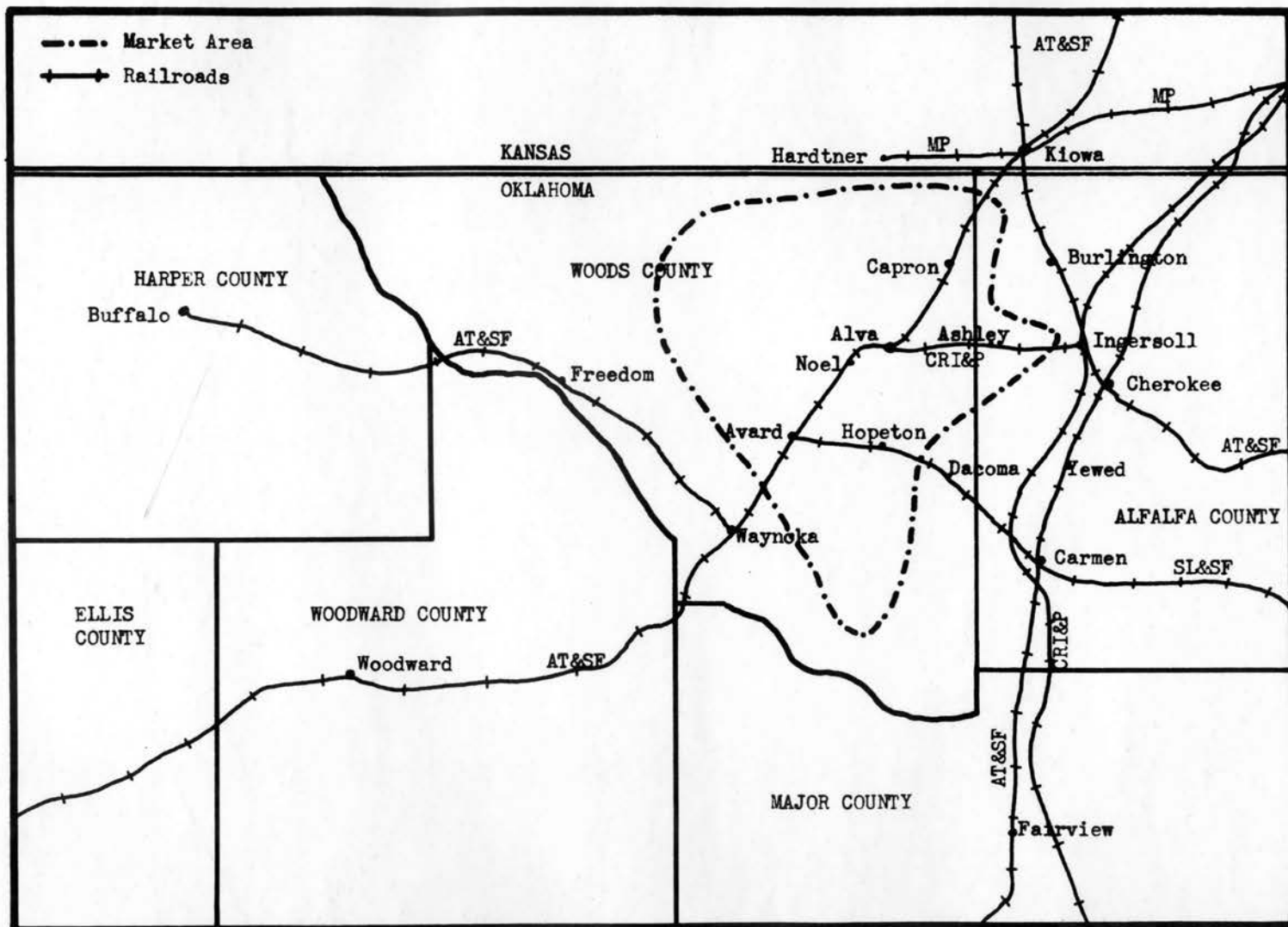


Table 1. Number of Competing Facilities Within and Adjacent To
The Market Area of the Farmers Cooperative Association

Name of Town	Grain Facilities			
	Mills	Line Firms	Locally Owned Firms	Cooperatives
Alva	1	1	0	1
Avard	0	1	0	1
Burlington	0	0	1	1
Capron	0	0	1	1
Carmen	0	1	0	1
Cherokee	1	0	1	1
Dacoma	0	1	0	1
Freedom	0	1	0	1
Hardtner	0	3	0	0
Hopeton	0	1	0	1
Ingersoll	0	0	0	1
Kiowa	1	2	1	1
Waynoka	0	0	0	1
Yewed	0	1	2	0

Name of Town	Sideline Facilities			
	Produce Stations	Petroleum Stations	Feed and Farm Supply Stores	Firms Handling Coal
Alva	6	12	4	2
Avard	1	1	2	2
Burlington	1	2	2	2
Capron	1	1	1	1
Carmen	0	5	3	2
Cherokee	4	8	8	3
Dacoma	2	1	2	0
Freedom	3	2	3	2
Hardtner	2	3	1	1
Hopeton	1	3	2	2
Ingersoll	0	1	0	0
Kiowa	3	8	1	2
Waynoka	2	9	2	1
Yewed	0	1	0	0

SOURCE: Personal interviews with local residents in each community.

between the town in question and the nearest station of the Alva cooperative. In cases where cooperative facilities are available, the line of division is more nearly located at a central position between an Alva cooperative station and the other cooperative. There are isolated examples of farmers who are nearer to other facilities but market through the Alva cooperative because of additional services which are rendered or the personal belief that greater benefits are received. The condition of roads and highways affect the decision of farmers as to which firm they will patronize. This is illustrated in Figure 2 in the case of the southern limit of the association's trade territory. The greater extension of the market area northwest of Alva shows the importance of facilities in neighboring towns in determining the market area of this association. The limited number of towns in this sector is the primary reason for this extension.

The existence of competing firms in the towns where the association's facilities are located results in internal division of the market area. Various types of competing facilities exist in Alva, Avard, Capron, and Hopeton. The effect of these firms upon volume has not been a primary concern of the association. With few exceptions, the major farmers in the entire area are active members of the cooperative. Their participation has assured the cooperative a constant volume in all departments. As a result, the cooperative has been able to maintain a dominate position in competition within the market area. It has, however, endeavored to respect the rights of other firms. This policy has resulted in the maintenance of friendly relations and decreased discriminatory competition on the part of all firms for additional control of the market area.

The history and growth of the association describes the transformation of the cooperative from a single-unit organization to the multi-unit and

multi-department organization that exists at the present time. The success in attaining its present status can be attributed primarily to the stability which has been maintained through the 30 years of expansion and development. Consideration of needs and desires of the members, efficient management, wise financing, and a carefully supervised expansion program are the primary factors which have contributed to the attainment of a sound and stable cooperative enterprise.

AN ANALYSIS OF THE FINANCIAL CONDITION AND OPERATIONS
OF THE ASSOCIATION AND ITS DEPARTMENTS

The analysis of the financial conditions and operations of the Farmers Cooperative Association of Alva is presented in four parts of this study. The first part deals with the financial conditions as obtained from an analysis of the annual balance sheets. Financial condition refers to the relationships that exist among the items constituting assets, liabilities, and net worth. The method employed is a percentage analysis of various elements of the balance sheet to the total assets. The second part is based upon an analysis of the items composing the annual operating statements. The material presented in this part measures the annual success of operations of the business as a whole by a percentage analysis of the operating statement items to the total sales. A business may be operating successfully and efficiently as a unit, however, various elements composing that unit may be inefficient in their operations. In view of this fact, the third part deals with the operations of the five departments constituting the totality of this cooperative. The final part is a ratio analysis to determine the basic relationships of balance sheet and operating statement items. The data used were taken from the annual audits, expense ledgers, and general ledgers of the association for the years 1942 to 1946, inclusive.

Financial Condition of the Association

Assets. The assets of this organization represent the value of that which is actually owned by the association. The primary elements composing the assets are cash, receivables, inventory, fixed assets, and other assets. The first three of these are classed as current assets; denoting that they can be readily converted to a form necessary for meeting current obligations. Cash as given in the audits is composed of cash on hand and

bank deposits. During the five-year period cash has averaged 14.4 percent of the total assets with a low in 1942 of 8.6 percent and a high of 16 percent in 1944 (Table 2). A study made in Michigan of various cooperatives showed that the average percentage of cash to total assets there was 12.7 percent.^{5/} It further stated, however, that purchasing and sales cooperatives usually maintained a higher percentage. The association under study holds a favorable position to this average. The policy of selling wheat immediately to insure an equality between purchases and sales, to minimize the effect of price changes, does not necessitate the maintenance of a large cash balance. As long as a margin of safety is maintained, the present cash percentage should be adequate.

Receivables are composed of accounts receivable, notes receivable, and storage receivable. Receivables should be converted to cash as the business proceeds, however, the possibility of loss on these is counteracted by a reserve for doubtful accounts. The success of the credit policy of the association can be ascertained to some extent from the percentage that receivables are of total assets. The average percentage for the period under study was 2.3 percent with a high of 4.9 percent in 1942 and a low of 1.3 percent in 1945. The present status of receivables is extremely favorable, however, this may be attributed to the high incomes which the farmers received during the war. As the ability of the farmers to meet these obligations becomes more difficult, a rise in the percentage of receivables to total assets may be anticipated.

^{5/} H. E. Larzelere, Financial Management Analysis of Farmers' Cooperatives in Michigan, p. 38.

Table 2. Combined Balance Sheets of the Farmers Cooperative Association,
From 1942 Through 1946

	: : 1942 :	: Percentage : : of Total : : Assets :	: : 1943 :	: Percentage : : of Total : : Assets :	: : 1944 :	: Percentage : : of Total : : Assets :
	(Dollars)	(Percent)	(Dollars)	(Percent)	(Dollars)	(Percent)
Assets:						
Cash	19,324.32	8.6	42,417.87	15.4	48,481.31	16.0
Receivables	11,110.92	4.9	5,491.75	2.0	8,077.53	2.6
Inventory	58,760.15	26.1	58,719.75	21.4	44,283.35	14.6
Current Assets	89,195.39	39.6	106,629.37	38.8	100,842.19	33.2
Other Assets	50,601.34	22.5	85,708.66	31.2	121,224.35	40.0
Fixed Assets	85,550.73	37.9	82,680.14	30.0	81,303.76	26.8
Total Assets	225,347.46	100.0	275,018.17	100.0	303,370.30	100.0
Liabilities:						
Accruals and Reserves	12,882.08	5.7	15,198.33	5.5	9,367.16	3.1
Dividends and Refunds	66,068.45	29.3	76,617.82	27.9	70,965.39	23.4
Current Liabilities	78,950.53	35.0	91,816.15	33.4	80,332.55	26.5
Fixed Liabilities	0.0		0.0		0.0	
Total Liabilities	78,950.53	35.0	91,816.15	33.4	80,332.55	26.5
Net Worth:						
Capital Stock	79,300.00	35.2	89,300.00	32.5	100,000.00	33.0
Allocated Reserve	0.0		19,351.43	7.0	37,247.16	12.3
Surplus	67,096.93	29.8	74,550.59	27.1	85,790.59	28.2
Total Net Worth	146,396.93	65.0	183,202.02	66.6	223,037.75	73.5
Total Net Worth and Liabilities	225,347.46	100.0	275,018.17	100.0	303,370.30	100.0

(Continued)

Table 2. Combined Balance Sheets of the Farmers Cooperative Association,
From 1942 Through 1946 - Continued

	: : 1945 :	: Percentage : : of Total : : Assets :	: : 1946 :	: Percentage : : of Total : : Assets :	: : Five-Year : : Average :	: Percentage : : of Total : : Assets :
	(Dollars)	(Percent)	(Dollars)	(Percent)	(Dollars)	(Percent)
Assets:						
Cash	64,435.69	14.7	74,805.28	15.2	49,892.90	14.4
Receivables	5,742.61	1.3	10,222.25	2.1	8,129.01	2.3
Inventory	44,543.52	10.2	49,533.65	10.1	51,168.08	14.8
Current Assets	114,721.82	26.2	134,561.18	27.4	109,189.99	31.5
Other Assets	144,695.95	33.0	128,027.95	26.1	106,051.65	30.6
Fixed Assets	178,906.97	40.8	227,805.55	46.5	131,249.43	37.9
Total Assets	438,324.74	100.0	490,394.68	100.0	346,491.07	100.0
Liabilities:						
Accruals and Reserves	11,144.30	2.5	12,224.71	2.5	12,163.32	3.5
Dividends and Refunds	81,171.00	18.5	104,580.89	21.3	79,880.71	23.1
Current Liabilities	92,315.30	21.0	116,805.60	23.8	92,044.03	26.6
Fixed Liabilities	30,600.00	7.0	18,000.00	3.7	9,720.00	2.8
Total Liabilities	122,915.30	28.0	134,805.60	27.5	101,764.03	29.4
Net Worth:						
Capital Stock	155,500.00	35.5	169,600.00	34.6	118,740.00	34.2
Allocated Reserve	64,008.94	14.6	78,168.09	15.9	39,755.12	11.5
Surplus	95,900.50	21.9	107,820.99	22.0	86,231.92	24.9
Total Net Worth	315,409.44	72.0	355,589.08	72.5	244,727.04	70.6
Total Net Worth and Liabilities	438,324.74	100.0	490,394.68	100.0	346,491.07	100.0

SOURCE: Annual Audits of the Association, from 1942 through 1946.

The third item composing the current assets is inventory. During the five-year period, the inventory averaged 14.8 percent of total assets with a high of 26.1 percent in 1942 and a low of 10.1 percent in 1946. The decrease in the annual percentages has not resulted from a proportional decrease in the dollar value of the inventory, but from an increase in fixed assets resulting in an increase in the value of the total assets. The association does not maintain an exceedingly large inventory in any department. As stated previously, the policy of maintaining an equality between sales and purchases in the wheat department accounts for the small inventory in this department. The rapid turnover in the produce department results from the perishable nature of the products and an effort to guard against price changes. During the war the scarcity of various items handled by the merchandise and petroleum departments resulted in a rapid turnover and in a small physical inventory. At the present the rapid fluctuation of prices has contributed to a policy of maintaining a small inventory in these departments to prevent a loss in case of a decrease in the inventory value. At the close of the fiscal period, the inventory is at the lowest level during the period. Since the data for this study were taken from the annual financial statements, the existence of a small inventory can be expected. The development of desirable sales outlets and sources of purchase has resulted in a decreased necessity for large inventories. Until a greater degree of stability is attained in the price structure, the maintenance of a small inventory is deemed desirable.

The fixed assets constitute permanent assets which cannot be easily converted into cash and are used for long periods of time in the normal operation of the cooperative. The major items composing fixed assets are real estate, buildings and improvements, sundry equipment, furniture and

fixtures, and delivery equipment. During the five-year period the average percentage of fixed assets to total assets was 37.9 percent, with a high of 46.5 percent in 1946 and a low of 26.8 percent in 1944 (Table 2). The value of fixed assets decreased during the first three years as a result of normal depreciation. Some minor items were added during this period, however, since no major expansions were made, the increases were less than the amount of depreciation for the fixed assets as a whole. The situation changed in 1945 and 1946. The addition of two new elevators plus minor items resulted in an increase of 120 percent in the fixed assets as presented in the 1945 audit. A third elevator constructed in 1946 caused a further increase in the fixed assets. As a result of the important position held by fixed assets in relation to total assets, any major expansions made by the association increases the percentage of fixed assets to total assets and increases substantially the value of the total assets.

The third principal division of assets is other assets. This division is composed primarily of investments, stock subscription receivables and accrued interest receivable, security deposits, and unexpired insurance. The investment element constitutes investments which have been made by the cooperative in other organizations. The majority of these are in central or terminal organizations which serve as a source of purchase or as a sales outlet for commodities handled by the association. The principal organizations are the Union Equity Cooperative Exchange, Consumers Cooperative Association, Consumers Refinery Association, Enid Cooperative Creamery Association, and the Alva Public Terminal. During the current year, 1947, the Alva Public Terminal was sold and the cooperative no longer has an investment in this firm. The association, also, has an investment in stock of the Wichita Bank for Cooperatives and prior to 1946 a major investment item was government war bonds. The

value of other assets increased for the first four years of the five-year period. This increase resulted from the expansion of their investments and the sale of capital stock which increased the stock subscriptions receivable. In 1946 the total value of other assets decreased. This resulted primarily from the sale of war bonds to aid in financing the construction of the Averd elevator. The percentage of other assets to total assets for the five-year period was 30.6 percent with a high of 40 percent in 1944 and a low of 22.5 percent in 1942 (Table 2). Other assets have increased in the past and will continue to increase in the future as a result of allocated reserves which are retained by the various central cooperatives and credited to the local association.

Total assets have increased 118 percent during the four-year period from December 31, 1942 to December 31, 1946. For the same period fixed assets increased 167 percent. Current assets increased 50 percent and other assets increased until 1946 when they decreased. Their decrease did not affect the total assets, since the amount was reinvested in fixed assets. The 1946 value of other assets, however, was 156 percent above the 1942 value. The greatest increase in total assets came in 1945 and this resulted from the construction of two new elevators. During the five-year period the percentages of total assets divided among the three major groups of assets were as follows: current assets 31.5 percent; fixed assets 37.9 percent; and other assets 30.6 percent.

Liabilities. The liabilities denote the obligations or indebtedness of the association. Pending obligations are classified as current liabilities, and are composed of two elements, accruals and reserves and dividends and refunds. The accruals and reserves do not constitute a major liability since they averaged only 3.9 percent of the total assets.

Dividends and refunds, on the other hand, averaged 24.1 percent. The entire value of dividends and refunds, as presented on the annual balance sheets, does not represent a pending liability against the current assets. A large portion of the dividends and refunds remains within the association. They are applied to the allocated reserve, stock subscription receivables, and current receivables. The amount retained from the dividend of each member is applied to his respective indebtedness to the association whether in the form of a stock subscription receivable or current receivables. In the case of the allocated reserve, the amount is earmarked as a capital investment by the individual member. The remainder constitutes a current liability and is refunded to the members of the association. Other items which usually appear under current liabilities are accounts and notes payable. Prior to the close of the fiscal year these items are paid, resulting in their absence from the balance sheets. The position of current liabilities is very favorable, averaging 26.6 percent of the total assets for the five-year period.

Fixed liabilities constitute the second group of liabilities and are composed of mortgages payable. The balance sheets for 1942, 1943, and 1944 do not list any fixed liabilities. In 1945, an operating loan of \$10,600 and a facility loan of \$20,000 were made from the Wichita Bank for Cooperatives. The principle of the loans was not reduced in 1945; however, in 1946 a payment was made. The operating loan was reduced to \$7,400 and the facility loan to \$10,600. In the period of one year the loans were reduced to 58.8 percent of their original value. The operating loan will be completely liquidated during the current year and the facility loan will be paid in full by June of 1950.

Net Worth. Net worth represents the members' equity in the assets of the association. It is composed of capital stock, allocated reserve, and

surplus. The capital stock averaged 34.2 percent of the total assets with a high of 35.5 percent in 1945 and a low of 32.5 percent in 1943 (Table 2). During the same period the value of capital stock increased 134.3 percent. The greatest increase came in 1945 and 1946 as a result of an effort made to increase the sale of stock to aid in financing three new elevators.

An allocated reserve ^{6/} has been established to provide additional capital for growth and expansion. This reserve was created by the retention of earnings which would ordinarily have been distributed to the members. The amount retained annually is credited to each member, respectively. The allocated reserve averaged 12.6 percent of the total assets with a high of 15.9 percent in 1946 and a low of 7.0 percent in 1943. No portion of the 1942 earnings was retained and as a result of the withdrawal of stock for deceased and inactive members the allocated reserve balance decreased in 1943. During the following three years a part of the earnings was retained and the value of the allocated reserve increased.

The general surplus is the difference between the total assets and the total liabilities plus the remainder of the net worth. The surplus is maintained primarily to protect the association against unexpected financial emergencies. As provided in the 1937 Oklahoma Cooperative Law, the association is required to retain 10 percent of the annual net earnings as general surplus, until the surplus equals 100 percent of the capital stock. ^{7/} The co-

^{6/} The allocated reserve is that portion of the association reserve that is earmarked for each respective member since it represents a retention of a portion of the member's dividend. An example of the unallocated reserve is the general surplus reserve.

^{7/} Secretary of State, Corporation Laws of Oklahoma, p. 68.

operative has carried out this provision and its surplus account was 63.6 percent of the capital stock at the close of 1946. During the five-year period the surplus averaged 24.9 percent of the total assets with a high of 29.8 percent in 1942 and a low of 21.9 percent in 1945. As a result of the manner in which surplus is determined, continued net earnings by the association will increase the surplus annually.

Dividends. One of the most important elements of any cooperative is the dividends or refunds returned to the stockholders. The source of payment of these dividends is from the net earnings realized during the fiscal year. Ten percent of the net earnings is first deducted and credited to the general surplus account as stated above. The remainder is then available for the payment of stock and patronage dividends. As prescribed in the by-laws, the dividends on stock cannot exceed 5 percent of the value of the capital stock. The remainder or patronage dividends is divided among the members in proportion to the total value of business done with the association during the year. There is no separation on a departmental basis with the exception of cream where the dividend is based on the pounds of butterfat marketed by each member.

As previously stated a portion of the dividend is retained in the association. This portion is applied on allocated reserve, stock subscription notes, and current accounts and notes receivables (Table 3). The remainder is then returned to the stockholders. The total dividend, as presented in Table 3, differs from the dividend as given in the annual balance sheets. This resulted from minor adjustments which were made prior to the actual payment of the dividends. The retention of a portion of the dividends for the allocated reserve provides a source of capital for future expansion. The increased amount retained in 1944 was to furnish additional capital to

Table 3. Division of Dividends of the Farmers Cooperative Association, From 1942 Through 1946

Year	Total Dividends	Applied on Allocated Reserve	Percentage of Total Dividend	Applied on Stock Notes	Percentage of Total Dividend
	(Dollars)	(Dollars)	(Percent)	(Dollars)	(Percent)
1942	66,066.68	17,718.54	26.8	9,099.44	13.8
1943	76,817.47	18,088.79	23.5	9,040.55	11.8
1944	71,021.68	26,916.16	37.9	7,965.11	11.2
1945	81,314.02	14,692.79	18.1	15,666.18	19.3
1946	105,153.59	29,002.29	27.6	10,645.66	10.1

Year	Applied on Accounts and Notes Receivable	Percentage of Total Dividend	Paid By Cash	Percentage of Total Dividend
	(Dollars)	(Percent)	(Dollars)	(Percent)
1942	1,864.42	2.8	37,384.28	56.6
1943	3,394.44	4.4	46,293.69	60.3
1944	1,946.01	2.7	34,194.40	48.2
1945	1,670.73	2.0	49,284.32	60.6
1946	2,313.44	2.2	63,192.20	60.1

SOURCE: Records of the Association, from 1942 through 1946.

aid in constructing two new elevators. The amount retained for stock subscription notes will depend upon the number of shares subscribed for during the year. The greater amount retained in 1945 and 1946 resulted from expansion of stock sales to aid in financing new elevators. The policy of applying a member's dividend to his account or note aids in reducing these to a minimum. The amount of the total dividend retained has been approximately 40 to 45 percent during the five years and the remainder has been returned to the members in the form of cash. The dividends aid in stimulating member business since they are a measure of the advantage of doing business with the cooperative as contrasted to marketing through private firms.

Annual Operations of the Association

Sales. The annual value of sales denotes the total income received from the sale of commodities handled and the return on services rendered by the association. The total annual sales was the gross operating income with two exceptions. In 1944 and 1946 a small addition resulted from handling charges and storage earned on wheat for each year, respectively (Table 4). During the five-year period under study, the sales have increased annually. Total sales plus additional operating income in 1946 was 111 percent greater than in 1942. Several factors have contributed to this increase. The primary factor was the increase in the general price structure. If volume had remained constant, this factor alone would have resulted in an increase in the value of sales. However, coupled with an increased price for all commodities was an increase in volume in most departments. The coal department was the one exception, since it decreased over the five years. The minor position of this department exerted very little influence upon the total sales. The 1946 volume was not the greatest in all departments for the five years; however, it was substantially above the 1942 level.

Table 4. Combined Operating Statements of the Farmers Cooperative Association,
From 1942 Through 1946

	: : 1942	: Percentage : : of Sales :	: : 1943	: Percentage : : of Sales :	: : 1944	: Percentage : : of Sales
	(Dollars)	(Percent)	(Dollars)	(Percent)	(Dollars)	(Percent)
Sales	1,193,767.95	100.0	2,171,986.17	100.0	2,496,443.94	100.0
Cost of Sales	1,084,316.57	90.8	2,037,136.00	93.8	2,372,426.26	95.0
Gross Earnings	109,451.38	9.2	134,850.17	6.2	124,017.68	5.0
Operating Expenses	62,318.20	5.2	81,605.31	3.8	89,887.37	3.6
Net Operating Earnings	47,133.18	4.0	53,244.86	2.4	34,130.31	1.4
Other Income	38,020.43	3.2	41,488.42	1.9	53,087.02	2.1
Other Deductions	11,740.90	1.0	11,127.10	.5	6,468.84	.3
Net Earnings	73,412.71	6.2	83,606.18	3.8	80,748.49	3.2
Interest	4,873.10	.5	5,238.32	.2	6,360.08	.3
Modified Net Earnings	68,539.61	5.7	78,367.86	3.6	74,388.41	2.9

	: : 1945	: Percentage : : of Sales :	: : 1946	: Percentage : : of Sales :	: Five-Year : Average :	: Percentage : of Sales
	(Dollars)	(Percent)	(Dollars)	(Percent)	(Dollars)	(Percent)
Sales	3,116,686.96	100.0	3,711,799.76	100.0	2,538,136.95	100.0
Cost of Sales	2,963,575.07	95.1	3,524,828.96	95.0	2,396,456.57	94.4
Gross Earnings	153,111.89	4.9	186,970.80	5.0	141,680.38	5.6
Operating Expenses	92,647.76	3.0	100,114.12	2.7	85,314.55	3.4
Net Operating Earnings	60,464.13	1.9	86,856.68	2.3	56,365.83	2.2
Other Income	37,104.55	1.2	38,868.31	1.0	41,713.75	1.6
Other Deductions	7,524.63	.2	9,080.61	.2	9,188.42	.3
Net Earnings	90,044.05	2.9	116,644.38	3.1	88,891.16	3.5
Interest	10,096.70	.3	11,650.57	.3	7,643.75	.3
Modified Net Earnings	79,947.35	2.6	104,993.81	2.8	81,247.41	3.2

SOURCE: Annual Audits of the Association, from 1942 through 1946.

The proportion of the total sales accountable to each department varied considerably over the five-year period. The wheat department has always been the major department of the association. The sales of the wheat department were 55.7 percent of total sales in 1942; however, it had increased to 75.9 percent in 1946 (Table 5). The opposite situation existed in the coal department. The sales in the other departments increased or remained fairly constant; however, their percentage of total sales decreased relative to the increase in the wheat sales. The primary reason for this situation may be attributed to a relatively greater increase in the volume of wheat sold and the price received for the wheat as compared to volume and price of the commodities handled in other departments.

Gross Earnings. Gross earnings are the difference between sales and cost of sales and serve as the source for the payment of operating expenses. They, also, measure the margin or mark-up that the association takes on the various commodities. Management is constantly confronted with the problem of maintaining a desirable margin. It must be adequate to cover the operating costs; however, a high margin may discourage business and decrease volume. Competition aids in determining the position of this point yet it is a problem that must be considered by management to insure operating efficiency. The average margin for all commodities handled by the association has decreased during the past five years. In 1942 the operating earnings or margin was 9.2 percent of the total sales (Table 4). By 1946 it had decreased to 5 percent. The primary reason for this decrease was the higher percentage of total sales that were accountable to the wheat department. The average margin on wheat for the period was 3.9 percent. As wheat sales have increased relative to total sales, it has resulted in a decrease in the average margin for all commodities.

Table 5. Relationship of Departmental Sales to Total Sales of the Farmers
Cooperative Association, From 1942 Through 1946

Year	Total Sales	Wheat Sales	Percentage of Total Sales	Coal Sales	Percentage of Total Sales	Merchandise Sales
	(Dollars)	(Dollars)	(Percent)	(Dollars)	(Percent)	(Dollars)
1942	1,193,767.95	665,088.52	55.7	14,015.22	1.2	189,003.67
1943	2,171,986.17	1,268,414.51	58.4	14,461.32	.7	404,319.94
1944	2,491,632.91	1,554,013.91	62.4	13,447.99	.5	417,902.45
1945	3,116,686.96	2,271,562.73	72.9	15,017.19	.5	321,171.55
1946	3,694,146.58	2,802,720.05	75.9	9,595.65	.3	378,148.83

Year	Percentage of Total Sales	Produce Sales	Percentage of Total Sales	Petroleum Sales	Percentage of Total Sales
	(Percent)	(Dollars)	(Percent)	(Dollars)	(Percent)
1942	15.8	244,096.45	20.5	81,564.09	6.8
1943	18.6	372,837.17	17.2	111,953.23	5.1
1944	16.8	383,760.57	15.4	122,507.99	4.9
1945	10.3	382,936.75	12.3	125,998.74	4.0
1946	10.2	360,677.13	9.8	143,004.92	3.8

SOURCE: Annual Audits of the Association from 1942 through 1946.

Operating Expenses. The operating expenses are the expenses incurred by the firm during its normal annual operations. The relationship existing between operating expenses and sales measures to some degree the operating efficiency of the association. During the five-year period operating expenses averaged 3.4 percent of the total sales with a high of 5.2 percent in 1942 and a low of 2.7 percent in 1946 (Table 4). The value of operating expenses has increased during the period. However, the rate of increase in sales has been greater, resulting in the decrease in the percentage of operating expenses to total sales. In order to ascertain the increase in the operating expenses an analysis of the items constituting operating expenses is necessary.

Salaries and wages composed the major operating expense item. For the five-year period this item accounted for 64.31 percent of the total operating expenses (Table 6). As a result of the important position held by salaries and wages, they were the chief factor contributing to an increase in total expenses over the five years. As the general price level increased, the necessity arose for increasing salaries and wages. In 1946 they were 81 percent above the 1942 level.

Other major items constituting operating expenses are taxes, depreciation, and insurance. When expenses are divided into fixed and variable elements, these three items are usually termed fixed costs. They are fixed costs since they must be met regardless of whether the association is carrying on its normal functions. These items accounted for 16.41 percent of the total operating expenses (Table 6). Depreciation increased in 1946 as a result of an addition to fixed assets from the construction of two new elevators in 1945. The remainder of the operating expenses are composed of several general items. The most important of these are lights and power, truck

Table 6. Relationship of Individual Expense Items to Total Operating Expense
of the Farmers Cooperative Association, From 1942 Through 1946

	1942	1943	1944	1945	1946	Five-Year Average	Average Percentage of Total Operating Expenses
	(Dollars)					(Percent)	
Salaries and Wages	37,328.38	53,137.46	59,385.85	58,160.01	67,120.33	55,026.40	64.31
Truck Expense	2,533.93	3,921.95	4,027.31	4,363.62	1,136.37	3,196.63	3.74
Repairs	3,329.25	2,733.77	2,756.18	2,463.12	2,898.07	2,836.08	3.31
Telephone and Telegraph	688.95	885.45	837.95	928.90	1,048.00	887.85	1.04
Office Supplies	1,405.70	1,483.43	1,428.58	994.01	1,563.45	1,375.03	1.61
Light and Power	2,771.21	3,349.82	2,798.75	3,591.43	3,106.04	3,123.45	3.65
Heat, Water, and Ice	444.47	549.73	753.11	712.24	761.59	644.23	.75
Lease and Rentals	38.00	80.00	170.00	234.00	126.00	139.60	.16
Taxes	2,218.76	2,632.98	3,570.97	4,408.63	5,246.53	3,615.57	4.23
Business Dues	221.55	210.50	205.00	233.00	240.50	222.11	.26
Donations	58.50	241.82	266.00	204.00	297.00	213.46	.25
Advertising	298.89	466.05	716.74	381.15	599.18	492.40	.58
Annual Meeting Expense	446.63	219.85	520.50	7.00	674.20	371.64	.43
Bond Expense	200.00	200.00	200.00	354.00	403.88	271.58	.32
Audit Expense	275.00	325.00	325.00	325.00	325.00	315.00	.37
Directors Fees	354.00	307.00	346.00	446.00	340.00	358.60	.42
Employee Life Insurance	126.12	149.92	135.39	285.63	208.24	181.06	.21
Interest Paid	88.93	0.0	0.0	943.50	807.89	614.40	.72
Insurance	2,602.77	3,220.34	3,684.99	3,958.27	3,428.19	3,378.91	3.95
Depreciation	6,221.43	6,653.96	6,976.15	6,817.93	8,544.35	7,042.76	8.23
General Expense	615.73	836.28	732.90	2,836.32	1,239.31	1,252.11	1.46

SOURCE: Annual Expense Ledgers of the Association, from 1942 through 1946.

expense, repairs, office supplies, and telephone and telegraph. As a whole, the majority of these are variable costs. The percentage range of these items to total operating expenses is 0.16 to 3.74 percent.

Other Income and Other Deductions. Other income denotes that portion of income derived from returns on investments and financial income. It does not arise from the actual operation of the association as a business unit. The most important element of other income is the returns on investments. These are usually in the form of dividends on stock and patronage refunds. As stated previously, this association owns stock in several terminal or central cooperatives. As a result of these investments, the local association shares in the net earnings of these various cooperatives. The items constituting financial income varied considerably over the five-year period. The most important of these are commission on sales tax, cash long, gain on the sale of fixed assets, and interest earned. These items do not compose a major portion of the gross income of the association. The relationship between sales and other income has varied during the five years. Other income averaged 1.6 percent of the total sales with a high of 3.2 percent in 1942 and a low of 1.0 percent in 1946 (Table 4).

The amount of other income received annually is dependent upon the successful operation of the overhead organizations and the volume of business transacted by the local association with them. The patronage refund from the Union Equity Cooperative Exchange of Enid to the Alva cooperative in 1944 was greater than the refund received during the other four years. This resulted in the greater size of other income in 1944. The primary elements composing other deductions are federal and state income tax, federal excess profits tax, and various minor financial elements. During the five-year period other deductions have constituted only 0.3 percent of the total sales.

Net Earnings. The net earnings are an important element of any business organization. They are even more important in a cooperative because they represent not only a measure of the success of operations for a fiscal year but, also, represent the savings realized by the members by doing business with the cooperative rather than a private firm. The value of net earnings has increased annually for the five-year period, however, the percentage it represents of the total sales has decreased or remained fairly constant. This has been caused primarily by an increased ratio of wheat sales to total sales. Wheat has a smaller margin than other commodities handled by the association and the resulting gross margin is a lower percentage of the total sales.

Interest. The analysis of the operating statements has been carried one step further in this study and a computation has been made for theoretical interest. The capital invested in any firm should be charged a prevailing rate and represented as a cost for the use of the capital for a specific purpose. In this study the net worth has been used as the basis and divided into facility, operating, and commodity capital. The current prevailing rates of the Wichita Bank for Cooperatives were applied to these various types of capital and the interest was computed. The amount of interest increased substantially in 1945 as a result of a rapid increase in the capital invested in the firm (Table 4). The net worth increased with additional sales of capital stock. The corresponding increase in assets was primarily an increase in fixed assets with the construction of two elevators. The final earnings of the association have been termed modified net earnings and represent the amount remaining after interest has been deducted from net earnings.

Departmental Operation of the Association

Wheat Department. The importance of wheat production in the area served by the association was the reason for the organization of this cooperative. Since the association was first organized this department has been the largest and most important. Other departments have been added as demand necessitated, however, they have been secondary to wheat marketing. As stated in the section on growth of the association, facilities have been expanded from a single frame elevator in Alva to include wheat facilities at five other locations: Ashley, Avard, Capron, Hopeton, and Noel. To insure even greater ability to handle adequately the wheat of members, desirable sales outlets have been established. The majority of the wheat purchased by the association is sold to four firms, Union Equity Cooperative Exchange and General Mills at Enid and the Alva Roller Mills and Alva Public Terminal at Alva. The advantage of marketing cooperatively has prompted the association to market a greater volume with the Union Equity than with the other firms. During the harvest season a large volume is stored and subsequently sold to General Mills and the Alva Public Terminal. The Alva Roller Mills purchased wheat from the association primarily during periods of low inventory in their own elevators to insure continuous operation of the local mill. The car shortage during the past few years has increased the volume sold to the Alva Roller Mills and the Alva Public Terminal. Cars could be transferred in the yards at Alva and be available for use again in a short period of time. As a result of continuous patronage of these four firms, the cooperative is assured of an outlet for all wheat purchased at any time throughout the entire year.

The problem of wheat storage has become a great deal more important during the past few years. A pronounced trend on the part of producers to

take advantage of elevator storage is apparent. The risk involved in home storage has caused it to become less popular. This risk is practically eliminated in elevator storage if the elevators are properly constructed and operated. The low storage rates and convenience of elevator storage have also influenced this trend. The prevailing rate for the local association for the past five years has been one and one-fourth cents per bushel monthly with a maximum total of eight and one-half cents. This association differs from some cooperatives in that regardless of where a producer's wheat is stored, he incurs no greater cost than if the wheat were stored in the local elevator. The matter of differentials in freight and other charges on shipped storage grain does not penalize the individual but is absorbed by the association.

The shift from home storage to elevator storage has necessitated the addition of more facilities and increased the need for arrangements to ship overflow to regional or other terminals. Revolutionary changes in the method of harvesting make it difficult to determine what constitutes adequate local facilities at the present time. The shortage of railroad cars has increased the difficulty, also, in determining the most desirable local storage capacity. This is definitely one of the major problems facing management at the present and it is difficult to predict the availability of cars and the harvesting methods that will be employed in the future. A great deal of wheat has been turned away from the stations of the association during the past few years because facilities were not adequate to handle the wheat. This resulted from the accelerated rate that wheat is being harvested on the farms in this area and the inadequate number of cars available for moving the wheat from the local elevators to terminal facilities. Management must provide adequate facilities, however, because of the inability to foresee the future changes in

wheat marketing, care must be taken not to construct excess facilities. Such a move would prove more detrimental to the association than the inability to handle all wheat offered for storage at the present time.

The volume of wheat sold by the association increased annually during the five-year period (Table 7). The volume sold in 1946 was 145 percent greater than the 1942 volume. This resulted from an increase in production and an increase in membership. Although the market area of the association does not include the entirety of Woods County and a portion of wheat produced in Alfalfa County is marketed at Ashley, production data for Woods County indicate there has been an increase in acres harvested each year since 1942. The resulting bushels produced have increased over the period with a low of 1,560,000 bushels in 1943 and a high of 3,728,000 bushels in 1946. As a result of the increased production the volume available for sale increased and the volume handled by the association increased. Coupled with increased production has been a rapid increase in membership. The 1946 membership was 115 percent greater than the membership in 1942. As a result primarily of these two factors the volume handled by the association increased during the five-year period.

The seasonal volume was available only for the wheat purchased. Information on wheat sales could not be obtained since the final settlement on wheat sales was not made in many cases for several months after the sale was confirmed. At the time the sale is made the association draws a draft on the buyer for the approximate amount and after the destination, weight, and grade are determined the final settlement is made as time permits. The seasonal volume of wheat purchases, however, reaches a peak in June and July during the harvesting season (Figure 3). Two other minor peaks come in January and September. The increased purchases in January result from

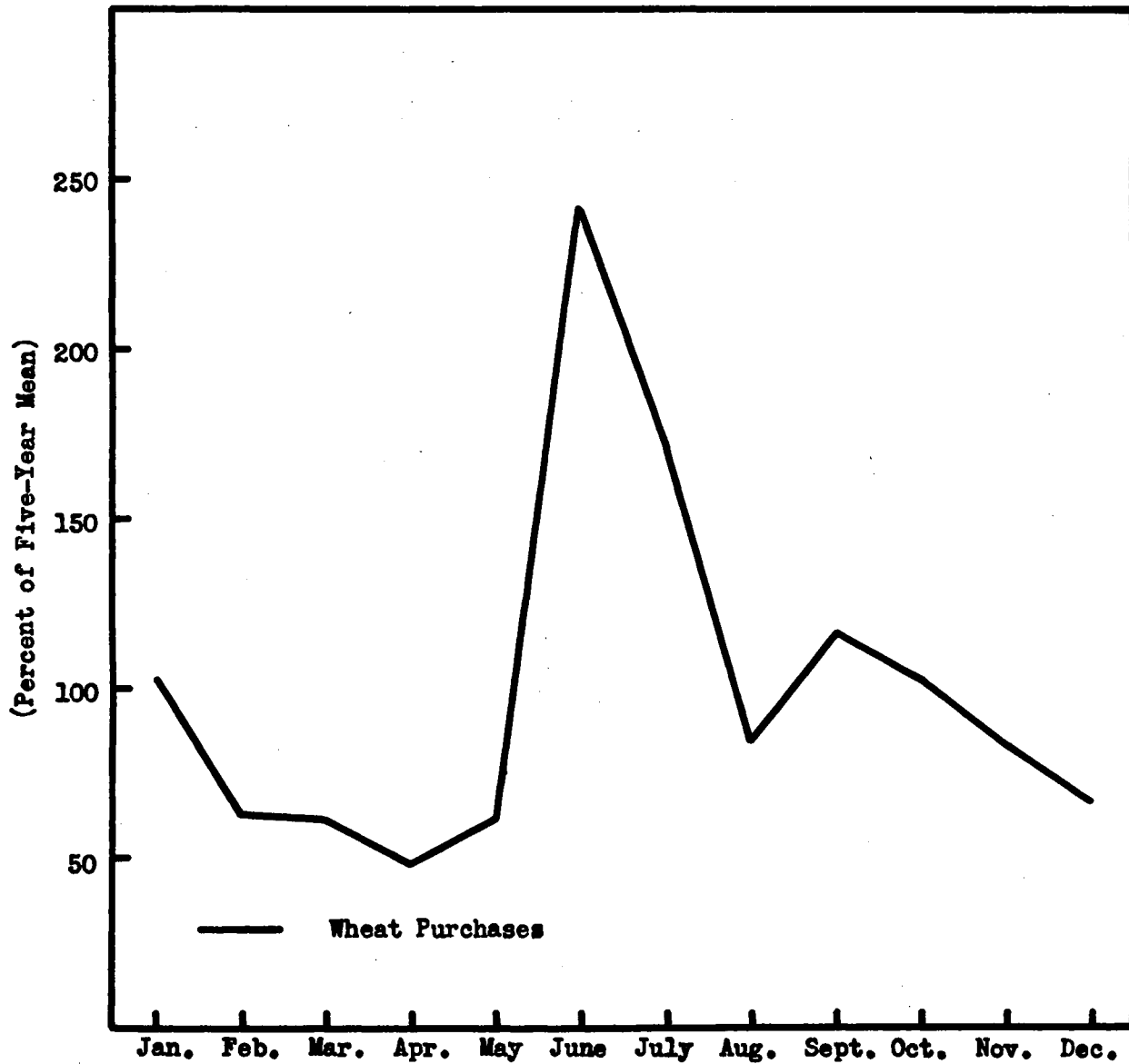
Table 7. Operating Statement of the Wheat Department of the Farmers
Cooperative Association, From 1942 Through 1946

Year	Volume Sold	Sales	Price Per Bushel	Cost of Sales	Cost per Bushel	Gross Earnings	Earnings Per Bushel	Storage Handling Charges	Operating Expenses
	(Bushels)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1942	647,715	665,088.52	1,027	622,459.58	.961	42,628.94	.065		22,417.43
1943	828,526	1,268,414.51	1,531	1,231,737.89	1.486	36,676.62	.043		22,157.65
1944	974,653	1,554,013.91	1,594	1,534,265.76	1.574	19,748.15	.020	4,811.03	24,285.17
1945	1,467,789	2,271,562.75	1,547	2,223,186.41	1,514	48,376.32	.033	17,341.13	30,434.26
1946	1,587,807	2,802,720.05	1,765	2,749,752.12	1.732	52,967.93	.033	17,653.18	33,011.71

Year	Expenses Per Bushel	Net Operating Earnings	Earnings Per Bushel	Other Income	Other Deductions	Net Earnings	Interest	Modified Net Earnings
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1942	.034	20,211.51	.031	30,904.25	4,662.97	46,452.79	3,352.75	43,100.04
1943	.026	14,518.97	.017	31,596.76	2,986.31	43,129.42	3,218.19	39,911.23
1944	.0249	274.01	.0003	38,412.10	1,075.65	37,610.46	3,665.06	33,945.40
1945	.021	17,942.06	.012	25,870.10	2,279.10	41,533.06	6,998.65	34,534.21
1946	.021	37,609.40	.024	28,436.95	2,802.84	63,243.51	9,063.92	54,179.59

SOURCE: Annual Audits of the Association, from 1942 through 1946.

Figure 3. Average Seasonal Variation of Wheat Purchases for the Farmers Cooperative Association, From 1942 Through 1946



SOURCE: Table 16, page 96.

restricted sales by farmers during the latter part of the previous year in an effort to reduce income taxes to a minimum. The September peak results from the sale of wheat by farmers to replenish operating funds. The practice of equalizing daily sales with purchases to minimize possible loss from price fluctuations should result in a seasonal variation of wheat sales for the association in conformity with the seasonal variation of purchases.

The increase in value of sales and cost of sales was greater than the proportional increase in volume (Table 7). This resulted from an increase in the price of wheat over the five-year period. The average price paid by the association was \$1.45 per bushel as compared to the average Oklahoma farmer price of \$1.37 for the same period. The gross earnings realized by the cooperative decreased with a low of two cents per bushel in 1944 (Table 7). However, even though the margin at the local level was very small during this year the dividend returned by the terminal organization was much greater.

The government loan program on wheat resulted in a great deal of difficulty in analyzing wheat sales, and the resulting gross earnings. Income did not follow the actual sales of the wheat and on several occasions the final settlement was not made on a portion of the wheat until the following year.

The operating expenses have increased in dollar value, however, the expense per unit of wheat sold has decreased. This indicates that as volume increases the unit expense decreases and serves to measure the operating efficiency of the department. The other income is composed primarily of the dividend received from the Union Equity Cooperative Exchange. The interest on the capital invested in the department increased in 1945 with an additional increase in 1946 and was accountable to the construction of three new

elevators. The modified net earnings indicate that the wheat department has carried on profitable operations during the five-year period. The low earnings in 1944 may be accountable to the low margin the association received. As a whole, however, this department has contributed a great deal to the successful operation of the association during the five-year period under study.

Coal Department. Although the coal department was one of the original departments of the association, it now maintains a relative unimportant position. For many years coal and wood constituted the major sources of fuel in Woods County. The establishment of a natural gas system in Alva was the first factor that caused a decline in coal consumption. At the present a second factor, the extensive use of propane and butane in the rural areas, has caused a further decline. These two competing fuels have proven to be more convenient and economical than coal. The decreased consumption of coal has resulted in a decreased volume of sales for the cooperative, however, the continued use of coal by machine shops and some members of the association has prompted the continuation of the coal department.

The majority of the coal handled by the cooperative is purchased from three firms, McAlester Fuel Company, Sinclair Coal Company, and Jackson, Hunter, and Gould. The coal is purchased in carload lots for delivery at Alva, Ashley, and Hopeton. The small volume of coal now being handled at Ashley may result in the management's discontinuing carload delivery at this station. If this decision is made, coal will be delivered by truck from Alva, thereby decreasing the inventory maintained at Ashley.

The volume of coal has decreased during the past five years. The coal sold in 1946 was 54 percent of the 1942 volume and 53 percent of the volume sold in 1943 (Table 8). As stated previously, this decrease has resulted from the substitution of other fuels. The seasonal variation of coal volume indicates that a majority of the coal is used for heating purposes since the

Table 8. Operating Statement for the Coal Department of the Farmers
Cooperative Association; From 1942 Through 1946

Year	Volume Sold (Tons)	Sales (Dollars)	Price Per Ton (Dollars)	Cost of Sales (Dollars)	Cost Per Ton (Dollars)	Gross Earnings (Dollars)	Gross Earnings Per Ton (Dollars)	Operating Expense (Dollars)
1942	1,785.21	14,015.22	7.85	10,843.35	6.07	3,171.87	1.78	1,429.64
1943	1,812.18	14,461.32	7.98	12,067.27	6.66	2,394.05	1.32	1,541.16
1944	1,543.25	13,447.99	8.71	11,528.12	7.47	1,919.87	1.24	1,761.04
1945	1,628.00	15,017.19	9.22	12,484.58	7.67	2,532.61	1.56	1,832.25
1946	961.46	9,595.65	9.98	7,756.80	8.07	1,838.85	1.91	1,852.22

Year	Expense Per Ton (Dollars)	Net Earnings (Dollars)	Net Earnings Per Ton (Dollars)	Other Income (Dollars)	Other Deductions (Dollars)	Net Earnings (Dollars)	Interest (Dollars)	Modified Net Earnings (Dollars)
1942	.80	1,742.23	.98	55.48	341.38	1,456.33	45.53	1,410.80
1943	1.85	852.89	.47	58.01	221.21	689.69	62.47	627.22
1944	1.14	158.83	.10	60.87	126.55	93.15	58.98	34.17
1945	1.13	700.36	.43	80.19	147.04	633.51	65.65	567.86
1946	1.93	-13.37	-.01	38.86	90.42	-64.93	48.48	-113.41

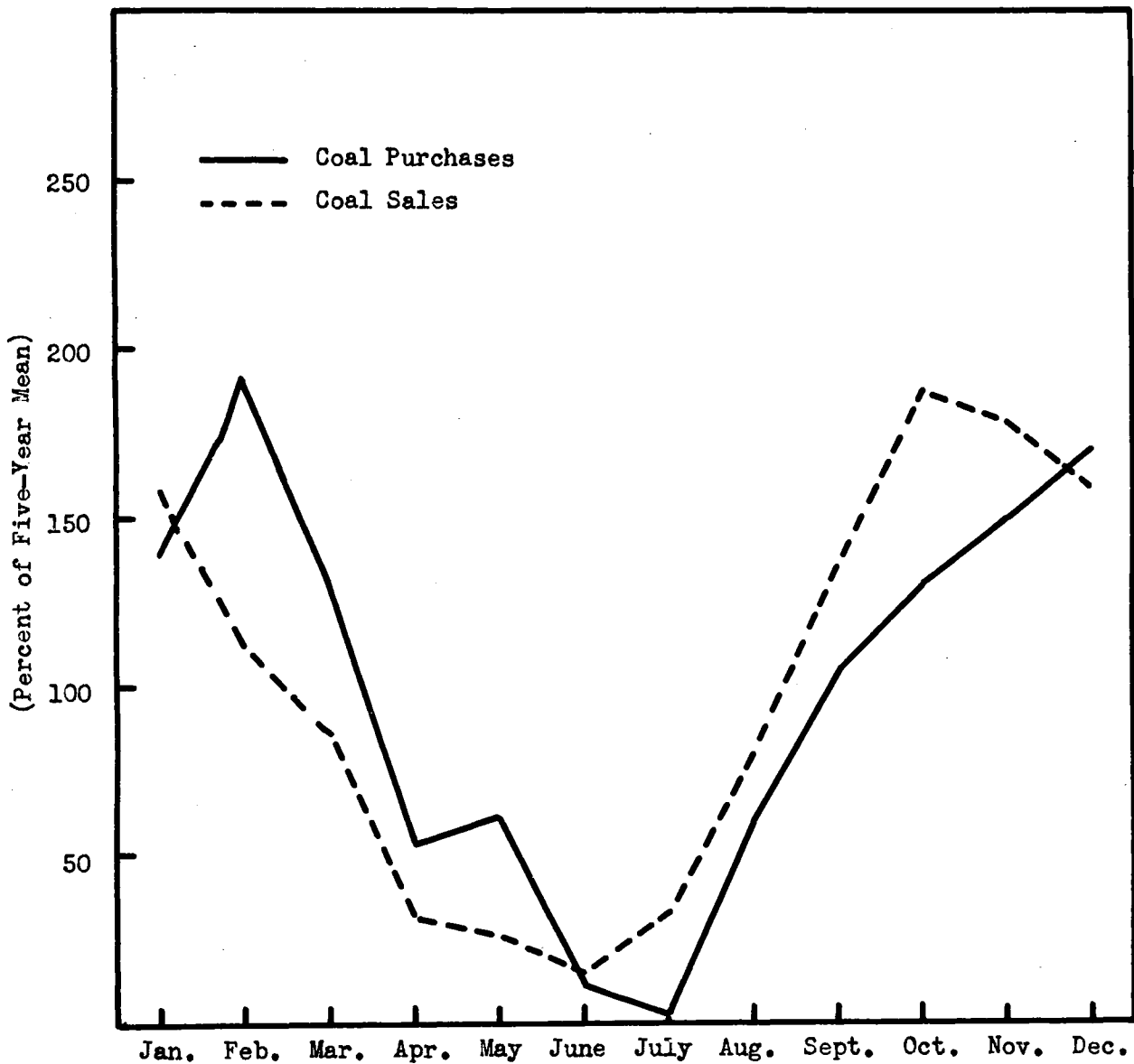
SOURCE: Annual Audits of the Association, from 1942 through 1946.

peak of coal sales is during the winter months (Figure 4). The variation between purchases and sales results from the ability to maintain an inventory since coal can be stored for long periods of time. With the increased availability of propane and butane since the close of the war and the continued installation of systems for their use on the farms of Woods County, a more drastic curtailment of coal consumption can be anticipated.

In analyzing the operations of the coal department a definite relationship between volume and earnings becomes apparent. As volume has decreased the net earnings have decreased. In 1946 when the price and gross earnings on coal were the highest for the five-year period, the firm incurred a net loss in the coal department (Table 8). Operating expenses increased over the five years as a result of the rise in the general price structure. Salaries, which compose 36 percent of the operating expenses, increased annually. The future of the coal department depends primarily upon the maintenance of a stable volume. If the volume continues to decrease it may be advisable to discontinue the coal department in the future.

Merchandise Department. The merchandise department was one of the original departments of the association. The seasonal aspect of wheat marketing prompted the addition of merchandise as a sideline department to insure sufficient earnings for continual operation of the cooperative. The department has proved to be a successful sideline business and has grown as the association expanded. In the summer of 1947 the association was operating merchandise facilities at Alva, Ashley, Avard, Capron, and Hopeton. The primary commodities handled by this department are feed, seed, and farm supplies. As the demand for various farm supplies became apparent the inventory was expanded and additional products were made available for sale.

Figure 4. Average Seasonal Variation of Coal Sales and Purchases for the Farmers Cooperative Association, From 1942 Through 1946



SOURCE: Table 17, page 96.

The sources of purchase of merchandise items vary more than they do in other departments. This results from the greater variety of products handled by this department. The local Alva Roller mills serves as the source of mill feeds, chiefly bran, shorts, and flour. A large portion of the whole grains is purchased through the Union Equity Cooperative Exchange at Enid and is delivered by trucks from that association or in carload lots. Two other important sources are the Merit Feed Mills and Producers Cooperative Oil Mill at Oklahoma City. The former delivers various concentrates and feed products and the latter is the chief source for the purchase of cottonseed meal and cake. Transient truckers and local farmers also provide an important source of purchase of merchandise items. Local farmers who have an excess of production of various grains and hay usually find a sales outlet for these through the merchandise department of their own association. Transient truckers have been an important source of purchase for various small grains, seed, and alfalfa and prairie hay. As the department has expanded a greater effort has been made to purchase in carload lots when the demand insured a rapid turnover of the commodity. Salesmen from various companies make regular visits to the local association and fill orders as required. During the past few years, as the Consumers Cooperative Association of North Kansas City has expanded the list of farm supplies available for sale, the local association has increased their purchases from this cooperative.

The association has practiced a system of centralized purchasing for the department. The department head, after conferring with the manager, purchases all commodities which are available for sale in the department. As stated previously, facilities are available at Alva, Ashley, Capron, Hopeton, and Averd for the sale of merchandise commodities. Except in remote cases, delivery is made at Alva and trucks from the local association transport the

commodities to the other stations. Small bins have been constructed in the warehouses at each station for bulk grains, and space is available for the display of other feeds, seeds, and farm supplies. The inventory maintained at the stations is smaller than that existing at the central department in Alva.

An important function of the department has been the preparation of poultry mash. The firm previously handled various commercial feeds, however, for a number of years the local association has mixed their own mash at a reduced cost to the members. Custom grinding has, also, been an important function of this department. At a nominal fee the patrons can have farm-produced grains ground at the warehouse in Alva; however, this service is not available at the other stations of the cooperative.

The volume of the merchandise department cannot be measured in physical units because of the multiplicity of units involved in the commodities handled. As a result, the most logical measure of volume is total sales. Several factors may have attributed to the variations in the total sales of this department (Table 9). Feed sales represent the major portion of the total sales. Variations in the volume of feed sold is dependent upon the number of livestock and chickens on the farms of Woods County. The total number increased from 1942 to 1943 as a result of the increased emphasis placed on livestock and poultry products to aid in the war effort. This increase may have influenced the increased sales of the merchandise department. During the same period, the price for feeds increased and the membership of the association expanded. The volume reached a peak in 1944, however, it declined in 1945 (Table 9). This decrease resulted from a curtailment of livestock and poultry production. Also, the increase in feed prices during 1945 influenced volume. The number of livestock and poultry continued to decline

Table 9. Operating Statement of the Merchandise Department of the Farmers
Cooperative Association, From 1942 Through 1946

Year	Sales	Cost of Sales	Gross Earnings	Gross Earnings Percentage of Cost of Sales	Operating Expenses	Operating Expenses Percentage of Cost of Sales
	(Dollars)	(Dollars)	(Dollars)	(Percent)	(Dollars)	(Percent)
1942	189,005.67	164,685.00	24,320.67	14.77	14,461.69	59.46
1943	404,319.94	366,547.05	37,972.89	10.37	19,079.08	50.24
1944	419,902.45	379,194.41	38,708.04	10.21	22,113.94	57.13
1945	321,171.55	292,333.50	28,838.05	9.86	20,798.03	72.12
1946	378,148.83	342,827.36	35,321.47	10.30	21,865.96	61.91

Year	Net Operating Earnings	Other Income	Other Deductions	Net Earnings	Interest	Modified Net Earnings
	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)	(Dollars)
1942	9,858.98	3,962.82	2,594.91	11,226.89	471.54	10,755.35
1943	18,893.81	3,702.88	3,146.93	19,449.76	674.88	18,774.88
1944	16,954.10	5,076.61	2,130.86	19,539.85	853.66	18,686.19
1945	8,040.02	3,653.89	1,526.38	10,167.53	1,123.10	9,044.43
1946	13,455.51	3,512.46	1,928.08	15,039.89	910.27	14,129.62

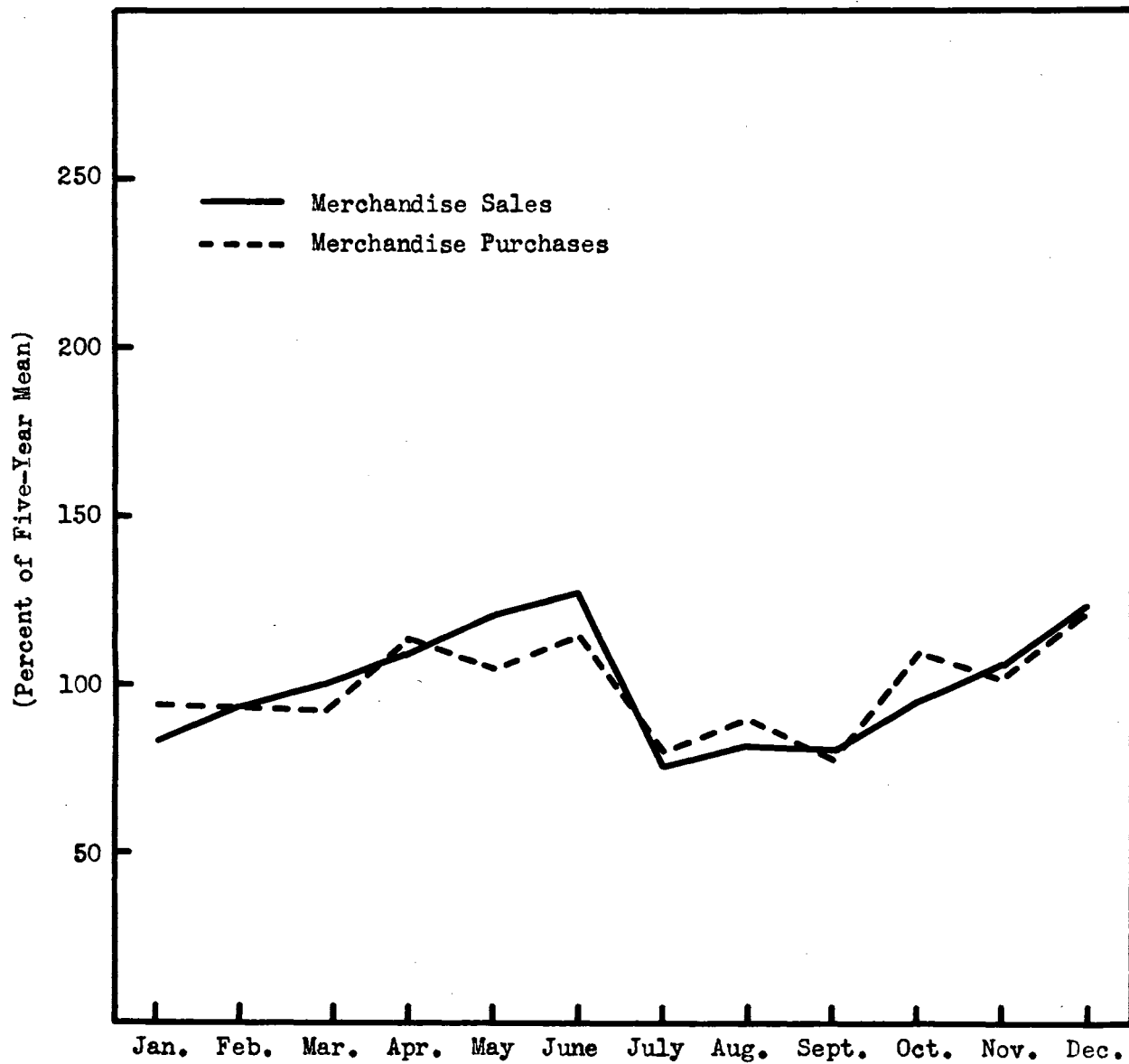
SOURCE: Annual Audits of the Association, from 1942 through 1946.

in 1946, however, the rapid increase in prices after price control was discontinued aided in increasing the value of total sales in 1946. The availability of various other farm supplies for which there was an effective demand was another factor which accounted for the increased value of total sales.

The seasonal variations in volume show a peak in June with the second high period in December (Figure 5). The rise in volume of sales during the first half of the year may be accountable to increased sales of poultry feeds as the poultry on the farms increased during this period. Inadequate supplies of feed for livestock purchased the previous year may result in further purchases during this period. Concentrates to supplement grass pasture for dairy herds, higher price of feeds resulting from decreased supplies prior to the harvesting of the new crops, and an increased volume of seed sold for spring crops are other factors which may have attributed to this peak period. The volume decreases abruptly after the new crop is harvested and feed is available from the farm production. Cream and egg production declines during the summer months and the needs for mash and concentrates are not as great. During the fall months the volume rises as feed is purchased for winter feeding. The abrupt rise in December probably results from excessive purchases by farmers to decrease their gross income for tax purposes.

The gross earnings when expressed as a percentage of cost were the greatest in 1942 (Table 9). During the other four years they remained fairly constant; averaging approximately 10 percent. It is the custom of the association to use a 12 percent margin for analyzing monthly operating efficiency of this department. At the close of the year when the physical inventory is taken, the correct average margin for the year is computed. From the above averages for the past four years it is apparent that greater accuracy

Figure 5. Average Seasonal Variation of Merchandise Sales and Purchases for the Farmers Cooperative Association, From 1942 Through 1946



SOURCE: Table 18, page 97.

would be attained if a 10 percent rather than a 12 percent margin were used for monthly computations. The operating expenses of the department have increased as the general price level has risen. Salaries over the five-year period account for 57 percent of the total operating expenses. The association has increased salaries as the general cost of living has increased. The high in 1944 for operating expenses resulted from the allocation of a greater percentage of the administrative expenses to this department, because their gross earnings were greater than those in other departments. The net earnings of the department have conformed to the general pattern of the total sales. Earnings were greater in proportion in 1942 as a result of a greater margin and lower operating expenses. During the five-year period, volume has influenced the modified net earnings of the association and indicates that increased volume should be a definite goal of the merchandise department.

Produce Department. The produce department has proved to be a very successful addition to the association. Although the entire market area of the association is predominately a wheat production area, a majority of the members produce dairy and poultry products for home consumption and the surplus is marketed through the association produce stations at Alva and Avarad. The production of these products increased substantially during the war as a result of an effort on the part of the farmers to provide these vitally needed commodities to aid in the war effort. With an increased production on the farms the volume marketed with the association has increased.

Additional success of the produce station may be accounted to the fact that an endeavor has been made to provide desirable outlets for the sale of the produce commodities handled by the association. Since severing connections with Armour and Company, the association has marketed the cream

through the Enid Cooperative Creamery Association. Twice each week a truck from the local association collects the cream purchased at the produce station at Alva and Avard and delivers it to the creamery in Enid. The dividend received by the association from the creamery has created an added incentive for increased cream production by the members of the Alva association.

During the past few months the Enid creamery has provided a market for a large portion of the eggs purchased at the Alva cooperative. The remainder of the eggs are marketed through Wilson and Company and Armour and Company. The chief outlet for the sale of poultry is Armour and Company. Armour trucks collect the poultry at various intervals from the produce station and final settlement is made with the association at the time of collection. Hides constitute a very small part of the total volume of the produce station and are sold locally.

The volume of purchases of the produce station is influenced by the production practices existing on the farms of the members of the association. As stated previously, the volume of these commodities increased during the war as a result of the increased production by farmers in response to war-time production goals (Table 10). During the war the high prices for all dairy and poultry products plus subsidies served as a further incentive for increased production. After the close of the war the volume handled by the association decreased. The actual cause of this decrease cannot be attributed to any one factor. The price of dairy and poultry products, with the exception of eggs increased in 1946, however, the volume handled by the association decreased. One factor which may have contributed to this decrease was a tendency for the farmers to anticipate a greater return from wheat production with the prevailing high price for wheat. Land which had formerly been used for production of feed crops was reverted to wheat

Table 10. Comparative Statement for the Individual Commodities of the Produce Department
of the Farmers Cooperative Association, From 1942 Through 1946

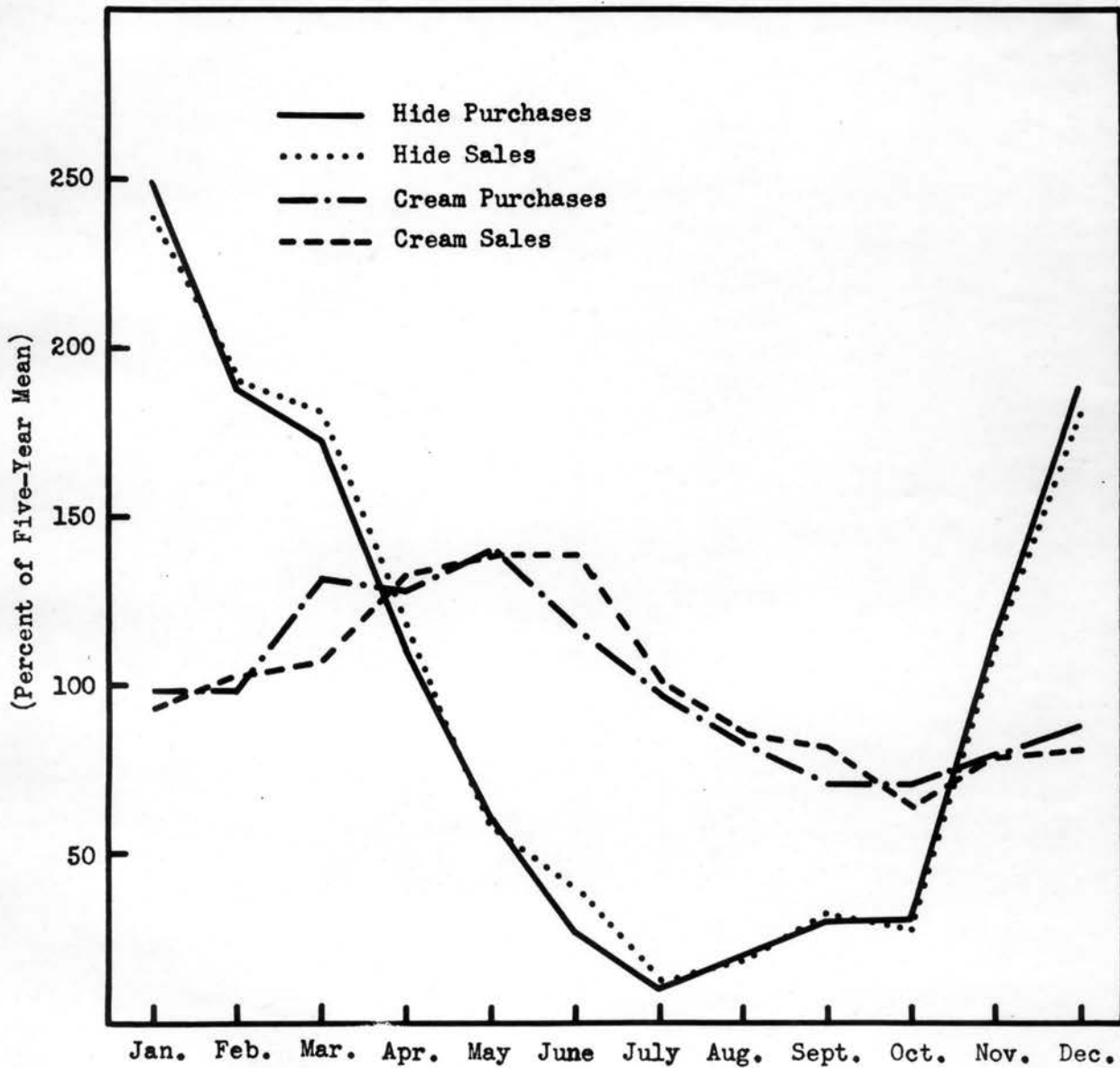
	Volume	Sales	Price Per Unit	Cost of Sales	Cost Per Unit	Gross Earnings	Earnings Per Unit	Gross Earnings Percentage of Cost
	(Units)	(Dollars)	(Cents)	(Dollars)	(Cents)	(Dollars)	(Cents)	(Percent)
Butterfat: (Pounds)								
1942	304,454	156,851.65	44.95	118,597.27	58.95	18,254.38	6.00	15.40
1943	328,922	185,906.66	56.52	161,763.25	49.18	24,143.41	7.54	14.92
1944	319,646	178,846.57	55.95	159,703.25	49.96	19,143.12	5.99	11.99
1945	335,380	192,222.40	57.31	163,780.92	48.83	28,441.48	8.48	17.37
1946	275,096	189,405.28	68.85	157,567.03	57.28	31,838.25	11.57	20.20
Poultry: (Pounds)								
1942	170,676	33,447.12	19.60	30,984.81	18.15	2,462.31	1.45	7.99
1943	232,701	55,235.58	23.74	51,602.07	22.18	3,633.51	1.56	7.03
1944	239,666	56,729.19	23.67	51,808.83	21.62	4,920.36	2.05	9.48
1945	200,468	46,203.75	23.05	42,464.70	21.18	3,739.05	1.87	8.83
1946	190,532	47,469.87	24.92	42,935.80	22.54	4,534.07	2.38	10.56
Eggs: (Dozen)								
1942	257,339	73,060.01	28.39	69,015.27	26.82	4,044.74	1.57	5.85
1943	372,127	130,914.84	35.18	124,526.75	33.46	6,388.09	1.72	5.14
1944	476,431	147,310.59	30.92	137,823.34	28.93	9,487.05	1.99	6.88
1945	415,410	143,767.28	34.61	131,450.19	31.64	12,317.09	2.97	9.39
1946	372,700	123,120.94	33.03	114,891.50	30.83	8,229.44	2.20	7.14
Hides: (Pounds)								
1942	6,585	737.67	11.20	619.77	9.41	117.90	1.79	19.02
1943	7,132	780.09	10.94	629.51	8.83	150.58	2.11	23.89
1944	7,825	874.62	11.18	779.64	9.96	94.98	1.22	12.25
1945	6,724	743.32	11.06	635.30	9.45	108.02	1.61	17.04
1946	6,066	681.04	11.23	585.98	9.66	95.06	1.57	16.25

SOURCE: Annual Audits of the Association, from 1942 through 1946.

production. The price of livestock and the cost of feed may have been factors which exerted an influence upon the production of dairy and poultry products. Since both of these were high, the tendencies to dispose of dairy cattle and to maintain smaller poultry flocks were probable. As production practices are altered on the farms, a corresponding change in volume can be expected in the commodities handled by the produce department.

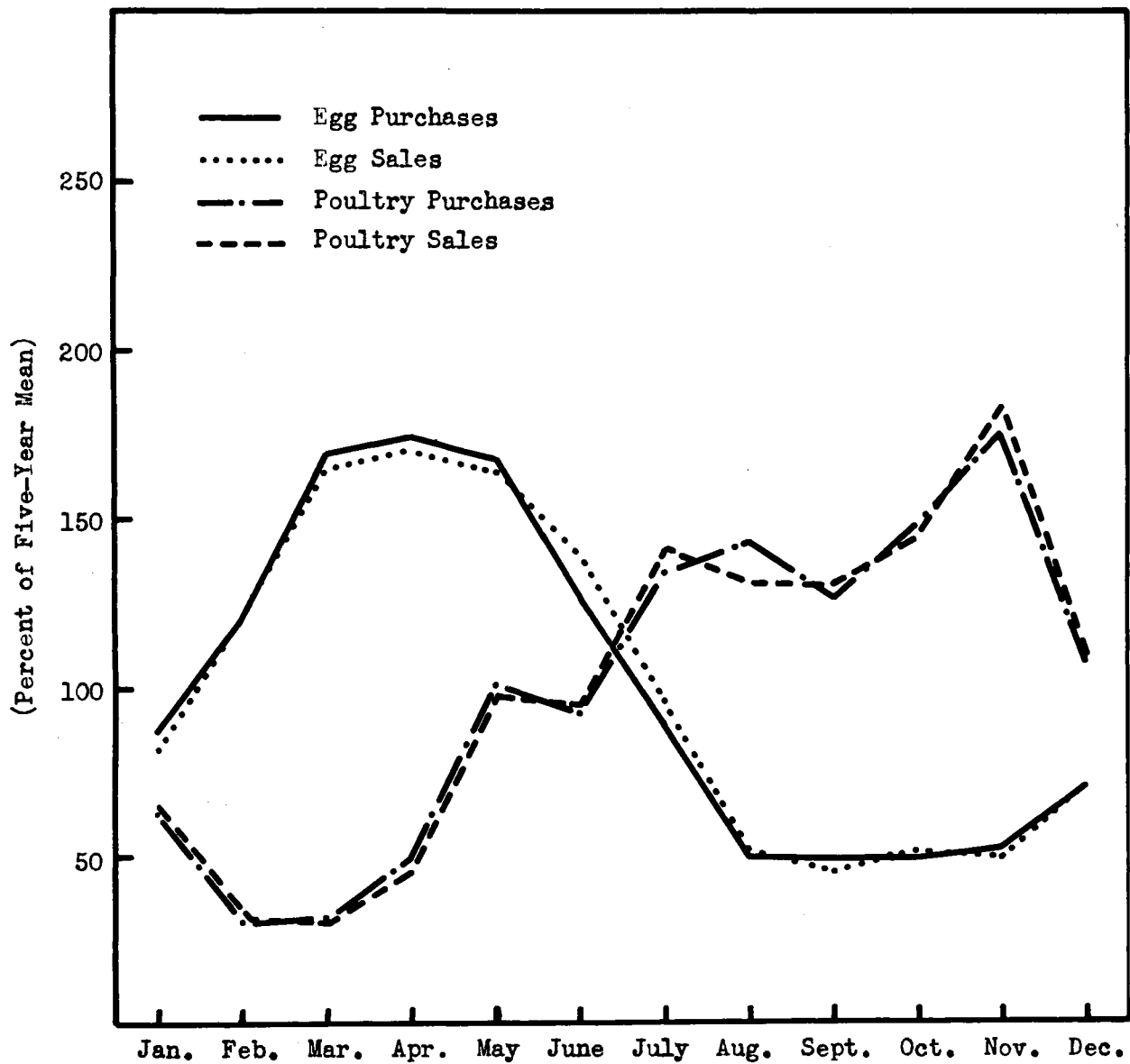
An analysis of the seasonal variations of volume for the commodities handled by the produce station indicates a rapid turnover of these commodities. This, of course, can be attributed to the high degree of perishability of these products. The deviation in the lines representing sales and purchases for cream results from the fact that final settlement is not made at the time of delivery but is forwarded to the local association at a future date (Figure 5). The seasonal variation of these commodities is correlated with the production practices employed on the farms of members. During the spring months egg production is high and the sale of poultry is at a minimum until those hatched in the spring are ready for market (Figure 7). As egg production decreases during the summer months, the volume of poultry marketed increases and reaches a peak during the fall months when egg production is at a minimum. In the case of cream, the availability of wheat pasture during the winter and excellent grass pasture in the spring results in a maximum volume of cream production during the spring months. Idle farm labor is another factor which stimulates cream production during the winter and spring. During the summer months when pasture is at a minimum and farm labor is diverted to wheat production, the volume of cream decreases. The variance in volume of hides corresponds to the periods of maximum farm butchering. As indicated in Figure 6 and 7, the production practices are reflected in the seasonal variations in volume of these four commodities handled by the association.

Figure 6. Average Seasonal Variation of Sales and Purchases for Cream and Hides for the Farmers Cooperative Association, From 1942 Through 1946



SOURCE: Tables 19 and 20, pages 98 and 99.

Figure 7. Average Seasonal Variation of Sales and Purchases for Eggs and Poultry for the Farmers Cooperative Association, From 1942 Through 1946



SOURCE: Tables 19 and 20, pages 98 and 99.

An analysis of the operations of the produce department shows a decrease in the total departmental sales for 1945 and 1946 below the 1944 peak (Table 11). This decrease resulted from the reduction in the volume marketed. During the same period, however, the gross earnings have increased. Several factors may have contributed to this increase. It is evident that volume has not materially affected gross earnings. The prices of these commodities increased in 1945 and 1946 and the rising prices may have caused a greater disparity between cost and sales prices; widening the margin realized by the association. The cost price or the price paid for the produce purchased from the farmers conformed to the five-year average Oklahoma farmer prices. The average price for butterfat was 48.84 cents per pound as compared to an average Oklahoma farmer price of 48.4 cents. During the same period the average price of eggs and poultry was 30.34 cents per dozen and 21.13 cents per pound. The Oklahoma farmer price for the same two commodities was 32.7 cents per dozen and 21.2 cents per pound.

Operating expenses reached a peak in 1944, however, even with an increase in the general price level they decreased in 1945 and 1946 (Table 11). The salaries composed the major element of operating expenses. As volume increased the need for additional personnel arose and the amount paid as salaries in the department increased. This additional personnel was composed of extra labor paid on an hourly basis with very little change in the permanent personnel. As a result of the increased gross margins in 1945 and 1946 and a decrease in the operating expenses, the net earnings increased. Other income is composed primarily of dividends on the stock investment in the Enid Cooperative Creamery Association. After income tax, which was the primary element of other deductions, and interest were deducted, the resulting modified net earning shows a very favorable position for the produce

Table 11. Operating Statement of the Produce Department of the Farmers
Cooperative Association, From 1942 Through 1946

	: 1942	: 1943	: 1944	: 1945	: 1946
	(Dollars)				
Sales	244,096.45	372,837.17	383,760.57	382,936.75	360,677.13
Cost of Sales	219,217.12	338,521.58	350,115.06	338,331.11	315,980.31
Gross Earnings	24,879.33	34,315.59	33,645.51	44,605.64	44,692.82
Operating Expenses	12,076.29	18,014.28	19,586.92	18,965.61	17,681.93
Net Operating Earnings	12,803.04	16,301.31	14,058.59	25,640.03	27,014.89
Other Income	275.89	620.36	440.40	813.96	405.56
Other Deductions	2,617.27	2,875.71	1,771.66	2,132.07	2,441.18
Net Earnings	10,461.66	14,045.96	12,727.33	24,321.92	24,979.27
Interest	377.44	488.94	690.59	790.99	527.38
Modified Net Earnings	10,084.22	13,557.02	12,036.74	23,530.93	24,451.89

SOURCE: Annual Audits of the Association, 1942 through 1946.

department. It is interesting to note, however, that in 1944 when total sales were the greatest the earnings were low. This resulted from the smaller margin realized by the association and the greater operating expenses.

Petroleum Department. Wheat production is characterized by a high degree of mechanization, and a stable source of fuel and other petroleum products is necessary for the successful operation of farm machinery. The association met the demand of its members by the addition of a petroleum department. From the outset the department has proved to be a wise investment and has received the support and patronage of the members of the cooperative. Although two petroleum stations are now in operation, rural delivery has been primarily responsible for the volume attained. Three trucks at Alva and two trucks at Capron deliver petroleum products to the farms of patrons. At the stations the cooperative maintains complete facilities for servicing the cars of patrons and complete lines of tires, tubes, and various parts and accessories are available for sale.

The primary source of purchase of petroleum products is the Consumers Cooperative Association state office at Enid. Transports from this cooperative deliver gasoline, kerosene, oil, and grease to the stations at Alva and Capron. Bulk tank facilities are owned by the Alva association at both points to insure adequate storage space and a stable inventory. The same organization also serves as the source of purchase of tires, tubes, and various other "Coop" brand products which are available for sale at the stations. Various accessories which cannot be purchased through this cooperative are purchased from automobile supply wholesalers and locally.

As stated previously, the present facilities at Alva are inadequate, pending the completion of the new station now under construction. The new

station, however, will be able to serve more adequately the needs of its patrons. In the past only one grease rack and one room for washing cars were available. The new station will have two of each. Additional pumps will be installed and the construction design insures a greater availability of space for all facilities of the station.

The volume of the various commodities has varied during the five-year period. The lower volume in 1942 may be accountable to the existence of only one station until October of that year when the firm acquired the Capron station (Table 12). Gasoline and tire rationing during the first four years exerted an influence upon volume. This is evident from the increased volume in gasoline and merchandise in 1946. The principal items constituting merchandise are tires and tubes. After the war when tire rationing was discontinued and tires became available the total value of merchandise sales increased immediately. The seasonal variation of these commodities indicates a greater disparity between sales and purchases than was true in the wheat and produce departments. This results from an effort to maintain a stable and adequate inventory. The monthly volume of sales conformed to the period of maximum use of farm machinery (Figures 8, 9, and 10). During June and July when the wheat crop is harvested and the land is prepared for planting the new crop, volume increases. The volume decreases in August as farm activity declines, however, it increases in September as the need for petroleum products again rises with the planting of the new crop. The peak in October for kerosene sales results from the use of this product for domestic fuel for heating rural homes during the winter season (Figure 8).

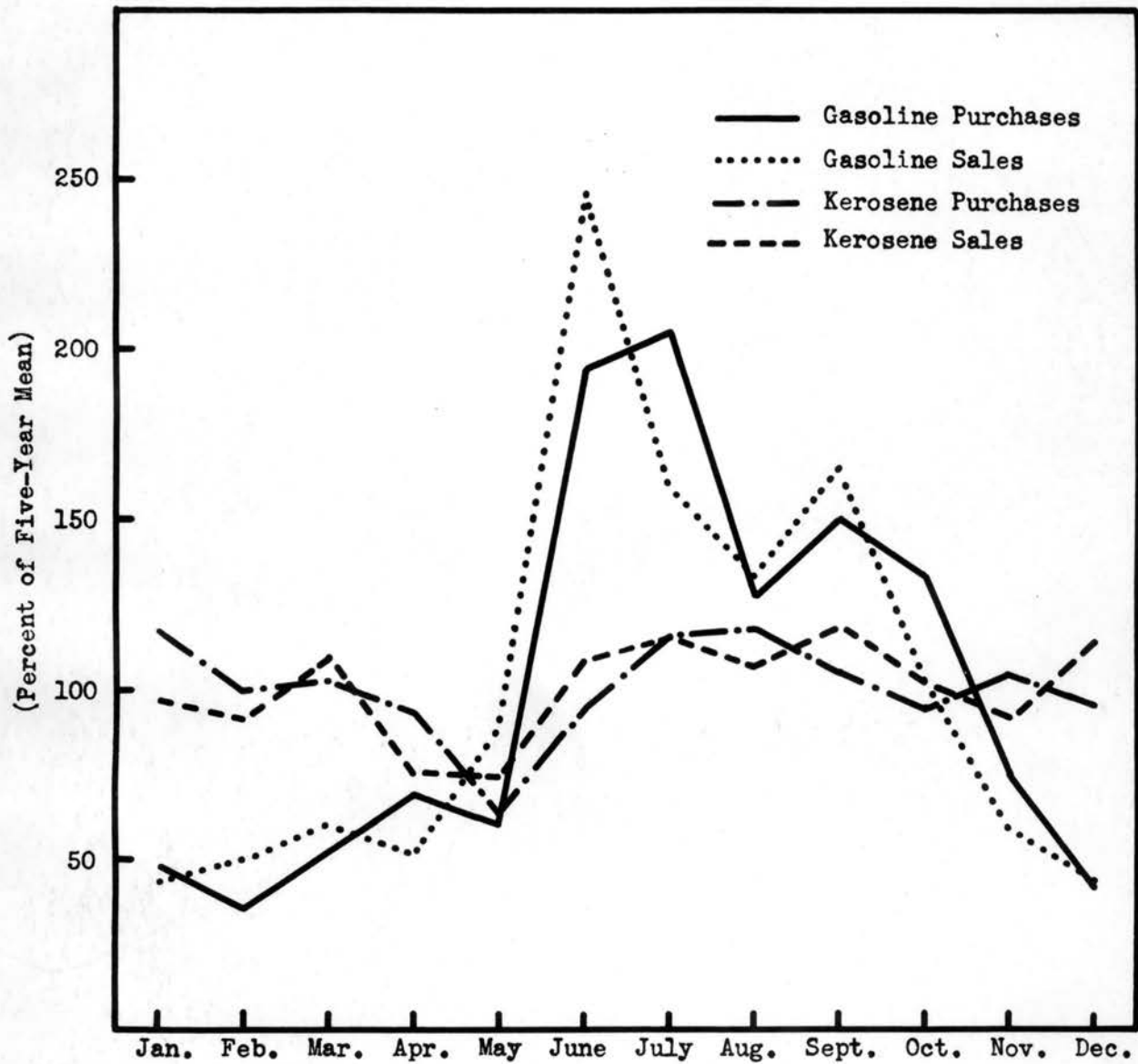
The volume of departmental sales has increased annually during the five years (Table 13). The 1946 sales were 75 percent greater than the sales in 1942. The increase in sales resulted primarily from an increase in volume

Table 12. Comparative Statement for the Individual Commodities of the Petroleum Department
of the Farmers Cooperative Association, From 1942 Through 1946

	Volume	Sales	Price Per Unit	Cost of Sales	Cost Per Unit	Gross Earnings	Earnings Per Unit	Gross Earnings Percentage of Cost
	(Units)	(Dollars)	(Cents)	(Dollars)	(Cents)	(Dollars)	(Cents)	(Percent)
Gasoline: (Gallons)								
1942	498,797	58,620.55	11.75	51,486.80	10.32	7,133.75	1.43	13.86
1943	586,090	75,541.71	12.89	62,909.14	10.73	12,632.57	2.16	20.08
1944	668,292	84,972.79	12.71	69,518.10	10.40	15,454.69	2.31	22.23
1945	658,930	86,602.94	13.14	70,839.68	10.75	15,763.26	2.39	22.25
1946	695,208	96,060.58	13.82	76,092.95	10.95	19,967.63	2.87	26.24
Kerosene: (Gallons)								
1942	93,872	6,550.55	6.98	4,766.42	5.08	1,784.13	1.90	37.43
1943	138,395	9,684.91	7.00	7,076.16	5.11	2,608.75	1.89	36.87
1944	156,185	10,960.93	7.02	7,996.25	5.12	2,964.68	1.90	37.08
1945	151,722	10,624.46	7.00	7,613.19	5.02	3,011.27	1.98	39.55
1946	132,213	10,659.86	8.06	7,369.22	5.57	3,290.64	2.49	44.65
Oil: (Quarts)								
1942	38,336	5,767.13	15.04	3,742.63	9.76	2,024.50	5.28	54.09
1943	50,927	7,636.86	15.00	6,387.10	12.54	1,249.76	2.46	19.57
1944	63,447	9,629.13	15.18	7,620.17	12.01	2,008.96	3.17	26.36
1945	50,740	8,314.27	16.39	6,401.39	12.62	1,912.88	3.77	29.88
1946	55,049	9,042.19	16.43	6,151.99	11.18	2,890.20	5.25	46.98
Grease: (Pounds)								
1942	11,363	1,030.77	9.07	930.41	8.19	100.36	.88	10.79
1943	14,347	1,477.56	10.30	1,209.44	8.43	268.12	1.87	22.17
1944	13,298	1,431.47	10.76	1,227.71	9.23	203.76	1.53	16.60
1945	14,211	1,497.67	10.54	1,191.29	8.38	306.38	2.16	25.72
1946	13,429	1,466.31	10.92	1,086.89	8.09	379.42	2.83	34.91
Merchandise: (Dollars)								
1942		9,595.09		6,187.26		3,407.83		55.08
1943		17,612.19		10,880.37		6,731.82		61.87
1944		15,513.67		10,960.68		4,552.99		41.54
1945		18,959.40		11,193.92		7,765.48		69.37
1946		25,775.98		17,811.32		7,964.66		44.72

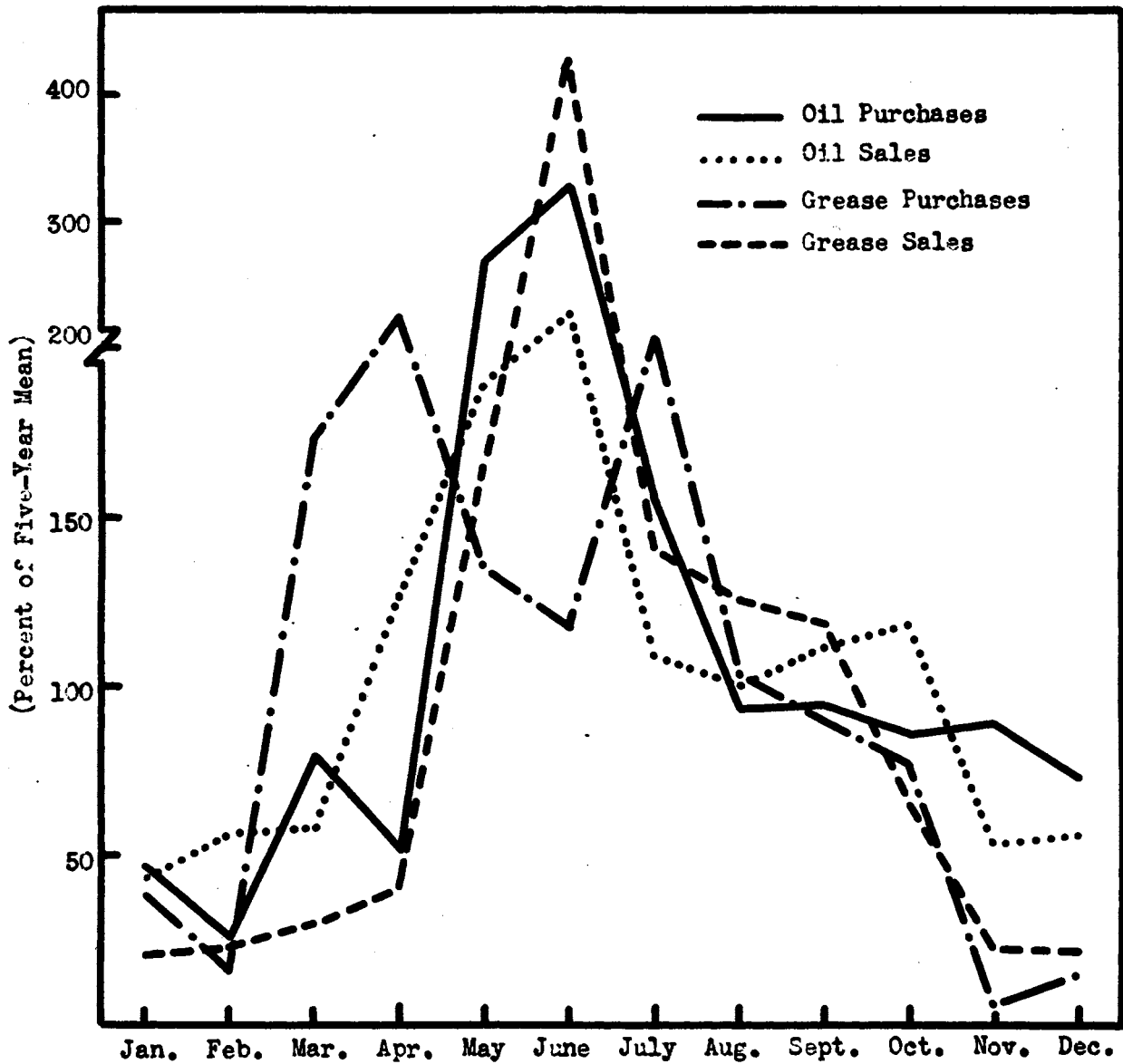
SOURCE: Annual Audits of the Association, from 1942 through 1946.

Figure 8. Average Seasonal Variation of Sales and Purchases for Gasoline and Kerosene for the Farmers Cooperative Association, From 1942 Through 1946



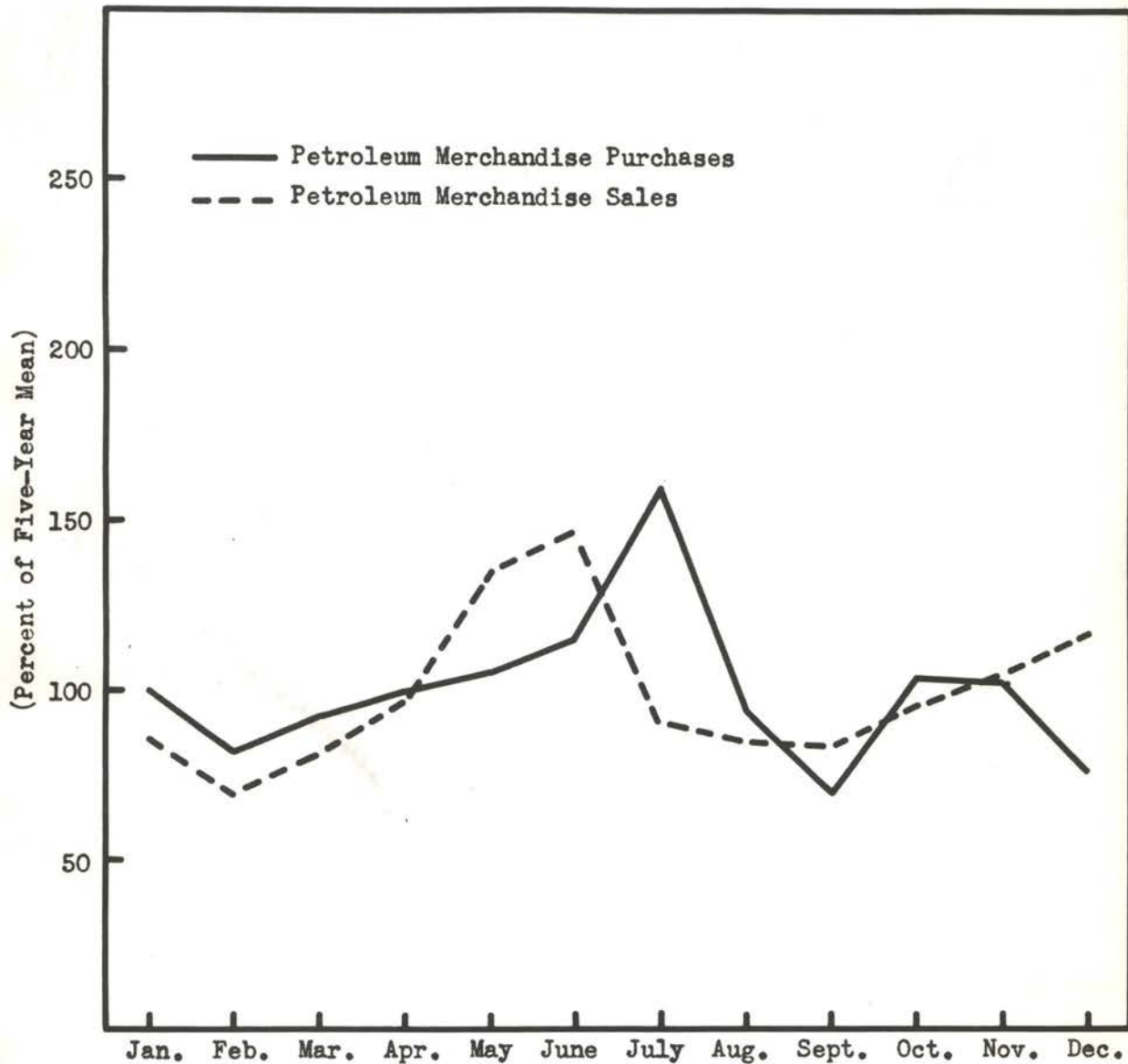
SOURCE: Tables 21 and 22, pages 100 and 101.

Figure 9. Average Seasonal Variation of Sales and Purchases for Oil and Grease for the Farmers Cooperative Association, From 1942 Through 1946



SOURCE: Tables 21 and 22, pages 100 and 101.

Figure 10. Average Seasonal Variation of Petroleum Merchandise Sales and Purchases for the Farmers Cooperative Association, From 1942 Through 1946



SOURCE: Tables 21 and 22, pages 100 and 101.

Table 13. Operating Statement of the Petroleum Department of the Farmers
Cooperative Association, From 1942 Through 1946

	: 1942	: 1943	: 1944	: 1945	: 1946
	(Dollars)				
Sales	81,564.09	111,953.23	122,507.99	125,998.74	143,004.92
Cost of Sales	67,113.52	88,462.21	97,322.91	97,239.47	108,512.37
Gross Earnings	14,450.57	23,491.02	25,185.08	28,759.27	34,492.55
Operating Expenses	11,933.15	20,813.14	22,140.30	20,617.61	25,702.30
Net Operating Earnings	2,517.42	2,677.88	3,044.78	8,141.66	8,790.25
Other Income	2,821.99	5,510.41	9,097.04	6,686.41	6,474.48
Other Deductions	1,524.37	1,896.94	1,364.12	1,440.04	1,818.09
Net Earnings	3,815.04	6,291.35	10,777.70	13,388.03	13,446.64
Interest	625.84	793.84	1,091.79	1,118.11	1,100.52
Modified Net Earnings	3,189.20	5,497.51	9,685.91	12,269.92	12,346.12

SOURCE: Annual Audits of the Association, from 1942 through 1946.

and an increase in price of the various products. The increased volume resulting from the addition of the Capron station in October, 1942 was primarily responsible for a 37 percent increase in the value of sales in 1943 over 1942. The cost of sales have not increased proportionally to the increase in sales. As a result the gross earnings were increasing annually not only in dollar value but also as a percentage of cost of sales. The tendency to widen margins as prices increased may have been a factor involved. The effort to conform with local competitive prices was also influential. This increased percentage was most noticeable in gasoline margins. The average margin in 1942 was 13.86 percent of cost as compared to 26.24 percent in 1946 (Table 13). During this same period the operating expenses increased, however, they did not increase as rapidly as gross earnings. After all further additions and deductions have been made the modified net earnings indicates that the department has been very successful during the five-year period. As prices have risen and margins widened, a greater saving has been realized by the members of the association.

Financial Ratios of the Association

The use of financial ratios serves as a measure of the operating and business efficiency of a business enterprise. Although definite assumptions cannot be drawn from the financial ratios they do serve as indicators of the strength or weakness of an association. More definite conclusions can be reached if a comparative study is made. In this study, however, since only one association is involved it is necessary to revert to previous studies to obtain comparative data. Difficulty arises in this procedure since other studies vary in time and type of association studied. These variations must be considered in any conclusions made. Six ratios have been selected to measure the business and operating efficiency of this association.

The first ratio, current assets to current liabilities, measures the ability of the association to meet current obligations. During the five-year period the ratio was 1.24 to 1 (Table 14). A study made of farmers' elevators in Kansas concluded that the average ratio for these items was 2 to 1.^{8/} In another study made on cooperative grain elevators in Kansas and Oklahoma, it was found that 75 percent of the Oklahoma associations included in the study had a 2 to 1 relationship between current assets and current liabilities.^{9/} The relationship that exists in the local association is not favorable when compared to these previous studies. However, as stated previously, the major element of the current liabilities is dividends and refunds and a large portion of these are retained in the association. As a result they do not incur an obligation on the current assets.

The second ratio is current assets to total liabilities. Current assets, as defined previously, denote those assets which can readily be converted to a form necessary for meeting obligations. Total liabilities include not only the current liabilities but also fixed liabilities. They represent the total obligations or indebtedness of the association. The average ratio for these two items during the five-year period was 1.12 to 1 (Table 14). This ratio is significant because it measures the ability of the association to liquidate all indebtedness from current capital. During the first three years under study current liabilities and total liabilities were synonymous since no fixed liabilities existed. Two loans from the Wichita

^{8/} R. M. Green and Vance M. Rucker, Marketing Problems of Farmers' Elevators in Kansas, pp. 10-11.

^{9/} Harold Hedges, Operations of Cooperative Grain Elevators in Kansas and Oklahoma, p. 13.

Table 14. Selected Financial Ratios of the Farmers Cooperative Association,
From 1942 Through 1946

	:	:	:	:	:	:	:
	: 1942	: 1943	: 1944	: 1945	: 1946	: Five-Year	: Average
	(Ratio)						
Current Assets to Current Liabilities	1.13	1.16	1.26	1.24	1.15	1.24	
Current Assets to Total Liabilities	1.13	1.16	1.26	.93	1.00	1.12	
Net Worth to Total Liabilities	1.85	2.00	2.78	2.57	2.64	2.55	
Net Worth to Fixed Assets	1.71	2.22	2.74	1.76	1.56	1.90	
Sales to Total Assets	5.30	7.90	8.23	7.11	7.57	7.33	
Supply Sales to Accounts and Notes Receivable	50.25	84.70	128.77	112.24	78.87	87.24	

SOURCE: Computed from the Annual Audits of the Association, from 1942 through 1946.

Bank for Cooperatives created a fixed liability in 1945. This was the only year during the five years that the ratio of current assets to total liabilities was less than 1 to 1.

Another ratio of importance is net worth to total liabilities. This ratio measures the relationship between members' equity and creditors' equity. The average ratio of these items was 2.55 to 1 for the period (Table 14). This ratio is significant since it serves as a measure of the financial soundness of the association. With older firms such as the Alva association, the ratio of net worth to total liabilities will become greater with increased term of operations. As an organization matures a greater percentage of the capital investment is represented as permanent capital. The association holds a favorable position since the member's equity is more than twice the total liabilities.

The fourth ratio, net worth to fixed assets, measures the relationship between the members' equity or permanent capital investment and the permanent investment in facilities and equipment. The average ratio for the local association was 1.9 to 1 (Table 14). A study made of a group of farmers' cooperatives in Michigan found the average ratio of these two items to be 1 to ¹⁰/₁. The ratio for this association indicates that the stockholders have furnished sufficient capital for all fixed assets and, also, some for other capital needs. The ratio decreased in 1945 as additional fixed assets were added to the association as a result of the construction of two new elevators. The variation in this ratio is dependent upon the rapidity of sale of capital stock and the size of annual net earning, which determine the amount of increase in the surplus and allocated reserve

¹⁰/ H. E. Larzelere, Op. cit., p. 73.

accounts. This is counter-balanced by the amount used for additional fixed assets. As a result of these factors a great deal of variation can be anticipated annually in this ratio.

The fifth ratio is sales to total assets. This ratio indicates the rate of turnover of capital invested. This, also, serves as a measure of the efficiency of the use of capital. The Michigan study concluded that with the exception of livestock cooperatives, the range of this ratio was 1.8 to 1 to 7.4 to 1.^{11/} The average ratio for the local association was 7.33 to 1 (Table 14). The decrease in 1945 and 1946 below 1944 resulted from an increase in total assets through expansion of plant facilities. The average ratio for the period, however, indicates an efficient use of the capital invested in the association.

The final ratio used in this study is supply sales to accounts and notes receivable. Supply sales are composed of the annual coal, merchandise, and petroleum department sales. This ratio measures the rate of turnover of receivables. It also, indicates the efficiency of the credit and collection policy. This ratio will tend to be high during periods of prosperity and decrease as the ability to meet obligations becomes more difficult. The volume of business increases during prosperous periods and the need for credit decreases. The ratio of these items averaged 87.24 to 1 for the association during the five-year period (Table 14). A range of 7.0 to 1 to 25.9 to 1 were the results of the Michigan study.^{12/} The ratio of this cooperative indicates that they maintain a restricted credit policy and an effective policy for collection of accounts and notes. During the war years a

^{11/} Ibid., pp. 66-67.

^{12/} Ibid., p. 68.

favorable ratio could be anticipated as a result of the high earning power of the members of the cooperative. As this earning power declines, a decline in this ratio can be expected. Care must be taken by management to continue a restricted credit policy during the period of regression.

THE FUNCTIONAL STRUCTURE OF MEMBERSHIP AND MANAGEMENT

Membership

The successful operation of a cooperative organization is dependent upon an active and loyal membership, for the members are the organizers, owners, and patrons of their association. Although in their capacity as members they do not determine the general policies and direct the actual operations, they are responsible for the ultimate control of the association. The degree of responsibility and support assumed by the members determines the ability of the association to operate through periods of adverse conditions. As a result, a well informed membership is a paramount feature in an efficient and successful cooperative. The management is constantly confronted with the problem of providing information for the members that will enable them to possess a better understanding of the operations of their organization. In order to maintain an active and interested membership, membership relations becomes a necessity and cannot be disregarded if the association is to operate with maximum efficiency.

Membership Growth. As a preview to a discussion of the membership of the cooperative under study, a resume of membership growth indicates that it has expanded rapidly during the twenty-seven years for which records are available. The lack of more accurate information necessitates the use of the number of shares of stock as the basis for estimating membership. Prior to 1940, the shares of stock measured very accurately the actual membership. Since that year the purchase of additional shares of stock by various members has resulted in a greater deviation between actual membership and the number of shares of stock outstanding. In 1946 there were 1,185 members compared to 1,696 shares of outstanding stock. Another inconsistency arises since the number of shares of stock does not accurately measure the active membership

of the association. The policy of repurchasing the stock of deceased members and those no longer residing in the association market area, however, decreases the disparity of these two items to a minimum. With these points in mind, an analysis of the growth of outstanding stock indicates that the stock in 1946 was approximately six times greater than in 1921.^{13/} The first increase noted was in 1928. This resulted from the additional members acquired through the purchase of the Ashley station. The next important increase was in 1934. The instigation of a note plan for the purchase of stock brought about this increase and has been a major factor contributing to increased stock sales since that time. The acquisition of the Capron station in 1935 aided also in promoting stock sales. The rapid increase from 1944 through 1946 has resulted from an effort to increase the sale of stock to new members and the sale of additional stock to old members to aid in financing the construction of new elevators at Ashley, Hopeton, and at the newly acquired station at Avard.

Membership Requirements. In view of the rapid growth of membership, the question then arises, "Who may become members of this cooperative?" The association is incorporated under the 1937 Oklahoma Cooperative Marketing Association Act. A provision of this act requires that cooperative members shall be agricultural producers.^{14/} The local cooperative conforms with this provision and in the by-laws of the organization it is stated that "members of this association shall be actual producers." In conformity with the 1937 law, democratic control is maintained in this cooperative. It is provided in the by-laws that "each stockholder shall be entitled to cast only one vote

^{13/} Cf. ante, p. 17.

^{14/} Secretary of State, Corporation Laws of Oklahoma, p. 62.

regardless of the number of shares of stock he owns." Each stockholder, also, is limited to five shares of capital stock. The major duties or rights of the members are found in the by-laws. The most important of these are the election of a board of directors and the amending of the articles of incorporation and by-laws as the need arises. The by-laws, in conformity with the State law, prescribe the limitation on membership and rights or duties of members.

Note Plan. The note plan has been mentioned previously and it has been an important factor causing the rapid increase in membership. Briefly, the plan permits a prospective stockholder to sign an agreement or note in which he agrees to turn his entire dividend to the cooperative until such time as his stock subscription is paid in full. This plan stimulates the sale of stock since it does not necessitate the physical outlay of the amount necessary for the purchase of a share of stock. The par value of stock in this association at the present is \$100 per share. For small farmers who wish to obtain the benefits of marketing their products cooperatively this amount deducted from their current income may represent too great a burden. The note plan enables them to become a member through the accumulation of annual dividends and their application to the principle of their note. The patron receives full rights of membership as soon as the note is signed. His decision to become a member is entirely arbitrary since forced patronage does not exist.

Tax Exemption. The Alva cooperative does not meet the requirements for full exemption from income tax as prescribed by the Bureau of Internal Revenue. In order to be eligible for full-exemption, it would be necessary to return the net earnings to patrons without discrimination between members and non-members. The local association returns the savings in the form of

dividends on stock and patronage dividends to the members only. It does not wish to change its present status and secure full-exemption because this would necessitate a more complex accounting system and eliminate a selective membership policy. As prescribed in the by-laws, individuals cannot become a member of the cooperative without first receiving approval of the Board of Directors. The policy does not denote an attempt to form a highly selective membership. Instead it indicates an effort which is being made to secure new members who are interested in cooperative marketing and will become active patrons of the organization. Such a policy has resulted in the formation of a strong and active membership and has encouraged regular patrons to become members and participate in the annual savings.

Member and Non-member Business. In a discussion of membership, the ratio of member to non-member business should be considered. In conformity with the provisions of the Capper-Volstead Act ^{15/} and the 1937 state law, the by-laws of the association states that "the association shall not deal in the products of non-members to an amount greater in value than such as are handled by it for members." Difficulty in the execution of this provision has not been encountered since member business has greatly exceeded non-member business. During the five-year period included in this study, the value of member business averaged 90.61 percent of the total business with a low of 85.84 percent in 1942 and a high of 97.22 percent in 1946. The annual percentage increased annually during the period. This resulted primarily from the increased number of active patrons who became members during the period. The note plan with its ease of stock purchase stimulated increased membership. Although the association does not actively solicit stock sales, except for

^{15/} L. S. Hulbert, Legal Phases of Cooperative Associations, pp. 213-214.

special purposes, they do encourage non-members who patronize the association to become members.

Membership Relations. The need for a well organized membership relations program for this organization has not been considered necessary and as a result it has been limited in its scope. The successful operation of the cooperative has been an important factor contributing to the strong and loyal membership. The farmers in this area are cooperatively-minded and have realized benefits from their support of the organization. Many cooperatives have had difficulty in obtaining the support of second generation farmers. A survey of the stockholders' list of this association indicates that a majority of the members' sons purchase stock and become active patrons when they start operation of their own farm enterprises. As a result, membership relations have lagged behind other activities of the association. The primary medium of strengthening membership relations has been the annual meeting of the stockholders. This meeting covers an entire day in length and lunch is served at noon. The manager presents a report summarizing the operations of the cooperative for the past year and various speakers, who are well informed on cooperative marketing, present discussions of various current problems. A summary of the annual audit is prepared in an understandable form, printed, and supplied to the members at that meeting. Throughout the year a well informed Board of Directors and staff of employees serve as a medium through which information is disseminated to the members and ideas and desires of the members are transmitted to the association. The management has been willing to make available any information regarding the operations of the cooperative desired by the members. Such a policy has aided in strengthening the members' confidence in their association. It is difficult to measure the effectiveness of membership relations. In the case of this association, it may be advisable to

outline a plan for local educational meetings if added contact with the members is desired. Membership relations should not be neglected; however, the type of program for a particular cooperative should be formulated in accordance with the situation existing locally.

Management

The previous discussion of membership stressed the importance of an active and loyal membership for the successful operation of a cooperative organization. Regardless of the strength and loyalty of membership, a cooperative enterprise cannot function successfully unless those elements that compose management are competent and efficient. Bakken and Schaars state that, "Perhaps the greatest single force for the success or failure of a business venture is its management."^{16/} In discussing the management of a cooperative it is often divided into three elements, membership, board of directors, and manager. This discussion, however, will be concerned primarily with the board of directors, manager, and employees holding administrative positions. It is not the purpose of this discussion to minimize the importance of membership as an element of management. As stated previously, the ultimate control of the cooperative is the responsibility of the members. That control is expressed through their duty to elect a board of directors to guide the operations of their association. The greater the degree of responsibility assumed by the members, the greater will be the effort made to select individuals who are capable, competent, and efficient to serve as the board of directors.

Board of Directors. In the cooperative under discussion, the board of directors is selected in conformity with the 1937 State Law and in

^{16/} Henry H. Bakken and Marvin A. Schaars, The Economics of Cooperative Marketing, p. 336.

accordance with the by-laws of the local association. As prescribed in the by-laws, the board of directors shall be composed of five members. The board members serve for three years, however, their terms of office are staggered with the election of two directors at each of two consecutive annual meetings and one director at the following annual meeting. Such a policy assures the retention of experienced board members each year. Although not specifically stated in the by-laws, it is the custom of this association to select board members from the area served by each of the stations. This results in a better representation of the entire membership on the board of directors. The general duties of the directors of this organization are typical of any cooperative. They formulate the general operating policies, select a manager, supervise the enforcement of the policies enacted, evaluate the effectiveness of these policies, and serve in a liaison capacity between the association and its members. It is difficult to establish a standard for the measurement of the capability and efficiency of the board of directors. The directors of this association, however, do meet certain prerequisites for a successful board member. They are all successful farmers, loyal supporters of the cooperative, leaders of their respective communities, and willing to sacrifice the time and effort required to serve as directors. As a result, the present board of directors are very capable and efficient and the relationship between the board of directors and manager is extremely favorable.

Manager and Administrative Employees. The second important element composing the management is the general manager of the association. As stated previously, one of the duties of the board of directors is to select the individual who will fill this position. In making this selection, care must be taken to meet the requirements of the position. He must possess the necessary

business and technical knowledge to direct the actual operations of the association. He must be sympathetic to the cooperative method of doing business. In his capacity as manager he must be able to coordinate the labor force to insure maximum utilization of the employees. He must realize his obligation to members not only as patrons but also as owners of the association. The man who will accept the position for the lowest salary in most cases is not the man to be selected. Rather, in order to insure the most efficient and successful operations, the best man obtainable will usually prove to be more economical.

The rate of change of managers is an important factor to be considered. Stability cannot be maintained if frequent changes of managers occur. With this association there have been eight managers during the thirty years of its operation. During the initial years there were more frequent changes; however, this has changed and the present manager has held the position for eleven years. There is greater rapidity of turnover of other employees, since the majority of the employees are unskilled. As a result, they are more likely to respond to higher wage incentives on the outside. The rate of change decreases as the degree of responsibility increases. The positions of department heads and office staff are more stable and the rate of turnover is smaller than that of other employees. As a whole, however, the labor force of the association has been very stable.

As this association has increased in size and other departments have been added, the need for decentralization of control has become a necessity. The organization has been departmentalized and an employee, who was capable of supervising the operations of the department, has been placed in the position as head of the department. These department heads supervise and coordinate the operations within their respective departments in conformity with

the decisions of the general manager and the board of directors. Although the departmentalization is on a commodity basis, the organization is also divided on a station basis. Each of the stations is a unit in itself with a local station manager supervising its operations. As is true with the department heads in Alva, each station manager submits a daily report to the general manager of the previous day's activities and business. These reports are combined by the office staff at Alva and entered in the association records. This system enables the general manager to coordinate the activities of various departments and stations and to devote more time to the supervision of problems that affect the association as a whole.

Management Problems. The major problem confronting management at the present time is to improve the efficiency of the employees. Although various sideline activities have been added to aid in minimizing the seasonal variations of the labor requirement, the problem has not been completely solved. Efforts are made to divert the employees to other departments to insure maximum utilization of the labor force. The need for these employees and additional labor during other periods results in a hesitancy on the part of management to decrease the total number of employees. Management is attempting to improve the quality of service rendered to the patrons. A strong competitive spirit is lacking since the strong membership insures active patrons. This does not diminish the need for quality service and its improvement should be the responsibility of the department heads. In the past there has been too much time devoted to the preparation of the daily reports. The manager intends to correct this situation by increasing the clerical staff upon the completion of the new association office under construction. Daily reports will then be submitted in a semi-completed form and the department heads and station managers can devote more time to the supervision of the

operations of their respective departments or stations. It is the opinion of the manager that through various corrective measures of this type the efficiency of the employees and the services rendered to the patrons will be improved.

SUMMARY AND CONCLUSIONS

The Farmers Cooperative Association of Alva has expanded rapidly from a single-unit organization in 1917 to a multi-unit and multi-department organization at the present time. During these thirty years the authorized capital stock has increased from the original \$15,000 to \$200,000. Sales in 1921 were approximately \$500,000 and in 1946 they exceeded \$3,700,000. The increase in sales was accompanied by a proportionate increase in membership during the same period.

The rapid expansion of sales and membership necessitated an expansion in the physical facilities of the association. The original facilities in Alva have been expanded and the association is now operating facilities at five other locations: Ashley, Avard, Capron, Hopeton, and Noel. The most noticeable expansion was made in the wheat facilities. The original frame elevator in Alva was replaced and additional storage facilities have been constructed in Alva and at the other stations. The combined elevator space in 1946 was 547,000 bushels. Produce and petroleum departments have also been added, resulting in a total of five departments with the original three departments: wheat, coal, and merchandise. With the addition of other stations and departments and the rapid growth of membership, the market area of the association has been expanded to form a circle around Alva.

The present status of the association can be accounted to the stability that has been maintained during the thirty years of expansion and development. The attainment of a sound and stable cooperative association has resulted from efficient management, consideration of the needs and desires of members, wise financing, and a carefully supervised expansion program.

The financial condition of the association, as measured by an analysis of the assets, liabilities and net worth, was very favorable. The total

assets increased 118 percent during the four-year period from December 31, 1942 to December 31, 1946. The greatest increase, 167 percent, was in fixed assets which resulted from the construction of three new elevators. During the five-year period the percentage of total assets divided among the three major groups of assets were as follows: current assets, 31.5 percent; fixed assets, 37.9 percent; and other assets, 30.6 percent.

The liabilities of the association averaged 29.4 percent of the total assets. The majority of the liabilities were composed of current liabilities and a major portion of the current liabilities were dividends and refunds payable. For the initial three years included in this study the association was free of any fixed liabilities. An operating and a facility loan in 1945 were the only fixed obligations incurred by the association during the five years.

The net worth represented an average of 70.6 percent of the total assets for the five-year period. The sale of capital stock was accelerated during the period to aid in financing new facilities. An allocated reserve was established to furnish additional capital for expansion purposes. The general surplus account was increasing as a result of the retention of 10 percent of the net earnings annually.

The study indicates that the financial structure of the association is in excellent condition. Although total assets have made a rapid increase, the association has borrowed very little outside capital. The increase in assets has been accomplished by the sale of capital stock and the retention of earnings in an allocated reserve.

The annual operations of the association, as measured by an analysis of the operating statements, indicates that the association as a unit has been very successful. Total sales plus additional operating income in 1946 was 111

percent greater than in 1942. This resulted from an increase in the general price structure and an increase in the volume of commodities handled. The average margin for all commodities has decreased during the five years. The primary reason for the decrease was the higher percentage of sales accountable to the wheat department, which has a lower margin.

The operating expenses averaged 3.4 percent of the total sales during the period. Salaries and wages composed the major items of operating expenses, averaging 64.31 percent of the total operating expenses. Taxes, depreciation, and insurance accounted for 16.41 percent of the operating expenses with the remainder composed of general maintenance and operating items. Operating expenses increased during the period as a result, primarily, of the general rise in the price structure. Other income, composed primarily of returns on investments and financial income, averaged 1.6 percent of total sales and other deductions, principally income tax, averaged three tenths of one percent of total sales.

The value of the net earnings has increased during the period, however, their percentage of total sales has decreased. After deducting the interest on invested capital the modified net earnings averaged 3.2 percent of the total sales. During each of the five years the earnings of the association has been returned to the stockholders in the form of dividends on stock and patronage dividends. A portion of individual dividends is retained to apply on the respective stock subscriptions and current receivables of the stockholder. A portion of the earnings are, also, retained and earmarked for each stockholder in the allocated reserve. As a result of the retention the amount of the dividends and refunds actually paid in cash averaged approximately 55 to 60 percent of the total dividends payable.

An analysis of the departments indicates that all departments with the exception of the coal department have been very successful in their operations during the five-year period. The decrease in volume in the coal department resulted in a net loss for this department in 1946. The substitution of other fuels on the farms of members was the primary reason for the decline in the volume of coal sales. The volume in the wheat department increased annually during the period under study. The increased price for wheat plus an increased volume resulted in a rapid increase in the value of wheat sales. The percentage of total sales represented by wheat sales increased annually. The volume of sales in the merchandise department decreased in 1945 and 1946. This may have resulted from the curtailment of livestock and poultry production by the members, causing a decrease in the volume of feed sales. The same reason may account for the decreased volume of the produce department. The actual value of produce sales remained fairly constant, however, because of the higher price for the produce commodities. There has been an increase in the petroleum sales annually, resulting from increased volume and higher prices. The seasonal variations in volume for individual commodities have been representative of the seasonality of marketing practices. Although operating expenses have increased in all departments as a result of the rising price level, the operating net earnings have increased or remained nearly constant. All of the departments, except the coal department, were operating efficiently during the five years. Increased membership and volume indicate that continued success in the four departments can be anticipated in the future.

The financial ratios computed in this study, also, indicate the success and efficiency of the association. The low ratio of receivables to supply sales is important since it indicates a sound and stable credit policy.

The analysis of the financial conditions, operations of the organization as a unit, departmental operations and relationship of balance sheet and operating statements items indicates that the association is stable, successful, and efficient.

The membership of the association has grown from the few original stockholders to 1,185 members, representing 1,696 shares of outstanding stock in 1946. The use of a note plan, which enables a prospective member to sign a note and pay for his share of stock through the accumulation of his dividends, has encouraged active patrons to become members. As a result of the ease of becoming a member, the member business averaged 97.22 percent of the value of total business in 1946. The association does not meet the requirements for income tax exemption since they do not return the savings to both members and non-members. The successful operations of the association has created a stable and loyal membership and the need for a well-organized member relations program has not been a necessity.

Management is composed of the Board of Directors, Manager, and administrative employees. The board of directors is composed of five members. They formulate the general operating policies, select a manager, supervise the enforcement of the policies enacted, evaluate the effectiveness of these policies, and serve in a liaison capacity between the association and its members. The manager directs the actual operations of the association and delegates power to department heads for the operation of their respective departments. One of the chief problems confronting management at the present is the improvement of the efficiency of employees and service rendered to the patrons of the association.

APPENDIX

Table 15. Annual Sales and Outstanding Stock of the Farmers
Cooperative Association of Alva, From 1921 to 1946

Year	Annual Sales	Outstanding Stock
	(Dollars)	(Shares)
1921	512,299	267
1922	420,493	266
1923	431,357	265
1924	745,991	256
1925	575,718	255
1926	956,640	257
1927	647,736	264
1928	888,681	295
1929	678,126	293
1930	366,412	292
1931	289,514	286
1932	236,968	285
1933	452,000	285
1934	546,079	400
1935	611,813	480
1936	961,350	531
1937	813,575	569
1938	696,901	573
1939	717,590	619
1940	833,109	672
1941	1,744,627	724
1942	1,193,768	793
1943	2,171,986	893
1944	2,491,633	1,000
1945	3,116,687	1,555
1946	3,694,146	1,696

SOURCE: Annual Audits of the Association from 1921 through 1946.

Table 16. Seasonal Variation of Wheat Purchases for the Farmers
Cooperative Association, From 1942 Through 1946

	: January :	: February :	: March :	: April :	: May :	: June :	: July :	: August :	: September :	: October :	: November :	: December :	: Five-Year Mean :
Wheat Purchases: (Bushels)													
1942	146,480	23,141	22,013	6,596	107,904	616,319	162,370	91,046	72,862	106,414	128,205	92,570	
1943	128,059	102,607	69,049	52,275	26,362	111,728	67,706	50,770	59,807	91,258	114,839	72,405	
1944	60,260	58,010	31,414	27,460	29,288	199,984	165,639	42,712	183,153	156,457	54,911	63,747	
1945	84,048	93,100	148,902	76,549	56,907	130,976	348,651	200,222	226,188	121,605	58,860	20,625	
1946	88,381	24,365	20,987	48,348	70,055	113,374	85,682	22,985	29,354	25,715	47,342	84,418	
Average	101,446	60,244	58,473	48,246	59,032	234,476	166,009	81,546	114,273	100,290	80,290	66,753	97,561
Percentage of Mean	104	62	60	49	61	240	170	84	117	103	103	68	

SOURCE: Annual Sales and Purchase Ledgers of the Association, from 1942 through 1946.

Table 17. Seasonal Variation of Coal Sales and Purchases for the Farmers
Cooperative Association, From 1942 Through 1946

	: January :	: February :	: March :	: April :	: May :	: June :	: July :	: August :	: September :	: October :	: November :	: December :	: Five-Year Mean :
Coal Purchases: (Pounds)													
1942	377,400	507,900	419,400	167,180	0	140,200	0	229,000	510,600	271,320	554,800	528,300	
1943	263,490	638,000	180,830	0	497,000	2,500	3,980	182,600	491,000	493,560	439,260	468,800	
1944	350,900	157,700	426,460	354,100	154,600	0	0	187,700	80,100	535,500	346,110	336,170	
1945	632,480	514,400	425,930	79,900	75,300	0	0	173,170	280,500	276,680	477,780	486,880	
1946	198,250	697,940	266,400	96,300	78,200	0	0	0	0	137,200	141,770	407,100	
Average	364,504	503,188	343,804	139,496	161,020	28,540	796	154,494	272,440	342,852	391,944	445,450	262,377
Percentage of Mean	139	192	131	53	61	11	.3	59	104	130	149	170	
Coal Sales: (Pounds)													
1942	499,230	402,760	226,730	90,690	69,520	83,990	59,620	223,280	448,110	669,910	346,350	445,220	
1943	420,110	251,050	290,160	35,250	141,710	33,930	247,230	312,190	508,270	400,580	482,510	492,380	
1944	311,930	239,610	242,380	196,550	29,900	47,050	54,670	178,790	401,490	516,140	450,380	461,610	
1945	487,350	390,050	250,480	72,020	80,950	28,690	45,950	269,060	261,550	468,700	431,760	421,390	
1946	312,980	182,060	98,000	14,490	12,560	3,540	4,920	32,580	119,890	357,040	562,750	222,305	
Average	406,320	293,106	221,550	81,800	66,928	39,440	82,478	204,180	347,862	482,464	454,750	408,621	257,454
Percentage of Mean	158	114	86	31	26	15	32	79	135	187	178	159	

SOURCE: Annual Sales and Purchase Ledgers of the Association, 1942 through 1946.

Table 18. Seasonal Variation of Merchandise Purchases and Sales for the Farmers
Cooperative Association, From 1942 Through 1946

	: January :	: February :	: March :	: April :	: May :	: June :	: July :	: August :	: September :	: October :	: November :	: December :	: Five-Year Mean
Merchandise Sales: (Dollars)													
1942	11,796	13,019	18,885	18,664	20,218	17,273	10,984	9,997	14,306	15,907	16,920	18,660	
1943	18,531	20,553	24,687	29,563	33,216	35,513	28,679	29,545	35,047	40,880	46,773	61,333	
1944	41,605	49,224	42,388	48,639	47,111	60,073	18,121	20,132	19,718	22,585	19,608	28,699	
1945	21,359	21,554	27,434	27,514	31,968	40,538	30,107	17,741	22,840	29,274	27,306	34,138	
1946	27,689	28,711	29,806	31,340	41,487	28,204	20,804	39,013	24,182	28,823	42,655	35,433	
Average	24,196	26,612	28,640	31,144	34,800	36,320	21,739	23,286	23,219	27,494	30,652	35,653	28,646
Percentage of Mean	84	93	100	109	121	127	76	82	81	96	107	124	
Merchandise Purchases: (Dollars)													
1942	13,271	10,154	15,106	17,615	17,022	13,453	10,085	9,454	9,755	21,885	16,135	16,303	
1943	18,479	18,656	20,252	26,695	31,809	31,074	33,500	31,201	27,063	40,556	46,658	51,230	
1944	44,698	41,645	33,388	37,586	39,288	53,169	19,371	23,316	17,098	19,530	16,621	25,139	
1945	20,640	19,861	23,833	27,080	24,519	27,518	16,358	18,177	24,088	26,647	22,706	36,592	
1946	25,378	31,808	28,250	39,943	24,018	25,930	24,785	41,688	23,672	33,331	30,999	31,051	
Average	24,493	24,425	24,166	29,384	27,331	29,829	20,820	24,727	20,335	28,390	26,624	32,063	26,086
Percentage of Mean	94	93	92	113	105	114	80	95	78	109	102	123	

SOURCE: Annual Sales and Purchase Ledgers of the Association, from 1942 through 1946.

Table 19. Seasonal Variation of Produce Sales by Major Commodities for the Farmers Cooperative Association, From 1942 Through 1946

	: January	: February	: March	: April	: May	: June	: July	: August	: September	: October	: November	: December	: Five-Year Mean
Eggs: (Dozen)													
1942	11,443	22,735	34,935	34,247	35,698	32,354	19,805	16,982	9,658	14,213	9,250	16,022	
1943	23,316	44,364	44,816	55,748	44,640	46,649	33,808	12,573	12,524	16,364	13,675	23,654	
1944	34,772	50,817	62,935	64,448	77,184	50,596	34,467	21,006	18,079	18,465	18,496	25,167	
1945	32,206	40,430	54,489	55,501	48,868	52,006	38,421	18,613	18,999	14,995	18,821	22,063	
1946	26,565	32,756	63,249	58,237	52,591	37,799	23,312	11,651	12,085	14,380	17,285	22,793	
Average	25,660	38,220	52,085	53,636	51,796	43,880	29,962	16,165	14,269	15,638	15,505	21,939	31,567
Percentage of Mean	81	121	165	170	164	139	95	51	45	50	49	70	
Cream: (Pounds)													
1942	21,427	27,411	25,860	31,546	34,612	29,329	23,119	12,041	32,801	18,358	24,416	23,534	
1943	29,383	28,942	29,902	35,998	39,606	34,075	29,178	26,188	17,952	17,473	20,164	19,759	
1944	20,675	24,273	28,479	34,950	33,339	39,074	26,649	24,295	23,868	15,113	24,340	24,591	
1945	27,103	27,167	30,882	35,608	39,365	43,372	30,540	28,867	16,792	18,640	17,534	19,512	
1946	22,310	25,688	24,991	35,056	32,832	33,891	22,678	17,510	14,453	14,206	14,720	19,467	
Average	24,180	26,696	28,023	34,632	35,951	35,948	26,433	21,780	21,173	16,758	20,235	21,373	26,098
Percentage of Mean	93	102	107	133	138	138	101	84	81	64	78	82	
Poultry: (Pounds)													
1942	9,153	3,806	3,569	4,814	12,212	12,266	10,541	16,670	11,929	25,386	35,348	24,892	
1943	8,296	5,364	4,189	6,597	11,233	15,113	35,481	30,188	20,610	25,138	46,591	23,901	
1944	17,358	7,843	5,449	11,911	21,850	19,579	29,531	24,422	28,740	29,024	26,612	17,338	
1945	8,590	2,477	5,355	4,274	16,822	17,618	16,220	23,137	36,310	23,738	29,388	16,541	
1946	12,674	9,542	7,468	11,172	21,208	16,046	28,439	18,440	14,795	20,395	19,682	10,671	
Average	11,214	5,806	5,206	7,754	16,665	16,124	24,042	22,571	22,477	24,736	31,524	18,669	17,232
Percentage of Mean	65	34	30	45	97	94	140	131	130	144	183	108	
Hides: (Pounds)													
1942	1,273	561	885	722	284	264	162	122	0	267	691	1,354	
1943	1,548	1,249	821	988	322	221	30	72	222	113	666	880	
1944	1,374	1,298	1,539	872	745	74	50	48	295	0	441	1,089	
1945	1,421	1,280	1,071	412	145	269	0	88	222	164	650	1,002	
1946	1,213	1,021	861	347	170	275	84	157	140	235	747	816	
Average	1,366	1,082	1,035	668	333	221	65	97	176	156	639	1,028	572
Percentage of Mean	239	189	181	117	58	39	11	17	31	27	112	180	

SOURCE: Annual Sales and Purchase Ledgers of the Association, from 1942 through 1946.

Table 20. Seasonal Variation of Produce Purchases by Major Commodities for the Farmers Cooperative Association, From 1942 Through 1946

	January	February	March	April	May	June	July	August	September	October	November	December	Five-Year Mean
Eggs: (Dozen)													
1942	14,910	23,153	31,629	36,056	38,292	27,935	20,248	15,411	13,057	12,868	10,157	15,130	
1943	27,118	38,222	48,858	54,426	50,190	42,174	31,442	12,078	13,657	17,313	16,687	25,626	
1944	31,002	48,580	65,487	74,870	70,396	47,254	34,131	18,635	19,992	16,139	19,666	24,195	
1945	34,277	40,556	63,968	54,622	54,067	44,179	30,434	19,809	16,497	14,949	18,898	22,160	
1946	30,564	40,653	56,605	54,254	52,410	37,392	23,119	11,791	12,245	14,266	17,340	24,231	
Average	27,574	38,233	53,309	54,845	53,071	39,787	27,875	15,545	15,090	15,107	16,550	22,268	31,604
Percentage of Mean	87	121	169	174	168	126	88	49	48	48	52	70	
Cream: (Pounds)													
1942	24,667	24,211	30,739	31,608	34,437	24,910	22,647	22,918	18,729	22,932	23,893	26,621	
1943	29,441	28,008	34,483	35,291	38,072	34,328	28,342	19,873	18,310	18,849	18,901	21,769	
1944	22,539	24,347	32,734	33,831	38,337	31,213	26,784	23,613	22,650	18,243	22,600	26,585	
1945	28,227	27,486	38,602	33,391	39,962	35,687	29,276	24,897	18,766	18,002	18,254	21,647	
1946	23,101	23,720	34,488	31,566	33,286	26,119	20,377	16,142	13,921	13,850	18,670	20,237	
Average	25,595	25,554	34,209	33,137	36,820	30,451	25,485	21,489	18,475	18,375	20,464	23,372	26,119
Percentage of Mean	98	98	131	127	141	117	97	82	71	70	78	89	
Poultry: (Pounds)													
1942	8,154	3,295	4,048	5,807	13,373	10,900	11,641	15,505	17,141	23,357	35,540	23,394	
1943	8,124	4,119	4,244	7,751	13,177	16,143	31,186	32,046	22,521	28,400	41,982	23,785	
1944	15,799	7,783	6,549	13,065	21,298	21,647	25,685	28,747	24,272	31,501	24,239	18,005	
1945	7,725	2,780	5,398	4,453	19,421	15,453	17,229	27,817	29,802	23,842	29,558	16,697	
1946	14,481	8,484	6,730	11,381	21,068	16,148	28,786	18,811	15,261	19,840	19,502	10,777	
Average	10,857	5,292	5,394	8,492	17,267	16,058	22,905	24,585	21,799	25,388	30,174	18,531	17,262
Percentage of Mean	63	31	32	49	100	93	133	142	126	147	175	107	
Hides: (Pounds)													
1942	1,304	598	737	681	374	177	140	84	111	359	745	1,460	
1943	1,613	955	951	913	386	82	24	57	196	169	704	1,024	
1944	1,314	1,489	1,700	818	565	67	51	76	267	17	427	1,092	
1945	1,590	1,295	824	411	146	270	0	180	106	164	660	1,011	
1946	1,362	1,053	762	349	263	195	85	157	182	195	751	817	
Average	1,437	1,078	995	634	347	158	60	111	172	181	657	1,081	
Percentage of Mean	249	187	172	110	60	27	10	19	30	31	114	188	576

SOURCE: Annual Sales and Purchase Ledgers of the Association, from 1942 through 1946.

Table 21. Seasonal Variation of Petroleum Sales by Commodities for the Farmers Cooperative Association, From 1942 Through 1946

	January	February	March	April	May	June	July	August	September	October	November	December	Five-Year Mean
Gasoline: (Gallons)													
1942	15,912	16,436	21,287	21,298	36,603	89,622	60,495	71,152	68,749	39,818	45,496	11,932	
1943	22,132	27,298	30,705	29,789	35,254	132,330	56,793	71,238	78,990	48,810	27,825	24,926	
1944	22,928	27,245	35,654	25,397	48,486	137,300	113,230	70,246	86,965	49,265	25,381	26,194	
1945	24,490	24,388	36,234	20,110	49,842	111,509	117,402	78,219	67,491	77,967	27,809	23,469	
1946	25,083	30,841	32,719	35,597	57,254	167,425	64,276	52,567	124,994	53,931	26,030	24,493	
Average	22,109	25,242	31,320	26,438	45,489	127,637	82,439	68,684	85,438	53,964	30,508	22,203	51,789
Percentage of Mean	43	49	60	51	88	246	159	133	165	104	59	43	
Kerosene: (Gallons)													
1942	5,457	4,314	7,418	5,192	6,284	9,682	7,404	11,601	11,449	8,320	7,926	8,825	
1943	10,828	9,281	12,250	9,204	7,586	15,569	11,608	15,298	16,105	10,638	8,438	11,590	
1944	10,703	11,817	14,473	12,129	8,787	13,101	21,798	14,713	14,494	10,648	9,189	14,263	
1945	13,767	12,942	13,020	8,751	11,666	10,146	15,104	10,956	8,724	16,918	12,528	17,201	
1946	13,735	12,507	13,337	6,553	7,121	12,106	8,501	6,627	15,396	10,625	13,138	12,567	
Average	10,898	10,172	12,100	8,366	8,289	12,121	12,833	11,839	13,234	11,430	10,244	12,889	11,205
Percentage of Mean	97	91	108	75	74	108	115	107	118	102	92	115	
Oil: (Quarts)													
1942	1,424	1,084	2,197	2,133	4,094	6,202	3,262	3,807	4,971	2,768	3,408	2,986	
1943	2,249	2,445	1,693	5,585	9,030	10,250	3,266	4,033	4,978	2,835	1,929	2,634	
1944	1,775	3,433	2,422	11,215	8,158	12,282	6,916	5,310	4,254	3,332	1,816	2,534	
1945	1,798	2,028	2,391	2,747	7,153	11,107	5,862	4,768	3,700	4,043	2,467	2,136	
1946	2,057	3,121	3,315	5,365	12,342	9,054	4,113	3,607	6,048	2,344	1,866	1,817	
Average	1,861	2,422	2,512	5,409	8,155	9,779	4,684	4,305	4,790	5,064	2,297	2,421	4,308
Percentage of Mean	43	56	58	126	189	227	108	100	111	118	53	56	
Grease: (Pounds)													
1942	302	122	328	514	1,377	4,145	923	1,363	973	622	409	285	
1943	122	214	332	632	1,990	5,371	1,568	1,344	1,360	991	285	138	
1944	121	468	260	270	1,493	4,807	2,183	1,741	1,125	487	124	219	
1945	176	217	346	210	1,766	5,104	2,004	1,730	1,117	1,069	214	258	
1946	363	231	319	624	2,448	4,552	1,089	790	2,044	503	185	281	
Average	217	250	317	450	1,815	4,796	1,553	1,394	1,324	734	243	236	1,111
Percentage of Mean	20	23	29	41	163	431	140	125	119	66	22	21	
Merchandise: (Dollars)													
1942	404	409	924	940	841	757	917	472	559	1,307	796	1,270	
1943	1,110	1,243	1,276	1,967	1,850	2,458	1,304	1,174	979	1,047	1,486	1,720	
1944	897	1,001	658	1,189	2,018	2,385	1,109	1,190	1,012	1,118	1,524	1,413	
1945	1,062	1,061	1,495	1,084	1,709	2,132	1,556	1,510	1,812	1,701	1,750	2,088	
1946	2,800	1,327	1,498	1,855	3,336	2,933	2,717	1,780	1,713	1,807	2,041	1,969	
Average	1,254	1,008	1,170	1,407	1,951	2,133	1,320	1,225	1,215	1,396	1,519	1,692	1,458
Percentage of Mean	86	69	80	96	134	146	90	84	83	95	104	116	

SOURCE: Annual Sales and Purchase Ledgers of the Association, from 1942 through 1946.

Table 22. Seasonal Variation of Petroleum Purchases by Major Commodities for the Farmers Cooperative Association, From 1942 Through 1946

	January	February	March	April	May	June	July	August	September	October	November	December	Five-Year Mean
Gasoline: (Gallons)													
1942	18,027	14,622	21,982	29,187	18,144	110,476	64,151	61,613	78,816	43,257	54,962	31,251	
1943	19,368	15,708	38,103	35,051	25,148	97,015	86,979	76,865	93,439	37,407	46,300	34,078	
1944	15,835	26,990	27,167	32,449	43,507	62,164	169,059	61,794	78,138	82,112	40,572	18,220	
1945	31,982	16,147	31,505	40,735	32,286	87,449	125,666	91,317	52,414	108,231	39,219	7,631	
1946	40,816	22,098	32,363	44,598	41,034	160,757	100,433	43,916	98,688	84,568	38,098	19,877	
Average	25,206	19,113	30,224	36,404	32,024	103,572	109,258	67,101	80,299	71,115	39,790	22,211	53,026
Percentage of Mean	48	36	57	69	60	195	206	127	151	134	75	42	
Kerosene: (Gallons)													
1942	4,186	3,653	3,671	7,277	7,339	11,276	10,631	12,957	7,191	6,840	11,466	8,655	
1943	13,775	9,701	10,536	19,548	3,510	11,269	11,013	16,493	19,655	1,976	9,676	12,687	
1944	13,072	12,629	12,658	10,920	11,524	7,232	21,921	15,506	10,922	16,016	13,413	12,932	
1945	14,636	14,726	12,920	7,716	8,076	12,105	10,439	14,135	11,066	18,650	7,274	8,576	
1946	21,023	15,815	18,073	7,718	4,547	11,328	11,108	17,647	10,747	9,619	17,840	11,852	
Average	13,538	11,305	11,572	10,636	6,999	10,642	13,022	13,348	11,916	10,620	11,934	10,950	11,357
Percentage of Mean	117	99	102	93	62	94	115	118	105	94	105	96	
Oil: (Quarts)													
1942	2,012	762	2,288	3,972	828	1,640	5,696	1,176	1,300	3,480	16,428	516	
1943	3,320	2,108	10,600	000	7,788	9,720	1,620	5,620	2,048	5,160	5,356	10,060	
1944	1,836	1,236	880	000	19,652	540	18,460	9,012	1,204	3,520	464	2,864	
1945	1,726	1,739	2,565	4,481	5,354	12,667	9,707	2,876	5,187	5,509	2,426	1,049	
1946	2,020	000	2,148	3,208	28,932	6,580	440	2,712	11,836	12,100	880	2,376	
Average	2,183	1,169	3,696	2,332	12,511	15,229	7,185	4,279	4,315	3,954	4,111	3,373	4,611
Percentage of Mean	47	25	80	51	271	330	156	93	94	86	89	75	
Grease: (Pounds)													
1942	300	120	0	9,903	10	695	980	800	1,130	770	90	190	
1943	900	540	8,040	320	1,725	600	1,500	300	350	25	0	300	
1944	0	0	700	0	5,216	100	3,860	2,115	000	230	200	100	
1945	260	0	60	900	000	2,038	3,225	2,075	825	2,031	0	133	
1946	500	100	112	528	000	2,550	1,150	000	2,350	874	0	0	
Average	392	152	1,782	2,330	1,390	1,207	2,143	1,058	931	792	58	145	1,032
Percentage of Mean	38	15	173	226	135	117	208	103	90	77	6	14	
Merchandise: (Dollars)													
1942	400	207	641	842	377	763	505	717	416	539	827	453	
1943	767	968	1,232	873	1,499	1,399	457	583	845	807	1,211	686	
1944	1,137	924	514	506	502	1,435	1,625	846	370	1,166	720	700	
1945	888	726	664	615	1,032	769	1,854	1,368	579	1,048	815	000	
1946	1,676	1,185	1,425	1,972	1,715	1,240	3,365	1,031	1,171	1,448	1,431	1,877	
Average	974	802	895	963	1,025	1,122	1,561	909	674	1,002	1,001	743	973
Percentage of Mean	100	82	92	99	105	115	160	93	69	103	102	76	

SOURCE: Annual Sales and Purchase Ledgers of the Association, from 1942 through 1946.

BY-LAWS

THE FARMERS COOPERATIVE ASSOCIATION

ALVA, OKLAHOMA

By-Laws of THE FARMERS COOPERATIVE ASSOCIATION OF ALVA, OKLAHOMA, formed under the Cooperative Law of Oklahoma 1937, known as the "Cooperative Marketing Association Act," and in accordance with the Capper-Volstead Act.

ARTICLE I

Section 1. The name of this Association shall be THE FARMERS COOPERATIVE ASSOCIATION OF ALVA, OKLAHOMA, and its principal place of business shall be at Alva, Oklahoma.

Section 2. The purposes and powers of this association shall be to buy and sell all kinds of grains and other farm products, hardware, implements, lumber, coal, flour and feed, motor fuels, petroleum products and auto accessories, and other related articles; to prepare for market, manufacture and transport any of the above mentioned articles; to do a public warehousing business and store grain in interstate commerce and specifically to qualify for and operate a storage and warehouse business under the U. S. Warehouse Act of the laws of the State of Oklahoma; and to purchase hold or convey real estate; to borrow money in such amounts as provided by law and to give security therefore; to finance and aid in financing of the marketing of agricultural products of its members; to make and execute notes, bonds, mortgages and all instruments and obligations necessary to carry out the business of this Association, but the Association shall not deal in the products of non-members to an amount greater in value than such as are handled by it for members.

Section 3. Members of this Association shall be actual producers.

Section 4. The fiscal year of this Association shall begin with the first day of January and end with the thirty-first day of December of each year.

ARTICLE II

CAPITAL STOCK

Section 1. The amount of Capital Stock shall be Two-Hundred Thousand Dollars (\$200,000.00), which shall be divided into two thousand (2000) shares, of the par value of One Hundred Dollars (\$100.00) each.

Section 2. All stocks of this Association is subject to the provisions of the By-Laws of the Association. No persons shall purchase stock from holders thereof or become stockholders without first consulting the By-Laws of the Association and getting approval of the Board of Directors. No Stockholder shall own more than Five Hundred (\$500.00) dollars in par value of Capital Stock.

Section 3. Certificates of stock shall be issued by order of the Board of Directors when such stock has been fully paid for by cash, notes, or stock credits. All certificates of stock shall be signed by the president and the secretary, and shall be sealed with the corporate seal.

Section 4. Treasury stock shall be held by the Association subject to the disposal by the Board of Directors, and shall neither vote nor participate in dividends.

Section 5. The Association shall have a first lien on all the shares of its Capital Stock, and upon all dividends declared upon the same, for indebtedness of the respective holders thereof to the Association.

Section 6. Transfers of stock shall be made only on the books of the Association with approval of the Board of Directors. The old certificate, properly endorsed, shall be surrendered and cancelled before a new

certificate is issued. The stock books of the Association shall be closed against transfers for a period of 60 days before each annual meeting of stockholders.

Section 7. In case any member ceases to be a stockholder by the retirement or transfer of his stock, then any credits applied to his account on the purchase of additional stock shall be retired or transferred in the same manner and on the same ratio of value that applies to the stock.

Section 8. In case of loss or destruction of a certificate of stock, no new certificate shall be issued in lieu thereof except upon satisfactory proof on affidavit, to the Board of Directors of such loss or destruction; and upon the giving of satisfactory security, by bond or otherwise, against loss to the Association. Any such new certificate shall be plainly marked "Duplicate."

Section 9. The Board of Directors are authorized, at their discretion, to buy stock of deceased stockholders at par value where there are no heirs eligible to membership in the Association.

ARTICLE III

STOCKHOLDERS' MEETINGS

Section 1. The annual meeting of the stockholders shall be held during the month of January in each year, date to be set by the Board of Directors, at the principal office of the Association or as may be designated by the Board of Directors, provided that if less than a quorum are present at any such special or annual meeting on the days called, that those present may adjourn from time to time until three (3) adjournments. The president shall call special meetings of the stockholders to be held from time to time by the request of three (3) members of the Board of Directors. Ten (10) days'

notice shall be given by the secretary in writing, addressed to each stockholder of record at the time of the call.

Section 2. The owner of as much as twenty percent (20) of the issued Capital Stock may call a special meeting of the stockholders by filing with the secretary a demand therefor, when it shall be the duty of the secretary to call such a meeting upon ten (10) days' notice in writing to each stockholder of record.

Section 3. At a called meeting of the stockholders only such business as may be stated in the call can be transacted at such meeting.

Section 4. At a stockholders meeting one hundred (100) stockholders shall constitute a quorum and a majority of such quorum shall constitute a lawful majority for the transaction of business.

Section 5. The Articles of Incorporation may be amended at any time, or from time to time, by the affirmative vote of two-thirds (2/3) of the members present at any annual meeting of the stockholders, or by-laws may be amended by the affirmative vote of the majority of the members present at any annual meeting of the stockholders, if notice of the proposed amendment shall have been given in the call for such meeting. Such amendment shall be put into effect by the Directors, who shall sign and acknowledge and file, as above provided, new or revised articles containing such amendments and superseding the original articles.

Section 6. At every such meeting each stockholder shall be entitled to cast only one (1) vote regardless of the number of shares of stock he owns.

Section 7. A proxy cannot be voted in this Association.

ARTICLE IV

BOARD OF DIRECTORS

Section 1. The stock, property, and affairs of such Association shall be managed by the Board of Directors, which shall consist of five members, all of whom must be stockholders and who shall be elected at the annual meeting of the stockholders. There shall be elected five directors, one of whom shall serve one year, two of whom shall serve two years, and the remaining two of whom shall serve three years. As the term of office of each of these directors expires, a successor shall be elected, who shall serve for three years unless sooner removed, or until his successor is elected and qualified.

Section 2. All officers of this Association, consisting of a President, Vice-President, and Secretary-Treasurer, shall be elected from among the Board of Directors.

Section 3. Vacancies. Any director or officer of such Association may be removed by a majority vote of the stockholders at any regular or special stockholder meeting lawfully called, and the vacancy may be filled at such meeting or by the remaining directors at any regular or special called meeting.

Section 4. The directors may appoint an attorney for the Association and such agents or representatives, and employ such persons as may be necessary to properly conduct its business. All such appointments shall be subject to the pleasure of the Board of Directors as to the time of employment and compensation.

Section 5. Liability of Directors. If the directors of such Association shall declare and pay any dividend or appointment of earnings, or profits to members or non-members when the Association is insolvent or when

it would be rendered insolvent by such payment such directors shall be jointly and severally liable for all debts of the Association then existing and for all such debts as shall be thereafter incurred while they shall respectively continue in office. Any director may relieve himself from such liability at any time before the time fixed for the payment of such dividend or appointment by filing a certification in writing of his objection with the secretary of the Association, and with the County Clerk of the county in which the principal office is located.

Section 6. The compensation of the Board of Directors shall be \$4.00 per day of service and traveling expenses when called out of county on business for the Association.

ARTICLE V

DIRECTORS' MEETINGS

Section 1. Directors' meetings shall be held in each month and on the second Tuesday of each month. Special meetings of the directors may be held upon the call of the president, or upon the request of three (3) members of the Board of Directors.

Section 2. At a directors meeting a majority of the directors shall constitute a quorum.

Section 3. In the absence of the president, the vice-president shall preside at all meetings.

ARTICLE VI

DUTIES OF THE OFFICERS

Section 1. The business affairs of the Association shall be delegated to a Board of Directors of five (5) members who shall have full authority to act for the Association at any and all time when stockholders are not in session, provided the Board may not have power to alter or amend

By-Laws or do anything in violation of some or of any act or resolution passed by the stockholders.

Section 2. The President shall preside at all general, regular and special stockholders', directors' meetings, and shall sign all contracts, agreements, deeds, mortgages, or other instruments when authorized and directed by the stockholders or directors.

Section 3. It shall be the duty of the Board of Directors to have an audit made of the books of the Association: This audit to show the financial condition of the Association at the end of the fiscal year and this report to be submitted at the annual meeting of the stockholders.

Section 4. The vice-president in the absence of the president shall perform all the duties of the president.

Section 5. The secretary shall be the recording officer of the Association and shall keep the minutes of all stockholders' and directors' meetings and shall issue all stock paid for. He shall give notice of any special or regular meetings of the stockholders or directors when required to do so by the By-Laws and shall discharge such other duties as the Board of Directors may require.

Section 6. The General Manager shall conduct the business of the Association interum between meetings of the Board of Directors and shall have full authority to do so and shall have power to hire and discharge the employees of the Association and to do all things necessary to be done in the proper operation of the business; subject, however, to the power and right of the Board of Directors to enlarge or diminish the power of the General Manager at any time by resolution duly passed at any directors meeting. The General Manager shall give surety bond for not less than \$5,000.00.

Section 7. No officer, members, agent, or employees of the Association, shall in the name of the Association, deal or trade in futures or options in any grain, commodity, stock or thing or speculate in any manner on cash grain.

ARTICLE VII

DISTRIBUTION OF EARNINGS

Section 1. The directors, subject to revision by the stockholders, at any general or special meeting lawfully called shall apportion the net earnings and profits thereof from time to time at least once in each year in the following manner:

Section 2. Not less than ten percent thereof accruing since the last apportionment shall be set aside in the surplus or reserve fund until such fund shall equal at least the amount of the paid up capital stock.

Section 3. Dividends at a rate not to exceed five percent (5) per annum, may, be declared upon the paid up capital stock. Five percent may be set aside for educational purposes.

Section 4. The remainder of such net earnings shall be apportioned and paid to all members. Such earnings shall be paid either in cash or capital stock, provided that an amount of the net earnings may be apportioned to credits on capital stock, special reserves, or non-interest bearing members' equity certificates, with or without due date, ratably upon the value or volume of the products sold to, or handled through, the Association and or the value or volume of purchases from, or through, the Association by each member.

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- Expense Ledgers of the Farmers Cooperative Association of Alva, Oklahoma from 1942 through 1946.
- Minutes of the Board of Directors and Stockholders Meetings of the Farmers Cooperative Association of Alva, Oklahoma from 1917 through 1946.
- Purchases and Sales Ledgers of the Farmers Cooperative Association of Alva, Oklahoma from 1942 through 1946.