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Title of Study: A Study of the Development and Business Operations of the Clyde Cooperative Association of Medford, Oklahoma

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Scope of Study: This is a study of the development and annual business operations of the Clyde Cooperative Association of Medford, Oklahoma. The object is to evaluate the factors which have contributed to the success of the association and are likely to influence its future operations. The scope of the study includes an analysis of the growth and development of the association; the financial structure and operations from 1943 through 1947; and the annual operations of each station in the association from 1945 through 1947.

Findings and Conclusions: The cooperative, which started as a small local unit in 1921 with twenty stockholders, has expanded into a multiple unit firm with more than six hundred stockholders in 1947. The elevator capacity has increased to over 700,000 bushels and plans are being formulated for further expansion. The analysis of the financial structure indicates that the total assets of the firm have increased from \$204,432 in 1943 to \$654,754 in 1947. This increase was accomplished by the use of facility loans, certificates of indebtedness, retention of annual earnings, and the sale of capital stock. A comparison of financial and operation ratios with similar cooperatives indicated capable management. The operating statements show that the net savings increased from \$60,196 in 1943 to \$110,273 in 1947. The operating expenses increased each year and salaries and wages accounted for 54.8 per cent of the total average expenses. The analysis of station operations reveals that each station earned a net saving each year. Sideline activities indicated a net loss at only one station for the 1945 through 1947 crop years. The study indicates a need for careful consideration of such problems as follows: (1) maintain a sufficient volume in periods of business regression to meet the increasing fixed expenses, (2) more efficient utilization of the time and abilities of each employee, (3) further departmentalization, accompanied by the addition of an assistant general manager, (4) development of a more unified merchandising program, (5) further improvement of accounting procedures, (6) special endeavor to further reduce operating expenses, (7) further centralization at Medford and Lamont, (8) centralized purchasing and inventory control of sideline products, (9) a program for membership education and public relations, (10) repayment of facility loans and certificates of indebtedness as rapidly as net savings permit, (11) a special effort to control credit sales, (12) development of personnel to replace future vacancies in key management positions.

ADVISER'S APPROVAL

Howard S. Whitney

A STUDY OF THE DEVELOPMENT AND BUSINESS OPERATIONS
OF THE CLYDE COOPERATIVE ASSOCIATION OF
MEDFORD, OKLAHOMA

By

H. PRENTISS GAZAWAY

Bachelor of Science

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H. PRENTISS GAZAWAY
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CONTENTS

	PAGE
INTRODUCTION	1
Purpose of the Study.	1
Method of Procedure	2
THE LOCATION AND DEVELOPMENT OF THE COOPERATIVE.	4
Description of the Area	4
Introduction	4
Location	4
Type of Farming.	5
Transportation Facilities.	7
Market Outlets	7
HISTORY OF THE ASSOCIATION	9
History from Origin to 1929	9
History from 1930 to 1940	11
History from 1941 to 1948	14
THE DEVELOPMENT OF THE ASSOCIATION	21
Financial Structure	22
Membership.	25
Management.	26
Facilities.	28
Commodities and Service	29
AN ANALYSIS OF THE COMBINED BALANCE SHEET.	31
Assets.	31
Current Assets	32
Other Assets	32
Fixed Assets	33
Total Assets	36
Liabilities	36
Current Liabilities.	36
Fixed Liabilities.	37
Net Worth	38
Capital Stock.	38
Allocated Reserves	39
Surplus Reserves	39
Patronage Refunds.	40

CONTENTS (Continued)

	PAGE
AN ANALYSIS OF THE COMBINED OPERATING STATEMENTS FROM 1943 THROUGH 1947	42
Sales.	42
Gross Operating Margins.	46
Operating Expenses	46
Salary and Wage Expense.	50
Physical Facility Expense.	50
Other Expense.	51
Other Additions.	52
Net Savings.	53
 ANALYSIS AND COMPARISON OF FINANCIAL AND OPERATING RATIOS.	55
Financial Ratios	55
Current Assets to Current Liabilities.	56
Current Assets to Total Liabilities.	56
Net Worth to Total Liabilities	59
Net Worth to Fixed Assets.	59
Operating Ratios	60
Sales to Total Assets.	60
Supply Sales to Trade Receivables.	61
Sales to Annual Inventory.	61
Operating Expenses to Total Sales.	62
Net Savings to Total Assets.	62
 ANALYSIS OF STATION OPERATION.	63
Medford.	69
Station Operation.	69
Wheat Department	72
Sideline Department.	72
Clyde.	73
Station Operation.	73
Wheat Department	76
Sideline Department.	76
Lamont	77
Station Operation.	77
Wheat Department	80
Sideline Department.	80
Deer Creek	81
Station Operation.	81
Wheat Department	84
Sideline Department.	84
Ronfrow.	85
Station Operation.	85
Wheat Department	88
Sideline Department.	89
Nardin	89
Station Operation.	89
Wheat Department	93
Sideline Department.	93

CONTENTS (Concluded)

	PAGE
Salt Fork.	94
Station Operation.	94
Wheat Department	95
Sideline Department.	98
SUMMARY AND CONCLUSIONS.	99
APPENDIX	104
BIBLIOGRAPHY	116

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LIST OF TABLES

NUMBER		PAGE
1	Growth of Capital Stock, Total Assets, and Net Savings of the Clyde Cooperative Association, From 1921 Through 1947	23
2	Combined Balance Sheet of the Clyde Cooperative Association From 1943 Through 1947	34
3	Division of Patronage Refunds of the Clyde Cooperative Association, From 1943 Through 1947.	41
4	Combined Operating Statements of the Clyde Cooperative Association, From 1943 Through 1947.	43
5	Relationship of Commodity Sales to Total Sales of the Clyde Cooperative Association, From 1943 Through 1947.	45
6	Margins, Expenses and Savings (in cents) Per Dollar of Total Sales for Wheat and Sidelines at the Clyde Cooperative Association, From 1943 Through 1947.	48
7	Relationship of Individual Expense Items to Total Expense of the Clyde Cooperative Association, From 1943 Through 1947.	49
8	Selected Financial and Operating Ratios of the Clyde Cooperative Association From 1943 Through 1947	57
9	Comparative Financial and Operating Ratios for the Clyde Cooperative Association, The Farmers Cooperative Association of Alva, and the Farmers Cooperative of Hobart . . .	58
10	Relationship of Individual Expense Items to Total Expenses by Stations of the Clyde Cooperative Association, From 1945 Through 1947.	65
11	Operating Statement for the Medford Station With a Three-Year Average From 1945 Through 1947.	70
12	Operating Statement for the Clyde Station With a Three-Year Average From 1945 Through 1947.	74
13	Operating Statement for the Lanont Station With a Three-Year Average From 1945 Through 1947.	78
14	Operating Statement for the Deer Creek Station With a Three-Year Average From 1945 Through 1947.	82

LIST OF TABLES (Continued)

NUMBER	PAGE
15 Operating Statement for the Renfrew Station With a Three-Year Average From 1945 Through 1947	86
16 Operating Statement for the Hardin Station With a Three-Year Average From 1945 Through 1947	91
17 Operating Statement for the Salt Fork Station With a Three-Year Average From 1945 Through 1947	96

INTRODUCTION

The success of a local cooperative, like other types of private business, depends upon efficient management for successful operation. This success further depends upon the effective control of the resources used in the operation of the firm. Efficient management in a cooperative rests with the membership. The members are the association and each benefits from the business in proportion to use. They are both the owners and the customers, as well as the recipients of the revenue saved by the firm.

Local associations often own and direct regional cooperatives which have contributed greatly to the success of the locals. The local cooperatives vary from a single unit firm acting independently at the local level to a multiple unit association with an administrative headquarters in one community and operating branch stations in several adjoining communities. This study deals with a multiple unit type of organization.

Purpose of the Study

The purpose of this study is to analyze the development and business operations of the Clyde Cooperative Association of Medford, Oklahoma, and to evaluate the conditions that have contributed to its success and are likely to influence future operations.

The historical analysis of the development of the organization is necessary to evaluate current operations and to foresee future problems. The analysis of the balance sheets, operating statements, and the financial and operating ratios aids in understanding the present operations and

financial structure of the cooperative. The station analysis aids in determining the efficiency of operation and the contribution of each station to the success of the multiple unit association.

Method of Procedure

The information in the first section of the study is based on interviews with board members and employes, current literature, by-laws, and the minutes of the board of directors and the stockholders meetings. The information presented in the remainder of the study is primary data obtained from the association audits, expense ledgers, and interviews with the general manager, bookkeeper, and station managers.

In the balance sheet and operating sections an effort is made to analyze the financial condition and merchandising operations of the cooperative. A comparative percentage analysis is used in both sections. The elements of the balance sheet are compared to total assets. The sections of the operating statement are compared to total sales.

The discussion on financial and operation ratio analysis is an attempt to compare the financial structure and business operations of the Clyde Cooperative Association with similar cooperatives. The period of study for this section and the balance sheet and operations sections is for the crop years of 1943 through 1947.

The final section is devoted to an analysis of the operation and role of each station as a part of the association, and is based on the crop years of 1945 through 1947. The cooperative does not maintain complete operating and expense records for either commodity departments or separate stations. It is necessary to allocate the wheat sales, other operating income, patronage refunds received, and operating expenses. Wheat sales are allocated to each station according to its percentage of the total bushels handled by the

association. Patronage refunds received on wheat sales is prorated to each station according to its percentage of the total bushel volume. Patronage refunds received from farm supplies purchases by the cooperative were prorated to each station on the basis of its percentage of total sideline sales.

The operating expenses for each of the stations are allocated between wheat and sideline departments according to the general manager's estimates. The operating expenses for the stations are obtained from the association expense ledger when possible. The general expenses of the association and expenses not identified as to station were allocated. The method used to handle each expense item is explained in greater detail in the section where this analysis occurs.

THE LOCATION AND DEVELOPMENT OF THE COOPERATIVE

Description of the Area

Introduction. The cooperative marketing of grain is a significant agricultural development of this century. Although many of the cooperatives have been in operation for years, the greatest expansion in volume and facilities has happened in the past decade. Approximately a million farmers now own and operate the seventeen regional associations comprising the National Federation of Grain Cooperatives. In the 1948 crop year, this group of regional cooperatives had a combined grain volume of 358,950,000 bushels.¹

The Union Equity Cooperative Exchange of Enid, Oklahoma, one of these seventeen regional associations, is the world's largest grain elevator with a capacity of thirty-three million bushels. One hundred eleven local cooperatives in Northern Texas and Western Oklahoma, owned by 25,000 grain producers, own and direct the Union Equity.² The Clyde Cooperative of Medford, Oklahoma, is one of the most successful local associations which preceded the development of the Union Equity Cooperative Exchange as a regional grain marketing association.

Location. The Clyde Cooperative Association has its main office and facilities in Medford, county seat of Grant County. Of the six branch

¹ Thomas E. Hall, Regional Grain Cooperatives, p. 4.

² Roy F. Henderson, "Farmer Built and Farmer Owned," Co-op Grain Quarterly, IX (March, 1951), 3-6.

stations, all but Hardin, which is two miles east of the county line in Kay County, are located within the eastern half of the county. Grant County is located in the north-central section of Oklahoma and is bounded on the north by Sumner County, Kansas, by Kay County on the east, Garfield County on the South, and Alfalfa County on the west. (Figure 1).

Type of Farming. This county contains 636,160 acres of which 605,662, or ninety-five per cent of the total land area, is in cultivation.³ The size of farms in Grant County is increasing. The 1940 census recorded a population of 13,128 with 4,024 urban and 9,104 farm residents. Medford, the main trading center, increased in population between 1940 and 1945 from 1,121 to 1,304 and is the largest town, though Pond Creek and Lamont each have nearly 1,000.

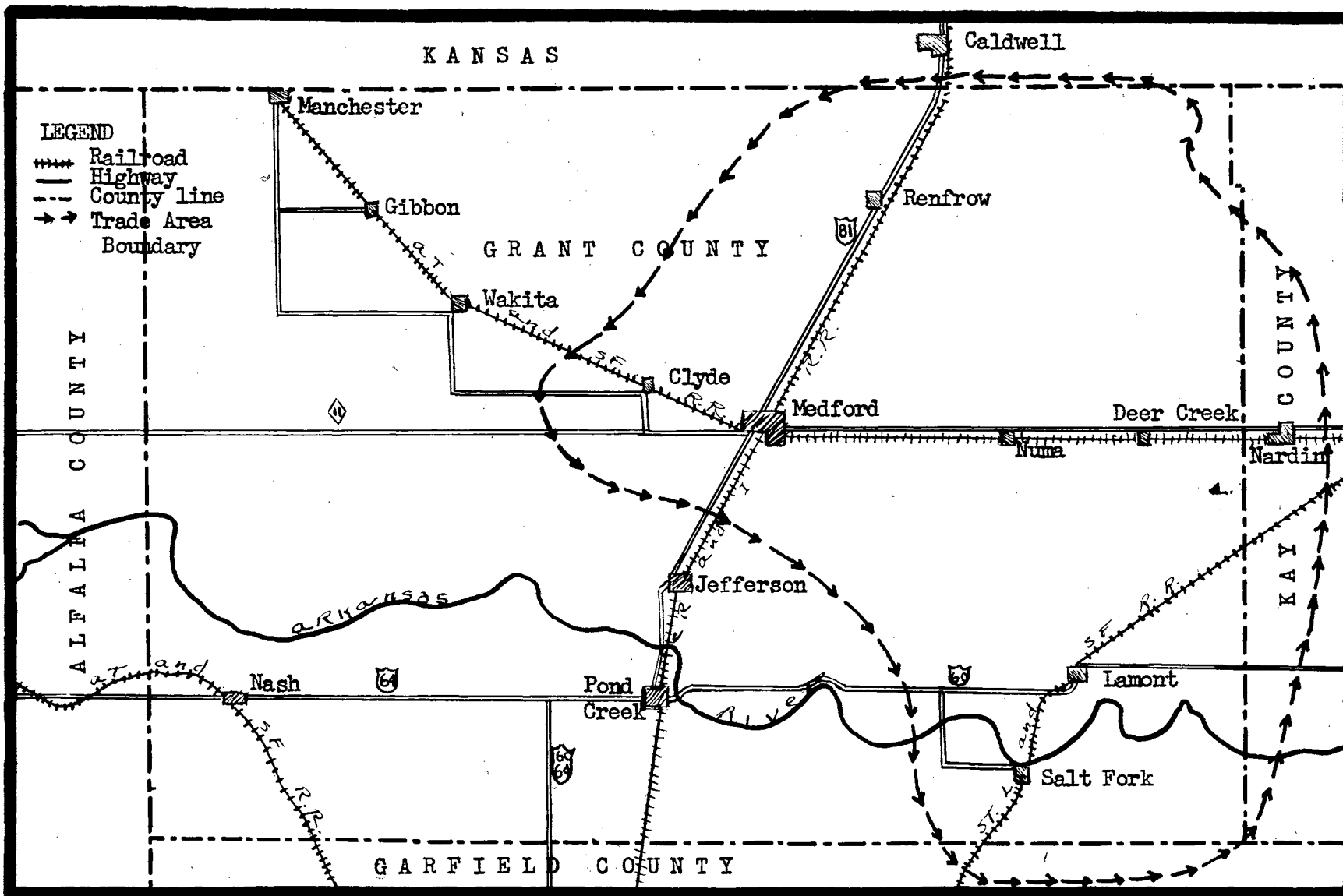
Wheat, the main crop, comprises approximately three-fourths of the total crop land and averages from 150 to 200 acres per farm. For the crop years 1943 through 1947, Grant County ranked in the highest three counties of the state in total wheat produced.⁴ Other crops include oats, barley, corn, rye, sorghum, alfalfa and areas of pasture along the Salt Fork River. Feed crops, native pasture, and winter wheat pasture make a livestock enterprise a profitable part of many farm operations.

This county would rate high in Oklahoma on any comparative scale of living standards. Of the 1,934 farms, 1,162 were owner or part-owner operated indicating a low percentage of farm tenancy. Approximately ninety-eight per cent of the population is American born and a high rate of literacy

³ U. S. Department of Commerce, Agricultural Census, I pt. 25, 1945, pp. 23-149.

⁴ Estimated from reports released by the office of the Agricultural Statistician, United States Department of Agriculture, Bureau of Agricultural Economics, Oklahoma City, Oklahoma.

FIGURE I
 LOCATION OF THE STATIONS IN MARKET AREA OF THE CLYDE
 COOPERATIVE ASSOCIATION OF MEDFORD, OKLAHOMA



exists. It would be difficult to find rural homes not serviced by telephones, electricity, and running water or farms without a tractor, truck, and automobile. Farm people make up much of the membership of the chambers of commerce and civic clubs. The men who live on farms are business men as well as those who operate an urban business.⁵

Transportation Facilities. The county has adequate transportation and marketing facilities. Two paved highways cross the county. U. S. 81 passes through the center from the north connecting Caldwell, Kansas, Medford, and Pond Creek with Enid to the south; U. S. 60 runs east and west through Lamont and intersects with 81 at Pond Creek; U. S. 64 enters the county west of Nash and joins U. S. 81 and 60 four miles west of Pond Creek. State highway 11 runs east and west through Nardin and Deer Creek and connects Medford with Blackwell and Cherokee. Highways and farm-to-market roads seem adequate to service the entire county.

Railroad service is adequate for the county except for the shortage of box cars during the harvest season. A main line of the Chicago, Rock Island, and Pacific follows U. S. Highway 81 from Caldwell, Kansas, through Renfrow, Medford, Pond Creek, and Enid to Forth Worth, Texas. The Atchison, Topoka, and Santa Fe has two lines through the county. The main line enters the northwest corner at Manchester and extends through Clyde, Medford, Deer Creek and Nardin. A branch of this line crosses the southwest corner and serves the area around Nash. Lamont and Salt Fork, in the southeastern corner are served by the Saint Louis-San Francisco line.

Market Outlets. The principal market outlet for wheat is the farmer's cooperative associations, all of which are associated with the Union Equity. Cooperatives in the county include the Farmer's Cooperative Elevator Company

⁵ R. G. Miller, "The Smoking Room," Daily Oklahoman (October 29, 1950), 11.

at Wakita and Gibbons, The Equity Exchange of Nash, the Farmer's Grain Company of Pond Creek, the State Line Grain Company of Manchester, and the Clyde Cooperative Association. All of these are successful farmer owned and operated enterprises.

The equivalent of fifty-five to sixty per cent of the total wheat produced in Grant County during the 1946 and 1947 crop years was marketed by these cooperatives.⁶ They also handled similar amounts of feed grains and a large volume of farm supplies. Total annual sales for these Grant County cooperatives during the two years were from eight to ten million dollars with net savings of from \$250,000 to \$300,000.

Private and line elevator competition is found at most of the market points in the county. Jefferson and Numa are the only markets without cooperative competition and Manchester and Gibbons are the only stations served only by cooperative elevators. There are twenty-seven elevators located in the fourteen grain markets. Four are independent, eleven are line, and twelve are cooperative elevators.

The largest cooperative in Grant County and one of the largest in the state is the Clyde Cooperative Association with average annual sales of \$2,379,669 from 1943 through the 1947 crop years. This association operates stations at Clyde, Medford, Renfrow, Deer Creek, Nardin, Lamont, and Salt Fork. In a quarter of a century this farmer-owned and directed business has grown from a small local at Clyde into a firm with approximately thirty regular employees, the largest payroll of any private business in the county.⁷

⁶ Annual Audits of the Association and personal interview with the managers of the Nash, Wakita, and Manchester cooperatives.

⁷ Personal interview with manager and bookkeeper, July 18, 1948.

HISTORY OF THE ASSOCIATION

History from Origin to 1929. The Clyde Cooperative Association originated with the Grange of Cherry Vale at a country school two miles west of Clyde, when several farmers joined together to buy farm supplies. Their success with group purchasing and dissatisfaction with wheat prices and buying practices influenced members of the group to sell their wheat cooperatively.⁸ The Clyde Cooperative Association was incorporated for \$12,000 with \$100 par value stock in June of 1921 with twenty members. The charter members elected William Schultz, J. G. Ciskowski, B. F. Cline, James Wright, and D. R. Garringer as a board of directors. The board elected B. F. Cline for president and D. R. Garringer to act as both manager and secretary-treasurer. The facilities of the Association included a portable John Deere loader and a pair of pitless grain scales. Wheat was purchased on a commission basis for the Blackwell Mill and Elevator Company. Commodities handled were oil, sugar, flour, and twine. During these first years approximately one hundred sixty local farmers patronized the new business.⁹

By February, 1922, when the first stockholders meeting was held, there were more than sixty stockholders in the organization. It was voted to purchase a 12,000 bushel frame elevator at Clyde from the Blackwell Mill and

⁸ The writer regrets it was not possible to obtain a more detailed account of these first years of the Cooperative's history as the first minute book from origin through 1928 was not available.

⁹ B. F. Cline, personal interview. Madford, Oklahoma, July 19, 1948.

Elevator Company. The board first offered \$6,500 and, in April, purchased the elevator for \$8,500. To secure capital for this venture, the board of directors launched a stock selling campaign. The results were representative of the post-war depression and cooperative financing. Only one member, B. F. Cline, sold stock and turned in \$400 in notes and \$300 in cash. To give the appearance of success, the board recommended the money necessary to pay interest on capital stock be taken from the funds set aside to pay for the \$8,500 grain elevator.

During the next few years it was a constant struggle to prevent the failure of the new cooperative. In 1923, Clarence W. Roseberry, manager at Clyde for the Blackwell Mill and Elevator Company, was named manager and C. E. Clark was elected to the board. John Keith and Alfred Shultz each served short periods as managers between 1925 and 1926. In 1925 a second agreement to buy grain on commission was made with the Blackwell Mill and Elevator Company. This contract was renewed annually until November, 1928, when the association started selling wheat through the newly organized Union Equity Cooperative Exchange of Enid, Oklahoma. The board of directors deemed it necessary to borrow money to pay interest on capital stock in January, 1926. This was accomplished only when members of the board personally endorsed the association note given as security for the loan. The stockholders meeting in January, 1927, elected L. E. Molka to the board. Later the same year Bernard Blubagh, son of one of the stockholders, was hired to manage the cooperative.¹⁰

In October of 1928, the organization received its first correspondence from E. H. Puckett who represented the Union Equity Cooperative Exchange of Enid, a newly organized regional grain marketing cooperative. At the annual

¹⁰ Cooperative Consumer, XV, No. 8, (April 30, 1948), 12-13.

meeting in December of the same year, Mr. Puckett explained the purpose and operation of the Union Equity Cooperative Exchange. L. M. Wilson and C. S. Shollhamer were elected directors and Directors Melka and Cline were appointed to investigate Mr. Puckett and the cooperative he represented. The association voted to pay eight per cent interest on capital stock and to give four bushels of apples as a Christmas gift for each stockholder.¹¹

Seemingly, the annual meeting of 1929 and the year following was the turning point in the development of the Clyde Cooperative Association. The stockholders approved membership in both the Union Equity Cooperative Exchange and the Farmer's National Grain Corporation. Stock was to be sold to construct a new elevator at Medford. At a special meeting in May it was voted to increase the capital stock from \$20,000 to \$50,000.¹² A motion was approved to build a petroleum station at Medford after a similar motion to build at Clyde had failed. The association closed the year with a net savings of \$1,028 and stockholders were paid eight per cent interest. L. E. Melka and C. E. Clark were reelected as directors and B. F. Cline was elected to the Board of Directors of the Union Equity Cooperative Exchange.

History from 1930 to 1940. The market area of the Clyde Cooperative was rapidly expanded during this decade. Negotiations started for the purchase of cooperative elevators at Renfrow, Numa, and Jefferson shortly after completion of the Medford elevator in 1930. Representatives of the association met with the Numa and Jefferson delegates several times during the early thirties, but they failed to agree on plans for merger. The Renfrow elevator, with a capacity of 28,000 bushels was purchased in 1936. In 1935, the 10,000

¹¹ Ibid., pp. 12.

¹² Starting in 1929, the remaining history was taken from the secretary's minutes for the association.

bushel cooperative elevator at Nardin was leased for one cent per bushel of grain handled. The same year the association decided to build a 60,000 bushel elevator at Clyde station and the Tillotson Construction Company of Omaha, Nebraska, received the contract to build and completed construction in time for the 1936 harvest. The following year, the Deer Creek elevator, 8,000 bushel capacity, was leased on a contract similar to the one for Nardin. Both elevators were operated under lease until a merger was completed with the Deer Creek Cooperative in 1937 and the Nardin group in 1938.

Another 10,000 bushel elevator was purchased in Medford from Sam P. Wallingford Grain Company in 1938. Further station expansion for the period was completed in May, 1940, with the purchase of the cooperative elevator in Salt Fork. The capacity of this elevator was 12,000 bushels and the purchase price was \$4,750 plus the inventory valued at cost. The Renfrow, Deer Creek, and Nardin station investments were similar in amount, the purchase price of each coupled with building and equipment repairs amounted to less than \$10,000.

Numerous expansions in commodities handled and services rendered for the farmers of the area occurred during this period. This started in 1930 when the board approved the addition of a delivery service for sideline sales. Orin L. Sturtz, a local farmer and present manager of the Clyde station, was hired to operate the delivery truck. Facility expansion included a retail gasoline pump in Medford, and gasoline and kerosene dock with pumps at Clyde. Sources of supply were improved by a new contract to handle oil and grease for the Vacuum Oil Company and the renewal of a contract with Magnolia Company for gasoline and kerosene. The association continued to purchase commercial feeds and flour through the Blackwell Mill and Elevator Company.

The Clyde manager was authorized to stock hardware and automobile accessories. This proved to be one of the stations most important sidelines. In 1934, delivery service was improved by the addition of a delivery truck at Medford. Coal sales were increased at Medford, Clyde, and Renfrow when the latter station was added in 1936. A grain cleaner with facilities was added as another service at Medford in 1934. In November, 1937, representatives of the Consumers Cooperative Association of Kansas City influenced the board to handle their petroleum and other "co-op" products. Starting as early as the annual meeting in 1931, the addition of a produce department was frequently discussed at annual and board meetings.

Facilities were increased and equipment was added to accommodate the increasing volume and added enterprises. Elevator capacity was expanded from the original 12,000 bushels at Clyde station to over 200,000 bushels in 1940. Not only were new elevators added at Medford and Clyde, but grain facilities at the stations were repaired to increase capacity. Larger platform and overhead scales were installed at all stations. Coal bins built at Medford in 1931 were enlarged in 1938 and new facilities were built at Clyde in 1933 and at Renfrow in 1936; at Medford, farm supply warehouses were added in 1932 and 1939; and feed and merchandise buildings and a bulk tank for petroleum were added at Wardin in 1939.

New lots were purchased at Deer Creek for bulk petroleum tanks in 1939 and 1940, and garages were built at Clyde and Medford for the delivery trucks. The association purchased and repaired housing for both the station manager and driver at Clyde and a residence was purchased for the manager of the station at Salt Fork.

Another step forward in the thirties was the increased affiliation with regional cooperatives. The original investment in the Union Equity, made in

1929, was increased to 300 shares of \$100 par value stock plus earnings retained in reserves. The association supported the expansion of the Union Equity and in 1934 approved the regionals plan to build a million bushel elevator at Enid. The Clyde Cooperative supported the Farmers' National Grain Corporation in 1930 and purchased its first stock on the Wichita Bank for Cooperatives in 1934. By 1940, the local cooperative had invested \$200 in Consumer Cooperative Association stock and \$300 in a subsidiary, the Cooperative Refinery Association. Patronage refunds retained also increased the investment in this regional farm supply cooperative.

The Clyde Cooperative had a small turn-over in management and personnel considering its rapid expansion. L. C. Fleming was employed in early 1930 to manage the Medford station and was replaced in May, 1932, by Bernard Blubaugh who was transferred to Medford after being appointed general manager of the association that year. Orin L. Sturtz was made station manager at Clyde, a position he still holds, and Lewis Dahlem, now a member of the board of directors, was hired as a truck driver at Clyde. The association's growth and the additional records required for both member and non-member patronage necessitated the employment of a bookkeeper in early 1935. Employees at this time included a general manager and driver, Clyde station manager and driver, a truck driver and bookkeeper at Medford. The number of employees increased to eleven at the close of the decade after the four branch stations were added and facilities increased at Medford.

History from 1941 to 1948. The Clyde Cooperative Association continued to expand at a more rapid rate in the forties than during the thirties. In the early forties, the need for more storage facilities was a major problem of most grain marketing firms. Several favorable crop years and the government policy of supporting grain prices through Commodity Credit

Corporation loans accumulated large holdings of grain and resulted in a greater need for more grain storage. The combine method of harvesting shortened the harvest season and the box car shortage during harvest also contributed to the storage problems.

The board contracted with the Tillotson Construction Company in January, 1941, to construct a 200,000 bushel concrete elevator at Medford. The last branch station was added to the association in 1943. The farmer's owning the Lamont Cooperative Elevator expressed a desire to merge with the Clyde Cooperative in 1942. The station was operated under lease during the 1942 crop year and the purchase was completed the following spring. A short time later the members approved a plan to construct an elevator at Lamont. The new members of the Clyde Cooperative in the Lamont community agreed to subscribe to half the cost and each was given the opportunity to purchase two \$100 shares of stock. A 200,000 bushel concrete elevator, which cost \$107,645 with equipment, was completed in time for the 1946 harvest. An elevator at Clyde was completed in time for the 1948 harvest. The Clyde elevator was similar to the structures at Lamont and Medford; the building and its equipment cost \$120,000. This 600,000 bushel increase in elevator capacity since 1941 concluded construction during the period of study though constructions at Deer Creek, Nardin, and Renfrow were being considered. During 1947 and 1948, buildings for housing grain cleaning equipment were constructed at Clyde, Lamont, and Renfrow. The equipment was installed at a total cost of \$40,500. Moisture machines for testing grain were installed at all stations.

Sideline facilities were expanded almost as rapidly as grain storage facilities were increased. The Texaco Service Station, which adjoined the Medford property, and three distillate tanks were purchased in 1941. That

year the association contracted to handle Seiberling tires, two old trucks were replaced and a new truck was added. At Lomont, a tank truck and pick-up were purchased for deliveries and two lots were purchased for the addition of petroleum bulk tanks and the construction of a warehouse for handling merchandise. A residence for the manager, two additional lots, an office building and a warehouse were added at Nardin.

A long discussed advancement was made in 1944 with the purchase of facilities for a produce store in Medford. Products handled are cream, eggs, poultry, hides, seeds, feed, and related merchandise. Stock was purchased in the Enid Cooperative Creamery which served as a regional processing and sales agency for dairy products and eggs. Produce sales increased yearly to \$128,550 in 1948. Another important improvement made was the purchase of a large \$10,000 building for the association's Medford office which was remodeled and equipped with a modern heating and cooling system. In 1945, the service station in Medford was remodeled and enlarged for complete service. A new Dodge truck with a flat bed and rack was purchased for general hauling between sources of supply, Medford, and branch stations.

The construction of the feed mill at Medford in 1946 and 1947 required the association's largest sideline investment. The cost of the mill, completely equipped, exceeded \$130,000. Plans for the mill were completed only after a committee from the board of directors inspected mills at Hobart, Oklahoma; Perryton, Texas; and Dodge City, Kansas. The mill has a daily feed-mixing capacity of two tons per hour, storage facilities for 1600 bushels of grain, and twenty carloads of supplies. The rolling machine has a capacity of 400 bushels each hour. Other equipment includes a molasses mixing machine, ten horse-power boiler with a grain steamer for rolling and crimping grain, a 2,500 pound freight elevator, grain cleaner, and seed treaters. Feed is mixed according to the "Open Formula" method where the

exact amount of all ingredients for each mixture is available for the customer. The Consumer's Cooperative Association contracted to purchase any surplus output of the mill.

The association became a lending agency for the Commodity Credit Corporation through arrangements with the Wichita Bank for Cooperatives in 1942. Necessary wheat loan documents were purchased from the bank and the Clyde Association received a .75 per cent commission on all loans handled. More than \$500,000 in loans was made during this year. The previous year the manager had been instructed to lease 100,000 bushels of elevator space to the Commodity Credit Corporation. The members also approved a resolution stating that the same storage rate be paid on all grain under commodity loans regardless of where the wheat was stored. This resolution was sent to the Commodity Credit Corporation.

In 1941, the authorized capital stock was increased from \$50,000 to \$150,000 with a \$100 par value and the members approved the following changes in by-laws:

Article III

Stockholder's Meetings

Section 1. The fiscal year of this Association shall commence on the first day of February and end on the last day of January. The regular annual meeting of the stockholders shall be held at a place designated by the board of directors within sixty (60) days following the close of the fiscal year, the date to be set by the Board of Directors. Special meetings of the stockholders may also be called by the Board of Directors, or petition of twenty per cent (20%) of the total number of stockholders, setting forth therein the purpose, time, hours, and place of such meeting, which shall be filed with the Secretary-Treasurer at least fifteen days (15) before each meeting is to take place. Said special meeting may be called for any lawful purpose, including the matter of considering charges against any officer or employee.

Article IV

Apportionment of Earnings

Section 1. The directors, subject to revision by the members, at a general or special meeting, lawfully called, shall apportion the net earnings at least once a year.

Section 2. Ten per cent (10%) of the net earnings accruing since the last apportionment shall be credited to a Surplus Reserve Account until such Surplus Reserve Account shall be equal the amount of the paid up stock. Amounts held in reserve, in addition to the amount credited to the Surplus Reserve Account, shall be allocated on the books of the Association to the credit of all patrons, both the members and non-members, on the basis of patronage.

Section 3. Dividends at a rate not to exceed six per cent (6%) may be paid on the Capital Stock.

Section 4. The remainder of such net earnings shall be apportioned and paid to all patrons, being apportioned to members and non-members alike of the same basis and same percentage. Such earnings shall be paid either in cash, capital stock, credits on capital stock, special reserves, or non-interest bearing member equity certificates without due date, ratably upon the value or volume of the purchases from or through the Association by each patron; provided that amounts prorated to patrons who are not members shall be credited to them severally, and such credits, when presented by any one eligible to own stock in said Association in a sum equalling the par value of one share of stock, shall be received at face value in exchange for a share of stock in said Association.

The authorized capital stock was increased from \$150,000 to \$500,000 in 1947. Shares of stock were reduced from \$100 to \$25 par value and the requirement for paid-up membership was increased to twelve shares of stock.

A new method of selecting nominees for the board of directors was initiated.

The president of the board appoints a nominating committee of seven, excluding present directors. One member of the committee is selected from each station.

The nominating committee is to select three nominees for each vacancy and present them to members at the stockholder's annual meeting for election.

The association used several methods to finance facility expansion and business operations. Non-member patrons were encouraged to purchase stock

and members were allowed to purchase more than a \$100 share. Operating capital was obtained by loans from the Wichita Bank for Cooperatives and the Grant County Bank. Several facility loans secured by mortgage were obtained from the Wichita Bank. Each year the members voted to retain from twenty to forty per cent of the annual savings to reserve accounts for repaying loans. Certificates of indebtedness were used to help finance the Clyde elevator. Four members subscribed to \$5,000 each and a total of \$31,000 was raised. These certificates, bearing three and one half per cent interest were to be paid in five equal payments plus annual interest. The principal could be paid in full any time after the first year of issue.

The investments in other cooperatives increased substantially during the forties. The total investment in stock, surplus, and patronage reserves amounted to approximately \$200,000 in January, 1949. These investments were in the Union Equity Cooperative Exchange, the Consumer's Cooperative Association, the Wichita Bank for Cooperatives, the Farmers' Cooperative Gas Association, the Enid Cooperative Creamery Association, and the Cooperative Refinery Association.

More than two-thirds of the stock and all but \$339 in patronage refunds were invested in the first two associations. The patronage refunds from these regional associations amounted to approximately \$66,961 in the 1948 crop year.

Numerous changes in personnel occurred from 1940 to 1949. The full-time employees increased to thirty in 1949 and the regular monthly payroll was approximately \$5,500. The larger stations continued to have less manager turnover; John Cowen and Roy Chism, present managers at Lamont and Deer Creek, were hired in the early forties. The Nardin, Renfrow, and Salt Fork stations had a new manager approximately every two years. To some extent this changing personnel could be attributed to higher salaries paid elsewhere during the

war. The association could not profitably meet these higher salaries at the smaller stations.

The Board of Directors had relatively few changes in membership. C. E. Clark, Mike Hein, E. J. Best, and Louis Droselmeyer were retired after several terms of continuous service; C. S. Shellhammer, long-time board member, moved from the community; L. E. Melka, who served continuously since 1927, became ineligible for re-election when he ceased farming. Mr. Melka had been president from 1937 to 1947 and was succeeded by B. F. Cline. Otto Zeman served as Secretary-Treasurer from 1933 to the present time. Directors elected during the period included John R. Skalnik, J. T. Meese, Fred Unbehauen, Leo Gilbert, Andrew Swanson, O. N. Parrett, Lewis Dahlem, and Lewis Clark.

THE DEVELOPMENT OF THE ASSOCIATION

Since organization in 1921, the Clyde Cooperative Association has expanded rapidly. The periods of development were the period of local organization, the period of station and regional growth, and the period of present scale operation which corresponds with the period of business analysis.

Growth during the first few years of the cooperative was slow. Membership decreased from 1923 to 1928. Other measures of growth for the period are not available except that in 1922 and 1925 net savings were not sufficient to pay interest on capital stock. Between organization and 1928 the association was often close to failure. Perhaps the main benefit of this period was the training and experience received in cooperation that enabled continuance of the association through the depression period that followed.

The period of regional and station growth was started by affiliation with a cooperative regional sales and terminal storage agency. Shortly after this time, the association extended its area of operation and moved its headquarters to Medford where petroleum and other sidelines were added. Participation in the Farmers National Grain Corporation, the Wichita Bank for Cooperatives, and the Consumers Cooperative Association followed. Participation in these regional associations contributed significantly in financial help, patronage savings and the cooperative "know how" that enabled the association to purchase advantageously other less successful cooperatives and sideline enterprises.

The period of business analysis is one of further integration within the market area and with regional cooperatives. Additional expansion occurred

in wheat and sideline facilities and the produce and mill departments were added. A more favorable period seldom occurs for the assimilation and continued expansion than happened during the period business operations were analyzed. Few, if any, elevator and farm supply businesses failed to prosper during the 1943-1947 period. Although none are known in the region that expanded operations, especially elevator capacity, as did the Clyde Cooperative Association.

Financial Structure. Members of a tax-exempt cooperative must supply 50 per cent of the firm's dollar volume of business and must also contribute to its financial structure.¹³ After a cooperative has been in operation long enough to build up its capital structure with net savings retained from operations, the need for capital stock contributions becomes of lesser importance than encouraging patronage from non-members to maintain an active patron-membership and business volume.

The authorized capital stock of the cooperative corporation was increased from \$12,000 to \$20,000 in 1929, \$50,000 in 1930, \$150,000 in 1941, and \$500,000 in 1948. Prior to 1948, the par value of a share of stock was \$100. The authorized capital stock is now \$500,000 divided in 20,000 shares at \$25 per value. The change to a lower par value stock, and the accumulation of patronage refunds toward a share of stock for non-members should result in a growing and active membership.¹⁴

The number of shares of capital stock issued increased steadily the past twelve years from 89 in 1935 to 660 in 1947. (Table 1) The rate of increase was not so rapid as total assets. This indicates that membership in the enterprise was not expanding as rapidly as was the capital structure of the cooperative. In 1941, the policy adopted by the association was that

¹³ John H. Davis, The Economic Analysis of the Tax-Status of Farmer Cooperatives, pp. 69-71.

¹⁴ Harold Hedges, Operations of Cooperative Grain Elevators in Kansas and Oklahoma, p. 41.

TABLE 1
GROWTH OF CAPITAL STOCK, TOTAL ASSETS, AND NET SAVINGS
OF THE GLYDE COOPERATIVE ASSOCIATION,
FROM 1921 THROUGH 1947

Year	Capital Stock Outstanding	Capital Stock & Stock Credits*	Total Assets*	Net Savings*
	(Number)	(Dollars)	(Dollars)	(Dollars)
1921	20			
1922	60			
1923	77			
1924	75			
1925	65			
1926	59			
1927	59			
1928	61			
1929	90	20,600	51,435	2,618
1930	109	20,970	42,730	4,646
1931	106	20,970	48,859	8,859
1932	106	14,682	46,634	5,369
1933	91	14,438	53,311	7,449
1934	94	15,700	50,687	5,731
1935	89	18,280	44,614	10,281
1936	97	22,322	67,932	17,623
1937	104	25,305	76,653	9,742
1938	181	35,440	101,716	16,552
1939	201	39,623	106,663	26,583
1940	226	47,079	193,413	13,262
1941	236	51,276	176,320	25,521
1942	256	55,039	193,413	40,444
1943	284	64,505	204,432	60,196
1944	337	76,785	582,284	71,971
1945	566	102,643	364,400	56,640
1946	602	108,634	505,591	87,547
1947	660	118,132	654,521	110,273

*Source: Records of the association, from 1921 through 1947. Data for years previous were not available.

no stockholder shall hold more than \$500 or 5 per cent of the authorized capital stock of the corporation. Previous to this time it was the policy of the board to recommend that members be discouraged from owning more than one share, \$100 par value. In 1948 the policy was adopted that no stockholder shall own more than 5 per cent of the authorized capital stock. This limits the amount that any member may own to \$2,500. A limit of \$1,000 should be high enough to maintain a reasonable capital stock and low enough to better disperse stock ownership among the active members.

Total capital stock plus stock credits increased from \$20,600 in 1929 to \$189,528 in 1948. (Table 1) The first available record as to surplus was for 1941 and amounted to \$8,735. It has since increased to \$57,506 in 1948. By-laws adopted in 1948 also require that 10 per cent of the yearly earnings shall be credited to a statutory reserve fund until such fund shall equal the amount of paid up stock and that any additional amounts held in reserve shall be allocated to the credit of all patrons on the basis of patronage. The 1941 policy was to set aside not less than 20 per cent in a surplus reserve fund.

The dividends paid on capital stock were also reduced by the new by-laws. This change reduced the maximum interest paid from 8 to 5 per cent annually. Reducing the interest paid on capital stock will permit a greater amount of the association's earnings to be returned in patronage refunds and will discourage those seeking membership for investment purposes. Another change in the by-laws was the elimination of the section stating that amounts carried to the reserve fund shall be allocated in the association's records on a patronage basis, and no stockholder shall be required to maintain in this reserve fund so allocated more than the amount of their fully paid capital stock in the association.

Membership. Membership in a cooperative involves the combined responsibility of the stock owner and customer. Each member has equal voting power and the benefits go primarily to the users instead of the owners of the firm. Because of this dual responsibility, membership is the foundation of cooperative success. The association by-laws contain the following policies designed to strengthen membership:

1. Common stock has a low par value of \$25 per share and is non-transferable.
2. Stock may be paid for in either cash, patronage refunds, or both.
3. Patrons accepted for membership are permitted to vote when 20 per cent of the par value of one share of stock is paid.
4. Each member has one and only one vote regardless of the amount of stock owned.
5. Members must own four paid up shares of stock before receiving patronage refunds in cash.
6. Not more than 25 per cent of the members patronage refunds shall be paid in cash until the member owns twelve paid shares of stock.
7. Only producers of agricultural commodities handled by the association are eligible for membership.
8. Members must agree to comply with the charter and by-laws of the association.
9. Application for membership must be accepted by the board of directors.
10. Those seeking approval for membership must meet any other requirements of the board of directors.

Prior to the 1948 amendments to the by-laws stock had a par value of \$100 each and patronage refunds could be retained only until one share of stock was paid in full.

The association through the Board of Directors may terminate membership and purchase stock for any of the following reasons:

1. Death
2. Moving from trade area of association

3. Ceases to patronize association for three consecutive years
4. Willfully fails to comply with by-laws
5. Willfully obstructs purposes and activities of the association
6. Engaging in competing interests.

To protect the members' rights the association must operate for the mutual benefit of its members as producers and shall not deal in the products of non-members to an amount greater in value than such as are handled for its members. Directors and employees cannot have competing business interests or deal in grain futures.

Membership has increased from the twenty charter members more than sixty times. (Table 1) In 1922 there were 60 stockholders and approximately a total of 160 patrons. In January, 1948, there were 660 members holding \$100 or more in stock, and 593 owning \$20 or more, but less than 100, making a total of 1,253 members. Total patrons for the year amounted to 4,157.

Management. The management of a cooperative may be compared to a pair of scissors. Employees with managerial responsibilities are the cutting edge and the members are the handle, but the rivet that holds both together and in proper alignment is the Board of Directors. There have been relatively few changes in members comprising the board of directors. B. F. Cline and L. E. Melka have served as president; William Webber, T. A. O'Brian, L. E. Melka, and Otto Zeman as secretary-treasurer; C. S. Shollhammer, C. E. Clark, L. M. Wilson, D. R. Garringer, E. J. Best, M. Hein, J. T. Moese, C. A. Mattingley, Lewis Droselmeyer, John Skalnik, Louis Dahlen, Leo Gilbert, D. J. Yerian, Fred Ubehauen, Andrew Swanson, Lewis Clark, and O. H. Parrett have served as directors. Several of these men have served a number of terms.

The present board, is representative of the farmer-owners who have made the Glyde Cooperative a successful business. They farm from 320 to 2,040

acres of land, practically all owned and are successful grain and livestock producers.

The association is fortunate in having had only one general manager, Bernard Blubaugh, who was first employed as manager of the Clyde Station in 1937. Several station managers and other employees have been with the association several years. Loyal and efficient employees and capable management are important in any successful business and probably more so in a cooperative. A number of studies of the reasons for failure of cooperatives indicate that lack of efficient management is responsible as often as any other single cause.¹⁵

The association is managed by a board of nine members who must be members of the cooperative and are elected at the annual meeting. Three new directors are elected each year and their term is for three years. Directors' powers are mainly:

1. To employ and dismiss a manager and such other employees as may be necessary or desirable.
2. To fix the salary of the manager and such other help as necessary.
3. To elect own officers and hold regular monthly meetings.
4. To employ a competent accountant for annual audit and present a detailed report on the business at each annual meeting.
5. To see that responsible employees and the secretary-treasurer are sufficiently bonded.
6. To provide adequate insurance for facilities and liabilities.
7. To appoint three members to a committee to inventory all property of the association within five days after close of the fiscal year.
8. To have full power to make all necessary rules and regulations for the association which are not inconsistent with the laws of Oklahoma and the Articles of Incorporation and by-laws of the association.

¹⁵ Henry H. Bakken and Marvin A. Schaars, The Economics of Cooperative Marketing, pp. 337.

The principal powers of the general manager are the following:

1. To have custody of the funds used in the operation of the business and to keep such records as will preserve an accurate record of all business transacted.
2. To show any day the financial condition of the association.
3. To present detailed written monthly reports to the Secretary-Treasurer, subject to the approval of directors.
4. He shall have control over and may employ and dismiss all agents and employees of the association not especially employed by the board of directors.
5. He shall perform such other duties as are incident to the position he holds.

Present by-laws do not contain policies as to station and department operations as a part of the association or the responsibility of station or departmental managers. Among other things not covered in the by-laws are personnel policy, membership, education, public relations, advertising or promotion of the association, relations with regional associations and price or service policy. Prior by-laws, adopted in 1941, did state that 5 per cent of the net savings may be set aside for educational purposes to be used at the discretion of the directors. Members of a cooperative have a larger responsibility than that of merely buying supplies and selling products through their association.

Facilities: Since the cooperative is primarily a wheat assembly, storage, and sales agency, its elevators are the largest investment for the association and for all stations except Medford. The elevator facilities of the association are larger in capacity and investment than any country elevators in the state and are still being expanded. The present distribution of elevator capacity in bushels is as follows:

Clyde	260,000	Benfrow	28,000
Medford	250,000	Mardin	16,000
Deer Creek	12,000	Salt Fork	15,000
Lamont	200,000		

Members of the association are favorably considering the construction of large concrete structures at Deer Creek and Salt Fork. If these plans are carried out the total storage capacity of the association will be approximately a million and half bushels. All elevators are bonded under the federal warehouse supervision except Salt Fork which is a state bonded house.

Sideline facilities have been rapidly expanded and new services added. The most recent addition is the \$20,000 general office and \$128,000 mill at Medford. Bulk oil stations are at Clyde, Deer Creek, and Lamont; a modern service station and bulk oil plant is located at Medford. Other sideline facilities include the produce station at Medford, hardware stores at Clyde and Renfrow, farm supply warehouses at Medford, Clyde, Lamont, Deer Creek, Renfrow, Salt Fork, and Nardin, coal bins at Clyde, Medford, Renfrow, and Lamont, and residences at Clyde, Nardin, and Salt Fork.

Elevator and sideline facilities at all stations are modernly equipped with adequate equipment and accessories. Medford, Clyde, Renfrow, and Lamont stations have grain cleaning facilities. The association operates a fleet of nine trucks and pickups. Two large semi-trailers, one for petroleum products and the other for grain, feed and general hauling. The association has adequate trucks to haul its sideline products from supply sources to local stations and delivery service for farm supplies.

Commodities and Service. Though organized primarily to market wheat the association has expanded constantly in the number and volume of products handled. Besides wheat, all stations handle grain sorghums, oats, corn, barley, mixed feeds, seeds and hay. Service sales have increased rapidly in recent years and include grain storage, seed cleaning and treating, automobile and truck service, feed milling and grinding, and farm delivery supplies. In addition the association furnishes an order service for many items of hardware, machinery, equipment and supplies not ordinarily carried in stock.

The new produce department handles cream, eggs, poultry, hides and offers a complete stock of related merchandise. The Clyde farm store stocks a \$10,000 inventory of hardware, appliances and accessories. The Renfrow station stock a limited amount of similar items. Petroleum tank-truck service from Medford, Clyde, Deer Creek and Lamont is so located as to service the associations trade territory. The mill has adequate stock of "Cooperative" feeds and all stations handle feed and seed. The service station offers a line of auto accessories including auto, truck, and tractor tires. The association does not have a grocery department, but handles a limited amount in case lots.

AN ANALYSIS OF THE COMBINED BALANCE SHEET

This part deals with a study of the financial condition of the association, and is based on the annual balance sheets. Financial condition refers to the relationship of the items constituting the assets, liabilities, and net worth. The balance sheet is a summarized annual report which presents a picture of the firm's financial condition at the end of its business year. An analysis of the annual balance sheets for a five-year period should indicate how much capital is used in the business, for what purposes the capital is used, and from what sources the cooperative obtains its operating and permanent capital. The data analyzed is for the crop years 1943 to 1947, inclusive. The financial condition of this association is compared with two similar cooperatives.¹⁶

Assets

The assets of a cooperative represent the value of things the firm owns or are owed to it at a definite time, the annual audit date. The assets are classed as current, other and fixed assets. The parts comprising current assets are cash on hand and in the bank, accounts receivable and inventories. Other assets include stock in other firms, mainly regional cooperatives, United States treasury bonds, investments in unexpired insurance premiums, building materials and meter deposits. Fixed assets consist of the value of

¹⁶ Howard Stephen Whitney, A Business Analysis of the Farmer's Cooperative Association of Alva, Oklahoma, pp. 26-27.

Harold S. Bauman, A Cost Analysis of the Farmer's Cooperative Association of Hobart, Oklahoma, p. 20.

land, elevators and equipment, mill and equipment, all other buildings and equipment, and furniture and fixtures.

Current Assets. Total current assets, with the exception of wheat loans receivable,¹⁷ increased regularly during the period. (Table 2) Cash averaged 2.6 per cent of total assets and was lower each year than the Hobart and Alva associations except in 1943.¹⁸ Receivables consist of trade receivables minus reserve for bad accounts plus advances on grain, trade and stock notes receivable. The total of these items is indicative of the firm's credit policy. Receivables varied from 2.6 per cent in 1946 to 60.6 per cent in 1944 and averaged 18.3 of total assets during the period. Except for the wheat loans receivable in 1944 the association compares favorably with both associations. Current assets should equal two or more times current liabilities if a firm is to be reasonably sure of paying current liabilities when they are due without impairing operating capital. During the five-year period inventories averaged 12.3 per cent of the total assets. The low was 6.7 in 1944 and the high, 15.2 per cent in 1943. The average is slightly less than for the Alva association and much lower than the average inventory for the Hobart association. The greater part of the inventory consists of sidelines. Both sideline and wheat inventories ordinarily are lower at the close of the fiscal year. The policy of selling wheat immediately after purchase contributes to small grain inventories. Both the Alva and Hobart Cooperatives have a larger volume of sideline sales and therefore would ordinarily have a larger inventory.

Other Assets. Investments in other cooperatives compose the major part of other assets. Investments in other cooperatives include capital stock,

¹⁷ Cf. ante, p. 17.

¹⁸ Whitney, loc. cit.
Bauman, loc. cit.

surplus reserves and allocated patronage refunds. Other items in other assets are unexpired insurance premiums, meter deposits, U. S. Treasury Bonds, and building material. Of the cooperative investments the largest part, over 60 per cent, is in the Union Equity Cooperative Exchange.

Other assets made up a substantial proportion of the total assets and remained fairly stable in amount. During the period of study other assets averaged 19.2 per cent of total assets and were highest in 1943, 23.3 per cent and lowest in 1944, 11.9 per cent. The three year average of the Hobart association was 15.27 per cent and the average for Alva was 30.6 per cent.

The value of other assets increased three times in value during the period. They increased from \$47,652 in 1943 to \$141,148 in 1947 and averaged \$68,975 for the period. (Table 2) Other assets should continue to increase chiefly because they include patronage refunds for capital stock and allocated reserves retained for the local association by its regional cooperative affiliates.

Fixed Assets. Permanent facilities and fixtures which cannot be readily converted into cash and are used in the normal operation of the firm over a period of time are fixed assets. Such assets are valued at original cost less reserves for depreciation. Fixed assets increased regularly during the period from \$102,925 to \$366,602 for the five-year period. (Table 2) The rate of increase in 1946 and 1947 was greater than for the first two years of the period and the rate of increase was greater than for Alva. Fixed assets also increased as a percentage of total assets, averaging 47.6 per cent, while Alva averaged only 37.9 per cent. This indicates that Medford was expanding permanent facilities at a greater rate. Fixed assets increased more rapidly than either current or other assets.

TABLE 2

COMBINED BALANCE SHEET OF THE CLYDE COOPERATIVE ASSOCIATION,
FROM 1943 THROUGH 1947

	1943		1944		1945	
	Dollars	Percentage of Total Assets	Dollars	Percentage of Total Assets	Dollars	Percentage of Total Assets
Assets:						
Cash	15,896	7.8	8,056	1.4	16,210	4.5
Receivables	6,916	3.4	352,917*	60.6	10,980	3.0
Inventory	31,043	15.2	39,003	6.7	52,455	14.4
Current Assets	53,855	26.4	399,986	68.7	79,645	21.9
Other Assets	47,652	23.3	69,324	11.9	82,730	22.7
Fixed Assets	102,925	50.3	112,974	19.4	202,025	55.4
Total Assets	204,432	100.0	582,284	100.0	364,400	100.0
Liabilities:						
Payables	2,719	1.3	324,430**	55.7	5,230	1.4
Accruals and Reserves			247	.1	233	.1
Dividends and Refunds	27,395	13.4	66,002	11.3	47,693	13.1
Current Liabilities	30,114	14.7	390,679	67.1	53,146	14.6
Fixed Liabilities					50,501	13.8
Total Liabilities	30,114	14.7	390,679	67.1	103,647	28.4
Net Worth:						
Capital Stock	64,505	31.6	76,785	13.2	102,643	28.2
Allocated Reserves	95,324	46.6	93,134	16.0	130,760	35.9
Surplus	14,489	7.1	21,686	3.7	27,350	7.5
Total Net Worth	174,318	85.3	191,605	32.9	260,753	71.6
Total Net Worth and Liabilities	204,432	100.0	582,284	100.0	364,400	100.0

TABLE 2 (CONTINUED)

COMBINED BALANCE SHEET OF THE CLYDE COOPERATIVE ASSOCIATION,
FROM 1943 THROUGH 1947

	1946		1947		Five-Year Average	
	Dollars	Percentage of Total Assets	Dollars	Percentage of Total Assets	Dollars	Percentage of Total Assets
Assets:						
Cash	8,752	1.7	12,579	1.9	12,301	2.6
Receivables	13,206	2.6	38,563	5.9	34,517	18.3
Inventory	65,404	13.0	95,357	14.6	56,752	12.3
Current Assets	87,362	17.3	147,004	22.4	153,570	33.2
Other Assets	103,117	20.4	141,148	21.6	88,795	19.2
Fixed Assets	315,112	62.3	366,602	56.0	219,927	47.6
Total Assets	505,591	100.0	654,754	100.0	462,292	100.0
Liabilities:						
Payables	3,987	.8	3,073	.5	67,889	14.7
Accruals and Reserves	2,832	.5	2,981	.5	1,257	.3
Dividends and Refunds	78,772	15.6	99,246	15.1	63,821	13.8
Current Liabilities	85,591	16.9	105,305	16.1	132,967	28.8
Fixed Liabilities	118,201	23.4	160,381	24.5	65,817	14.2
Total Liabilities	203,792	40.3	265,686	40.6	198,784	43.0
Net Worth:						
Capital Stock	108,634	21.5	118,133	18.0	94,140	20.4
Allocated Reserves	157,060	31.1	224,627	34.3	140,181	30.3
Surplus	36,105	7.1	46,308	7.1	29,187	6.3
Total Net Worth	301,799	59.7	389,068	59.4	263,508	57.0
Total Net Worth and Liabilities	505,591	100.0	654,754	100.0	462,292	100.0

* Includes \$322,257 in Commodity Credit Corporation Wheat loans receivable.

** Includes \$322,257 in Commodity Credit Corporation Wheat loans payable.

SOURCE: Annual Audits of the Association, from 1943 through 1947.

Total Assets. Total assets increased yearly from \$204,432 in 1943 to \$654,754 in 1947, an increase of 220.3 per cent, and averaged \$462,292 for the period. (Table 2) Medford increased more than either of the other associations. The relation of total assets to total liabilities was more favorable than the Hobart Association and less favorable than for the Alva Associations. For the periods of study, total liabilities as a percentage of total assets averaged 44.0 for Hobart, 43.0 for Medford, and 29.4 per cent for Alva. The rank of the associations in value of total assets was Medford, Hobart, and Alva.

Liabilities

Liabilities are the debts or obligations of a firm and are grouped into current and fixed liabilities. Current liabilities include accounts payable, accruals and reserves, and refunds payable. Accruals include interest, gasoline tax, social security tax, withholding tax, unemployment insurance tax, and sales tax. Accounts payable include \$322,257 in wheat loans payable to the Wichita Bank for Cooperatives but are usually the amounts that a firm currently owes for supplies and merchandise purchased. A relatively large entry under this item would indicate the association lacked cash or, for some reason, was not paying cash for purchases and likely not taking advantage of possible cash discounts. This situation is frequently associated with a slow inventory turnover and slow collection of credit sales.

Current Liabilities. Current liabilities increased from \$30,114 in 1943 to \$105,305. in 1947 and, for the same period, increased from 14.7 to 16.1 per cent of total assets. (Table 2) The greater part of this increase resulted from the increase in dividends and refunds.

Disregarding wheat loans payable in 1944, accounts payable decreased slightly while accruals and reserves increased substantially. Dividends

payable increased to \$99,246 in 1947, 15.1 per cent of total liabilities.

Payables, accruals and reserves were less than one per cent of total liabilities for this year.

During comparable periods, current liabilities averaged 26.6 and 36.2 per cent at Alva and Hobart compared to 28.8 per cent for the Clyde Cooperative Association. Dollar comparisons were \$92,044 for Alva, \$149,412 for Hobart, and \$132,967 for Medford.¹⁹

Fixed Liabilities. Fixed liabilities are long term liabilities maturing more than one year from date and includes mortgages and certificates of indebtedness. It should be the policy of a cooperative to maintain its permanent capital requirements by ownership equity of members rather than by mortgage borrowing.²⁰ These funds ordinarily represent funds borrowed for expanding facilities and permanent working capital.

The annual audits of 1943 and 1944 did not indicate any fixed liabilities. In 1945, 1946, and 1947 respectively, fixed liabilities increased from \$50,501 to \$118,201 and \$160,382. (Table 2) This was a percentage increase from 13.8 in 1945 to 24.5 per cent of total assets in 1947. A major part of this indebtedness was for construction of the feed mill and office at Medford and elevators at Lamont and Clyde. The greater portion was borrowed from the Wichita Bank for Cooperatives. Permanent liabilities amounted to \$65,817 and averaged 14.2 per cent of total assets. This was considerably more than the \$9,720 or 2.8 per cent for Alva and the three-year average of \$32,246 or 7.8 per cent for Hobart. Neither of these cooperatives was expanding as rapidly as the Medford Association.

¹⁹ Whitney, loc. cit.
Bauman, loc. cit.

²⁰ H. E. Larzelere, Financial Management of Farmer's Cooperatives in Michigan, p. 43.

Net Worth

Net worth in the cooperative represents the members' equity in the association's assets. It is composed of capital stock, surplus and allocated reserves. Members' equity represents that proportion of total assets free of indebtedness or the percentage of net worth to the book value of all assets. The allocated reserve is that part of the firm's reserve credited to the account of each patron since it represents a retention of a proportion of the member's patronage savings. The surplus reserve is an unallocated reserve required by the State Cooperative Law of 1937.²¹ This law requires each association to retain 10 per cent of the annual net savings until the surplus reserve is equal to capital stock outstanding. Both allocated and surplus reserves are income tax exempt as corporate income, since this cooperative is tax-exempted. Net worth grew yearly in increasing amounts from \$174,318 in 1943 to \$389,068 in 1947, a total increase of 171.4 per cent. (Table 2) Total net worth was larger than either of the other associations and the rate of increase for Medford was more rapid than for Alva during a comparable period. Total net worth for the Medford cooperative averaged 57 per cent of total assets and decreased from 85.3 in 1943 to 59.4 per cent in 1947. This decrease was caused by an increase in the fixed liabilities as funds were borrowed to expand facilities. The comparable averages for the Alva and Hobart cooperatives were 70.6 and 56.0 per cent.

Capital Stock. The capital stock was \$64,505 in 1943 and increased to \$118,133 in 1947. (Table 2) Capital stock increased rapidly during the period to finance the firm's expansion and a total of 236 shares was issued in 1945. (Table 1) Total capital stock for the Medford association increased less than either the Alva or Hobart cooperatives. The Hobart firm increased more during the 1946 to 1948 period than either of the other organizations.

²¹ Secretary of State, Corporation Laws of Oklahoma, p. 68.

The average capital stock was \$94,140 for the Medford firm, \$118,740 for the Alva firm, and \$125,070 for the Hobart firm. The capital stock averaged 20.4 per cent of total assets and was highest at 31.6 per cent, it decreased to 18.0 per cent in 1947. This indicates that a great portion of the expansion in facilities and operations was financed to a larger extent by loans and deferred patronage refunds than by sale of capital stock.

Allocated Reserves. Allocated reserves for the period increased from \$93,134 in 1944 to \$224,627 and averaged \$140,181. The average was 30.3 per cent of total assets and ranged from a low of 16.0 in 1944 to 46.6 per cent in 1943. Allocated reserves for Alva ranged from none in 1942 to \$78,168 in 1946 and averaged \$39,755 or 11.5 per cent of total assets. Hobart's allocated reserves decreased during the three-year period ranging from \$92,013 in 1946 to \$25,473 in 1947 and averaging \$62,431 or 15.14 per cent of total assets. This indicates that the Clyde Cooperative is deferring a larger part of its annual patronage refunds. This method of financing is considered to be more in accordance with cooperative principles than use of capital stock. Use of this method indicates that present users or more active patrons are making the greatest contribution for financing the cooperative.

Surplus Reserves. The state cooperative law of 1937 requires cooperative associations to set aside 10 per cent of its annual savings until its surplus reserve equals capital stock.²² Surplus reserves for the Clyde Cooperative increased annually from \$14,489 to \$46,308 and averaged 6.3 per cent of total assets during the period. This was considerably less than either the Alva or Hobart Associations which averaged 24.9 and 10.5 per cent respectively.

²² Secretary of State of Oklahoma, loc. cit.

Patronage Refunds

The net savings of a cooperative corresponds to net income in business for profit. As net income is the measure of operating success for a corporation and the source of dividends, so the net savings for a cooperative are the source of patronage refunds. Ten per cent of the annual net savings are set aside for a statutory reserve fund as previously explained. The next claim on annual savings is interest on capital stock, presently limited to a maximum of 5 per cent. The remainder must be distributed as patronage refunds both to member and non-member patrons, alike. Earnings shall be ratably distributed according to value or volume either in cash, capital stock, or credits on capital stock, special reserves, certificates of indebtedness or non-interest bearing revolving fund certificates without due date. This method is similar to that of the Alva Association except that the 5 per cent of the net earnings may be set aside for an educational reserve fund by the board of directors. From 26.3 to 57.5 per cent of the total refunds of the association were applied on reserves (Table 3) and from none in 1944 to 73.7 in 1947 were applied on stock during the period. The percentage of refunds paid by cash varied from none in 1947 to 41.5 in 1944. The Alva Association cash refunds were 56.6 per cent in 1942 and 60.6 per cent in 1945.²³ Total patronage refunds for the Alva Cooperative were also higher ranging from \$66,007 in 1942 to \$105,154 in 1946. The retention of a greater part of the patronage refunds for expansion purposes is desirable so long as membership relations are not unduly affected.

²³ Whitney, op. cit., pp. 33-35.

TABLE 3

DIVISION OF PATRONAGE REFUNDS OF THE GLYDE COOPERATIVE ASSOCIATION,
FROM 1943 THROUGH 1947

Year	Total Refunds (Dollars)	Applied on Reserves (Dollars)	Percentage of Total Refunds
1943	46,748	21,880	46.8
1944	65,888	38,565	58.5
1945	47,713	27,423	57.5
1946	74,733	38,103	51.0
1947	94,919	24,970	26.3

Year	Applied on Stock (Dollars)	Percentage of Total Refunds	Paid by Cash (Dollars)	Percentage of Total Refunds
1943	12,652	27.1	12,216	26.1
1944			27,323	41.5
1945	7,231	15.1	13,059	27.4
1946	12,161	16.3	24,469	32.7
1947	69,949	73.7		

SOURCE: Records of the Association, from 1943 through 1946.

AN ANALYSIS OF THE COMBINED OPERATING STATEMENTS
FROM 1943 THROUGH 1947

Sales

Total sales indicate the gross dollar volume of business transacted by the association. Sales are of two kinds: one is the sale of products for the producer patrons, the other is the sale of farm and family supplies purchased by the association for its member-patrons. This association was organized primarily as a sales agency for wheat farmers, yet from the beginning the ecoperative has purchased commodities for its members, serving both as a sales and purchasing agency. In recent years its part as a service agency has been increasing. Service sales do not appear in the total sales but are included in operating income.

Total sales increased annually during the five-year study from \$1,280,776 in 1943 to \$3,342,725 in 1947, an increase of 161 per cent. (Table 4) A great part of this increase was new business and not the result of an increasing price level. Sales for the Alva association increased only 111 per cent during the period of 1942 through 1946 but averaged \$2,538,137 compared with \$2,379,669 for Medford.²⁴ Total sales at the Hobart Cooperative averaged \$2,529,800 for the 1946-48 period with a considerable decrease in 1948 sales.²⁵

Total sales were divided between wheat and sidelines. Sideline sales

²⁴ Whitney, op. cit., p. 36.

²⁵ Bauman, op. cit., p. 26.

TABLE 4

COMBINED OPERATING STATEMENTS OF THE CLYDE COOPERATIVE ASSOCIATION,
FROM 1943 THROUGH 1947

	1943		1944		1945	
	Dollars	Percentage of Sales	Dollars	Percentage of Sales	Dollars	Percentage of Sales
Sales	1,280,776	100.0	1,653,139	100.0	2,378,954	100.0
Cost of Sales	1,229,076	96.0	1,607,206	97.2	2,298,128	96.6
Gross Margin	51,700	4.0	45,933	2.8	80,826	3.4
Operating Income	35,021	2.7	26,790	1.6	16,667	.7
Gross Operating Margin	86,721	6.7	72,723	4.4	97,493	4.1
Operating Expenses	58,020	4.5	60,220	3.7	83,183	3.5
Net Operating Savings	28,701	2.2	12,503	.7	14,310	.6
Other Additions	31,495	2.5	59,468	3.6	42,330	1.8
Net Savings	60,196	4.7	71,971	4.3	56,640	2.4

	1946		1947		Five-Year Average	
	Dollars	Percentage of Sales	Dollars	Percentage of Sales	Dollars	Percentage of Sales
Sales	3,242,754	100.0	3,342,725	100.0	2,379,669	100.0
Cost of Sales	3,139,207	96.8	3,230,780	96.6	2,300,879	96.7
Gross Margin	103,547	3.2	111,945	3.4	78,790	3.3
Operating Income	27,252	.8	48,753	1.4	30,897	1.3
Gross Operating Margin	130,799	4.0	160,698	4.8	109,687	4.6
Operating Expenses	90,525	2.8	130,682	3.9	84,526	3.5
Net Operating Savings	40,274	1.2	30,016	.9	25,161	1.1
Other Additions	47,274	1.5	80,257	2.2	52,165	2.2
Net Savings	87,548	2.7	110,273	3.1	77,326	3.3

SOURCE: Annual Audits of the Association, from 1943 through 1947.

were divided into four groups: feed grains, produce, petroleum, and general merchandise. Feed grain sales consist of grain sorghams, oats, corn, and barley. Produce sales include cream, eggs, poultry, hides, and related merchandise. Petroleum sales are made up of gasoline, distillate, kerosene, oil and grease. Seed, feed, coal hardware, accessories, and limited sales of electrical appliances, farm machinery and miscellaneous supplies are all included as general merchandise sales.

Wheat sales increased from \$994,377 in 1943 to a \$2,831,753 high in 1946 and decreased slightly in 1947. (Table 5) The number of bushels handled increased from approximately 1,083,500 in 1943 to 1,546,000 in 1947. The sales increased regularly in volume and as a per cent of total sales varied from 77.6 per cent of total sales in 1943 to 87.3 per cent in 1946. (Table 5)

Sideline sales for the Alva and Hobart Cooperatives were larger in both dollar volume and percentage of total sales. Total sideline sales for Medford increased from \$296,399 in 1943 to \$592,496 in 1947. The greatest increase was in the produce sales. (Table 5)

Merchandise sales tripled and petroleum sales doubled during this period.

The produce department was added in late 1944 and sales increased to \$116,407 in 1946. Produce sales of the Alva Association averaged \$382,937 and accounted for the major differences in sideline sales of the two associations.²⁶ Feed grain sales were the only sideline sales that decreased during the period. This decrease is not so great as indicated because merchandise sales in 1946 and 1947 include mill sales. (Table 5) Feed grain were sold by the mill also. Merchandise sales including mill sales increased from \$80,365 to \$259,177 during the period.

²⁶ Whitney, op. cit., p. 38.

TABLE 5

RELATIONSHIP OF COMMODITY SALES TO TOTAL SALES OF THE GLYDE COOPERATIVE ASSOCIATION,
FROM 1943 THROUGH 1947

Year	Total Sales (Dollars)	Wheat Sales		Feed Grain		Merchandise Sales	
		Dollars	Percentage of Total Sales	Dollars	Percentage of Total Sales	Dollars	Percentage of Total Sales
1943	1,280,776	994,377	77.6	140,909	11.0	80,365	6.3
1944	1,653,138	1,336,187	80.8	114,818	6.9	87,638	5.3
1945	2,378,954	1,973,001	82.9	85,449	3.6	103,156	4.4
1946	3,242,755	2,831,753	87.3	74,223	2.3	120,589	3.7
1947	3,342,724	2,750,228	82.3	78,159	2.3	259,177	7.8

Year	Produce Sales		Petroleum Sales	
	Dollars	Percentage of Total Sales	Dollars	Percentage of Total Sales
1943			65,125	5.1
1944	36,102	2.2	78,393	4.7
1945	123,906	5.2	93,442	3.9
1946	116,407	3.6	99,783	3.1
1947	110,622	3.3	144,537	4.3

SOURCE: Annual Audits of the Association from 1943 through 1947.

Gross Operating Margins

Total annual sales less total cost of sales equals gross margin or gross savings on commodities handled. Gross margins on commodities plus other operating income equals gross operating margin. Sources of other operating income include wheat storage and cleaning, service sales at the Medford service station, truck income, and feed grinding and mixing. The last two were included for the first time in 1947. Gross margins are indicative of the mark-up or merchandising margin for commodities. The total gross operating margin is the source of payment for all operating expenses and local savings.

The annual gross operating margin ranged from 4.0 in 1946 to 6.7 in 1943 and averaged 4.6 per cent. (Table 4) This was approximately 1 per cent less than that of either the Hobart²⁷ or Alva²⁸ Associations. Wheat sales, with a smaller mark-up constitute a larger proportion of the Clyde Cooperative's total sales than is the case with the other associations. This, in part, accounts for the difference. Gross operating margins were lowest at \$72,723 in 1944 and highest in 1947 at \$160,698 averaging \$109,687. Other operating income was largest in 1947 at \$48,753 chiefly the result of truck and milling services, new sources of income to the cooperative. Truck income amounted to \$4,440 and milling was \$1,102 for the year. These two sources of other income and income from grain cleaning which increased from \$974 in 1945 to \$3,240 in 1947 should continue to increase other operating income.

Operating Expenses

The expenses of the association incurred during the course of normal business operation are operating expenses. The relationship between operating expense, gross operating margin, and total sales is indicative of the

²⁷ Bauman, loc. cit.

²⁸ Whitney, op. cit., p. 36.

merchandising efficiency of the cooperative in its local operations. Operating expenses exceeded gross margins for the five-year period indicating that the net savings of the association came mainly from the patronage refunds received from its affiliate cooperatives rather than local operations. Operating expenses increased annually from \$58,020 to \$130,682 during the five-year period. (Table 7) Operating expenses for the wheat department tended to decrease slightly during the last two years and averaged 2.5 cents per dollar of sales for the five-year period. (Table 6) Sideline operating expenses increased during the last three and averaged 8.6 cents per dollar of sales. For the purpose of comparison and analysis the following classification was used for the detail of expense: salaries and wages, depreciation, insurance and bonds, interest, taxes, repairs, utilities, supplies, telephone and telegraph, advertising, truck, and administrative and selling. Audit and legal, directors fees, donations, dues and subscriptions, lease and rentals, bank charges, travel, meeting, expense, produce station, service station, mill and other miscellaneous expenses were combined under administrative and selling expenses. (Table 7) The most important expense items, combined under administrative and selling expenses were bank charges, and miscellaneous expenses which averaged \$1,348 and \$906, respectively, for the five-year period.

For discussion purposes, the expenses are combined into three groups: salaries and wages which account for more than half of the total operating expenses. Physical facility expenses or those that are primarily fixed costs, include depreciation, insurance and bonds interest, and taxes. The third group is other expenses which are more variable and include repairs, utilities, supplies, telephone and telegraph, truck, advertising, and administrative and selling.

TABLE 6

MARGINS, EXPENSES AND SAVINGS (IN CENTS) PER DOLLAR OF TOTAL SALES
FOR WHEAT AND SIDELINES AT THE CLYDE COOPERATIVE ASSOCIATION,
FROM 1943 THROUGH 1947

	1943	1944	1945	1946	1947	Average
Gross Margin						
Wheat	1.89	1.08	1.82	2.03	1.59	1.72
Sidelines	11.50	9.92	11.08	11.22	11.51	11.11
Other Operating Income						
Wheat	3.50	1.99	.81	.93	1.50	1.47
Sidelines	.06	.04	.17	.24	1.38	.48
Gross Operating Margin						
Wheat	5.39	3.07	2.63	2.96	3.09	3.19
Sidelines	11.56	9.96	11.25	11.46	12.89	11.59
Total Expenses						
Wheat	3.50	2.70	2.51	1.92	2.68	2.51
Sidelines	8.10	7.60	8.28	8.84	9.60	8.65
Other Additions						
Wheat	2.52	3.87	1.82	1.32	2.43	2.19
Sidelines	2.26	2.47	1.60	2.43	2.15	2.19
Net Savings						
Wheat	4.41	4.24	1.94	2.36	2.84	2.87
Sidelines	5.72	4.83	4.57	5.05	5.44	5.13
Total	4.70	4.35	2.38	2.70	3.10	3.25

Other additions for wheat is patronage refunds from the Union Equity Cooperative Exchange.

Other additions for sidelines is patronage refunds from the Consumer Cooperative Association plus gain on sale capital assets, interest received, and other miscellaneous income.

SOURCE: Annual Audits of the Association from 1943 through 1947.

TABLE 7

RELATIONSHIP OF INDIVIDUAL EXPENSE ITEMS TO TOTAL EXPENSE
OF THE CLYDE COOPERATIVE ASSOCIATION, FROM 1943 THROUGH 1947

Expenses	1943 (Dollars)	1944 (Dollars)	1945 (Dollars)	1946 (Dollars)
Salaries and Wages	29,128	36,493	47,029	52,232
Depreciation	6,785	7,108	7,769	9,927
Insurance and Bonds	5,494	3,113	7,125	3,030
Interest	1,200	297	2,066	2,352
Repairs	1,181	1,099	782	910
Taxes	3,948	1,927	4,957	6,148
Utilities	2,405	1,967	2,400	2,899
Supplies	2,858	2,062	3,055	3,153
Telephone and Telegraph	695	814	1,122	1,207
Advertising	385	125	229	509
Truck	824	882	1,507	2,695
Administrative and Selling Expense	3,117	4,333	5,142	5,463
Total	58,020	60,220	83,183	90,525

Expenses	1947 (Dollars)	Five-Year Average (Dollars)	Percentage of Average Total Expense
Salaries and Wages	66,848	46,346	54.8
Depreciation	16,076	9,533	11.2
Insurance and Bonds	6,564	5,065	6.0
Interest	4,113	2,005	2.4
Repairs	2,793	1,354	1.6
Taxes	10,660	5,528	6.5
Utilities	4,046	2,743	3.2
Supplies	4,137	3,053	3.6
Telephone and Telegraph	1,278	1,023	1.2
Advertising	374	325	.4
Truck	5,709	2,324	2.8
Administrative and Selling	8,084	5,227	6.3
Total	130,682	84,526	100.0

SOURCE: Annual Expense Ledgers of the Association, from 1943 through 1947.

Salary and Wage Expense. The salaries and wages constitute the largest item of expense for the cooperative and averaged 54.8 per cent of all operating expense for the five-year period. (Table 7) The primary cost problem confronting management is how to minimize and best utilize the number and time of employees. This is probably a more difficult managerial problem for a cooperative because of the dual customer-stockowner relationship.

Increases in salaries and wages were the main contributor to the increasing operation costs of the association during the period of study. Salaries and wages increased from \$29,128 in 1943 to \$66,848 in 1947 while total operating expenses increased from \$58,020 to \$130,682. Cooperatives have frequently been characterized as paying low salaries, though it does not seem to apply to this association. Salaries and wages will likely continue to be the largest expense of an association of this type and in a cooperative which is characterized by increasing fixed costs, offers management its greatest challenge for lowering the costs of operation.

Physical Facility Expense. Depreciation, insurance and bonds, taxes, and interest are frequently termed fixed costs. These expenses are approximately the same each year regardless of the volume of business transacted. These expense items averaged 26.1 per cent of total expenses for the five-year period. The addition of the mill, elevators and other facilities, combined with the increased use of machinery and equipment, significantly increased the operating expenses during the last three years of study. As a result of the larger facilities, these expenses are probably higher than for comparable firms. In the event of a decreasing price level or reduction in the volume of business handled it would become more difficult for the association to decrease costs and operate with a net saving.

The amount of depreciation increased annually from \$6,785 in 1943 to \$16,076 in 1947, an increase of 237 per cent. This was next to the largest

item of expense and averaged 11.2 per cent of total expenses. (Table 7) This expense is likely to constitute a larger percentage of total expenses if other costs or price levels are decreased. The more extensive the facilities, the greater will be this expense burden. Taxes increased from \$3,948 in 1943 to \$10,660 in 1947 and averaged 6.5 per cent of total operating expenses during the period. The ad valorem, or property taxes, accounted for the greater part of total taxes and the greatest increase in total taxes. Other items included were unemployment, social security, corporation licenses, excise, and use taxes.

It is a policy of the association not to incur unnecessary risks and to be fully protected with bonds for responsible employees and officers and with property and liability insurance. Warehouse bonds are also included in this item of expense. Insurance and bond expense increased from \$5,494 in 1943 to \$6,564 in 1947 and averaged 6.0 per cent of total operating expense. This item is largely a fixed cost and is not likely to decrease so long as present facilities are operated.

Interest paid was the most variable facility expense. The interest expense decreased from \$1,200 in 1943 to \$297 in 1944 and then increased annually to \$4,113 in 1947, averaging 2.4 per cent of total expenses for the period. Considering the increased funds invested in facilities and funds required for operation, it is not likely this item of expense will be greatly reduced.

Other Expense. The other operating expenses amounted to 19.1 per cent of total expenses for the period and in order of importance were administrative and selling, supplies, utilities, truck, repairs, telephone and telegraph, and advertising. This group of expenses increased proportionally less during the first four years of study than either facility expenses or salaries and wages. The increase was mainly a result of the larger volume of sales. These

expenses increased more during the fifth year of analysis than for the four previous years. This was largely the result of the operation of new facilities and increasing price levels.

The items included in other expense ranged from 6.3 per cent of total expenses for administrative and selling to .4 per cent for advertising. The advertising expense averaged only \$325 yearly and did not increase as sideline and service sales were expanded. (Table 7) Perhaps the most significant difference between the Medford and Hobart associations in expenses was in administration and selling and advertising expense. Advertising was 3.0 per cent and administrative and selling was 9.5 per cent of total expenses for the Hobart cooperative.²⁹

The expenses for repairs and supplies combined increased from \$4,039 in 1943 to \$6,930 in 1947 and averaged 5.2 per cent of total expenses. During the five-year period utility expense increased from \$2,405 to \$4,046 and averaged 3.2 per cent of total expenses. (Table 7) Truck expense increased from \$824 in 1943 to \$5,709 in 1947 for the greatest change. This increase resulted mainly from the addition of another transport truck and the increased expense is more than off-set by the saving in freight paid. Telephone and telegraph expense doubled during the period and averaged \$1,023 or 1.2 per cent of total expenses.

Other Additions

Other savings include patronage refunds and deferred patronage refunds received from regional cooperatives, interest on shares of stock in cooperatives and other investments, and gain on the sale of fixed assets. The greater part of other additions is refunds on patronage received from the Union Equity Cooperative Exchange and the Consumer's Cooperative Association.

²⁹ Bauman, op. cit., p. 27.

Other additions amounted to two-thirds of the net savings. This was considerably more than for either of the other cooperatives. Other additions for the wheat department exceeded wheat operating expenses in 1944 and averaged only slightly less for the five-year period. (Table 6) Other additions averaged \$52,165 for the period and increased yearly from \$31,495 in 1943 to \$80,257 in 1947. For the period 1942 through 1946 other additions for Alva averaged \$41,714 and increased less during the period. Hobart averaged \$40,720 and varied from \$33,376 in 1946 to \$44,799 in 1947. Other additions for wheat were most irregular and varied from 1.32 cents per dollar in 1946 to 3.87 cents per dollar of sales in 1944. (Table 6) Other additions for sidelines varied from 2.47 cents per dollar in 1944 to 1.60 per dollar of sales in 1945. Other additions averaged 2.19 cents per dollar of sales for both wheat and sideline sales for the period.

Net Savings

The net earnings or net income is the most interesting figure in the operating statement. It represents the annual savings realized by the patrons by doing business with their cooperative rather than a profit firm. From net savings, after interest on stock and reserves are deducted, the patronage refunds are made. A complementary use of net savings is the adding of new members by applying patronage refunds for non-members on shares of stock. Net savings tended to increase for the five-year period and were highest in 1947. This was more the result of increasing dollar volume of wheat sales than an increase in margins.

The net savings for the association fluctuated considerably. In 1947 the net savings amounted to \$110,273 and increased each year except 1945 when net savings were \$56,640. (Table 4) In 1947 net savings were 3.1 cents on dollar sales. This amounted to 2.8 cents per dollar of wheat sales and

5.4 cents on sideline sales. (Table 6) Net earnings in 1945 averaged 2.4 cents, and was 1.9 on wheat and 4.6 on sideline sales. Further study indicates that the low earnings in 1945 were mainly caused by small storage earnings and patronage refunds from the Union Equity. Total net savings averaged \$77,326 as compared to \$88,891 for Alva³⁰ and \$56,310 for Hobart.³¹ Net savings as a percentage of total sales averaged 3.3 cents per dollar for Madford, 3.2 for Alva and 2.2 cents per dollar of sales for Hobart.

Operating income plus other additions for the five-year average were equal to the average operating expenses of 3.5 cents per dollar of sales and exceeded the average net savings. (Table 4) Total net savings were 3.3 cents per dollar of sales as compared to 2.9 cents for wheat and 5.1 cents per dollar of sideline sales. (Table 6)

³⁰ Whitney, loc. cit.

³¹ Bauman, op. cit., p. 26.

ANALYSIS AND COMPARISON OF FINANCIAL AND OPERATING RATIOS

The relative business efficiency of a cooperative association may be evaluated with the use of business ratios for comparing their financial statements. Although definite conclusions may not be drawn from business ratios, they do serve as indicators of relative strength or weakness of similar associations.

To aid in the analysis of the financial structure and business operation of the association, four financial and five operating ratios for the period from 1943 through 1947 were used. The same nine ratios were computed for two similar cooperatives at Alva and Hobart for purposes of comparison. The Alva study was for the five-year period 1942 through 1946; the Hobart study was for a three-year period 1946 through 1948. Information for similar cooperatives for the same five-year period as used in this study of the Clyde Cooperative was not available.

Financial Ratios

The financial ratios from the combined balance sheets are a useful tool for analyzing the financial structure of a firm. Such an analysis may reveal certain strong or weak points in the financial structure. Comparative analysis of the financial statement for five years with comparisons from the two similar associations should show changes in the financial structure. This comparison should indicate the favorable or unfavorable changes in the elements comprising the combined balance sheets during the period of study. The following financial ratios were computed for the three associations:

1. Current assets to current liabilities
2. Current assets to total liabilities
3. Net worth to total liabilities
4. Net worth to fixed assets.

Current Assets to Current Liabilities. The first ratio, current assets to current liabilities, reflects the relation of two related parts of the balance sheet and measures the ability of the association to meet current obligations.³² Other studies conclude that normally an association is considered in good financial condition when its current assets are two or more times current liabilities.³³ The firm can be reasonably sure of being able to meet current liabilities as they come due without endangering its operating capital.

This ratio averaged 1.15 to 1 for the five year period. (Table 9) The ratio varied from 1.79 to 1 in 1943, from 1.02 to 1 in 1944 and 1946, and 1.40 to 1 the last year of the period. (Table 8) The average for the two comparable firms was 1.24 to 1, both had the same ration. (Table 9) The ratio was lowest for the Medford Association but all three were considerably below the recommended 2 to 1 ratio.³⁴ The major element included in current liabilities is patronage refunds, a large portion of which are retained in the association for several years, and, as such, are not an obligation on current assets.³⁵

Current Assets to Total Liabilities. The second ratio measures the ability of the association to liquidate all indebtedness from current capital.

³² Roy M. Green and Vance M. Rucker, Marketing Problems of Farmers Cooperatives in Kansas, pp. 10-11.

³³ Harry E. Ratcliffe, Perry V. Hemphill, and Harold F. Hollands. Cooperative Grain Elevators in North Dakota and Eastern Montana, pp. 18-29.

³⁴ Harold Hedges. Operations of Cooperative Grain Elevators in Kansas and Oklahoma, p. 3.

³⁵ Whitney, op. cit., p. 74.

TABLE 3

SELECTED FINANCIAL AND OPERATING RATIOS OF THE CLYDE COOPERATIVE ASSOCIATION
FROM 1943 THROUGH 1947

Ratio	1943	1944	1945	1946	1947	Five-Yr. Average
Current Assets to Current Liabilities	1.79 to 1	1.02 to 1	1.50 to 1	1.02 to 1	1.40 to 1	1.15 to 1
Current Assets to Total Liabilities	1.79 to 1	1.02 to 1	.77 to 1	.43 to 1	.55 to 1	.77 to 1
Net Worth to Total Liabilities	5.79 to 1	.49 to 1	2.52 to 1	1.48 to 1	1.46 to 1	1.33 to 1
Net Worth to Fixed Assets	1.69 to 1	1.70 to 1	1.29 to 1	.96 to 1	1.06 to 1	1.20 to 1
Sales to Total Assets	6.27 to 1	6.36 to 1	6.52 to 1	6.41 to 1	5.11 to 1	5.98 to 1
Supply Sales to Receivables Trade	207.85 to 1	52.86 to 1	53.61 to 1	63.52 to 1	84.89 to 1	73.70 to 1
Sales to Annual Inventory	41.26 to 1	42.38 to 1	45.35 to 1	49.58 to 1	34.87 to 1	41.91 to 1
Operating Expense to Total Sales	.045 to 1	.036 to 1	.035 to 1	.028 to 1	.039 to 1	.035 to 1
Total Net Savings to Total Assets	29.45 to 1	12.36 to 1	15.54 to 1	17.32 to 1	16.84 to 1	16.73 to 1

SOURCE: Annual Audits of the Association from 1943 through 1947.

TABLE 9

COMPARATIVE FINANCIAL AND OPERATING RATIOS FOR THE GLYDE
COOPERATIVE ASSOCIATION, THE FARMERS COOPERATIVE ASSOCIATION
OF ALVA AND THE FARMERS COOPERATIVE OF HOBART

Ratio	MEDFORD	ALVA	HOBART
Current Assets to Current Liabilities	1.15 to 1	1.24 to 1	1.24 to 1
Current Assets to Total Liabilities	.77 to 1	1.12 to 1	1.02 to 1
Net Worth to Total Liabilities	1.33 to 1	2.55 to 1	1.27 to 1
Net Worth to Fixed Assets	1.20 to 1	1.90 to 1	1.40 to 1
Sales to Total Assets	5.98 to 1	7.33 to 1	6.13 to 1
Supply Sales to Receivables Trade	73.70 to 1	87.24 to 1	27.24 to 1
Sales to Annual Inventory	41.91 to 1	49.60 to 1	25.54 to 1
Operating Expense to Total Sales	.035 to 1	.034 to 1	.044 to 1
Net Savings to Total Assets	.1673 to 1	.2565 to 1	.1668 to 1

SOURCE: Annual Audits of Clyde Cooperative Association from 1943 through 1947.
Annual Audits of Farmers Cooperative Association of Alva, from 1942 through 1946.
Annual Audits of the Farmers Cooperative of Hobart from 1946 through 1948.

Total liabilities were the same as current liabilities in 1943 and 1944 until loans were secured to build the Lament elevator in 1945 and the mill at Medford in 1946. This ratio for the Clyde Association decreased annually from 1.79 to 1 in 1943 to a low of .43 to 1 in 1946, and increased to .77 to 1 in 1947. (Table 8) The capital, secured by the loans required to expand facilities some \$400,000, increased total liabilities at a more rapid rate than current assets. For the periods of study the .77 to 1 ratio for Medford was below the 1.12 to 1 for Alva and the 1.02 to 1 ratio for Hobart. (Table 9) This difference may be largely attributed to the more rapid expansion of physical facilities of the Clyde Cooperative Association financed by mortgage borrowing.

Net Worth to Total Liabilities. This financial ratio measures the relation of members' equity in the firm to creditors' claims against the assets of the association. A favorable ratio is indicative of a strong financial structure. The ratio for the Clyde Cooperative ranged from 5.79 to 1 in 1943, from .49 to 1 in 1944. This ratio averaged 1.33 for the Medford cooperative. (Table 8) The Hobart cooperative averaged 1.27 to 1 from 1946 through 1948 and the Alva Association averaged 2.55 to 1 from 1942 to 1946. (Table 9) The low ratio for the Clyde cooperative in 1944 was a result of the wheat loans previously explained. Taking this factor into consideration, with the rapid facility expansion and the rate the Association is retiring its mortgaged indebtedness, the ratio is not below standard.

Net Worth to Fixed Assets. This balance sheet ratio expresses the relationship between the capital invested in the business by its members and the permanent investments of the firm in facilities and equipment. A ratio of 1 to 1 is usually considered standard. A larger ratio indicates that the stock holders have contributed more capital than is required by the association for fixed assets.

For the Clyde cooperative, this ratio averaged 1.20 to 1, decreased from 1.70 to 1 in 1944, to .96 to 1 in 1946. (Table 8) The decrease in ratio indicates that permanent assets were increasing at a faster rate than capital stock, surplus, and allocated reserves. The increase from .96 to 1 in 1946 to 1.06 to 1 in 1947 may be the beginning of a reverse trend.

For the period studied, the Hobart ratio was 1.40 to 1 and the Alva ratio was highest with 1.90 to 1. (Table 9)

Operating Ratios

The significance of data in the operating statements of a cooperative can often be more conveniently evaluated with the use of ratios. Local differences in accounting procedures, credit and service policy, the combination of enterprises, and other factors related to volume, and costs usually limit the use of these ratios to general or broad comparisons between similar associations. Five operating ratios are used in this section:

1. Sales to total assets
2. Supply sales to trade receivables
3. Sales to annual inventory
4. Expenses to total sales
5. Net savings to total assets

Sales to Total Assets. This ratio expresses the relationship of business volume to total assets of the firm and may be regarded as a measure of the rate of turnover of the total capital employed in the association. An unfavorable rate of capital turnover for comparable business concerns may be the result of a too small volume of sales, too much capital in receivables or slow moving inventories and over-investments in facilities and equipment.³⁶

This ratio of sales to total assets for the Clyde cooperative averaged 5.98 to 1. (Table 9) Comparable ratios for the Hobart and Alva cooperatives

³⁶ Larzelere, op. cit., pp. 66-67.

were 6.13 to 1 and 7.33 to 1, respectively. This ratio indicated a downward trend but varied less than the ratio of sales to total assets for the Alva association. Justification, at least in part, for the less favorable ratio for the Medford association was the rapid increase in assets resulting from the more rapid expansion of facilities and a higher percentage of wheat sales in relation to total sales.

Supply Sales to Trade Receivables. The second operating ratio indicates the relationship of sideline business to credit sales at the end of the fiscal year. A high ratio indicates that a firm has a better credit or collection program or both. The ratio also tends to serve as an indicator of the general business conditions within a firm. This is because the turnover of receivables tend to be more rapid during periods of favorable conditions and slower as business conditions become more adverse. The ratio of sideline sales to trade receivables is considered favorable for the Clyde association. Its ratio was 73.70 to 1 compared to 27.24 to 1 for the Hobart and 87.24 to 1 for the Alva associations. (Table 9)

Sales to Annual Inventory. The ratio of sales to inventories is a measure of the turnover of inventories, indicating the number of times during the year that inventories have been converted to sales. For associations of this type, the ratio should be computed separately for both wheat and sidelines. During the periods of analysis, the ratios for Medford, Alva, and Hobart were 41.91, 49.60, and 25.54, respectively. (Table 9) This difference in ratios probably is not so much in operating efficiency as merchandise handled. A further explanation may be that departments and facilities of the Medford firm were expanded during the period of study have not been used near capacity. The sales to annual inventory for Medford increased from 41.26 to 1 in 1943 to 49.58 to 1 in 1946 and dropped to 34.87 to 1. (Table 8) This ratio should increase as the new facilities are used to greater capacity.

Comparable ratios for the Alva and Hobart cooperatives were not computed on a yearly basis.

Operating Expenses to Total Sales. This ratio gives the relationship of costs to business volume and is a yardstick by which the operating efficiency of the association may be indicated. The ratio of operating expenses to sales was highest for the Clyde association in 1943 at .045 cents per sales dollar. (Table 8)

The ratio reduced during each of the next three years to .028 to 1 dollar of sales for 1946 operations and averaged .035 to 1 for the five-year period. The average ratio for the Alva association was slightly less at .034 cents per dollar of sales. Hobart, with a ratio of .044 to 1, had the highest costs. (Table 9) A greater volume of sideline sales attributed to higher costs at the Hobart association while the fixed cost on the larger facilities at Medford would likely off-set the larger proportion of sideline sales at Alva.

Net Savings to Total Assets. The final ratio in this comparison is net savings to total assets which expresses the relationship of net income to the total investments of the association. This ratio should indicate the rate of return on the capital used. According to this ratio, the returns of the Hobart and Clyde cooperatives were almost the same and Alva's ratio was significantly greater than either. Only one year, in 1943, was the return of the Clyde association greater than the five-year average of the Alva cooperative. The ratio of return on investment was lowest for the Clyde cooperative in 1944 but tended to increase during the final three years of analysis. Yearly data for the other associations were not readily available.

ANALYSIS OF STATION OPERATION

The objective of this section is two-fold. First, to evaluate the contribution of each station to the operation of the association and second, to approximate the benefits from integration of the seven stations into a multiple unit association.

The data presented in this section are from the annual audits and expense ledgers of the association for the crop years 1945 through 1947. A three-year rather than a five-year period is used. The changes in accounting procedures, addition of new departments, and the time required to organize the data made the three-year period seem more feasible.

Sales, cost of sales and gross margins, except for wheat, were taken from the annual trading statements of the cooperative. Wheat sales were computed as previously explained.³⁷ Other income was taken from the annual operating statements and allocated to each station. Storage earned and cleaning income were allocated according to each station's percentage of wheat sales and credited to the wheat department. Grinding and mixing income were credited to the sideline sales for Medford. Truck income was allocated to the sideline department of each station according to the station's percentage of total sideline sales.

The patronage refunds received from the Union Equity Cooperative were allocated to each station according to its percentage of total wheat sales. The patronage refunds from the Consumers Cooperative Association were first

³⁷ Cf. ante, p. 2.

separated into refunds received from petroleum and other merchandise. The total refund from petroleum sales was allocated to stations according to their percentage of total petroleum sales. The same procedure was used for allocating patronage refunds received from other merchandise. Other deductions and other additions were allocated to each station's sideline department on the basis of its percentage of total sideline sales.

Operating expenses were prorated to the wheat and sideline departments according to the estimates of the general manager. As far as possible, the individual expense items were charged to each station as posted in the association expense ledger. These expenses and general expenditures, such as office salaries and auditing, were allocated either on the basis of total wheat sales or total sideline sales. The nature of each expense was used to determine its most logical allocation. For example, elevator supplies, electricity, and grain fumigants were allocated according to total wheat sales. Office salaries and administrative and selling expenses were allocated on the basis of total sales. Truck expense was allocated on the basis of sideline sales. Ad valorem taxes were allocated by station according to the tax records of the county assessor. Total salaries and wages were used to allocate the unemployment insurance. The book value of permanent assets at each station was used as the basis for allocating interest, depreciation, and insurance and bonds.

The data presented in this section may or may not be representative of each station's actual operation. It is typical to the extent it represents the accounting records of the association, estimates by the general manager, and the writer's interpretation. For the purpose of discussion, the operating and expense data for each station are assumed to be representative of actual station operation.

TABLE 10

RELATIONSHIP OF INDIVIDUAL EXPENSE ITEMS TO TOTAL EXPENSES
BY STATIONS OF THE CLYDE COOPERATIVE ASSOCIATION,
FROM 1945 THROUGH 1947

MEIFORD	1945 (Dollars)	1946 (Dollars)	1947 (Dollars)	Three-Year Average (Dollars)	Percentage of total Expense
Salaries and Wages	20,251	25,431	34,684	26,789	54.6
Depreciation	4,366	4,401	9,342	6,036	12.3
Insurance and Bonds	3,159	1,406	3,114	2,560	5.2
Interest	788	1,434	2,569	1,597	3.2
Taxes	2,769	2,708	5,396	3,624	7.4
Utilities	1,011	1,081	1,658	1,250	2.5
Telephone & Telegraph	422	365	434	407	.8
Repairs	383	206	991	527	1.1
Supplies	1,245	1,331	1,665	1,414	2.9
Advertising	90	183	139	137	.3
Truck Expense	711	1,233	4,161	2,035	4.1
Administrative and Selling Expense	1,947	2,184	4,052	2,727	5.6
Total	37,142	41,963	68,205	49,103	100.0

CLYDE	1945 (Dollars)	1946 (Dollars)	1947 (Dollars)	Three-Year Average (Dollars)	Percentage of total Expense
Salaries and Wages	6,021	6,338	6,852	6,403	54.0
Depreciation	1,222	1,217	1,415	1,284	10.9
Insurance and Bonds	1,068	488	1,048	868	7.3
Interest	118	86	122	109	.9
Taxes	393	360	347	367	3.1
Utilities	472	433	555	487	4.1
Telephone & Telegraph	193	187	150	177	1.5
Repairs	131	182	556	290	2.5
Supplies	502	388	534	475	4.0
Advertising	31	67	47	48	.4
Truck Expense	337	593	499	476	4.0
Administrative and Selling Expense	1,077	720	807	868	7.3
Total	11,565	11,059	12,932	11,852	100.0

TABLE 10 (CONTINUED)

RELATIONSHIP OF INDIVIDUAL EXPENSE ITEMS TO TOTAL EXPENSES
BY STATIONS OF THE GLYDE COOPERATIVE ASSOCIATION,
FROM 1945 THROUGH 1947

LANOCT	1945 (Dollars)	1946 (Dollars)	1947 (Dollars)	Three-Year Average (Dollars)	Percentage of total Expense
Salaries and Wages	4,952	7,374	8,379	7,068	42.9
Depreciation	216	2,121	2,324	1,560	10.8
Insurance and Bonds	743	340	673	585	4.1
Interest	938	4,676	1,132	915	6.4
Taxes	320	2,045	3,027	1,798	12.4
Utilities	272	588	576	379	2.6
Telephone & Telegraph	114	221	190	175	1.2
Repairs	75	56	328	146	1.0
Supplies	359	692	636	542	3.7
Advertising	28	118	59	66	.5
Truck Expense	65	187	622	291	2.0
Administrative and Selling Expense	536	972	1,216	925	6.4
Total	8,668	15,302	19,680	14,550	100.0

DAVER CREEK	1945 (Dollars)	1946 (Dollars)	1947 (Dollars)	Three-Year Average (Dollars)	Percentage of total Expense
Salaries and Wages	6,586	5,300	6,003	5,963	61.4
Depreciation	581	536	730	622	6.4
Insurance and Bonds	702	208	624	511	5.3
Interest	60	41	79	60	.6
Taxes	621	399	437	502	5.2
Utilities	236	224	314	258	2.7
Telephone and Telegraph	118	118	122	119	1.2
Repairs	55	78	338	174	1.8
Supplies	372	242	364	326	3.4
Advertising	34	46	49	43	.4
Truck Expense	279	508	581	456	4.7
Administrative and Selling Expense	679	622	718	673	6.9
Total	10,292	8,372	10,458	9,707	100.0

TABLE 10 (CONTINUED)

RELATIONSHIP OF INDIVIDUAL EXPENSE ITEMS TO TOTAL EXPENSES
BY STATIONS OF THE CLYDE COOPERATIVE ASSOCIATION,
FROM 1945 THROUGH 1947

EXPENSE	1945 (Dollars)	1946 (Dollars)	1947 (Dollars)	Three-Year Average (Dollars)	Percentage of total Expense
Salaries and Wages	2,249	3,073	3,903	3,275	54.7
Depreciation	533	590	831	652	10.9
Insurance and Bonds	524	239	491	418	7.0
Interest	52	35	67	51	.8
Taxes	361	235	242	279	4.7
Utilities	161	218	441	274	4.6
Telephone & Telegraph	85	96	150	110	1.8
Repairs	20		128	49	.8
Supplies	227	211	424	287	4.8
Advertising	14	41	40	32	.5
Truck Expense	45	69	203	139	2.3
Administrative and Selling Expense	278	383	621	427	7.1
Total	5,149	5,190	7,641	5,953	100.0

WARDEN	1945 (Dollars)	1946 (Dollars)	1947 (Dollars)	Three-Year Average (Dollars)	Percentage of total Expense
Salaries and Wages	3,614	2,287	3,219	3,059	55.5
Depreciation	515	590	753	619	11.3
Insurance & Bonds	528	197	347	357	6.9
Interest	60	41	83	61	1.1
Taxes	277	228	209	238	4.4
Utilities	153	166	232	184	3.4
Telephone & Telegraph	197	126	117	117	2.4
Repairs	89	375	140	201	3.7
Supplies	216	158	237	204	3.7
Advertising	21	28	19	23	.4
Truck Expense	44	48	147	80	1.5
Administrative and Selling Expense	398	282	358	346	6.3
Total	6,022	4,506	5,861	5,469	100.0

TABLE 10 (CONCLUDED)

RELATIONSHIP OF INDIVIDUAL EXPENSE ITEMS TO TOTAL EXPENSES
BY STATIONS OF THE CLYDE COOPERATIVE ASSOCIATION,
FROM 1945 THROUGH 1947

SALT FORK	1945 (Dollars)	1946 (Dollars)	1947 (Dollars)	Three-Year Average (Dollars)	Percentage of total Expense
Salaries and Wages	2,757	2,450	3,308	2,838	58.2
Depreciation	366	421	663	483	10.0
Insurance and Bonds	400	150	267	272	5.6
Interest	50	38	62	50	1.0
Taxes	217	174	178	190	3.9
Utilities	96	189	270	185	3.8
Telephone & Telegraph	84	94	116	98	2.0
Repairs	29	32	263	108	2.2
Supplies	135	192	276	201	5.9
Advertising	11	34	22	22	.3
Truck Expense	26	58	169	84	1.7
Administrative and Selling Expense	175	301	311	262	5.4
Total	4,346	4,133	5,905	4,794	100.0

SOURCES: Annual audits and expense ledgers of the association, from 1945 through 1947.

Medford

Station Operation. The main office and the greater part of sideline facilities of the Clyde Cooperative Association are located in Medford, the county seat and largest trade center in Grant County. Included in the sideline facilities, which operate in addition to three elevators, are a produce station, added in 1945; a well-equipped service station; a bulk petroleum plant; a grain cleaning building with equipment; and store facilities for handling general merchandise. Total sales of the mill in 1947, its first year of operation, were \$139,588.

Few, if any, single unit elevator cooperatives in the state could equal this station's average annual sales of \$1,176,671 for the 1945 through 1947 crop years. (Table 11). Operated independently, this station would require from twelve to fifteen regular employees. The general manager of the association, with the aid of department heads, manages the station.

Total sales and net savings increased yearly for the three-year period. Sales at Medford increased from \$1,067,222 in 1945 to \$1,299,603 in 1947. Net savings were \$32,560 for the average and increased annually from \$19,864 in 1945 to \$43,268 in 1947. Patronage refunds from overhead cooperatives averaging \$20,081, composed more than half the net savings. This amounted to 1.7 cents per dollar of sales. (Table 11)

Operating expenses were 4.2 cents per dollar of sales and increased from \$37,142 in 1946 to \$68,205 in 1948 and averaged \$49,103 for the period. Considering the extent of sideline enterprises, salary and wage expense were not excessive and amounted to \$20,678 or 54.6 per cent of total operating expenses. (Table 10).

Operating expenses other than salaries and wages; depreciation, insurance and bonds, interest, taxes, averaged only 17.3 per cent of all operating expenses. The greatest increase was in truck expense which increased from

TABLE 11

OPERATING STATEMENT FOR THE MEDFORD STATION
WITH A THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1945 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents)	Sidelines Per Dollar)
Sales	1,067,222	788,806	278,416	100.0	100.0
Cost of Sales	1,035,625	774,479	261,146	98.2	93.8
Gross Margin	31,597	14,327	17,270	1.8	6.2
Operating Income	8,026	6,811	1,215	.9	.4
Gross Operating Margin	39,623	21,138	18,485	2.7	6.6
Operating Expenses	37,142	14,857	22,285	1.9	8.0
Net Operating Savings	2,481	6,281	- 3,800	.8	1.4
Other Additions	17,383	14,328	3,055	1.8	1.1
Net Savings	19,864	20,609	- 745	2.6	.3

1946 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents)	Sidelines Per Dollar)
Sales	1,163,189	878,135	285,054	100.0	100.0
Cost of Sales	1,115,166	860,317	254,849	98.0	89.4
Gross Margin	48,023	17,818	30,205	2.0	10.6
Operating Income	12,945	8,714	4,231	1.0	1.5
Gross Operating Margin	60,968	26,532	34,436	3.0	12.1
Operating Expenses	41,963	16,785	25,178	1.9	8.8
Net Operating Savings	19,005	9,747	9,258	1.1	3.3
Other Additions	15,526	11,558	3,968	1.3	1.4
Net Savings	34,531	21,305	13,226	2.4	4.7

TABLE 11 (CONCLUDED)

OPERATING STATEMENT FOR THE MEDFORD STATION
WITH A THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1947 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents)	Sidelines Per Dollar
Sales	1,299,603	902,769	396,834	100.0	100.0
Cost of Sales	1,239,317	888,403	350,914	98.4	88.4
Gross Margin	60,286	14,366	45,920	1.6	11.6
Operating Income	23,869	15,676	8,193	1.7	2.0
Gross Operating Margin	84,155	30,042	54,113	3.3	13.6
Operating Expenses	68,205	27,282	40,923	3.0	10.3
Net Operating Savings	15,950	2,760	13,190	.3	3.3
Other Additions	27,336	21,980	5,356	2.4	1.4
Net Savings	43,286	24,740	18,546	2.7	4.7

1945-47 Average

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Total (Cents per Dollar)	Wheat	Sidelines
Sales	1,176,671	856,570	320,101	100.0	100.0	100.0
Cost of Sales	1,130,036	841,066	288,970	96.0	98.2	90.3
Gross Margin	46,635	15,504	31,131	4.0	1.8	9.7
Operating Income	14,947	10,400	4,546	1.3	1.2	1.4
Gross Operating Margin	61,582	25,904	35,678	5.3	3.0	11.1
Operating Expenses	49,103	19,651	29,462	4.2	2.3	9.2
Net Operating Savings	12,479	6,263	6,216	1.1	.7	1.9
Other Additions	20,081	15,955	4,126	1.7	1.9	1.3
Net Savings	32,560	22,218	10,342	2.8	2.6	3.2

SOURCE: Annual audits and expense ledgers of the association,
1945 through 1947.

\$711 to \$4,161 during the three years. The increase resulted primarily from the addition of another transport truck in 1947 and increased operating costs. Other operating expense items for the three-year average, in order of dollar volume, were administrative and selling, truck, supplies, utilities, repairs, telephone and telegraph, and advertising.

Wheat Department. The volume of wheat handled by the Medford station decreased in proportion to the total volume of the association as other station facilities were expanded. The dollar volume of wheat sales increased annually and averaged \$356,570 or approximately 550,000 bushels for 1945, 1946, and 1947 crop years. The gross operating margin was 3.0 cents per dollar of sales varying from 2.7 cents in 1945 to 3.3 cents in 1947. Net operating savings exceeded operating expenses by .7 cents per dollar of sales. This, plus other additions, equals total net savings and amounted to 2.6 cents per dollar of sales for the period. Other additions for wheat sales are synonymous with patronage refunds from the Union Equity Cooperative Exchange. These additions averaged \$15,955 for the period.

Net savings from wheat marketing increased from \$20,609 in 1945 to \$24,740 in 1947 and averaged \$22,218.

Sideline Department. Included in the Medford sideline facilities, in addition to the new mill with \$139,588 sales in 1947, are a produce station averaging sales of \$128,360 for the three years ended in 1947; a well equipped service station and a petroleum bulk plant averaging \$69,462 yearly from 1945 to 1947; feed grains and seeds; general merchandise, and service sales.

Sideline sales increased annually to \$396,834 in 1947 and the average of \$320,101 for the three years was more than double sideline sales of the six branch stations. With the new facilities and current prices, sideline sales could be increased to \$450,000 to \$500,000 without expanding facilities or personnel.

Net savings averaged \$10,432, 3.2 cents for each dollar of sales, and varied from a net loss of \$745 in 1945 to \$18,546 in 1947. The low net savings of 3.2 cents per dollar of sales during the period for the most part could be attributed to the loss in 1945. The net savings in 1946 and 1947 were almost equal to the association's three-year average of 4.7 cents per dollar of sideline sales. Medford's net savings were more than equal to that of both Clyde and Deer Creek stations. (Table 10) Operating expenses increased from 8.0 to 10.3 cents per sales dollar and averaged 9.2 for the three years.

Clyde

Station Operation. In addition to being the place of origin of the association, Clyde is one of the larger stations. Since completion of the new 200,000 bushel elevator the station has three full-time employees including the station manager, elevator operator, and a man handling petroleum sale and delivery. Manager O. L. Sturtz was first employed at Clyde in 1930 as truck driver and has been manager at the station since 1932.

Facilities at the Clyde Station, excluding elevators, include petroleum facilities, grain cleaner building, feed warehouse, combination office and hardware store, and coal bins. Petroleum facilities consist of a warehouse, pump and bulk tanks, a tank truck and truck shed. The station has two residences for the local manager and truck driver.

Sales of the Clyde Station averaged \$411,982 for the three years, and were exceeded only by Medford and Lamont. (Table 12) Sales increased from \$369,107 in 1945 to \$429,906 the next year and to \$436,932 for 1947. Average operating expenses, amounting to 2.9 cents per dollar of sales, were considerably lower than that of the two next larger stations. Salaries and wages were 54.0 per cent of operating expenses. This, with depreciation, interest, insurance and taxes composed 76.2 per cent of the average expenses amounting

TABLE 12

OPERATING STATEMENT FOR THE GLYDE STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1945 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents)	Sidelines (Per Dollar)
Sales	369,107	336,002	33,105	100.0	100.0
Cost of Sales	355,926	329,900	26,026	98.2	78.6
Gross Margin	13,181	6,102	7,079	1.8	21.4
Operating Income	2,599	2,599		.8	
Gross Operating Margin	15,780	8,701	7,079	2.6	21.4
Operating Expenses	11,565	7,749	3,816	2.3	11.5
Net Operating Savings	4,215	952	3,263	.3	9.9
Other Additions	7,110	6,103	1,007	1.8	3.0
Net Savings	11,325	7,055	4,270	2.1	12.9

1946 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents)	Sidelines (Per Dollar)
Sales	429,906	395,294	34,612	100.0	100.0
Cost of Sales	414,542	387,295	27,247	98.0	78.7
Gross Margin	15,364	7,999	7,365	2.0	21.3
Operating Income	3,548	3,548		1.0	
Gross Operating Margin	18,912	11,547	7,365	3.0	21.3
Operating Expenses	11,059	7,410	3,649	1.9	10.6
Net Operating Savings	7,853	4,137	3,716	1.1	10.7
Other Additions	6,202	5,203	999	1.3	2.9
Net Savings	14,055	9,340	4,715	2.4	13.6

TABLE 12 (CONCLUDED)

OPERATING STATEMENT FOR THE WHEAT SIDELINE WITH A
FIVE-YEAR AVERAGE FROM 1945 THROUGH 1947

1947 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Percentage)	Sidelines (Percentage)
Sales	236,038	297,295	39,036	100.0	100.0
Cost of Sales	202,407	290,971	33,536	98.4	81.6
Gross Margin	33,631	6,324	6,500	1.6	16.4
Operating Income	5,470	5,270		1.4	
Gross Operating Margin	17,915	11,815	6,100	3.0	15.4
Operating Expenses	12,932	6,544	4,268	2.2	10.8
Net Operating Expenses	7,563	3,151	1,892	.8	4.6
Other Additions	11,407	9,668	1,739	2.4	6.3
Net Savings	13,230	12,919	3,591	3.2	9.1

1945-47 Average

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Total (Percentage)	Wheat (Percentage)	Sidelines (Percentage)
Sales	271,982	376,196	35,704	100.0	100.0	100.0
Cost of Sales	304,312	369,382	28,936	96.7	98.2	80.9
Gross Margin	32,664	6,814	6,768	3.3	1.8	19.1
Operating Income	3,872	3,872		.9	1.0	
Gross Operating Margin	17,526	10,687	6,628	4.2	2.8	19.1
Operating Expenses	11,652	7,921	3,911	2.9	2.1	10.9
Net Operating Savings	5,874	2,766	2,937	1.4	.7	8.2
Other Additions	8,216	6,932	1,284	2.0	1.9	3.5
Net Savings	13,929	9,737	4,192	3.4	2.6	11.7

SOURCE: Annual audits and expense ledgers of the association, 1945 through 1947.

to \$11,352. The additional man for the new elevator and increasing costs should considerably increase the fixed operating expenses of the station.

Clyde's net savings of \$13,929 exceed those of Lamont and were second to Medford. (Table 12) Net savings amounted to 3.4 cents per dollar of sales, highest for all stations. This was largely the result of sales of items carrying a larger mark-up, the volume of grain handled in proportion to facilities and lower fixed operating costs.

Wheat Department. More than 95 per cent of the grain sales for the area are handled by the cooperative according to the Clyde manager. The line elevator here gives little competition and probably aids as an outlet for low quality grain.³⁸ Station wheat sales averaged \$376,198 or about 220,000 bushels annually for the three years and was exceeded by only the Medford and Lamont stations. (Table 12) Sales increased yearly from \$336,002 in 1945 to \$397,296 in 1947. The gross operating margin of 2.8 cents per dollar of wheat sales was lower than the average of the association. The chief reason being the low storage capacity as indicated by the low operating income.

Wheat department operating expenses of 2.1 cents per sales dollar were lower than for any station except Renfrow and significantly below that of Medford, Lamont, or Deer Creek. Net savings from wheat increased yearly from \$7,055 in 1945 to \$12,819 in 1947. This amounted to 2.6 cents per dollar of sales and Renfrow was the only station with a higher savings on wheat. Net savings on wheat averaged \$9,737 for the three years and were exceeded only by Medford though Lamont handled a larger volume.

Sideline Department. Sideline sales for the station increased yearly from \$33,105 for 1945 to \$39,636 for 1947 and averaged \$35,784. Though

³⁸ Personal interview, O. L. Sturtz, May, 1948.

exceeded in sideline sales by Medford, Lamont, and Deer Creek, this station with the exception of Deer Creek earned more net savings per dollar of sales. Net savings averaged 11.7 cents per dollar for the three years and were highest at 13.6 cents per dollar of sales in 1946. The favorable net savings is chiefly due to the high proportion of hardware and petroleum sales carrying a wider margin of savings. Net savings on sideline sales averaged \$4,192 for the three years and was highest at \$4,715 in 1946. Total net savings on sidelines were less than for Medford and Deer Creek.

Lamont

Station Operation. Lamont is the newest and most rapidly expanding branch station of the cooperative. Present facilities were in use only the last two years of analysis. The 200,000 bushel concrete elevator was completed early in 1946 and a cleaner building with new equipment was added in 1948. The station operates a tank truck and pick-up for farm deliveries. More than \$100,000 has been invested in new facilities and equipment since the station was purchased in 1942. The manager has been with the association since that time and has two full-time employees.

The station was second to Medford in total sales for the three years, averaging \$490,936. (Table 13) Sales increased from \$238,485 for 1945 to \$700,665 in 1946 the first year of operation for new facilities. Sales decreased in 1947 to \$533,658 the largest decrease of any station during the three-year period. All the decrease was in wheat sales.

Operating expenses more than doubled during the three-year period, increasing from \$8,668 to \$19,680 as the station expanded operations. Salaries and wages increased from \$4,952 to \$8,879 and averaged 48.9 per cent of operating expenses. (Table 10) Depreciation increased from \$216 to \$2,342 and taxes from \$320 to \$3,027. Tax expenses averaged 12.4 per cent of

TABLE 13

OPERATING STATEMENT FOR THE LAMONT STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1945 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per dollar)	Sidelines (Cents per dollar)
Sales	238,485	206,179	32,306	100.0	100.0
Cost of Sales	231,812	202,434	29,378	98.2	91.0
Gross Margin	6,673	3,745	2,928	1.8	9.0
Operating Income	1,595	1,595		.8	
Gross Operating Margin	8,268	5,340	2,928	2.6	9.0
Operating Expenses	8,668	7,368	1,300	3.6	4.0
Net Operating Savings	- 400	-2,028	1,628	-1.0	5.0
Other Additions	3,903	3,745	158	1.8	.5
Net Savings	3,503	1,717	1,786	.8	5.5

1946 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per dollar)	Sidelines (Cents per dollar)
Sales	700,665	666,661	34,004	100.0	100.0
Cost of Sales	685,544	653,075	32,469	97.9	95.5
Gross Margin	15,121	13,586	1,535	2.1	4.5
Operating Income	5,982	5,982		.9	
Gross Operating Margin	21,103	19,568	1,535	3.0	4.5
Operating Expenses	15,302	13,007	2,295	2.0	6.7
Net Operating Savings	5,801	6,561	- 760	1.0	2.2
Other Additions	8,989	8,774	215	1.3	.6
Net Savings	14,790	15,335	- 545	2.3	-1.6

TABLE 13 (CONCLUDED)

OPERATING STATEMENT FOR THE LAMONT STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1947 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	533,658	466,125	67,533	100.0	100.0
Cost of Sales	520,018	458,695	61,323	98.4	90.8
Gross Margin	13,640	7,430	6,210	1.6	9.2
Operating Income	6,421	6,421		1.4	
Gross Operating Margin	20,061	13,851	6,210	3.0	9.2
Operating Expenses	19,680	14,760	4,920	3.2	7.3
Net Operating Savings	381	- 909	1,290	- .2	1.9
Other Additions	13,205	11,348	1,857	2.4	2.7
Net Savings	13,586	10,439	3,147	2.2	4.7

1945-47 Average

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Total (Cents per Dollar)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	490,936	445,322	44,614	100.0	100.0	100.0
Cost of Sales	479,125	438,068	41,057	97.6	98.2	92.0
Gross Margin	11,811	8,254	3,558	2.4	1.8	8.0
Operating Income	4,666	4,666		1.0	1.1	
Gross Operating Margin	16,477	12,920	3,558	3.4	2.9	8.0
Operating Expenses	14,550	11,712	2,838	3.0	2.6	6.4
Net Operating Savings	1,927	1,208	720	.4	.3	1.6
Other Additions	8,699	7,956	743	1.8	1.8	1.7
Net Savings	10,626	9,164	1,463	2.2	2.1	3.3

SOURCE: Annual audits and expense ledgers of the association, 1945 through 1947.

operating expenses significantly exceeding the next highest percentage of 7.4 for Medford. Operating expenses equaled 3.0 cents per dollar of sales and were less than average for the association. (Table 13)

Savings averaged \$10,626 less at Lamont than at Medford, Clyde, and Deer Creek and were more variable than for other stations. Net savings were \$3,503 for 1945, increased to \$14,790 in 1946, then decreased to \$13,586 for 1947. The average of 2.2 cents per dollar of net savings were the lowest of all stations except Nardin.

Wheat Department. Wheat sales were \$445,322 or approximately 287,000 bushels for the period, second in both dollar and bushel volume to Medford with the greatest increase of all stations for the three-year period. (Table 13) Despite a \$2,028 loss in 1945, net savings averaged \$9,164 and were third to Medford and Clyde. The stations net savings of \$15,335 in 1946 exceeded that of Clyde station and was second to Medford. This was the first year of operation for the new elevator and other station facilities. In 1948 wheat again had a net operating loss which was more than off-set by storage and patronage refunds earned. This resulted in a net saving of \$10,439. When the operation of the new elevator is stabilized the station should be more successful than for the past two years.

Sideline Department. Commodities handled at Lamont the first two years of analysis were feed grains, seeds, merchandise oil and grease. A full line of petroleum products were added in 1947 to include oil and grease, gasoline, kerosene and farm delivery. Petroleum sales the first year increased to \$21,909. Field grain sales were second in volume to Medford. Station sideline sales increased from \$32,306 to \$34,004 to \$67,533 in 1945 to 1947, respectively. (Table 13) Present sideline facilities are adequate to average over \$75,000 for a comparable period. Despite the sideline loss of \$545 in 1946 the net

savings averaged \$1,463 for the three years and were \$3,147 in 1947. The gross operating margin averaged 8.0 cents per dollar of sales and was considerably below the 11.1 cents per dollar sales of the association for the period. In 1946 Lamont had a net operating loss of \$760 or 2.2 cents per dollar of sales. The small gross margin of 4.5 cents compared to 11.2 cents per dollar of sales for the association probably was used to promote a larger volume of patronage to utilize the newly expanded facilities. Gross margins increased to 9.2 cents per dollar of sales in 1947 and net savings were 4.7 cents per dollar of sales, totaling \$3,147. If the margin of net savings had equaled that at Clyde for the period, net savings would have amounted to \$7,901 annually.

Deer Creek

Station Operation. This station was operated under lease for two years prior to merging with the Clyde Cooperative Association in 1938. In terms of total investment, operating expenses, or the margin of net savings, Deer Creek is the most efficient station during the three years of analysis. Facilities and equipment include the elevator, warehouse, petroleum tanks and pumps and a farm delivery tank truck. The average net savings for the period is greater than the station investment. It employs two men on a year-round basis, a manager and his assistant, who is also the tank truck driver.

Station sales increased yearly from \$282,716 in 1945 to \$314,617 in 1947, averaging \$296,779 for the period. (Table 14) Net savings for the period amounted to \$13,345 and were exceeded only at Clyde and Medford. Both the gross operating margin and net savings per dollar of sales exceeded that of all stations. Net savings averaged 4.5 cents per dollar of sales compared to 3.4 cents at Clyde and 2.8 cents for the association.

TABLE 14

OPERATING STATEMENT FOR THE DEER CREEK STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1945 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	282,716	236,168	46,548	100.0	100.0
Cost of Sales	264,881	231,879	33,002	98.2	70.8
Gross Margin	17,835	4,289	13,546	1.8	29.2
Operating Income	1,827	1,827		.8	
Gross Operating Margin	19,662	6,116	13,546	2.6	29.2
Operating Expenses	10,292	6,175	4,117	2.6	8.8
Net Operating Savings	9,370	59	9,429	.0	20.4
Other Additions	5,608	4,290	1,318	1.8	2.8
Net Savings	14,978	4,231	10,747	1.8	23.2

1946 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	292,974	247,677	45,297	100.0	100.0
Cost of Sales	281,666	242,753	38,913	98.0	85.9
Gross Margin	11,308	4,924	6,384	2.0	14.1
Operating Income	2,224	2,224		.9	
Gross Operating Margin	13,532	7,148	6,384	2.9	14.1
Operating Expenses	8,372	5,023	3,349	2.0	7.4
Net Operating Savings	5,160	2,125	3,035	.9	6.7
Other Additions	4,546	3,261	1,285	1.3	2.8
Net Savings	9,706	5,386	4,320	2.2	9.5

TABLE 14. (CONCLUDED)

OPERATING STATEMENT FOR THE DEER CREEK STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1947 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	314,647	245,213	69,434	100.0	100.0
Cost of Sales	300,962	241,310	59,652	98.4	85.9
Gross Margin	13,685	3,903	9,782	1.6	14.1
Operating Income	3,379	3,379		1.4	
Gross Operating Margin	17,064	7,282	9,782	3.0	14.1
Operating Expenses	10,458	6,275	4,183	2.6	6.0
Net Operating Savings	6,606	1,007	5,599	.4	8.1
Other Additions	9,014	5,972	3,042	2.4	4.4
Net Savings	15,620	6,979	8,641	2.8	12.5

1945-47 Average

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Total (Cents per Dollar)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	296,779	243,019	53,760	100.0	100.0	100.0
Cost of Sales	282,503	238,647	43,856	95.2	98.2	81.6
Gross Margin	14,276	4,372	9,904	4.8	1.8	18.4
Operating Income	2,476	2,477		.8	1.0	
Gross Operating Margin	16,753	6,849	9,904	5.6	2.8	18.4
Operating Expenses	9,707	5,824	3,883	3.3	2.4	7.2
Net Operating Savings	7,045	1,024	6,021	2.3	.4	11.2
Other Additions	6,389	4,508	1,882	2.2	1.9	3.5
Net Savings	13,435	5,532	7,903	4.5	2.3	14.7

SOURCE: Annual audits and expense ledgers of the association,
from 1945 through 1947.

Operating expenses increased less for this station than any other, increasing only \$156 between 1945 and 1947. (Table 10) Operating expenses averaged \$5,963 and were below the association's average on a per dollar of sales basis. Salaries and wages were 61.4 per cent of operating expenses. Expenses other than salaries and wages, depreciation, interest, insurance and taxes amounted to 26.3 per cent of total expenses. The remaining expense items are administrative and selling, truck, supplies, truck, utilities, repairs, and telephone and telegraph.

Wheat Department. In proportion to elevator capacity this station handled the largest volume of wheat. Sales ranged from \$236,168 in 1945 to \$247,677 in 1946 and decreased to \$245,213 in 1947. (Table 14) Sales averaged \$243,019 or approximately 146,000 bushels annually for the three years. For the 12,000 bushel capacity elevator this amounted to a 12.2 turnover. Operating income for the period amounted to 1.0 cents per dollar of sales, the lowest of all stations except Clyde and Nardin. Lack of storage facilities for a larger volume of wheat purchases was the main reason for the low operating income. The net operating savings were highest of all stations. Total operating expenses amounted to 2.4 cents per dollar of wheat sales, considerably lower than the association average.

Net savings of the station were very favorable; though fifth in volume it ranked third in net savings, exceeded only by Clyde and Medford. The net savings were \$5,532 for the period. This equals 2.3 cents per dollar of wheat sales, the same as for the association. Deer Creek was second to Renfrow in net savings per dollar of wheat sales, fifth in value of wheat sales but third in total net savings.

Sideline Department. The station was second to Medford in total sideline sales. Sales were \$53,760 for the period and increased from \$45,297 in 1946

to \$69,437 in 1947. (Table 14) The feed grain sales at Deer Creek were exceeded by those at Medford and Lencat. The general merchandise sales were greater at Clyde and Medford. Petroleum sales averaged \$35,002 for the period and were exceeded only by Medford. Other commodity sales included feed, coal, and seeds.

Net savings equaled 14.7 cents per dollar of sideline sales, the most favorable for all stations. The wide gross margin and low operating expenses were chiefly responsible. The large volume of petroleum sales with a wide gross margin and the higher amount of patronage refunds received from regional cooperatives were contributors to the larger net savings on sideline sales.

This was the only station in the association where net savings from sidelines exceeded the net savings from wheat. Sideline savings were \$7,903 for the period, exceeded only by the Medford station.

Renfrow

Station Operation. Though this station has been owned by the association since 1935, it probably has more local competition than any other station in the cooperative and buys less than one-third of the grain sold from the area.³⁹ In 1948, the office was enlarged to stock hardware, and a cleaning house built with grain cleaning equipment installed. Both should add to the sideline business and elevator patronage. Renfrow is a one-man station, as is Nardin and Salt Fork, and does not sell petroleum products other than bulk oil and grease.

Total sales more than doubled at Renfrow and increased yearly from \$165,563 in 1945 to \$370,910 in 1947. (Table 15) Average sales were \$265,375. Sales exceed those of Deer Creek, Nardin, and Salt Fork. The station was fourth to Deer Creek, Salt Fork, and Nardin in the ratio of elevator capacity

³⁹ Personal interview, Gary Cassingham, July 8, 1947.

TABLE 15

OPERATING STATEMENT FOR THE RENFROW STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1945 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	165,563	162,773	2,790	100.0	100.0
Cost of Sales	161,081	159,816	1,265	98.2	45.3
Gross Margin	4,482	2,957	1,525	1.8	54.7
Operating Income	1,259	1,259		.8	
Gross Operating Margin	5,741	4,216	1,525	2.6	54.7
Operating Expenses	5,149	4,377	722	2.7	27.7
Net Operating Savings	592	- 161	753	- .1	27.0
Other Additions	3,017	2,957	60	1.8	2.1
Net Savings	3,609	2,796	813	1.7	29.1

1946 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	259,652	257,995	1,657	100.0	100.0
Cost of Sales	254,108	252,741	1,367	98.0	82.5
Gross Margin	5,544	5,254	290	2.0	17.5
Operating Income	2,315	2,315		.9	
Gross Operating Margin	7,859	7,569	290	2.9	17.5
Operating Expenses	5,190	4,411	779	1.7	47.0
Net Operating Savings	2,669	3,158	- 489	1.2	-29.5
Other Additions	3,425	3,395	30	1.3	1.8
Net Savings	6,094	6,553	- 459	2.5	-27.7

TABLE 15 (CONCLUDED)

OPERATING STATEMENT FOR THE RENFROW STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 19471947 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	370,910	367,729	3,181	100.0	100.0
Cost of Sales	365,207	361,966	3,241	98.4	101.9
Gross Margin	5,703	5,763	- 60	1.6	- 1.9
Operating Income	5,064	5,064		1.4	
Gross Operating Margin	10,767	10,827	- 60	3.0	- 1.9
Operating Expenses	7,641	6,495	1,146	1.8	36.0
Net Operating Savings	3,126	4,332	-1,206	1.2	-37.9
Other Additions	9,075	8,951	124	2.4	3.9
Net Savings	12,201	13,283	-1,082	3.6	-34.0

1945-47 Average

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Total (Cents per Dollar)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	265,375	262,832	2,543	100.0	100.0	100.0
Cost of Sales	260,132	258,174	1,958	98.0	98.2	77.0
Gross Margin	5,243	4,658	585	2.0	1.8	23.0
Operating Income	2,879	2,879		1.1	1.1	
Gross Operating Income	8,122	7,537	585	3.1	2.9	23.0
Operating Expenses	5,993	5,094	899	2.3	1.9	35.4
Net Operating Savings	2,129	2,443	-314	.8	1.0	-12.4
Other Additions	5,172	5,101	71	2.0	1.9	2.8
Net Savings	7,301	7,544	-243	2.8	2.9	- 9.6

SOURCE: Annual audits and expense ledgers of the association,
from 1945 through 1947.

to the average volume of grain handled. With more stable and efficient management Renfrow likely has a greater potential for increasing the volume of grain handled than other stations.

Total operating expenses relative to total sales were less than for all other stations and averaged 2.3 cents per dollar of sales. (Table 15) This amounted to \$5,993 for operating expenses, an increase from \$5,149 in 1945 to \$7,641 in 1947. (Table 10) Salaries and wages were 54.7 per cent of total expenses.

The operation of the Renfrow station improved during the period of study. Net savings more than tripled between 1945 and 1947 with an increase from \$3,609 to \$12,201. (Table 15) This occurred although sidelines had a net loss both years. The fact that a sideline department is not profitable does not mean it should be eliminated. A department operating at a loss may increase the business in other departments to an extent that the total net earnings are greater than without the department. The intention of the management to increase sidelines at this station may be the best possibility for increasing wheat volume to overcome local competition.

Wheat Department. Total wheat sales for Renfrow averaged \$262,832 or approximately 158,000 bushels for the three-year period and increased from \$162,773 in 1945 to \$367,729 in 1947. (Table 15) The association has employed three managers for the station since 1943. The present employee completed his first harvest season in 1947 as manager of the station.

The operating expenses at this station of 1.9 cents per dollar of sales were lower than for any other station. This, in part, may be the result of allocating to sidelines more than their share of operating expenses, but the fact that it also had the lowest total operating expenses may indicate greater efficiency in operation. Salary and wages averaged 54.7 per cent of

operating expenses but for the period were lower in proportion to the volume of grain handled than any other station. (Table 10)

Net savings on wheat sales varied from \$2,796 in 1945 to \$13,823 in 1947 and averaged \$7,537, the greatest variation of all stations. (Table 15) The net savings of 2.8 cents per dollar of wheat sales were less than the average of association for the three years. The 3.6 cents per dollar of net savings in 1947 exceeded that of all stations for any one of the three years.

Sideline Department. Renfrow had the lowest volume and the largest sideline loss of all stations. This loss was greatest in 1947 when merchandise sold for 1.9 cents per dollar less than cost of sales. The low margin may have been used to increase patronage. The plan of the local manager to promote grease and feed sales and the addition of a limited stock of hardware and merchandise should develop sidelines into a profitable part of station operation.

Total sideline sales averaged \$2,543 for the three years and varied from \$2,790 in 1945 to \$1,657 in 1946 and \$3,181 in 1947. (Table 15) The net loss increased from \$459 in 1946 to \$1,082 in 1947. Salt Fork and Nardin also had net losses though not so large.

The proportion of expenses allocated to sidelines may have been greater for the current years than justifiable. The general manager estimated that 15 per cent of the total expenses were accountable to the sideline department. This allocation averaged \$399 yearly and exceeded the average gross margin on sidelines by 2.7 cents per dollar of sales.

Nardin

Station Operation. This station, located two miles from the Grant-Key County line on state highway 11, is the only one outside the county. Facilities include the new office moved from Medford in 1946, a 16,000 bushel

elevator, a warehouse for feed and other supplies and a residence for the manager, who is the only year-round employee at the station. This station, too, has been operated with several local managers since becoming a part of the Clyde Cooperative in 1938.

Total sales averaged \$173,330, only \$259 more than the average for Salt Fork, the station with the lowest total sales. (Table 16) The \$21,260 increase in sales during the period was less than the increase in prices indicating that the station probably had a decrease in the volume of products handled.

Nardin was the only station with lower operating expenses in 1947 than in 1945. (Table 10) Total operating expenses were \$6,022 in 1945 and decreased to \$5,861 in 1947. Salaries and wages for the same years were \$3,614 and \$3,219, respectively. Other expense items that decreased were insurance and bonds, taxes, advertising, and administrative and selling. All others increased, with depreciation increasing from \$515 to \$753 during the three-year period and averaging 11.8 per cent of the total operating expenses. Salaries and wages were 55.5 per cent of operating expenses as compared with 54.7 and 58.2 per cent for Renfrow and Salt Fork.

Net savings of the station increased annually from \$2,522 to \$3,611 and averaged \$3,119 yearly for the three years. (Table 16) This was the equivalent of 1.8 cents per dollar of sales, the lowest for all stations. The net operating loss averaged \$241 for the period and was the greatest of any station. The 1946 crop year was the only one of the three that the station realized a net operating saving.

If this station had operated with the same net operating margin for sidelines as the association, its net savings would have averaged about \$450 more annually. Because of the low operating costs of the station and the \$10,157 sideline sales its net savings should be larger.

TABLE 16

OPERATING STATEMENT FOR THE NARDIN STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1945 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	159,282	148,764	10,518	100.0	100.0
Cost of Sales	154,917	146,062	8,855	98.2	84.2
Gross Margin	4,365	2,702	1,663	1.8	15.8
Operating Income	1,151	1,151		.8	
Gross Operating Margin	5,516	3,853	1,663	2.6	15.8
Operating Expenses	6,022	5,119	903	3.4	8.6
Net Operating Savings	- 506	-1,266	760	- .8	7.2
Other Additions	3,028	2,702	326	1.8	3.1
Net Savings	2,522	1,436	1,086	1.0	10.3

1946 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	180-165	172,293	7,872	100.0	100.0
Cost of Sales	176,465	168,679	7,786	97.9	98.9
Gross Margin	3,700	3,614	86	2.1	1.1
Operating Income	1,545	1,545		.9	
Gross Operating Margin	5,245	5,159	86	3.0	1.1
Operating Expenses	4,506	3,830	676	2.2	8.6
Net Operating Savings	739	1,329	- 590	.8	- 7.5
Other Additions	2,486	2,266	220	1.3	2.8
Net Savings	3,225	3,595	- 370	2.1	- 4.7

TABLE 16 (CONCLUDED)

OPERATING STATEMENT FOR THE NARDIN STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1947 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	180,542	168,460	12,082	100.0	100.0
Cost of Sales	177,954	165,772	12,182	98.4	100.8
Gross Margin	2,588	2,688	- 100	1.6	- .8
Operating Income	2,318	2,318		1.4	
Gross Operating Margin	4,906	5,006	- 100	3.0	- .8
Operating Expenses	5,861	4,982	879	3.0	7.3
Net Operating Savings	- 955	24	- 979	.0	-8.1
Other Additions	4,566	4,097	469	2.4	3.9
Net Savings	3,611	4,121	- 510	2.4	-4.2

1945-47 Average

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Total (Cents per Dollar)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	173,330	163,173	10,157	100.0	100.0	100.0
Cost of Sales	169,779	160,171	9,608	98.0	98.2	94.6
Gross Margin	3,551	3,002	549	2.0	1.8	5.4
Operating Income	1,671	1,671		1.0	1.0	
Gross Operating Income	5,222	4,673	549	3.0	2.8	5.4
Operating Expenses	5,463	4,644	819	3.1	2.8	8.1
Net Operating Savings	- 241	29	- 270	-.1		-2.7
Other Additions	3,360	3,022	338	1.9	1.9	3.3
Net Savings	3,119	3,051	68	1.8	1.9	.6

SOURCE: Annual audits and expense ledgers of the association, from 1945 through 1947.

Wheat Department. Hardin handled a smaller volume of wheat than any station. Total sales were \$163,173 or almost 98,000 bushels for the three-year average. The proportion of total association sales handled by Hardin decreased during the three-year period. The volume which decreased to less than 82,000 bushels in 1947 was the main cause. Sales increased from \$148,764 in 1945 to \$172,293 in 1946 but decreased to \$168,460 in 1947. (Table 16) The ratio of wheat handled to elevator capacity was exceeded only by Deer Creek and Salt Fork.

Hardin realized the lowest gross margin on wheat, only 1.6 cents in 1947. For the same period operating expenses were 3.0 cents per dollar of sales. This department had an operating loss of \$1,266 in 1945 and \$995 in 1947. The station's gross operating margin of 2.8 cents per dollar of sales was the same as for Deer Creek and less than that of any other station.

Hardin also realized a lower net operating saving than the other stations. For the three-year average net operating savings were \$4,673 and total operating expenses amounted to \$4,644. This leaves only \$29, the average operating savings. Other additions, chiefly patronage refunds, were \$3,022 and increased net savings to \$3,051. This was the lowest net savings on wheat of any station.

Sideline Department. Total sideline sales at Hardin more than doubled those of Renfrow and Salt Fork, the other one-man stations. Feed, feed grains and seeds comprised the greater part of the \$10,157 average sales. (Table 16) The remainder, oil and grease, accounted for \$520 annually for the three-year period. Sideline sales were \$10,518 in 1945 decreased to \$7,872 in 1946 and increased to \$12,082 in 1947.

The gross margin decreased each of the three years averaging 5.4 cents per dollar of sales which was less than that of any station. The gross margin was 15.8 cents per dollar in 1945, 1.1 cents in 1946 and 1.8 cents per dollar

less than cost of sales in 1947. The gross margin averaged only \$549 as compared to operating costs of \$819 for the three years. The average gross margin on sidelines for the association was 11.4 cents.

Net savings were \$68 for the three years decreasing annually from \$1,086 in 1945 to a net loss of \$510 in 1947. The managers estimate that 20 per cent of the operating expenses should be charged to sidelines seems feasible in view of the sizeable sales volume. With more stable margins and local management, sidelines should net savings of at least 5.0 cents per dollar of sideline sales. If the gross margin had been increased from 5.4 cents per dollar of sales to the average for the association, the station would have realized a net savings of 6.0 cents per dollar of sales.

Salt Fork

Station Operation. Salt Fork, the smallest station, is somewhat comparable to Renfrow and Nardin as to facilities and operation. It is the most distant station from Medford, and is only six miles from Lamont. Another similarity with Nardin and Renfrow is that the station has been operated by at least four managers during the five-year period of study.

Improvements include a 15,000 bushel elevator, coal bins, office and warehouse, and the manager's residence. A grain cleaner was installed in 1947 but was moved to Clyde in 1948. The present book value of station improvements would not exceed \$10,000.

The attempt by the association to increase business volume has been more successful with wheat than with sidelines. Considering the small investment and low expenses required to operate, both should be profitably accomplished by more stable and competent station management.

Total sales for the station were only a few dollars less than Nardin's sales. Total sales averaged \$173,071, increased from \$96,578 in 1945 to a

high of \$216,204 in 1946 and decreased to \$206,432 in 1947. (Table 17) In proportion, this was the greatest increase of any station. Operating expenses increased from \$4,346 in 1945 to \$5,905 in 1947, noticeably smaller than the increase in total sales. (Table 10) Expenses averaged 2.8 cents per dollar of sales and salaries and wages constituted 58.2 per cent of total average expenses.

Net savings exceeded those for Nardin and increased each of the three years from \$839 in 1945 to \$5,558 in 1947. (Table 17) Net savings were 2.2 cents per dollar of sales as compared to 2.8 cents for the association. In proportion, the net savings at Salt Fork increased more than for any other station. This was the result of the increase in net savings from wheat.

The operating statement indicates this station increased its contribution to the association each of the three years. Sales volume increased for both wheat and sidelines, the former more than doubling during the period. Net savings on wheat increased in both dollars and in margin during each of the three years. Sidelines incurred a net loss in both 1946 and 1947. This may be improved by increasing the sales volume and operating with a favorable gross margin.

Wheat Department. Wheat sales more than doubled at Salt Fork between 1945 and 1947. All stations exceeded Salt Fork in volume of grain handled, Nardin by approximately 250 bushels. In proportion to elevator capacity, Salt Fork was exceeded only by Deer Creek. The station averaged approximately 97,700 bushels or \$170,214 sales for the three years. (Table 17)

The gross operating margin increased from \$2,441 in 1945 to \$6,156 in 1946 then decreased to \$6,041 in 1947 and averaged \$4,879 for the three years. This amounted to 2.9 cents per dollar of sales for the station as compared to a 3.2 cent margin for the wheat sales of the association.

TABLE 17

OPERATING STATEMENT FOR THE SALT FORK STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1945 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	96,578	94,309	2,269	100.0	100.0
Cost of Sales	93,886	92,597	1,289	98.2	56.8
Gross Margin	2,692	1,712	980	1.8	43.2
Operating Income	729	729		.8	
Gross Operating Margin	3,421	2,441	980	2.6	43.2
Operating Expenses	4,346	3,911	435	4.1	19.2
Net Operating Savings	- 925	-1,470	545	-1.5	24.0
Other Additions	1,764	1,713	51	1.8	2.3
Net Savings	839	243	596	.3	26.3

1946 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	216,204	213,698	2,506	100.0	100.0
Cost of Sales	211,717	209,461	2,256	98.0	90.0
Gross Margin	4,487	4,237	250	2.0	10.0
Operating Income	1,919	1,919		.9	
Gross Operating Margin	6,406	6,156	250	2.9	10.0
Operating Expenses	4,113	3,720	413	1.7	16.5
Net Operating Savings	2,273	2,436	- 163	1.2	-6.5
Other Additions	2,874	2,814	60	1.3	2.4
Net Savings	5,147	5,250	- 103	2.5	-4.1

TABLE 17 (CONCLUDED)

OPERATING STATEMENT FOR THE SALT FORK STATION WITH A
THREE-YEAR AVERAGE FROM 1945 THROUGH 1947

1947 Statement

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	206,432	202,636	3,796	100.0	100.0
Cost of Sales	202,837	199,387	3,450	98.4	90.9
Gross Margin	3,595	3,249	346	1.6	9.1
Operating Income	2,792	2,792		1.4	
Gross Operating Margin	6,387	6,041	346	3.0	9.1
Operating Expenses	5,905	5,314	591	2.6	15.6
Net Operating Savings	482	727	- 245	.4	-6.5
Other Additions	5,076	4,934	143	2.4	3.8
Net Savings	5,558	5,661	- 103	2.8	-2.7

1945-47 Average

	Total (Dollars)	Wheat (Dollars)	Sidelines (Dollars)	Total (Cents per Dollar)	Wheat (Cents per Dollar)	Sidelines (Cents per Dollar)
Sales	173,071	170,214	2,857	100.0	100.0	100.0
Cost of Sales	169,480	167,148	2,332	97.9	98.2	81.6
Gross Margin	3,591	3,066	525	2.1	1.8	18.4
Operating Income	1,813	1,813		1.0	1.1	
Gross Operating Margin	5,404	4,879	525	3.1	2.9	18.4
Operating Expenses	4,794	4,315	480	2.8	2.5	16.8
Net Operating Savings	610	564	46	.3	.3	1.6
Other Additions	3,238	3,154	84	1.9	1.9	2.9
Net Savings	3,848	3,718	130	2.2	2.2	4.5

SOURCE: Annual audits and expense ledgers of the association,
from 1945 through 1947.

Operating expenses were 2.5 cents per dollar of sales as compared to a 2.4 cents for the association. Net savings increased annually from \$839 in 1945 to \$5,558 in 1947. The net savings averaged \$3,848 for the three years. All the increase in net savings was from wheat as sidelines had a net loss in 1946 and 1947. The net savings on wheat increased from .3 cents per dollar of sales to 2.5 cents in 1946 and 2.8 in 1947. The average for the association was 2.4 cents per bushel for the three years.

Sidelines Department. Sideline sales were \$2,857 for the period and increased from \$2,269 in 1945 to \$3,796 in 1947. (Table 17) Commodities sold include feed grains, coal, merchandise, seeds, oil and grease. Merchandise sales accounted for the greater part of the increase in 1947. After being charged with ten per cent of the station operating expenses the net savings averaged \$130 or 4.5 cents per dollar of sales. The dollar volume of savings exceeded those of Nardin and Renfrow. Net savings amounted to 4.5 cents per dollar of sales as compared to 5.1 cents for the association. Net savings per dollar of sales exceeded that of Lamont and Medford in addition to the stations already named. The volume of sidelines and net savings should continue to increase if the station has proper management.

SUMMARY AND CONCLUSIONS

The Clyde Cooperative Association of Medford, Oklahoma, has grown rapidly since organization in 1921. The cooperative has expanded from the original station at Clyde to include operations at seven stations. The association handles a large volume of wheat, and offers an assortment of sideline commodities and services for its farmer patrons.

Since organization, the authorized capital stock has increased from \$12,000 in 1921 to \$500,000 in 1948. Other measures of size have increased accordingly.

The first years of the association were characterized as a period of constant struggle against business failure. The decisions made by the management in 1929 probably were the turning point in the development of the cooperative. The members approved the Union Equity Cooperative Exchange of Enid, Oklahoma, as a regional sales agency for their wheat and the construction of elevator and sideline facilities at Medford.

The cooperative experienced periods of both gradual and rapid expansion. The firm carefully expanded during the thirties into a multiple unit firm with five stations and investments in the regional cooperatives. The most rapid period of growth occurred during the period of business analysis.

The financial condition of the cooperative, as evaluated by an analysis of the combined balance sheets, was reasonably sound. The total assets increased from \$204,432 in 1943 to \$654,754 in 1947. Total liabilities increased from \$30,114 to \$265,686 and increased annually as a per cent of total assets. This increase is the result of the addition of new facilities

and a growing volume of business. The total net worth increased from \$174,318 to \$389,068 but decreased as a percentage of total assets. The surplus and reserves were increased to a larger extent than capital stock.

An analysis of the combined operating statements indicated successful operation as measured by total net savings. The net savings increased from \$60,196 in 1943 to \$110,273 in 1947. The net savings realized from both wheat and sideline operations increased during the period but the increase from sidelines was greater. Net savings averaged 3.2 cents per dollar of sales for the five-year period. The average net savings decreased for wheat and increased for sidelines.

The operating expenses were larger each year during the study. Salaries and wages increased accordingly and averaged 54.8 per cent of the total operating expenses. The operating expenses amounted to 3.5 cents per dollar of sales. The margin of operating expenses tended to decrease for wheat sales and to increase for sideline sales.

The financial and operating ratio comparison with two similar cooperatives indicated that the financial structure is fairly sound and that the association is being operated successfully. The ratio of sales to annual inventory seems lower than desirable for the period but increased each year of study except 1947. The ratio of sales to total assets decreased as would be expected with the large addition of facilities and equipment. The ratio of net savings to total assets seemed more favorable the first two years than the last two years of the study.

The three-year analysis of the station operations indicated that each station earned an annual net saving. Total net savings and net savings from wheat increased annually at all stations except Lamont. Net savings from wheat decreased substantially at this station in 1947. The stations, except

Renfrow, Nardin, and Salt Fork, had successful sideline operations. The small average annual net savings from sidelines at Renfrow and Salt Fork were more than off-set by the loss for the three years of operation at Nardin. The low gross margin and operating loss at Nardin would warrant further investigation.

The Clyde Cooperative Association is a rapidly growing and successful business. The future will likely require more efficient local operations. To meet this challenge, the management will need to give careful consideration to such problems as the following:

1. The expensive and well-equipped facilities of the association have tended to increase the fixed operating expenses to the extent that a sizeable volume is necessary to continue to operate with a low cost per dollar of sales. It is advisable to plan what should be done if the volume of business is greatly reduced for several years and operating expenses remain near present levels.
2. Perhaps the most important management problem in a cooperative of this type is the increased utilization of the time and abilities of each employee. This may involve the formulation and execution of a program for selecting and training of employees for the efficient performance of a number of different jobs. This training should educate employees about the cooperative and its role as a community business.
3. The problems of management have increased as the association developed in size, area, and number of activities. It may be advisable to further departmentalize the association and to delegate more managerial responsibility to each section head.

Another consideration is the addition of an assistant general manager to coordinate departmental and station activity and to supervise the purchasing and delivery of sideline commodities for the entire association.

4. During these more prosperous times, the association should develop a unified merchandising program. This would help utilize facilities and employees to a greater extent and aid in maintaining sales volume during the periods when business activity will decline. A greater emphasis on sales promotion, especially advertising, may pay high returns. As changes in the demand of patrons become apparent commodities and services should be added and dropped as the occasion demands.
5. A further improvement in the accounting procedures and the use of annual audits for more effective control of departmental and station activities may facilitate better management.
6. An endeavor to further reduce the operating expenses through more complete use of facilities and equipment would possibly prove successful. This might include considering the possibility of seasonal and part-time operation of the smaller stations or operating the Salt Fork elevator under the supervision of the manager at Lamont.
7. It might be feasible to consider further centralization of sideline facilities and services at Lamont and Modford. A possible reduction of the number of bulk station facilities should lower expenses and result in more efficient utilization of labor and tank trucks. Moving the hardware store at Clyde to Modford and increasing its scale of operations is another possibility.

8. A more centralized system of purchasing and inventory control for sideline sales may enable larger quantity discounts, reduce handling costs, and lower the inventory investment. This should aid in the control of station and departmental operations and would be of greater importance during times when price levels are declining and replacement costs are lower than book value.
9. A program for membership education and public relations should be given additional consideration. The problem of keeping members active and informed grows more complex as a cooperative increases in size and new members join the association. This program will also aid in the development of potential board members.
10. The facility loans from the Wichita Bank for Cooperatives and the certificates of indebtedness should be repaid as quickly as net savings permit. The policy of deferring a substantial proportion of the annual net savings and using the funds to repay these loans should be continued.
11. The credit accounts of the association are likely to become a greater problem when business conditions are unfavorable and should be under close observation and control. A special effort should be made to keep all accounts current and to clear the books before each annual audit.
12. Perhaps the real test of the quality of managerial ability is how well the necessary personnel is developed, if the firm is to continue to succeed when the present management is no longer available.

APPENDIX

BY-LAWS

THE CLYDE COOPERATIVE ASSOCIATION

MEDFORD, OKLAHOMA

By-Laws of CLYDE COOPERATIVE ASSOCIATION 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

CAPITAL STOCK

Section 1. The Capital Stock of this Association shall be Five Hundred Thousand Dollars (500,000.00) and shall be divided into twenty thousand (20,000) shares of Twenty Five dollars (\$25.00) each, par value. Stock shall not be sold for less than its par value. It shall be paid for at such time and in such amounts as the Association may determine, and may be paid either in cash, or in any other manner determined by the Association.

Section 2. Certificates of stock shall be issued by order of the Board of Directors when such stock has been fully paid for by the subscribers. No member (either in person or through members of the immediate family, unless they are producers), shall be allowed to own more than Five per cent (5%) of the paid up Capital Stock.

Section 3. No stock shall ever be issued for less than par value, and all certificates of stock shall be signed by the President and attested by the Secretary-Treasurer, and shall be sealed with the Association Seal. Each certificate of stock shall have the following statement printed upon its face:

"This stock is subject to all the terms and conditions stated in the Articles of Incorporation and By-Laws of this Association in effect on the date of this certificate, and as legally amended at any later date."

Section 4. The association shall have the first lien on all shares of its Capital Stock and upon all interest and apportionments declared upon same for any indebtedness of the holders thereof to the Association.

Section 5. Transfer of stock, together with any Member Equity Credits or Special Reserves, shall be made on the books of the Association only with the approval of the Board of Directors and only to persons, firms or corporations eligible to hold stock and only when the transferring stockholder is free of indebtedness to the Association. 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 ten (10) days before each annual meeting of the membership.

Section 6. In case any member wishes to sell his stock he must first offer it for sale to the Association.

Section 7. In case of loss or destruction of a certificate of stock, no new certificate shall be issued in lieu thereof except upon satisfactory proof 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" upon its face.

Section 8. All applications for stock must be submitted to and approved by the Board of Directors before being issued. The certificates of the Capital Stock of the Association shall be issued in such form as the Board may direct, and shall be numbered and registered as issued. They shall exhibit the holders name, the number of shares, and the number of certificate, and shall be signed by the President and attested and sealed by the Secretary.

Section 9. Each member must own Four (4) fully paid shares of Stock before being eligible to receive payment of Patronage dividends in cash.

ARTICLE II

MEMBERSHIP

Section 1. Any person, including both landlords and tenants in share tenancies, who is a producer of any of the agricultural products handled by the Association in any territory tributary to the shipping points of this Association may become a member of this Association upon application accepted by the Board of Directors, by agreeing to comply with the requirements of these By-Laws and by purchasing at least one share of its Capital Stock, and by meeting any other requirements of the Board of Directors. Only such persons shall be or remain eligible to hold such stock or to participate in the affairs and management of this Association.

Section 2. Any producer of agricultural products who qualifies for membership under the provisions of Section 1, of this Article, shall be admitted as a member as soon as twenty per centum (20%) of the par value of a share of stock has been paid.

Section 3. In case of the death of a member, or if a member ceases to be eligible to hold stock as prescribed in Section 1, or removes from the territory tributary to the shipping points of this Association, or ceases to patronize it for a period of three (3) consecutive years, or willfully fails to comply with these By-Laws and other requirements, or willfully obstructs the purposes and proper activities of the Association, the Association through the Board of Directors may elect to purchase his share or shares of stock and terminate his membership upon tender to him or his heirs or legal representatives of the par value of his shares, or the book value if less, together with

any interest, Member Equity Credits, Special Reserves or patronage refunds due and unpaid less any indebtedness due from him to the Association.

Section 4. No person not eligible, according to Section 1 of this Article, to hold stock shall acquire any rights or privileges by any purported purchase or transfer of any such stock.

Section 5. This Association must operate for the mutual benefit of its members and shall not deal in the products of non-members to an amount greater in value than such as are handled by it for members.

ARTICLE III

MEMBERSHIP MEETINGS

Section 1. The fiscal year of this Association shall commence on the first day of February and end on the last day of January. The regular annual meeting of the membership shall be held at the location of the general office of the Association within sixty (60) days following the close of the fiscal year, the date to be set by the Board of Directors. Special meetings of the membership may be called by the President or by action of the Board of Directors. Special meetings may also be called by petition of ten per cent (10%) of the total number of members, setting forth therein the purpose, time, hour, and place of such meeting, which shall be filed with the Secretary-Treasurer at least fifteen (15) days before such meeting is to take place. Said special meeting may be called for any lawful purpose, including the matter of considering charges against any officer or employee.

Section 2. Before all regular and special meetings of the membership, the Secretary-Treasurer shall mail to each member at his last known place of residence a written or printed notice of the place and time of holding such meeting. Such notice shall be mailed at least ten (10) days prior to the date of said meeting.

Section 3. At all meetings of the membership, each member shall be entitled to cast one, and only one vote irrespective of the number of shares of stock owned. Voting by proxy shall not be allowed, but any member may vote by mail on any specific question, on the ballot furnished to the member by the order of the Board, and mailed with the notice of the meeting.

Section 4. At any meeting of the membership one hundred (100) members shall constitute a quorum for the transaction of business, but the members present at any meeting may adjourn the meeting to some other day or hour.

Section 5. The order of business at the annual meeting of the membership shall be:

- | | |
|---|--------------------------|
| 1. Roll Call | 5. Election of Directors |
| 2. Proof of Due Notice of Meeting | 6. Unfinished Business |
| 3. Reading and Disposal of Minutes | 7. New Business |
| 4. Annual Report of Officers & Committees | 8. Adjournment |

Section 6. Roberts Rules of Order shall govern the procedure of business at all meetings not covered by these By-Laws.

ARTICLE IV

DIRECTORS AND THEIR DUTIES

Section 1. The affairs of this Association shall be managed by a Board of Directors of nine (9) members, who shall be members of the Association and who shall be elected at the annual meeting of the membership. At the first meeting of the membership there shall be elected nine (9) Directors, three (3) of whom shall serve one year, three (3) of whom shall serve two years, and the remaining three (3) 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, or until his successor is elected and qualified.

Section 2. No person shall be eligible for the office of director if he is in competition with, or is affiliated with, any enterprise that is in competition with the Association.

Section 3. The Board of Directors shall have power to employ and dismiss a manager and such other employees as may be necessary or desirable. They shall have full power to make all necessary rules and regulations for this Association, which are not inconsistent with the laws of Oklahoma and the Articles of Incorporation and By-Laws of this Association. They shall fix the salary of the manager and such other help as is necessary or desirable for carrying on the business. The compensation, if any, of the members of the Board of Directors and officers, shall be determined by the members of the Association at the annual or special meeting of the membership. Whenever a vacancy occurs in the Board of Directors, other than from the expiration of a term of office, the remaining Directors shall elect a member to fill the vacancy until the next regular annual meeting of the membership.

Section 4. The Board of Directors shall hold a meeting within ten (10) days after the adjournment of the annual meeting of the membership for the purpose of organizing the Board of Directors and electing the President, Vice-President and Secretary-Treasurer. Regular monthly meetings of the Board of Directors shall be held. The time and place of holding the regular monthly Board meetings shall be determined by the Board of Directors.

Section 5. Special meetings of the Board of Directors may be called by the President, and in his absence by the Vice-President, or by a majority of the members of the Board of Directors.

Section 6. At all regular or special meetings of the Board of Directors, a majority of the Board shall constitute a quorum for the transaction of business, but a smaller number may adjourn the meeting to another day or hour. No measure voted upon by the Board of Directors shall be effective unless a majority of all members of the Board vote in favor thereof.

Section 7. At each regular annual meeting of the membership, the Board of Directors shall present a detailed statement or report of the business of

the preceding year. Such statement shall show the financial condition of the Association at the end of the fiscal year, in such form as shall fully exhibit the assets and liabilities of the Association, its earnings and income, purchases and sales, expenses and outlays, for the period.

Section 8. The Board of Directors each year shall appoint a committee of not less than three (3) of its members, whose duty it shall be, with the assistance of the manager, to take an inventory of all property of the Association within five (5) days after the close of the fiscal year. The results of such inventory shall be put into a written report properly itemized and sworn to as accurate and true before a notary public by each member of the committee. The original of each inventory report shall be promptly submitted to the Secretary to be a part of the permanent records of the Association. The information contained in any inventory report shall be available to any auditor or auditors engaged in auditing the business of the Association.

Section 9. The Board of Directors shall annually employ a competent accountant, who shall audit the books of the Association and make a report in detail to the Board, which report shall in turn be made to the members.

Section 10. Any Director of the Association may be removed from office for cause, by vote of not less than two-thirds of the members present at any annual meeting, or at any special meeting called for the purpose, at which a majority of the members shall be present. The Director shall be informed in writing of the charges preferred against him at least ten (10) days before such meeting and at such meeting shall have an opportunity to present witnesses and be heard in person or by counsel in answer thereto.

Section 11. No Director of this association shall be employed by the Association for a period of more than twenty (20) days during any calendar

year. No direct relative of any Director or of the manager shall be regularly employed by the Association.

ARTICLE V

OFFICERS AND THEIR DUTIES

Section 1. Officers of this Association shall consist of a President, Vice-President and Secretary-Treasurer, who shall be elected by the Directors. Said officers shall hold office for one year and until their successors are elected and qualified.

Section 2. The President shall preside at all meetings of the Board and membership, shall sign all stock certificates of the Association, and shall perform all such other duties incident to his office. In case of the absence or disability of the President, the Vice-President shall perform his duties, and in the absence of the President and Vice-President, a chairman shall be elected from the Directors present to preside at the meeting.

Section 3. The Secretary-Treasurer shall issue notices of all Board and membership meetings; shall attend and keep the minutes of same; shall have charge of all Association books, records and the seal; he shall perform other duties as are incident to his office.

Section 4. No person shall be eligible to the office of President or Vice-President who is not a Director, and no person shall be eligible to the office of Director who is not a member. Any Director who ceases at any time to be a member, shall at the same time cease to hold any office in this Association.

Section 5. The manager shall have custody of the funds used in the operation of the business of the Association, and keep such books as will preserve an accurate record of all business transacted by this Association, and show any day the financial condition of the Association. He shall make

a written detailed statement on the first of each month, showing the business done the previous month, and file said statement with the Secretary-Treasurer. Subject to the approval of the Board of Directors, the manager shall have control over and may employ and dismiss all agents and employees of the Association not especially employed by the Board of Directors. He shall perform such other duties as are incident to the position he holds.

Section 6. The manager, other employees and officers, who handle funds of the Association, shall be bonded to guarantee their fidelity, by a responsible surety company in such amounts as the Board of Directors may require. Said bonds shall be paid by, and shall run to the Association.

Section 7. It shall be the duty of the officers to provide for the adequate insurance of the property, including grain and property of all kinds, regardless of ownership, which may be in the possession of the Association, or owned or stored by it, and shall provide adequate workmen's compensation and employers' liability insurance for all employees.

ARTICLE VI

APPORTIONMENT OF EARNINGS

Section 1. The Directors, subject to revision by the members, at a general or special meeting, lawfully called, shall apportion the net earnings at least once in each year.

Section 2.

(A) Ten per cent (10%) of the net earnings accruing since the last apportionment shall be credited to a Surplus Reserve Fund until such Surplus Reserve Fund shall equal the amount of the paid-up Capital Stock.

(B) Any amounts held in reserve, in excess of the amount credited to the Surplus Reserve Fund, shall be allocated on the books of the Association to the credit of all patrons, both members and non-members, on the basis of patronage.

Section 3. Dividends at a rate not to exceed five per cent (5%) may be paid upon the paid-up Capital Stock.

Section 4.

(A) The remainder of such net earnings shall be apportioned and distributed to all patrons, being apportioned to members and non-members alike on the same basis and same percentage. Such earnings shall be distributed either in cash, capital stock, credits on capital stock, Member Equity Credits, Special Reserves, Certificates of Indebtedness, or non-interest bearing Revolving Fund Certificates 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 the purchases from, or through, the Association by each patron; provided that amounts distributed to patrons who are not members, but who are eligible for membership, shall be distributed to them in credits on Capital Stock until such accumulated credits are sufficient to cause a share of stock to be issued as provided for in Article I, Section 2 of these By-Laws.

(B) An amount not less than twenty-five per cent (25%) of each stockholder-member's patronage apportioned under this section shall be credited to the purchase of additional capital stock until such member owns ten (10) fully paid shares.

Section 5. Earnings received as a result of business done with other cooperative organizations, in the form of Capital Stock, Allocated Reserves, Deferred Patronage Dividends, Member Equities or in any form other than cash, shall be apportioned on the basis of patronage either in the Allocated Reserve Fund as provided for in paragraph (B), Section 2 of this article or in any form of obligation provided for in Section 4 of this article. Such earnings, when apportioned to the credit of individual patrons' accounts,

shall, to the fullest extent possible, be designated in such a manner that in the event, at any later date, it is found necessary, or deemed advisable, to remove such earnings from individual patrons' accounts such earnings can be removed in the same amounts as credited.

ARTICLE VII

MISCELLANEOUS PROVISIONS

Section 1. No officer, member, agent or employee of this Association shall in the name of the Association deal or trade in futures or options in any grain commodity, stock, or thing, except as it may be necessary or proper to hedge actual dealings in specific goods in which the Association has an interest, and then only with the knowledge and consent of the Board of Directors.

Section 2. No agent, or employee of this Association shall in his own, or the name of some other party, deal or trade in futures or options in any grain commodity stock or thing.

Section 3. The corporate seal of this Association shall consist of two concentric lines between which shall be the name of the Association and the words "Incorporated 1937 Oklahoma."

ARTICLE VIII

AMENDMENTS

Section 1. These By-Laws may be altered or amended, or complete new By-Laws adopted, at any regular or special meeting of the Association, by a vote of two-thirds of the members present, when notice of such proposed amendment, or the intention of adopting complete new By-Laws, is included in the call for such meeting.

Section 2. Any proposed amendment to these By-Laws, or new By-Laws adopted, shall be in conformity with the Articles of Incorporation of this Association, the Cooperative Law of Oklahoma 1937, known as the "Cooperative Marketing Association Act," and in accordance with the Capper-Volstead Act.

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PARCHMENT

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THE CLYDE COOPERATIVE ASSOCIATION OF MEDFORD, OKLAHOMA**

NAME OF AUTHOR: H. FRENTISS GAZAWAY

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