

A COST ANALYSIS OF THE FARMERS  
COOPERATIVE ASSOCIATION  
OF HOBART, OKLAHOMA

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COOPERATIVE ASSOCIATION  
OF HOBART, OKLAHOMA

By

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A FINANCIAL ANALYSIS OF THE FARMERS COOPERATIVE  
ASSOCIATION OF HOBART, OKLAHOMA

HAROLD D. BAUMAN

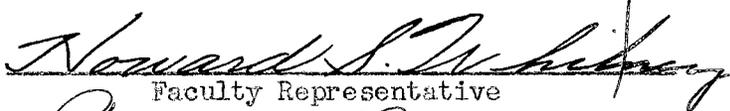
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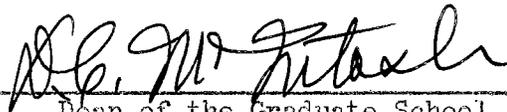
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## INTRODUCTION

The cooperative movement, like other phases of business, has had both good and bad periods in its development. Many cooperatives have enjoyed considerable success from their beginning, only to fall by the wayside later on. The cooperatives have some inherent advantages over private business, yet they must recognize that they also may have some disadvantages. The success of a cooperative is not due to the advantages it may have, but rather, how effectively and efficiently it utilizes these advantages.

Of the various types of cooperatives, the local unit is the most vital to a progressive cooperative movement. One could say it was the "grass roots" of the entire movement. There are small single unit local cooperatives, large multiple unit cooperatives, and all the varying degrees between these types. Mere size is no indicator of the degree of success. Each is an important part of the whole of cooperative endeavor.

### Purpose of the Study

The study is essentially a study of the cost structure of the Farmers Cooperative Association of Hobart, Oklahoma. Costs of the association were studied as they related to departmental operations, station operations, seasonal variation, and as to the fixed and variable nature of the costs. The business operations were analyzed for a three year period to determine the relationships among the factors making up the balance sheets and operating statements for the association as a unit. The growth and historical information is for the purpose of a better understanding of the association as it is

at the present time.

#### Method of Procedure

The first section of the study is based on information secured from interviews with Mr. Dan Diehl, Oklahoma Extension Service, who was familiar with the organization of the association, and Mr. Sid Barnes, the present manager. Also, the minutes book of the meetings of the association's board of directors was utilized.

The section on the financial analysis is based on information taken from the annual audit books of the association for the years 1946, 1947, and 1948. The information expressed in the combined balance sheet was obtained by adding together the balance sheets of the three years. The aging of accounts receivable was taken from the 1948 audit book. The combined operating statement was obtained by combining the 1946, 1947, and 1948 operating statements.

The cost study of the association utilized several sources of information. First, the cost analysis of the departments, wheat and side lines, is based on estimates made by the manager. These estimates pertained to the amount, expressed as a percent, that each department accounted for of each cost item. The annual audits were utilized to obtain the total amount of the individual cost items. The cost analysis of the stations was based on material secured from the annual audit books, and estimates of Mr. Barnes, the manager. Some of the expense allocations to the stations were based on sales volume, and some of the allocations were taken direct from the annual audits. The analysis of the seasonal costs utilized cost data secured from the monthly trial balances for the years 1947 and 1948. The seasonal cost data for 1946 was obtained by calculating the average percentage, by months

for 1947 and 1948, that each cost item was of its total. This percent figure was multiplied against the total of its particular cost item for 1946. This method was used because there was no seasonal cost material available in 1946. The fixed and variable cost percents were estimates. These estimates were based on the type of cost item, its relation to the associations operations, the nature of the cost over one year's operation and its flexibility. These percent estimates were applied against the total cost item to get the actual amount of fixed and variable cost. The same procedure of estimates was utilized in the fixed and variable analysis of the association as a unit, the departments, and the stations.

The interest expense has been recalculated for the association on the theory of opportunity costs. The method used in doing this was to calculate, from the balance sheet, the amount of money invested by the association in facilities, commodities, and operating capital. To these divisions were applied the interest rates used by The Bank for Cooperatives on facility, commodity, and operating loans. These rates were 4,  $2\frac{1}{4}$ , and 3 percent respectively. The assumption made was that the association could have had this interest return on their investment if they had loaned their investment rather than investing in the facilities, commodities, and operating capital which they had. The interest figure which the association paid that was listed in the annual audit, was omitted.

## CONDITIONS SURROUNDING DEVELOPMENT OF THE ASSOCIATION

Kiowa County was opened for settlement in 1901. From the very beginning agriculture, and particularly the growing of wheat, was the dominating influence in its rapid development. In the late 20's and early 30's, due to unfavorable conditions, wheat gave way to cotton in the order of importance, but since the early 30's wheat has gained steadily until it now occupies a position of major importance in the future prosperity and welfare of the county.

During and shortly after World War I, when wheat was then the leading agricultural commodity in the county, fair and adequate marketing facilities became a leading problem in this particular area. Discriminatory practices existing in the market as fostered by private grain dealers led to the organization of the Farmers Cooperative Association of Hobart, Oklahoma, in December 1919. The events leading up to this development are described in the following report taken from the 1919 annual Report of Dan Diehl, District Agent, of the Oklahoma Extension Service:

O. W. Talley is county agent of Kiowa County and as county agent has in the past year shipped 200 cars of feed into Kiowa County to the farmers at actual cost. This alone has saved the farmers about \$40,000.00 and has made it possible for them to save many a head of good breeding stock. Mr. Talley has been active in getting the farmers to take up the breeding of registered stock and his county has made rapid gains the past year in good livestock. In early days Kiowa County planted about three-fourths of her land in cotton, 50 percent in small grains and the rest in grain sorghum and other crops. Last year about 75 percent of all cultivated lands were sown in wheat, the yield was large and very few of the farms had any place to store the grain and most of the tenants, who represent about 50 percent of the farmers in the Southwest District, were forced to sell at the time of threshing. The grain dealers have taken advantage of the situation and bought the wheat below the

market price from ten cents to forty-five cents a bushel. Mr. Talley has had a number of farmers to ship their own wheat and the least any one made was seventeen cents up to forty-two cents per bushel. On the ninth day of December, 1919 the elevators were paying \$1.70 to \$1.90 per bushel for No. 54 test wheat at Hobart, Oklahoma. On this same day Mr. Talley loaded and shipped two cars of 54 test wheat selling it f.o.b. Hobart at \$2.25 per bushel. Mr. Talley also called the council of defense to investigate prices paid by local grain dealers. The result was a number of grain dealers' licenses were revoked and others are still being investigated. The grain dealers have become alarmed and are now offering to pay a rebate on wheat they had bought so low. This has not fooled the farmers and on the tenth day of December, Mr. Talley called a meeting of farmers at Hobart. The result was more than 200 farmers were present and organized the Farmers Cooperative Association of Hobart. They capitalized at \$25,000.00 and elected their officers and will proceed under the new cooperative law passed by the last legislature to handle all farm crops and any other business they shall agree upon.

#### Organization of the Association

The Farmers Cooperative Association was organized in December 1919. It was incorporated at \$25,000.00 with stock at \$25.00 par value, and began doing business April 1, 1920. The first Board of Directors was made up of H. E. Patchin, W. E. Gentry, George Walter Henry, Sam Standifer, and E. M. Smith. The elevator and fixtures were purchased from the Nelson Brothers at a price of \$12,500.00. The initial purpose in mind at the time of organization was wheat marketing entirely, but a side line of coal and feed was included from the very beginning.

Mr. O. W. Talley, who had been instrumental in showing up the discriminatory practices existing in other buying agencies, became the first manager of the organization. According to non-recorded information supplied by Dan Diehl, who was District Extension Agent during this period and who also played an important part in the initial organization, the Cooperative made a net profit of \$11,500.00 in the first 40 days of operation. However, due to price cutting tactics, and other trade practices carried on by private grain dealers in the area the following season, the organization realized a

net loss of better than \$6,000.00. This put the Association in a very bad financial position. The Cooperative had maintained the good will and cooperation of the merchants of the city of Hobart due to the trade brought into the area as a result of its operations. Therefore, the merchants deemed it good business to aid the Association in any possible way. Consequently they bought stock in the Association in order to give it the financial assistance it needed to carry on. This enabled the Cooperative to continue in business and under new management of C. E. Gentry, it began to gain gradually in financial strength.

#### Growth and History

The growth of the association has been reasonably steady and consistent. Only in its first few years of existence was it really in financial trouble. One of the main reasons the association has prospered as it has, is that it succeeded in establishing good will among both rural and urban people from the very first. The splendid reputation enjoyed by the association has enabled it to come through crisis where others might not. The association expanded from the original Hobart station to include stations at Babbs, Cold Springs, Komalty, and Roosevelt. The association is now one of the largest cooperatives in the state. From the beginning of a net loss in savings to the members, the association has expanded until a net savings of over \$92,000 was made in 1948.

The history of the growth of the association has been steady and free of many of the fluctuations that often accompany a growing business. After the associations beginning in 1919, two elevators were added before 1925. These stations were the Komalty and Babbs stations. The elevators at Cold Springs and Roosevelt were secured in 1943. The addition of these two

elevators completed the group of stations making up the present association.

Throughout the history of the association the growth has been consistent. During the depression period of the 1930's, the cooperative actually prospered and gained in financial stability. The association was able to pay an 8 percent dividend on stock, and a 2 percent patronage dividend during the 1930's.

The present manager, Mr. Sid Barnes, took office in 1938. At this time a new program of expansion was inaugurated. One of the first steps was the erection of a new elevator at Hobart to replace the old elevator. The year 1944 saw construction of a new elevator at Komalty. New elevators were built at both Babbs and Roosevelt in 1947. At this time the capital stock of the association was increased from \$50,000.00 to \$200,000.00, to be divided into 8000 shares of \$25.00 par value.

#### Commodities Handled

The commodities carried by the association have greatly increased in amount and kind since the beginning of its operations. Originally organized to market the members' wheat, this remains the primary function of the entire association. In fact, three of the five stations of the cooperative handle only wheat. These stations being Babbs, Komalty, and Cold Springs. These stations remain open only during the wheat harvest period.

The Roosevelt and Hobart stations are very similar in their organization and operation. Like the three other stations, the primary commodity handled is wheat. However, the importance of the sideline sales has greatly increased in recent years for both stations. These stations, in addition to wheat, handle produce, feed and seed, coal, and a line of appliance and hardware items.

The produce department is equipped to handle cream, eggs, wool, and

poultry. The importance of this service has greatly increased in recent years. The farm supply stores of Hobart and Roosevelt have met with favorable response from the members. The stores at both stations showed a rapidly increasing sales rate.

#### Physical Facilities

The growth of the physical plant of the association has not been carried on in a hit or miss manner. At the present time there are numerous services offered to the members, and plans are underway for new expansion. The most important service is, of course, wheat handling. A distribution of the association's elevator capacity is as follows:

Hobart . . . . .	.18,500 bushels
Babbs . . . . .	.20,000 bushels
Komalty . . . . .	.18,500 bushels
Cold Springs . . . . .	7,000 bushels
Roosevelt . . . . .	.75,000 bushels

A new 150,000 bushel elevator at the Hobart station is nearing completion and will be used in the 1950 wheat harvest. In addition to the wheat elevators, the association has adequate facilities for its sideline endeavors.

## COMBINED BALANCE SHEET FOR 1946, 1947, 1948

The balance sheet of a business is a report which presents a picture of its financial condition at a specified time in terms of dollars and cents.

It is an answer to three basic questions:

1. How much capital is used in the business?
2. For what purpose is the capital used in the business?
3. From what sources does the business obtain its capital?

For this analysis the current assets, fixed assets, and other assets will be utilized. On the liability side the current and fixed liabilities, and the total net worth will be used.

## ASSETS

Assets are items which represent value and are owned by the association. The assets of the association are made up of current assets and permanent assets. Current assets are composed of receivables, dividends receivable, inventories, investments, and prepaid insurance. These assets are relatively liquid in nature and more available to the business in emergencies than are permanent assets. Permanent assets are made up of buildings and equipment, fixtures, and sundry equipment. Generally these assets are not in a liquid form and in the event of forced disposal, they have a relatively small resale value.

## Current Assets

The current assets consist of cash on hand, receivables trade, dividends

receivable, and inventories. The cash on hand of the organization during the three years studied amounted to an average of 4.41 percent of the total assets (Table 1). The cash to current liabilities ratio three-year average was .66 percent which compares favorably with the standard of .2 percent to 1 set up for organizations of this type.<sup>1</sup> (Table 3) However, for the years 1946 and 1947, this ratio was only .09 percent and .08 percent respectively which was considerably below the standard. During these two years the cash amounted to only 2.99 percent and 3.54 percent respectively of total assets. This was a low percentage for a company doing this volume of business. In 1948, the amount of cash increased nearly 100 percent where it presented a more than satisfactory cash to current liabilities ratio.

#### Receivables

The receivables include accounts receivable-trade, wheat advances receivable, interest receivable, sales contracts receivable, and accrued storage receivable. Of these items the accrued storage, wheat advances, and trade accounts constitute the major part of the receivables. In 1946, the receivables were 4.49 percent of the total assets (Table 1). In 1947, the receivables accounted for 10.24 percent of the total assets, and in 1948, they were 9.13 percent of the total assets. However, in these last two years the sales volume tripled, increasing at a much faster rate than did the receivables. The standard ratio established for receivables to current assets for organizations of this type is 40 percent or less.<sup>2</sup> In 1946, the ratio was 11 percent and in 1947 and 1948 the ratio was 21 percent (Table 3).

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<sup>1</sup> R. M. Green and V. M. Rucker, Marketing Problems of Farmers' Elevators in Kansas, p. 11.

<sup>2</sup> Ibid., p. 19.

However, an analysis of the aging of accounts receivable-trade, indicates a trend that could become a danger point. During the last five years the amount of trade receivables outstanding has steadily increased in the accounts of 3-12 months age, and accounts over one year (Table 2). The total amount of credit outstanding was higher in 1948 than at any time in the last five years. The percentage of increase in total accounts receivable-trade in 1948 over 1947 was 23.82 percent. 1948 was 13.97 percent higher than 1947 in accounts under three months. It was 26.21 percent higher in accounts 3-12 months of age, and 1948 was 34.43 percent higher than 1947 in accounts over 1 year of age.

As the economic conditions begin to decline the tendency will be for more credit to be asked for and required. All too often the cause of business failure has been poor credit and collection policies. It would be advisable to keep a close observation on the credit trend and use aggressive collection methods to insure stability of the organization.

#### Dividends Receivable

The amount of dividends receivable is based upon the volume of business done with the Union Equity Cooperative of Enid, and the success of the operations of the Union Equity for each year. The amount of dividends receivable has increased in each of the years studied. This is primarily a result of the association marketing a larger volume of wheat each year through the Union Equity. The percent, which dividends receivable account for, of the total assets was 7.83 percent in 1946, 7.95 percent in 1947, and 7.38 percent in 1948. The three-year average was 7.70 percent. The decline in percent in 1948 is a result of the association's total assets increasing at a faster rate than did dividends receivable.

Table 1. Analysis of Accounts Receivable -- Trade for the  
Farmers Cooperative Association, from 1946 through 1948

	1946			1947			1948		
	Amount	Percent	Percent	Amount	Percent	Percent	Amount	Percent	
Under 3 Months	\$7,743.73	69.69	27.07	\$5,647.31	51.85	13.97	\$6,713.49	47.88	
3-12 Months	2,875.62	25.38	40.89	4,051.73	37.20	26.21	5,113.72	36.45	
Over 1 Year	492.17	4.43	142.21	1,192.05	10.95	84.48	2,199.10	15.67	
	11,111.57	100.00	1.98	10,931.09	100.00	28.82	14,031.31	100.00	

SOURCE: Annual audit of the Association for 1948.

Comparative Accounts Receivable - Trade

Year	Under 3 Mo.	2-12 Mo.	Over 1 Yr.	Total
1948	\$5,647.31	\$4,051.72	\$1,192.05	\$10,891.09
1947	7,743.73	2,875.62	492.17	10,708.30
1946	5,202.03	2,047.32	168.80	7,418.15
1945	2,646.19	636.69	226.83	3,509.71
1944	4,648.27	683.24	157.03	5,438.54

SOURCE: Annual audit of the Association for 1948.

### Inventories

One of the most important functions of management is to keep inventories fresh and within reason of the business operations. Inventories have constituted the largest single portion of current assets throughout the period studied. Inventories accounted for an average of 24.02 percent of the total assets for the period studied. In 1946, inventories amounted to 26.75 percent of the total assets. The amount of inventories increased substantially in 1947, however, the percent of total assets increased only slightly to 27.14 percent. The total assets of the association were increasing at approximately the same rate as inventories increased in 1947, causing only a slight increase in the percent inventories were of total assets. Inventories declined substantially in 1948. The percent which inventories accounted for of the total assets declined to 19.28 percent. Factors causing the percentage decline were a smaller actual amount of inventories and an increase in the amount of total assets. The actual amount of inventory was kept as low as possible to prevent loss in the event of price declines.

### Other Assets

Other assets is composed of investments, unexpired insurance, and miscellaneous assets. Other assets has made up a substantial portion of the association's total assets during the period studied, remaining fairly stable in amount. The three-year average of other assets was 15.27 percent of the total assets (Table 1). The range was from 13.20 percent to 16.83 percent, the amount increasing only slightly during the three-year period.

### Investments

The investments of the association compose the bulk of the other assets section of the balance sheet. Investments are composed of United States War

Bonds, investments in the Union Equity, Consumers Cooperative Association, Quint County Cooperative, and the Enid Cooperative Creamery Association. Also stock in the Wichita Bank for Cooperatives and stock in the Consumers Cooperative Locker Association. Of these investments the largest portion, over 50 percent, is with the Union Equity Cooperative Exchange. The investments of the association averaged 14.24 percent of the total assets for the three-year period. There was only a small variation for the individual years, but the trend was toward the increasing of the amount of investments of the association.

#### Unexpired Insurance and Miscellaneous

The unexpired insurance accounted for only a small portion of the total assets. The average percent of the total assets for the three-year period accounted for by insurance was .94 percent. There was an increase each year in the amount spent for insurance but it was of little consequence due to the importance of insurance. Miscellaneous items included security deposits and other types of deposits on equipment, accounting for only .09 percent of the association's total assets.

#### Permanent Assets

The items falling into the permanent assets classification constitute the largest single portion of the total assets. Permanent assets is made up of real estate, buildings and equipment, furniture and fixtures, trucks, grinding and mixing equipment, produce equipment, and sundry equipment. The amount of permanent assets increased in each of the years studied. However, the percent which permanent assets accounted for of total assets varied considerably. In 1946, permanent assets accounted for 44.74 percent of the total assets. Permanent assets increased approximately \$10,000.00 in value

in 1947, accounting for 36 percent of the total assets. The decline in percentage is a result of the total assets of the association increasing at a faster rate than the permanent assets increased. In 1948, permanent assets increased substantially, accounting for 40.03 percent of the total assets. The value of the association's permanent assets was approximately \$43,000.00 greater in 1948 than in 1946. However, the amount of the total assets increased at a faster rate, causing the permanent assets to account for a smaller percent of the total assets in 1948 than in 1946.

#### Buildings and Equipment

Buildings and equipment constitute the majority of the permanent assets. The three-year average of the buildings and equipment was 30.86 percent of the total assets. However, the percentage accounted for by buildings and equipment has dropped steadily during the three years. In 1946, buildings and equipment accounted for 38.77 percent of the total assets. In 1948, only 26.77 percent of the total assets is attributable to buildings and equipment. The principle reason for the decline of the buildings and equipments percentage of total assets is the substantial increase in the association's total assets over the three year period. Actually, the dollar value of the buildings and equipment has steadily increased during this period.

#### Other Permanent Assets

The other items constituting permanent assets, real estate, furniture and fixtures, trucks, sundry equipment, produce equipment, and grinding and mixing equipment compose less than 10 percent of the association's total assets. With the exception of the produce equipment, real estate, and sundry equipment, the other items make up less than 1 percent each of the total assets.

## LIABILITIES

A liability is a debt owed by the business. They are generally divided into two groups -- current liabilities and fixed liabilities. Current liabilities are those debts which arise out of current operations of the business and which are generally discharged by use of current assets. A common characteristic of current liabilities is the short maturity date, usually 30 to 90 days and seldom more than a year. Fixed liabilities are those which fall due at a time which is more than one year.

### Current Liabilities

The current liabilities are made up of payables, loans, accruals, and dividends payable. The current liabilities accounted for an average of 36.23 percent of the total assets during the period 1946, 1947, and 1948 (Table 1). The ratio of the current assets to current liabilities is 1.2 to 1 for the three-year period (Table 3). Compared with a standard ratio for this classification, which is 2 to 1 for this type of organization, it seems as if the current liabilities might have been slightly above the normal.<sup>3</sup>

#### Payables and Accruals

Of the total current liabilities, the payables and accruals accounted for only 3.56 percent for the three-year period. The payables constitute the majority of this, amounting to 2.83 percent of the current liabilities.

#### Loans

Loans constitute the largest single item of current liabilities. In the three-year period studied they amounted to an average of 20.07 percent of

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<sup>3</sup> Ibid., p. 10.

the association's total assets. As the association has expanded considerably, the amount of loans from the Wichita Bank for Cooperatives has increased. In 1946, the loan amounted to \$61,000.00 making up 13.55 percent of the total assets (Table 1). The amount of loans steadily increasing to \$99,908.00 in 1948, amounting to 21.07 percent of the total assets. The variation in the percentage of total assets accounted for by loans is small. Ranging from 13.55 percent to 21.07 percent, a difference of 2.52 percent. This indicates the value and assets of the business has increased in proportion to the amount of loans outstanding.

#### Dividends Payable

This item composes next to the largest portion of current liabilities. Dividends payable is made up of dividend checks payable, 4 percent interest on stock payable, and partonage refunds payable. There is considerable fluctuation in the total dividends payable due to the variation in the amount of business done. In the year 1946, the amount of money available as dividends was \$38,046.00 which was 11.57 percent of total assets. The following year sales increased approximately one-third. This caused an increase in the dividends payable amount of over 100 percent. The amount being \$35,824.00 which accounted for 19.77 percent of the association's total assets. In 1948, the sales of the organization were off over one-third of the previous year's sales, causing a decline in the dividends payable to only 3.34 percent of the total assets.

#### Fixed Liabilities

Fixed liabilities are composed of one item which is a mortgage payable to the Wichita Bank for Cooperatives. The amount is quite variable from year to year. In 1946, which was the peak year studied for loans, the loan

payable was \$35,875.00 accounting for 10.91 percent of the total assets. The following year the loan outstanding amounted to \$22,287.00 or 5.14 percent of the total assets. In 1948, the loans outstanding were larger in amount than either of the other two years. However, the association's total assets were substantially greater so the loans accounted for only 8.13 percent of the association's total assets (Table 1). A standard ratio of fixed assets to fixed liabilities for organizations of this type is 2 to 1.<sup>4</sup> The three-year average ratio of this association is 5 to 1, indicating there is no over financing of the association (Table 3).

#### NET WORTH

Net worth is composed of capital stock, reserves, and surplus. The capital stock authorized in 1946, was \$50,000.00 divided into 2,000 shares. In 1947, the authorized capital was increased to \$200,000.00 divided into 8,000 shares. This accounted for the increase in the percentage of total assets the capital stock accounted for. In 1946, the capital stock outstanding amounted to 19.13 percent of the total assets (Table 1). In 1947, after the increase in the amount of capital stock authorized, the capital stock amounted to 36.04 percent of the total assets. This represented a dollar increase in capital stock outstanding of approximately \$93,000.00 in the space of only one year. This is an indication of the respect for the association's operations, which the people of that area had. In 1948, there was a leveling off of the capital stock outstanding. There was approximately \$750.00 worth retired.

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<sup>4</sup> Ibid., p. 19.

The reserves are composed of member equity credits-local, member equity credits-Union Equity, and a reserve for educational purposes. The local member equity credits make up the largest portion of the reserves, although the reserve equity in the Union Equity is nearly as large. The reserve for educational purposes is small, being set up for the annual and educational meetings held by the association. The amount of reserves varied considerably during the period studied. This variation may be accounted for by the differences in the local member equity. In 1946, the reserves accounted for 27.98 percent of the total assets (Table 1). However, in 1947, the reserves fell to only 5.37 percent of the total assets. The difference being in a much smaller local member equity for that year. In 1948, the reserves increased to 14.71 percent of the total assets. The surplus is composed of the surplus reserve fund and donated surplus. The surplus reserve fund is cumulative and constitutes the most of the surplus. It is the amount left each year after the patronage refunds payable and the 4 percent interest on stock payable have been deducted from the net earnings. The surplus of the association has increased in each of the years studied. The three-year average percentage of the surplus was 10.49 percent of the total assets. The range was from 10.34 percent of total assets to 10.66 percent of the association's total assets. The cause of the relatively stable percentage amount of surplus is that the total assets have increased approximately the same percentage amount as did the surplus.

Table 2. Combined Balance Sheet of the Farmers Cooperative Association  
from 1946 through 1948

	1946		1947		1948		Three	
	Amount	Percent of Total Assets	Amount	Percent of Total Assets	Amount	Percent of Total Assets	Year Average	Percent of Total Assets
<b>Assets:</b>								
Cash	\$ 9,824.22	2.99	\$ 15,374.71	3.54	\$ 29,315.99	6.19	\$ 18,171.64	4.41
Receivable	14,775.90	4.49	44,432.79	10.24	43,253.66	9.13	34,154.11	8.28
Dividends Receivable	25,763.72	7.83	34,500.00	7.95	35,000.00	7.38	31,754.57	7.70
Inventories	87,953.97	26.75	117,814.61	7.14	91,405.70	19.28	99,058.09	24.02
Current Assets	138,317.81	42.06	212,122.11	48.87	204,380.35	43.09	184,940.09	44.84
Other Assets	43,408.31	13.20	65,688.24	15.13	79,789.24	16.83	62,961.93	15.27
Investments	41,486.58	12.61	60,379.20	13.91	74,329.32	15.67	58,731.70	14.24
Unexpired Insurance	1,898.73	.58	4,559.75	1.05	5,145.29	1.08	3,867.92	.94
Others	23.00	.01	749.23	.17	314.63	.08	362.28	.09
Permanent Assets	147,137.90	44.74	156,270.55	36.00	190,096.49	40.08	164,501.64	39.89
Real Estate	6,019.00	1.83	6,039.00	1.39	6,039.00	1.28	6,032.33	1.46
Buildings and Equipment	127,506.00	38.77	127,390.92	29.35	126,904.30	26.77	127,267.07	30.86
Furniture and Fixtures	2,960.32	.91	3,750.66	.86	4,694.22	.99	3,801.73	.92
Trucks	2,649.49	.81	5,108.68	1.18	4,311.79	.92	4,023.32	.98
Sundry Equipment	4,547.87	1.38	10,748.75	2.48	11,915.48	2.52	9,070.70	2.20
Grinding and Mixing	3,044.87	.93	2,836.09	.65	1,870.10	.40	2,583.68	.63
Produce Equipment	410.35	.12	396.45	.09	756.22	1.59	521.00	1.26
Total Assets	328,864.02	100.00	434,080.90	100.00	474,266.08	100.00	412,403.60	100.00
<b>Liabilities:</b>								
Payables	3,782.23	1.15	11,750.32	2.71	20,119.18	4.24	11,883.91	2.88
Loans	61,000.00	18.55	87,400.00	20.13	99,908.93	21.07	82,769.64	20.07
Accruables and Reserve	788.49	.24	--	--	53.10	.01	280.53	.68
Dividends Payable	38,046.34	11.57	85,824.13	19.77	39,564.78	8.34	54,478.41	13.21
Current Liabilities	103,617.06	31.51	184,974.45	42.61	159,645.99	33.66	149,412.50	36.23
Fixed Liabilities	35,875.73	10.91	22,287.47	5.14	38,576.00	8.13	32,246.40	7.82
Total Liabilities	139,492.79	42.42	207,261.92	47.75	198,221.99	41.80	181,658.90	44.05
<b>Net Worth:</b>								
Capital Stock	63,076.84	19.18	156,453.20	36.04	155,679.67	32.83	125,069.90	30.32
Reserves	92,013.49	27.98	25,472.82	5.87	69,807.30	14.71	62,431.20	15.14
Surplus	34,280.90	10.42	44,892.96	10.34	50,557.12	10.66	32,243.66	10.49
Total Net Worth	189,371.23	57.58	226,818.98	52.25	276,044.09	58.20	230,744.76	55.95
Total Liabilities and Net Worth	328,864.02	100.00	434,080.98	100.00	474,266.08	100.00	412,403.60	100.00

SOURCE: Annual audits of the Association, from 1946 through 1948.

Table 3. Selected Financial Ratios of the Farmers Cooperative Association,  
From 1946 through 1948

	:	:	:	:
	1946	1947	1948	Three Year Average
Current Assets to Current Liabilities	1.3 to 1	1.1 to 1	1.3 to 1	1.2 to 1
Cash to Current Liabilities	.09 to 1	.08 to 1	1.8 to 1	.66 to 1
Percent Receivables are of Current Assets	11%	21%	21%	18%
Fixed Assets to Fixed Liabilities	4 to 1	7 to 1	5 to 1	5 to 1
Cost of Sales to Total Sales	.97 to 1	.95 to 1	.96 to 1	.96 to 1

SOURCE: Computed from the annual audits of the Association from 1946 through 1948.

## COMBINED OPERATING STATEMENT FOR 1946, 1947, 1948

The operating statement is a summarized report of the transactions of the business for a specified period of time. Its function is to tell briefly the pertinent facts relative to the results achieved from operation of the business. The pertinent points brought out by the operating statement are:

1. The volume of sales for the period
2. The cost of sales
3. The costs of operating the business
4. The amount of non-operating income and expenses
5. The net earnings of the business as a unit

### Sales

The volume of sales for the association was a substantial amount during the years studied. The total amount of sales of the association in 1946, was \$2,368,373.00 (Table 4). The wheat sales accounted for approximately 78 percent of the total sales in this year. In the following year, 1947, the sales of the association increased substantially, as a result of a larger wheat crop and the addition of new sideline facilities, to \$3,207,042.00. The wheat sales increased at a faster rate than did sideline sales in 1947. The following year, 1948, the associations total sales declined to \$2,013,984.00. While the association handled more wheat in 1948 than in 1947, the price was lower resulting in a decline in wheat sales of slightly over one million dollars. Also, the sideline sales declined substantially in this year. The three year average of the association's total sales was \$2,529,800, which constitutes one of the leading sales records for Oklahoma

farm cooperatives.

#### Gross Operating Earnings

Gross operating earnings represent the difference between sales and cost of sales. They also represent the margin above cost, which the association charges to meet expenses. Factors helping to determine this margin amount are competition, operating costs, and the type of product being sold. The margin for the association increased in each of the years studied. This is a result of the added sideline business, which customarily carries a high mark-on, and the general, overall greater costs of doing business. Gross operating earnings accounted for 4.63 percent of sales in 1946, 5.44 percent in 1947, and 6.66 percent in 1948 (Table 4).

#### Operating Expenses

The cost of the operating expenses has increased in each of the years studied. In 1946, operating expenses were \$96,939.50, which accounted for 4.09 percent of the association's sales. Operating expenses increased to \$134,777.93 in 1947, accounting for 4.20 percent of the sales. This increase in operating costs in 1947 was caused by a general overall price increase in many of the operating items and by some expansion in the firms business operations. Also, the larger sales volume in 1947 contributed to the increase in operating costs. Operating expenses increased further in 1948, amounting to \$138,763.60, which accounted for 6.79 percent of the association's sales. The sales amount was down substantially in 1948, however, the volume of goods handled were greater in 1948 than in 1947. The price structure of goods sold was lower in 1948. This actual increase in goods handled helped to bring about a further increase in the operating expenses.

Salaries and wages are the major operating expense item. For the three year period salaries and wages accounted for 47.47 percent of the total

operating expenses (Table 5). Salaries and wages were one of the chief factors causing the rise in the total operating expenses in each of the three years. Other major operating expenses are depreciation, interest, and taxes. These costs combined with the salaries cost compose approximately 70 percent of the total operating expenses. These costs all increased in each of the years studied as a result of the expanded physical facilities of the association. The remainder of the expense items, which are insurance, utilities, telephone and telegraph, repairs and supplies, advertising, truck, and administrative and selling, tend to be of a smaller amount and more variable, or dependent upon sales volume. The depreciation, taxes, and interest tend to remain constant in amount regardless of the association's sales volume.

#### Other Income and Other Deductions

The source of other income is from the dividends paid to the association by the Union Equity Cooperative Exchange and the Consumers Cooperative Association. A small amount of income is also earned on rental of a seed drill, cement mixer, and interest on United States Savings Bonds. The dividends received by the association are the result of the amount of business done by the association with the Union Equity Cooperative Exchange and the Consumers Cooperative Association during the year, and the success of the operations of these organizations. The relationship between other income and sales increased slightly in each of the years studied. In 1946, other income amounted to 1.31 percent of the sales, increasing to 1.40 percent in 1947 and 2.18 percent in 1948 (Table 4). The increase in percentage in 1948 is a result of a greater proportionate decline in the association's sales than in other income. Actually, other income was approximately \$300 less than the preceding year. The elements comprising other deductions are cash short and loss on sale of permanent assets. During the three year period other deductions

accounted for only .01 percent of the association's sales.

### Net Earnings

The net earnings are an indicator of the success of the operations of the association. From the net earnings, the partonage dividends are paid the members and the surplus fund of the association is built. The net earnings for the association have fluctuated considerably. In 1946, the net earnings amounted to \$45,286.20, which accounted for 1.91 percent of the sales. In 1947, net earnings nearly doubled to \$84,170.59 accounting for 2.62 percent of the association's sales. This large increase was a result of a much larger volume of sales in both wheat and sidelines, with operating expenses increasing at a relatively slower rate. In 1948, net earnings declined to \$39,473.40, accounting for 1.96 percent of the total sales. The decline is due to a decline in price of wheat and a smaller volume of sideline sales. Also, the cost of labor and supplies was higher in 1948, causing the operating expenses to increase. The combination of these two factors caused the net earnings to decline to the lowest point for the period studied.

Table 4. Combined Operating Statements of the Farmers Cooperative Association,  
from 1946 through 1948

	1946		1947		1948		Three	Percent-
	Amount	Percent- age of Sales	Amount	Percent- age of Sales	Amount	Percent- age of Sales	Year Average	Percent- age of Sales
Sales	\$2,368,373.72	100.00	\$3,207,042.32	100.00	\$2,013,984.48	100.00	\$2,529,800.17	100.00
Cost of Sales	2,293,941.14	96.86	3,060,137.32	95.42	1,940,891.93	96.37	2,431,656.78	96.12
Other Operating Income	35,197.73	1.49	27,395.31	.86	61,159.65	3.03	41,244.89	1.63
Gross Operating Earnings	109,630.31	4.63	174,300.31	5.44	134,252.20	6.66	139,394.27	5.51
Operating Expenses	96,939.50	4.09	134,777.93	4.20	138,763.60	6.79	123,493.68	4.88
Net Operating Earnings	12,690.81	5.36	39,522.38	12.32	4,511.40	2.24	47,701.79	1.89
Other Income	33,375.88	1.31	44,799.38	1.40	43,984.80	2.18	40,720.02	1.60
Other Deductions	780.49	.04	151.17	.01	0	0	310.55	.01
Net Earnings	45,286.20	1.91	84,170.59	2.62	39,473.40	1.96	56,310.06	2.23

SOURCE: Annual audits of the Association, from 1946 through 1948.

Table 5. Relationship of Individual Cost Items to Total Operating Expenses  
from 1946 through 1948

	: : 1946 : (Dollars)	: : 1947 : (Dollars)	: : 1948 : (Dollars)	: : Three Year : Average : (Dollars)	: : Average Percent- : age of Total : Operating Costs
Salaries and Wages	45,930.24	64,733.04	65,207.37	58,623.62	47.47
Depreciation	9,757.63	11,001.80	13,628.05	11,462.49	9.28
Insurance and Bonds	5,560.70	5,412.84	8,235.89	6,403.14	5.18
Interest	10,218.62	12,971.91	14,282.72	12,491.08	10.12
Taxes	4,467.34	5,192.65	7,538.12	5,732.70	4.64
Utilities	2,798.54	3,444.81	3,044.18	3,095.84	2.51
Telephone and Telegraph	1,727.96	2,234.84	2,058.63	2,007.14	1.63
Repairs and Supplies	4,567.51	6,965.47	7,599.17	6,377.38	5.16
Advertising	2,261.30	3,876.90	4,975.06	3,704.42	3.00
Truck	1,209.95	2,148.11	2,112.88	1,823.65	1.48
Administrative and Selling	8,439.71	16,795.56	10,081.33	11,772.20	9.53

SOURCE: Annual audits of the Association from 1946 through 1948.

## DEPARTMENT COST ANALYSIS

### Introduction

For the purposes of analyzing the departmental costs, the association was divided into two departments, wheat and sidelines. All of the association's stations sell wheat and incur wheat costs. The expenses of the wheat department consist of all expenses attributable to wheat sales at all five stations. The sideline department is made up of the farm supply store, feed and seed, produce, alfalfa seed, and coal. The expenses of these departments have been combined and labeled sideline expenses.

The Hobart and Roosevelt stations have sideline departments. The three remaining stations have only a wheat department. Originally, the association was established as a wheat marketing association. The sideline department has been added and expanded to meet the needs of an increasing membership.

### Salaries and Wages

The salaries and wages figure consists of the manager's salary and commission, office salaries, store salaries, operating labor, and other commissions. This cost item is the largest single cost item of the association, accounting for slightly less than one-half of the association's annual total costs. The wheat department accounted for 35 percent of the salaries and wages cost and the sideline department was responsible for 65 percent. The sideline department does not lend itself to mechanization, as a result, the labor requirements are greater. The wheat department is mechanized to a considerable amount, which allows the labor cost to be reduced to a minimum.

In each of the three years studied, the total amount of the salaries

and wages item accounted for by the wheat department was substantially less than the comparable figure for the sideline department. In 1946, the salaries and wages item was \$16,075.00 for wheat and \$29,854.00 for sidelines (Table 6). In 1947, the wheat department had \$22,656.00 in salaries and wages, while the sideline department increased to \$42,076.00. A similar pattern existed in 1943 when the wheat department salaries and wages cost item amounted to \$22,822.00 while the sideline department had \$42,384.00 in salaries and wages (Table 6). This increase in the total salaries and wages amount in 1947 may be explained by the much greater volume of wheat and sideline business in 1947 as compared to 1946. While this volume of business declined in 1943, the general wage level was up, thereby tending to increase the salaries and wages amount in 1943. The portion of the total cost of handling a bushel of wheat accounted for by salaries and wages was quite stable throughout the period studied. In 1946, salaries and wages amounted to 1.7 cents per bushel handled, 1.8 cents in 1947, and 1.7 cents in 1943 (Table 7). Salaries and wages were the largest single cost item per bushel of wheat handled.

The cost per dollar of wheat sales and per dollar of sideline sales showed the sideline department had a much higher salaries and wages cost than did the wheat department. In 1946, the salaries and wages cost per dollar of wheat sale was .9 cent as compared to the similar figure for the sideline department, of 5 cents per dollar of sideline sales. In 1947, the portion of the cost per dollar of wheat sale accounted for by salaries and wages remained constant at .9 cents, while the similar figure for the sideline department increased to 6.2 cents per dollar of sideline sales. In 1943, the salaries and wages cost 1.5 cents per dollar of wheat sales and 8.4 cents per dollar of sideline sales. Sideline salaries increased in 1947, as a result of more sideline services being offered and the generally higher wage

level. Also, the volume of sideline sales was greater, causing a need for more labor in the sideline department. The large increase in salaries cost per dollar of wheat sales in 1948 is due exclusively to a much smaller dollar amount of wheat sales in 1948. The amount of salaries paid, as a result of the operations of the wheat department, was approximately \$200.00 greater in 1948 than in 1947. The increase in the cost of salaries per dollar of sideline sales is a result of the substantial decrease in sideline sales in 1948. The amount of salaries paid, as a result of the sideline operations, was approximately \$200.00 greater in 1948 than in 1947, while the decrease in sideline sales was approximately \$131,000.00.

The portion of the total costs accounted for by salaries and wages remained fairly stable as a percent of the total costs for the three-year period. The percent of the total yearly costs accounted for by salaries was 47.38 percent in 1946, 48.02 percent in 1947, and 46.99 percent in 1948 (Table 8). The slight rise in 1947 may be attributed to the large wheat crop in that year and the increase in sideline activities. The decline in the percent of salaries and wages of the total in 1948 may be attributed to the greater relative increase in the other cost items. The costs of salaries and wages for the sideline department have steadily increased and are much greater than the similar cost for wheat. The sideline activities do not lend themselves to the economies of volume, as does wheat. Too, the sideline department has steadily expanded its activities, necessitating greater costs.

#### Depreciation

The depreciation total is composed of the amounts of depreciation on all of the fixed assets of the association. Of the various fixed assets, the elevators accounted for the greatest portion of the total depreciation figure. The depreciation was divided evenly between the wheat and sideline departments.

The value of the fixed assets used by the sideline department is not as great as is the value of the fixed assets used in the operation of the wheat department. However, the rate of depreciation is greater, generally, for the fixed assets of the sideline department. The combination of these factors tend to equalize the amount of depreciation between the two departments.

The amount of depreciation increased in each of the years studied. The cost of depreciation was \$4,878.00 in 1946, for the wheat and sideline departments. The cost of depreciation increased to \$5,500.00 for both departments in 1947. This increase in 1947 is almost entirely due to new equipment at the Hobart station. In 1948, the depreciation cost increased to \$6,314.00 for each department. A large portion of this increase is a result of a new elevator and equipment at the Cold Springs station in 1948.

The portion of the total cost of handling a bushel of wheat accounted for by depreciation was stable throughout the period studied. In 1946, depreciation cost .5 cents per bushel handled, decreasing to .4 cents per bushel in 1947, and rising to .5 cents per bushel in 1948 (Table 7). This decrease in depreciation cost of .1 cent per bushel handled in 1947 may be explained by the extra large volume of wheat handled in this year with the depreciation increasing at a relatively slower rate.

The cost of depreciation, per dollar of wheat sales, and per dollar of sideline sales, showed a substantially higher cost attributable to sideline sales. In 1946, the depreciation cost per dollar of wheat sales was .3 of one cent. This similar figure for a dollar of sideline sale was .3 of one cent. In 1947, the depreciation cost per dollar of wheat sale increased to .4 of a cent. The depreciation cost per dollar of sideline sale remained at .3 of a cent. The depreciation cost per dollar of sale increased for both wheat and sideline departments in 1948. The cost to the wheat department

increased to .5 of a cent, while the depreciation cost to sidelines jumped to 1.4 cents per dollar of sale. This steady increase in depreciation costs of the sideline department over wheat is partially due to the added number of sideline facilities, but is principally due to the much larger volume of wheat sold than sideline sales. There was approximately three times as many dollars of wheat sold as there were sidelines in 1948.

The percent of the total yearly expenditures accounted for by depreciation was 10.06 percent in 1946, 8.16 percent in 1947, and 9.82 percent in 1948 (Table 3). The fluctuation is partially due to increased depreciation costs, but mainly as a result of the fluctuations of the association's total expenditures. These total expenditures were much greater in 1947 than in 1946, and they were greater in 1948 than in 1947.

The depreciation cost to the association has increased steadily throughout the period studied. The amount of the fixed assets of the association have greatly increased in that period. They have increased from \$147,139.00 in 1946 to \$190,096.00 in 1948. The fixed assets used in the sideline department, such as grinding and mixing equipment, depreciate at a much faster rate than do those used in the wheat department.

#### Insurance

The insurance total consists of prepaid insurance on all of the physical facilities of the association such as buildings, machinery, commodities, and trucks. Included in this prepaid insurance amount is a policy giving complete coverage to all employees of the association. This policy constitutes approximately one-fifth of the total prepaid insurance amount.

The total prepaid insurance amount increased during the period studied. The total insurance amounted to \$5,560.00 in 1946, to \$5,412.00 in 1947, and \$8,235.00 in 1948 (Table 6). This increase in prepaid insurance in 1948 may

be partially attributed to the increased insurable facilities at the beginning of 1948.

The portion of the total cost of handling a bushel of wheat accounted for by insurance was quite stable for the three-year period. In 1946, insurance cost .3 cent per bushel handled decreasing to .2 cent per bushel in 1947 and rising to .3 cent per bushel in 1948 (Table 7). This decrease in insurance cost of .1 cent per bushel handled in 1947 may be explained by the extra large volume of wheat handled in this year.

The cost of insurance per dollar of wheat sales and per dollar of sideline sales showed a substantially higher cost attributable to sideline sales. In 1946, the insurance cost per dollar of wheat sale was .2 cent. This similar figure for a dollar of sideline sale was .5 cent. The insurance cost per dollar of wheat sale decreased to .1 cent in 1947, and the cost per dollar of sideline sale decreased to .4 cent in the same year. This decrease is a result of a greater sales volume for both departments. The insurance cost per dollar of sale increased for both wheat and sideline departments in 1948. The cost to the wheat department increased to .3 cent, while the insurance cost to sidelines increased to .3 cent per dollar of sale. This increase in insurance costs per dollar of sale in 1948, is a result of a much smaller sales volume for both departments and an increased amount of prepaid insurance on hand.

Insurance costs are the same amount for the sideline department as they are for the wheat department. This was necessary because of the numerous buildings used by the sideline departments, the trucks, and the greater number of employees in the sideline departments. As a result of the sideline department incurring the same amount insurance costs as the wheat department, and the sales volume of the sideline department being much less than that of

the wheat department, the cost of insurance per dollar of sale tends to be much greater than the similar cost for wheat.

The percent of the total yearly expenditures accounted for by insurance was 5.73 percent in 1946, 4.02 in 1947, and 5.94 in 1948 (Table 8). This increase in 1948 is due to the increased total prepaid insurance cost of 1948 over 1947. The decrease in insurance cost in 1947 is due to the much greater total costs of the association in 1947 over 1946. Actually the prepaid insurance amount is approximately the same for these two years.

### Interest

The interest cost is composed of all of the interest paid by the association. The interest cost was broken into interest on facilities, interest on commodities, and interest on operating capital. From the total of these three interest classifications, the interest earned by the association was subtracted giving the interest total for the association.

The interest amount has increased in each of the years studied. Starting from an amount of \$10,218.00 in 1946, for the total interest figure, the interest increased to \$12,971 in 1947, and \$14,282 in 1948 (Table 6). All three of the interest classifications have increased in the period studied. The interest on operating capital has increased more than either commodity or facility interest for both wheat and sidelines. In 1948, the commodity interest amount decreased from the 1947 amount for both wheat and sidelines. In all three years, the interest on facilities constituted the largest portion of the total. This is because of the much larger amount of principal needed in the construction of physical facilities.

The portion of the total cost of handling a bushel of wheat accounted for by interest was stable throughout the period studied. In 1946, interest cost .5 cent per bushel handled, decreasing to .4 cent per bushel in 1947,

and rising to .5 cent per bushel in 1948 (Table 7). This decrease in interest cost of .1 cent per bushel handled in 1947 may be explained by the much larger volume of wheat handled in this year over 1946. The actual interest cost was larger in 1947 over 1946.

The cost of interest per dollar of wheat sales and per dollar of sideline sales showed a substantially higher cost attributable to sideline sales. On the period studied, each year the interest cost for sidelines was higher than for wheat. The principal reason being the much larger interest cost on commodities. The items making up the sideline department often had to be kept for long periods of time necessitating added interest costs. In 1946, the interest cost per dollar of wheat sale was .3 cent. The similar figure for a dollar of sideline sale was .9 cent (Table 7). In 1947, the interest cost was .2 cent for wheat and 1 cent per dollar of sideline sale. The interest cost to both departments increased in 1948 to .5 cent for wheat and 1.4 cent per dollar of sideline sale. This steady increase in interest costs of sideline over wheat is partially due to the added number of facilities. The interest on facilities constituted one-half the total interest cost for both departments. However, the big difference is in the commodity interest which was approximately fifty times greater for the sideline department over the wheat department in 1948. Too, the volume of sales is much greater for wheat than for sidelines.

The percent of the total yearly expenditures accounted for by interest was 10.55 percent in 1946, 9.63 percent in 1947, and 10.29 percent in 1948 (Table 8). This variation in 1947 under 1946 is due to the much greater total expense of the association. The actual interest cost was approximately \$2,500.00 greater in 1947 than in the previous year. In 1948, the interest cost increased approximately \$2,500.00 over 1947, thereby increasing the

percentage of the total expenditures accounted for by interest.

The interest cost to the association has increased steadily throughout the period studied. The physical facilities have increased, the volume of commodities handled has increased, and the need for operating capital has increased. As the organization expanded its operations, the interest costs expanded with it. The sideline department has led in the added interest costs. The commodity interest cost has increased markedly in the sideline department over the wheat department. However, the sideline department interest cost remained practically constant in 1948, while the wheat department interest cost increased substantially over 1947. This was due to the much greater interest on operating capital in the wheat department.

#### Taxes

Taxes are composed of the corporation license, social security tax, unemployment tax, ad valorem tax, use tax, and excise tax. Of these taxes the ad valorem or property tax accounted for approximately two-thirds of the total tax cost. The unemployment and social security were next in order of cost, with corporation licenses and excise tax following that order.

The tax cost has increased in each of the years studied. Starting from an amount of \$4,467.00 in 1946 for both wheat and sidelines, the tax cost increased to \$5,192.00 in 1947, and \$7,538.00 in 1948 (Table 6). This increase is due to the added facilities of the association in 1947, and particularly 1948. The ad valorem tax increased approximately 75 percent in 1948 over 1947. The new facilities constructed in 1947 first appeared on the 1948 tax rolls. This single tax item accounted for virtually all of the total tax increase in 1948 over 1947.

The portion of the total cost of handling a bushel of wheat accounted for by taxes was stable in 1946 and 1947, increasing .1 cent per bushel

handled in 1948. The cost of taxes per bushel of wheat handled in 1946 and 1947 was .3 cent (Table 7). The tax cost per bushel of wheat handled increased to .4 cent in 1948. This increase may be attributed to the increased ad valorem tax cost to wheat in 1948.

The tax cost per dollar of wheat sale and per dollar of sideline sale showed a slightly larger cost attributable to sideline sales. The tax cost was apportioned 65 percent to wheat and 35 percent to sidelines. This is due to the much larger ad valorem tax on the wheat elevators. Since wheat carries a higher portion of the tax cost the difference in costs between the wheat and sideline departments is not as great as was in some of the other cost items. In 1946, the tax cost was .2 cent per dollar of wheat sale as compared to .3 cent per dollar of sideline sale. In 1947, the tax cost was .1 cent for wheat as a result of a larger amount of wheat sales, and .3 cent for sidelines. In 1948, the tax cost to wheat increased to .3 cent per dollar of wheat sale while the cost per dollar of sideline sale increased to .5 cent (Table 7). This increase for both departments is mainly the result of the much higher ad valorem tax. The cost to sidelines still running above wheat due to the much smaller volume of sales.

The percent of the total yearly expenditures accounted for by taxes was 4.61 in 1946, 3.35 in 1947, and 5.43 of the total in 1948 (Table 8). The fluctuations are due to increased tax costs and also to the variation of the association's total expenditures particularly in 1947 over 1948. The increase in 1948 is largely due to the tax cost increase in that year.

The tax cost to the association has increased steadily throughout the period studied. The amount of the taxable assets of the association has increased thereby raising the ad valorem tax substantially. Also, the unemployment and social security taxes have increased as more workers were

hired to handle the additional sales volume.

### Utilities

Utilities are composed of water, gas and electricity. The total utilities expense was divided with 70 percent of the cost going to the wheat department and 30 percent of the total going to the sideline department. Much of the wheat equipment for the association is powered by electricity, which constitutes the major portion of the utility total.

The utility cost has tended to vary directly with the fluctuations of the wheat volume handled by the association. In 1946, the total utilities cost was \$2,798.00 (Table 6). The cost increased to \$3,444 in 1947, decreasing to \$3,044.00 in 1948. The wheat business for 1947 was much greater than in 1946, accounting for the added utility cost in 1947. When the wheat volume in 1948 declined, the utilities cost to the association declined. The portion of the total cost of handling a bushel of wheat accounted for by utilities fluctuated with the amount of wheat business. In 1946, the cost was .2 cent per bushel handled, decreasing to .1 cent in 1947, rising to .2 cent in 1948 (Table 7).

The utility cost per dollar of wheat sale and per dollar of sideline sale was .1 cent per dollar of wheat and per dollar of sideline sale in both 1946 and 1947. In 1948 the cost of utilities per dollar of sideline sale remained at .1 cent while the cost per dollar of sideline sale increased to .2. This increase in the utility cost per dollar of sideline sale is due to the substantial decrease in the amount of sideline sales in 1948. The actual amount of utility cost to the sideline department was greater in 1947 than in 1948.

The percent of the total yearly expenditures accounted for by utilities

was 2.33 percent in 1946, 2.56 percent in 1947, and 2.19 percent in 1948 (Table 3). This percentage decrease is due to the increasing amount of the association's total expenditures as compared to the more stable utility cost. The actual amount of utilities was greater in 1947 than either 1946 or 1948. Too, the actual amount was greater in 1948 than 1946.

The utility cost varies directly with the wheat volume of the association. This is due to the extensive use of electricity in the wheat elevators. The percentage of the association's total expenditures accounted for by utilities has decreased steadily in the period studied. This may be attributed to the total expenditures of the association rising steadily and at a faster rate than have been the utilities costs.

#### Telephone and Telegraph

The telephone and telegraph cost item is made up of the total telephone and telegraph cost to the association. Much of the business, especially wheat selling, is transacted by telephone. This is especially noticeable during the harvest months. The total of the telephone and telegraph cost was divided half and half between the wheat and sideline departments.

The telephone and telegraph cost has tended to vary with the variations in the total sales of the association. In 1946, the telephone and telegraph cost was \$1,727.00. The cost increased to \$2,234 in 1947, decreasing to \$2,058.00 in 1948 (Table 5). The wheat sales for 1947 were much greater than in 1946, accounting for most of the added telephone and telegraph cost in 1947. When the wheat sales decreased in 1948, the telephone and telegraph cost declined slightly. However, in 1948 the sideline facilities were greater than they had been previously. These added sideline facilities tended to keep the telephone and telegraph cost up.

The portion of the total cost of handling a bushel of wheat accounted

for by telephone and telegraph remained constant for the period studied. In 1946 the cost was .1 cent per bushel handled. This cost was .1 cent in 1947 and 1948 (Table 7).

The telephone and telegraph cost per dollar of wheat sale and per dollar of sideline sale was .1 cent per dollar of wheat and sideline sale in 1946. The telephone and telegraph cost per dollar of wheat sale declined to .05 cent in 1947. This decrease is due to the large volume of wheat sold by the association in 1947. The actual amount of telephone and telegraph cost was greater in 1947 than in 1946. The cost remained at .1 cent per dollar of sideline sale in 1947. In 1948, the cost was .1 cent per dollar of sale for both the wheat and sideline departments.

The percent of the total yearly expenditures accounted for by telephone and telegraph was 1.73 percent in 1946, 1.66 percent in 1947, and 1.43 percent in 1948 (Table 8). This percentage decrease is due to the increasing amount of the association's total expenditures as compared to the more stable telephone and telegraph cost.

The volume of the wheat sales has a positive effect on the amount of telephone and telegraph cost. Too, the added sideline facilities have tended to keep the telephone and telegraph costs up when the wheat sales volume declined. The percentage of the association's total expenditures accounted for telephone and telegraph decreased in each of the years studied, although the actual amount of telephone and telegraph expenditure increased. This is a result of the proportionally greater increase in the association's total expenditures in each of the years studied.

#### Repairs and Supplies

The repairs and supplies cost item is made up of the elevator repairs and maintenance, the upkeep on the sideline facilities, and the supplies

used in their operations. The repairs and supply total was divided with 60 percent of the cost going to the wheat department and 40 percent of the total going to the sideline department. The repairs and maintenance on the grain elevators constitute the largest portion of the repairs and supply cost item. Also wheat supplies are more costly than sideline supplies.

The repairs and supplies cost amount has increased in each of the years studied. In 1946, the total repairs and supplies cost was \$4,567.00. In 1947, the cost increased to \$6,965.00, rising to \$7,599.00 in 1948 (Table 6). The business of the association has increased making necessary more repairs and supplies needed. In the year in 1947, the wheat repairs and supplies cost increased substantially as a result of the increase in the volume of wheat handled. As sideline facilities expanded in 1948, they added to the total repair and supply cost. Too, the volume of wheat handled increased further in 1948.

The portion of the total cost of handling a bushel of wheat accounted for by repairs and supplies was .3 cent per bushel of wheat handled in 1946 and 1947 (Table 7). The cost increased to .4 cent per bushel of wheat handled in 1948. This increase in 1948 is attributable to the generally higher price level over 1947. Too, the volume of wheat handled was greater in 1948.

The repair and supplies cost per dollar of wheat sale and per dollar of sideline sale was .2 cent per dollar of wheat sale in 1946 and 1947. The cost per dollar of sideline sale was .3 cent in 1946 and .4 cent in 1947. In 1948, the cost of repair and supplies per dollar of wheat sale in 1948 increased to .3 cent and to .6 cent per dollar of sideline sale. This increase for both departments is due to the higher price levels in each of the succeeding years. The difference between the cost per dollar of sale between

the departments is a result of the much greater sales volume of the wheat department over which to spread the cost.

The percent of the total yearly expenditures accounted for by repairs and supplies was 4.72 percent in 1946, 5.17 percent in 1947, and 5.43 percent in 1948 (Table 3). The actual amount of expenditure for repairs and supplies also increased in these years, as a result of a greater volume of wheat handled and sideline endeavors.

The repairs and supply cost increased during each of the years studied. This increase was partially due to the added facilities of the association. Also it was due to the generally higher price level in each of the three years. This cost item tends to fluctuate directly with the volume of business done by the association. As volume of wheat handled increased throughout the period, it had a positive effect on the amount of repairs and supplies needed.

#### Advertising

The association uses advertising extensively in its sales operations. The sideline departments bear the heaviest portion of the advertising cost. Eighty percent of the advertising total is used by the sideline department. The farm supply store accounts for the largest portion of the sideline advertising. Also, the produce and feed and seed departments advertise considerably. The wheat department does relatively little advertising, accounting for 20 percent of the total advertising cost.

The total advertising cost has increased substantially during the period studied. In 1946, the advertising cost was \$2,261.00. The cost was \$3,876.00 in 1947 increasing to \$4,975.00 in 1948 (Table 6). This increase in advertising is a result of increasing sideline operations within the association.

The portion of the total cost of handling a bushel of wheat accounted for by advertising was .05 cent in 1946, increasing to .1 cent per bushel of wheat handled in 1947 and 1948 (Table 7). The total advertising cost was increased approximately \$1,600.00 in 1947 and approximately \$1,100.00 in 1948.

The advertising cost per dollar of wheat sale was .05 cent in 1946 and 1947. The same cost for sideline sales was .3 cent in 1946, rising to .5 cent in 1947. In 1948 the cost per dollar of wheat sale was .1 cent and for sidelines was .7 cent. The sideline department advertising cost was running well above wheat advertising cost because of the heavy advertising program utilized by the sideline department. The farm supply store was added at Roosevelt in 1947 and more advertising was used on both of the farm supply stores.

The percent of the total yearly expenditures accounted for by advertising was 2.33 percent in 1946, 2.83 in 1947, and 3.59 in 1948 (Table 8). This shows the increasing amount spent on advertising, which is increasing in percentage faster than is the total expenditures of the association.

The Hobart Cooperative Association uses advertising extensively in its sales operations. Advertising accounts for a substantial portion of the cost of sideline sales. All of the sideline facilities utilize advertising with the farm supply stores getting the major portion. Wheat is advertised, but not on an extensive basis as is the sideline department.

#### Truck Expense

Truck expense is made up entirely of truck expense incurred in the operation of the sideline department. There is no truck expense incurred in the wheat department operation. Only the Roosevelt and Hobart Stations have truck expenses. This is because no sideline facilities are present

at the Babbs, Komalty, and Cold Springs stations.

The truck expense has varied directly with the fluctuations of the sideline department sales. In 1946, the total truck expense was \$1,209.00 (Table 6). In 1947, this cost increased to \$2,148.00, decreasing slightly to \$2,112.00 in 1948. As the sideline facilities greatly expanded in 1947 and 1948 over the year 1946, the truck expense increased. When sideline sales declined in 1948, the truck expense declined.

The truck expense per dollar of sideline sale was .2 cent in 1946 (Table 7). In 1947 the truck cost per dollar of sale was .4 cent and increased to .5 cent in 1948. This increase in cost in 1947 is due to the increased volume of sideline sales causing the need for more truck usage. The increase in truck cost per dollar of sale in 1948 is due to the sales volume declining at a faster rate than did the truck expense.

The percent of the total yearly expenditures accounted for by truck expenses was 1.25 percent in 1946, 1.59 percent in 1947, and 1.52 percent in 1948 (Table 8). These variations in the percentage that truck expenses accounted for of the total expenditures, followed the variations in the actual amount of truck expenses.

The truck expense closely follows the pattern of sideline sales volume. This is because the sideline department accounts for all of the truck expense. Only two stations in the association incur truck expense. These stations are Roosevelt and Hobart. The other three stations offer no sideline facilities to incur truck expenses.

#### Administration and Selling

The administration and selling cost item represents a grouping of the minor cost items and cost items that do not occur regularly in the association. These cost items are: donations, director's fees, loss on accounts charged

off, office expense, produce expense, legal and audit, travel and entertainment, dues and subscriptions, rent paid, annual meeting expense, bank-exchange, and miscellaneous cost items. The total cost of these items was divided half and half between the wheat and sideline departments.

The administrative and selling total cost has followed the pattern of total sales for the association. In 1946, the cost was \$3,439.00 (Table 6). The cost increased to \$16,795.00 in 1947 as the volume of sales increased approximately one-third. The cost declined to \$10,031.00 in 1948, as the sales decreased to a point below the sales amount of 1946. However, the facilities which had been added and expanded in 1947 and 1948 were still contributing to the administrative and selling costs. This is the reason for the higher administrative and selling cost in 1948 over 1946 even though the association's total sales were less than in 1946.

The portion of the total cost of handling a bushel of wheat accounted for by administrative and selling costs varied considerably. In 1946, the cost was .6 cent per bushel handled (Table 7). This cost increased to .8 cent per bushel in 1947, decreasing to .5 cent in 1948. The increase of the administrative and selling cost in 1947 over 1946 may be explained by the larger volume of wheat sales in that year which added greatly to administrative and selling costs. The decrease in the administrative and selling cost per bushel of wheat handled in 1948 is due to the smaller amount of administrative and selling costs. Also there was less bank exchange by approximately 50 percent and there was no annual meeting expense listed in the 1948 audit.

The administrative and selling cost per dollar of wheat sale and per dollar of sideline sale was .3 cent for wheat and .5 cent for sidelines in 1946. This cost increased to .4 cent for wheat and .9 cent for sidelines

in 1947. In 1948, the cost to wheat increased to .5 cent and declined to .7 cent for sidelines. The portion of administrative and selling costs attributable to sidelines tended to vary with the sales volume of the sideline department. As the sideline sales reached a peak in 1947, so did the administrative and selling costs per dollar of sale. When these sales declined in 1948, the cost declined. The actual amount of administrative and selling cost attributable to wheat was much greater in 1947 than in 1948. However, the increase in the cost of administrative and selling expenses per dollar of wheat sale is due to the greater proportionate decline in total wheat sales in 1948 than the decline in administrative and selling costs of that year.

The percent of the total yearly expenditures accounted for by administrative and selling costs was 8.71 percent in 1946, 12.46 percent in 1947, and 7.27 percent in 1948 (Table 8). This increase in 1947 is a result of the association's increased total sales volume causing the administrative and selling cost to increase. The decrease in 1948, is a result of a decline in the association's total sales allowing a smaller amount of administrative and selling costs, and an increase in the association's total expenditures.

The administrative and selling cost fluctuates to a considerable degree with the association's total sales. This cost increases with every new facility offered by the association. The sideline department bears a high administrative and selling cost per dollar of sale as compared to the wheat department. As the association's total sales volume declined in 1948, the administrative and selling cost declined at a slower rate. As extra selling functions are added to the total business, some of these costs tend to become relatively fixed and remain, regardless of sales volume.

Table 6. Expense Allocation by Departments of the Farmers Cooperative Association,  
from 1946 through 1948

	1946		1947		1948	
	Wheat	Sidelines	Wheat	Sidelines	Wheat	Sidelines
Salaries and Wages	\$16,075.53	\$29,854.66	\$22,656.57	\$42,076.47	\$22,822.65	\$42,384.92
Depreciation	4,878.81	4,878.82	5,500.90	5,500.90	6,814.03	6,814.02
Insurance	2,780.35	2,780.35	2,706.42	2,706.43	4,117.95	4,117.94
Interest	4,625.76	5,592.86	5,638.80	7,333.11	6,907.10	7,375.62
Taxes	2,903.77	1,563.57	3,375.22	1,817.43	4,899.79	2,638.34
Utilities	1,958.98	839.56	2,411.38	1,033.44	2,130.93	913.25
Telephone and Telegraph	863.98	863.98	1,117.42	1,117.42	1,029.32	1,029.31
Repairs and Supplies	2,740.51	1,827.00	4,179.28	2,786.19	4,559.50	3,039.67
Advertising	452.26	1,809.04	775.38	3,101.52	995.01	3,980.05
Truck Expense		1,209.95		2,148.11		2,112.88
Administrative and Selling	5,308.38	3,131.33	10,318.98	6,506.56	6,331.37	3,749.97

SOURCE: Estimates of the manager.

Costs of Wheat Sales and Sideline Sales per Dollar of Sales and Costs  
per Bushel of Wheat Handled

	Total Bu. Handled	Total Wheat Sales	Total Wheat Costs	Cost/Bu. Wheat Handled	Cost / \$ Wheat Sales	Total Side- line Sales	Total Side- line Costs	Cost / \$ Sideline Sales
1946	957,443	\$1,770,755.79	\$42,588.38	.04	.02	\$ 597,617.93	\$ 54,351.12	.09
1947	1,256,691	2,523,536.05	58,630.35	.05	.02	683,506.27	76,097.53	.11
1948	1,304,351	1,511,710.62	60,607.64	.05	.04	502,273.86	78,155.97	.16
Total	3,518,485	5,806,002.46	161,876.37			1,783,398.06	208,604.67	
3-Yr. Average	1,172,828.3	1,935,334.1	53,958.79	.05	.03	594,466.02	69,534.89	.12

SOURCE: Annual audits of the Association from 1946 through 1948.



Table 8. Percent that Individual Cost Items are of the Total Yearly  
Costs of the Farmers Cooperative Association,  
from 1946 through 1948

	:	:	:
	1946	1947	1948
Salaries and Wages	47.38	48.02	46.99
Depreciation	10.06	8.16	9.82
Insurance	5.73	4.02	5.94
Interest	10.55	9.63	10.29
Taxes	4.61	3.85	5.43
Utilities	2.88	2.56	2.19
Telegraph and Telephone	1.78	1.66	1.48
Repairs and Supplies	4.72	5.17	5.48
Advertising	2.33	2.88	3.59
Truck Expense	1.25	1.59	1.52
Administration and Selling	8.71	12.46	7.27

SOURCE: Annual audits of the Association from 1946 through 1948.

## STATION COST ANALYSIS

Introduction

The Hobart Cooperative Association consists of five stations. Three of the stations handle only wheat and are in operation only during the wheat harvest season. These stations are Babbs, Komalty, and Cold Springs. The remaining two stations, Hobart and Roosevelt, handle sidelines in addition to wheat and are open the entire year. These two stations are alike in the commodities handled and the services rendered.

Salaries and Wages

The salaries and wages cost is the greatest single cost item for the association. Salaries and wages constitute approximately 45 percent of the association's total annual expenditures. In each of the years studied the Hobart station had a larger salary and wages cost than did any of the other stations. Roosevelt, Komalty, Babbs and Cold Springs followed in order, in the amount of the total salary and wages cost accounted for by individual stations.

The salaries and wages cost at the Hobart station increased throughout the period studied. In 1946, the salary and wages cost was \$23,299.00 at the Hobart station (Table 9). This accounted for 49.43 percent of the Hobart station's total costs for 1946. In 1947, the salary cost increased to \$33,640.00 at Hobart as a result of the large increase in sales volume, accounting for 49.26 percent of the station's total costs. The salary cost increased to \$35,135.00 at Hobart in 1948, accounting for 50.31 percent of the station's total costs. This slight increase in the salary and wage cost

may be due to the generally higher wage level in 1948. Also, the volume of goods handled remain nearly as great as in 1947. The station's facilities had been expanded, which increased the minimum labor force needed by the station to operate, regardless of sales volume.

The salary and wages cost increased steadily for the period studied at the Roosevelt station as a result of a steadily increasing volume of business. In 1946, the salary and wages cost was \$14,270.00 accounting for 46.03 percent of the station's total 1946 costs (Table 9). In 1947, the salary cost increased to \$19,103.00 accounting for 46.89 percent of the station's total annual costs. The increase in salaries in 1947 is a result of the greatly increased amount of wheat handled, approximately 35,000 bushels more, and the addition of a complete line of sideline facilities. In 1948, the salary cost increased slightly to \$19,373.00. This accounted for 44.23 percent of the total annual costs. While the actual amount of salaries and wages increased in 1948 over 1947 the percentage of the station's total annual costs declined in 1948 under that of 1947. The reason for this decline in percentage is that the other station costs increased more than did salaries. The increase in salary cost in 1948, is a result of the station doing a greater volume of business. Approximately, 18,000 bushels more wheat were handled in 1948 than in 1947. Also, the general wage level was higher in 1948.

The Babbs station, which handles only wheat and is open for a short period, has a substantially smaller salary and wage cost than does the Hobart and Roosevelt stations. The salary cost in 1946 was \$3,157.00 which accounted for 42.70 percent of the station's annual cost. The salary cost increased to \$4,375 in 1947 accounting for 44.81 percent of the total expenses. This increase in cost is due to the much greater volume of wheat handled in 1947

than in 1946. In 1948, the salary cost declined to \$3,765.00 accounting for 41.84 percent of the station's total annual cost. This decline in 1948 came as the total volume of wheat handled at Babbs was increasing. One of the possible reasons for this salary decline in the presence of an increasing wheat volume may be that in 1948 many businesses were attempting to economize as sales volume fell off. Too, there may have been some economy in operations as the volume was increasing.

Komalty is one of the stations handling wheat only. The salary and wage cost at Komalty varied directly with the volume of wheat handled. In 1946, the salary cost amounted to \$3,919.00 constituting 44.31 percent of the station's total annual expenditure. In 1947, the salary cost increased to \$5,722.00 accounting for 47.21 percent of the total annual cost. This gain in salary cost in 1947 is due to the large increase in the volume of wheat handled in 1947. Also, the salary cost increased more than did the other cost items causing the salaries to account for a larger portion of the total costs than in 1946. In 1948, the salary cost declined to \$4,463.00, making up 44.90 percent of the annual costs at the station (Table 9). This drop in salary cost in 1948 is a result of a much smaller volume of wheat handled in 1948 allowing less extra labor costs.

The Cold Springs salary and wage cost increased substantially in each of the years studied. However, the percent of the total expenditure accounted for by salaries declined in each of the years studied. The salary cost amounted to \$1,283.00 in 1946, constituting 49.33 percent of the total annual cost. In 1947, the salary cost increased to \$1,890.00 making up 48.99 percent of the total costs. The salary cost further increased to \$2,464.00 in 1948, accounting for 39.94 percent of the total annual costs. The salary cost increase in each of the years may be attributed to the increase in volume of

wheat handled at the Cold Springs station. The wheat handled increased approximately 95 percent at Cold Springs in 1948 over the previous year. The cause of the decline in the percent of the total costs accounted for by salaries and wages has been the increasing amounts of the administrative and selling costs, interest, and insurance. These increased costs were necessary as volume increased. The rate of increase in the salary cost was not as great as the rate of increase in the station's total costs.

### Depreciation

The depreciation cost to the association is one of the largest costs to the organization. Depreciation combined with salaries and wages, and interest make up approximately two-thirds of the association's total annual expenses. The Hobart station had the largest depreciation cost followed by Roosevelt, Babbs, Komalty, and Cold Springs in that order.

The Hobart station had a depreciation of \$4,887.00 in 1946, which accounted for 10.37 percent of the total station expenses (Table 9). The depreciation expense increased to \$5,811.00 in 1947, accounting for 8.51 percent of the total annual costs. The actual amount of depreciation cost increased in 1947. However, the percent of the total costs decreased. The reason for this decrease in percentage was the much greater total costs incurred in 1947 over 1946. In 1948, depreciation amounted to \$7,237.00 accounting for 10.36 percent of the total costs. The increase in depreciation costs in each of the years was due to the increased amount of fixed assets added to the station.

Depreciation costs at the Roosevelt station averaged about one-half of the depreciation cost of the Hobart station. The cost of the fixed assets at Hobart was substantially above the similar cost at Roosevelt. In 1946, the depreciation cost amounted to \$2,623.00 at Roosevelt accounting for

3.47 percent of the total annual costs. Depreciation expense increased slightly to \$2,848.00 in 1947, accounting for 6.99 percent of the total cost. The actual depreciation cost increased while the percent of the total cost decreased. This was a result of the relatively greater expanded total annual costs. The depreciation cost increased in 1948 to \$3,390.00 accounting for 7.74 percent of the total costs. The increase in 1948 was a result of an increase in the total amount of the station's fixed assets, principally the new elevator.

The Babbs station has a greater depreciation cost percentage of the total annual expenses than any other station in the association. This is a result of a new elevator, which accounts for the major portion of the Babbs depreciation cost. In 1946, the depreciation expense was \$1,047.00 (Table 9). This accounted for 14.17 percent of the total costs. In 1947, the depreciation increased slightly to \$1,134.00 accounting for 12.13 percent of the total station costs. Depreciation amounted to \$1,186.00 in 1948, which accounted for 13.19 percent of the total station costs. The depreciation cost at the Babbs station remained relatively fixed during the three years. The cost of the fixed assets increased less than two hundred dollars during the period studied.

The Komalty station depreciation cost averaged approximately one hundred dollars less than the depreciation cost at the Babbs station. These stations are similar in size and operation. The elevator at the Komalty station is 1500 bushels smaller, this being the principle difference between the two stations. Depreciation cost \$1,044.00 in 1946 accounting for 11.80 percent of the Komalty station's total annual costs. Depreciation cost declined slightly in 1947 to \$995.00 making up 8.22 percent of the total costs. The decline in this year is a result of a smaller depreciation cost on the

elevator. The decline in the portion of the total costs accounted for by depreciation is due to the large increase in the station's total station costs in 1947. In 1948, as a result of the addition of new equipment the depreciation cost increased to \$1,019.00 accounting for 10.24 percent of the total annual costs.

The Cold Springs station is the newest in the organization and has expanded rapidly. These expansions have increased depreciation costs substantially. The depreciation cost in 1946 was \$155.00 making up 5.98 percent of the total cost. Depreciation in 1947 cost \$161.00 accounting for 4.18 percent of the total station costs. The following year, 1948, a new elevator and equipment was installed. As a result of this increase in fixed assets, the depreciation cost increased to \$793.00 accounting for 12.86 percent of the total costs.

#### Insurance

The insurance is composed of insurance on the buildings of the association, the stock therein, the equipment, employees, and trucks. The Hobart station has the greatest insurance cost, followed by Roosevelt, Komalty, Babbs, and Cold Springs. The Babbs and Komalty stations have approximately the same insurance costs. The Hobart and Roosevelt stations may also be discussed together.

Hobart's insurance cost in 1946 was \$2,292.00 amounting to 4.86 percent of the total station costs (Table 9). The insurance cost for the Roosevelt station was \$2,101.00 amounting to 6.79 percent of the total costs at the Roosevelt station in 1946. Insurance costs increased at the Hobart station in 1947 to \$3,297.00 which comprised 4.83 percent of the total station costs. The increase is a result of more complete coverage on the facilities

and more insurable facilities and commodities. The cost of insurance at the Roosevelt station declined to \$1,335.00 in 1947, which constitutes 3.28 percent of the total costs. Insurance costs increased for both stations in 1948. The insurance cost to the Hobart station amounted to \$4,326.00 which comprised 6.19 percent of the total costs. Insurance cost at the Roosevelt station was \$2,589.00 accounting for 5.91 percent of the station costs. The increase in 1948, is a result of several of the policies being renewed at that time. Also the amount of coverage was increased on some of the fixed assets, such as the elevators.

Insurance at the Babbs and Komalty stations was similar in amount. The Babbs station insurance cost in 1946 was \$506.00 which accounted for 6.85 percent of the total station costs. Insurance cost at the Komalty station during this period was \$518 accounting for 5.86 percent of the total costs. The difference in the percent figures expressed is a result of a larger amount of total station costs at Komalty. In 1947, insurance cost at the Babbs station amounted to \$326.00 comprising 3.35 percent of the total costs. Insurance cost to the Komalty station for this period was \$313.00 accounting for 2.62 percent of the total station costs. The decline is due to several of the insurance nearing expiration, thereby reducing the amount of prepaid insurance. In 1948, insurance costs increased for both stations. The Babbs station insurance cost amounted to \$426.00, which accounted for 4.74 percent of the total station costs (Table 9). Insurance cost at the Komalty station for this period amounted to \$436.00 accounting for 4.39 percent of the total station costs. The fluctuations in insurance costs at these stations is a result of variations in the amount of unexpired insurance policies. In 1948, new policies were purchased for the Babbs and Komalty stations, causing the unexpired amount of insurance to be greater than in

1947. Too, the amount of coverage was increased in 1948.

Insurance cost for the Cold Springs station was \$142.00 in 1946, accounting for 5.46 percent of the total station costs. In 1947, the amount of prepaid insurance declined to \$134.00 accounting for 3.49 percent of the total costs. Insurance coverage was greatly expanded in 1948 as a result of a new elevator and equipment, and new policies were purchased increasing the amount of prepaid insurance to \$456.00. The insurance cost accounted for 7.39 percent of the total station costs in 1948.

### Interest

The interest for the association is a calculated amount based on the association's fixed assets, inventories, and operating totals. The total interest cost was divided among the stations according to the gross earnings of the individual stations. Three types of interest make up the total annual interest cost. These interest types are facility, commodity and operating. The commodity interest cost is for a short period of time and is the smallest amount of the three types of loans. The facility interest cost is incurred in the construction of new buildings, and makes up the largest portion of the total interest cost.

The Hobart station has the largest interest cost in the association. This is a result of the larger amount of gross earnings at Hobart, which was the basis for station allocation. The interest cost at Hobart was \$3,682.00 in 1946, accounting for 7.82 percent of the total annual station costs (Table 9). The interest cost increased substantially in 1947 to \$5,129.00 accounting for 7.51 percent of the total expenses. This increase in 1947 is a result of a combination of greater permanent assets, operating capital, and inventory in the business. In 1948, the interest cost to the Hobart station further

increased to \$5,554.00 accounting for 7.95 percent of the station's total annual costs. This increase in 1948 is primarily a result of an increased amount of permanent assets.

The Roosevelt station's interest cost increased in each of the years studied. This is a result of an increasing amount of business being done at Roosevelt, necessitating greater permanent assets, inventory, and operating capital. The interest cost at Roosevelt in 1946 amounted to \$3,512.00 accounting for 11.34 percent of the total annual station costs. Interest cost increased to \$4,195.00 in 1947, accounting for 10.30 percent of the costs. In 1948, interest costs further increased to \$4,761 accounting for 10.87 percent of the annual station costs. The actual amount of interest cost was greater in 1947 and 1948 than in 1946. However, the percentage of the total station costs was greater in 1946. This is a result of a greater proportion of increased total station costs in 1947 and 1948 than increased interest costs.

Interest costs at the Babbs station are greater than any other cost except salary and wage costs. The interest amount increased in each of the years studied as a result of an increasing amount of gross earnings. In 1946, the interest cost amounted to \$1,146.00 accounting for 15.50 percent of the total annual station costs (Table 9). In 1947, interest cost increased to \$1,317.00 accounting for 13.50 percent of the total costs. While the interest amount paid increased in 1946, the percent that interest amounted to of the total station costs decreased. This is a result of a greater proportionate increase of station costs than interest cost. In 1948, the interest cost increased slightly to \$1,356.00 accounting for 15.08 percent of the total costs. The increase in percentage accounted for by interest is due to a substantial decline in the Babbs station total annual costs.

Interest cost at Komalty is greater than all other cost items except salaries and wages. Interest cost during 1946 amounted to \$1,505.00 accounting for 17.02 percent of the total station costs. Interest cost increased in 1947 to \$1,814.00 as a result of increased gross earnings caused by a large sales volume, accounting for 14.97 percent of the total costs. This decline in percentage amount is a result of the total costs increasing approximately ten times greater than interest cost. In 1948, the interest cost declined to \$1,649.00 due to a much smaller volume of wheat handled, which lowered the gross earnings, accounting for 16.58 percent of the total station costs. This increase in percentage accounted for by interest is a result of a greater proportionate decline in total station costs than decline in interest cost.

Interest cost increased substantially in each of the years studied at the Cold Spring station. The total costs increased and the gross earnings increased in each of the years studied. The sales operations have increased a greater percent than any other station. In 1946, interest cost amounted to \$371.00 accounting for 14.30 percent of the total station costs. Interest cost increased in 1947 to \$514.00 constituting 13.34 percent of the total annual costs (Table 9). In 1948, interest cost amounted to \$959.00 accounting for 15.55 percent of the total costs. As the volume of business increased substantially in 1948, new facilities had to be added and more operating capital was required. These added costs were responsible for the increased interest costs.

#### Taxes

Taxes are composed of corporation license, social security, unemployment, ad valorem, use, and excise taxes. Of these various taxes the ad valorem, or property, is the major tax. The Hobart station has the greatest

tax cost followed by Roosevelt, Babbs, Komalty, and Cold Springs. The tax cost increased each year for each station during the period studied. This is a result of expanded physical facilities primarily.

Taxes at the Hobart station amounted to \$2,705.00 in 1946, constituting 5.74 percent of the total station costs (Table 9). Taxes increased to \$3,248.00 in 1947, accounting for 4.76 percent of the total costs. The decrease in percentage of the total costs is a result of a much greater proportionate increase in total costs than tax cost in 1947. Taxes increased to \$3,927.00 in 1948, accounting for 5.62 percent of the total costs. The increase in tax cost each year at the Hobart station is due to increased permanent assets, which caused a greater amount of ad valorem taxes.

The tax cost at the Roosevelt station was substantially below those of the Hobart station. The tax cost at Roosevelt was \$1,016.00 in 1946, constituting 3.28 percent of the total station costs. The taxes increased slightly to \$1,052.00 in 1947, accounting for 2.57 percent of the total costs. In 1948, the tax cost increased to \$2,307.00 for Roosevelt, accounting for 5.27 percent of the total station costs. The tax increase in 1948 is due to the new elevator, which was constructed in 1947, appearing on the 1948 tax roll.

Taxes at the Babbs, Komalty, and Cold Springs stations are not as great in proportion as taxes at the two larger stations. The amount of permanent assets at these stations is much smaller, and too, the workers taxes will not be as great. The tax cost at the Babbs station was \$323.00 in 1946, accounting for 4.38 percent of the total costs. The tax cost for the Komalty station was \$351.00 accounting for 3.98 percent of the total costs in 1946. Tax costs for both stations increased slightly in 1947. Babbs' tax cost

amounted to \$389.00 accounting for 3.98 percent of the total costs, while Komalty tax costs increased to \$421.00 constituting 3.48 percent of the total costs. Tax cost increased substantially for both stations in 1948. This tax increase is due almost entirely to an increased amount of ad valorem tax. The tax cost to the Babbs station increased to \$629.00 accounting for 7 percent of the total annual station costs (Table 9). Taxes at the Komalty station increased to \$541.00 constituting 5.44 percent of the total costs.

Taxes at the Cold Springs Station are a relatively small cost item. The permanent assets amount is small and operations are not so large. Taxes at the Cold Springs station were \$70.00 in 1946, constituting 2.71 percent of the total cost. Taxes amounted to \$79.00 in 1947, accounting for 2.07 percent of the total annual station costs. Tax cost increased in 1948 to \$131.00 accounting for 2.13 percent of the total annual costs. The tax increase in 1948 is due to an increased ad valorem tax on the new elevator and equipment, which was constructed the previous year.

#### Utilities

The utilities cost item is composed of water, lights, and power. The power cost makes up the greatest portion of the utilities cost. Much of the grinding and mixing equipment is operated by electricity. The Roosevelt station utilizes electricity extensively and bears the major portion of the total utility cost.

The utilities cost at Hobart tended to change with the volume of business done. Utilities cost \$702.00 in 1946, accounting for 1.49 percent of the total costs (Table 9). With an increase in business volume in 1947, the utilities cost raised to \$864.00 constituting 1.27 percent of the total costs. Utilities cost declined in 1948 to \$761.00 making up 1.09 percent of the total

annual station costs. The amount of utilities used fluctuated relatively little as compared to the station's sales volume. The amount of electricity used in the feed grinding and mixing accounted for the largest portion of the variation. Most of the utilities cost at the Hobart station is relatively constant regardless of sales volume.

Utilities cost is a major cost item at the Roosevelt station. Variations in the utilities cost came with the variations in volume of feed made, and volume of wheat handled. In 1946, utilities cost at Roosevelt was \$1,189.00 accounting for 5.37 percent of the total annual costs. The total amount paid of utilities increased to \$2,239.00 in 1947, accounting for 5.50 percent of the total costs. The increase in utilities cost is primarily a result of the greatly increased volume of wheat, which the station handled in 1947. In 1948, the utilities cost declined to \$1,973.00, accounting for 4.52 percent of the total costs. The decline in utilities cost is a result of a substantial drop in all sideline activities and sales, particularly grinding and mixing of feed.

The utilities cost at the Babbs, Komalty, and Cold Springs stations is the same respectively for each of the years. The utilities cost for these stations was \$92.00 in 1946, \$113.00 in 1947, and \$101.00 in 1948. Utilities accounted for 1.25 percent of Babbs total costs in 1946, 1.16 percent in 1947, and 1.13 percent in 1948. Utilities cost accounted for 1.04 percent of the Komalty total costs in 1946, .94 percent in 1947, and 1.02 percent in 1948. Utilities cost at the Cold Springs station accounted for 3.55 percent of the total costs in 1946, 2.95 percent in 1947, and 1.64 percent in 1948 (Table 9). The cause of the percentage decline at Cold Springs is due to the total station costs increasing in each of the years studied, while the utilities cost remained relatively stable. The slight increase in utilities cost in 1947,

is a result of the increase in the volume of wheat handled. The decrease in 1948 is caused by a decline in the volume of wheat handled. However, the utility cost at these three wheat handling stations tends to be relatively more fixed than at the two large stations. The effect of fluctuations in volume of wheat handled will be less on utilities at these small stations than at the two large stations.

#### Telephone and Telegraph

The telephone and telegraph expense is incurred mainly in the wheat selling operations. The Hobart station has the largest telephone and telegraph cost amount. The Babbs, Komalty, and Cold Springs stations were allocated the same amount of telephone and telegraph cost.

The Hobart station incurred a telephone and telegraph expense of \$1,307.00 in 1946 (Table 9). This amount accounted for 2.77 percent of the station's total costs in 1946. Due to a larger wheat crop in the following year, involving more selling effort, the telephone and telegraph cost increased to \$1,708.00, which accounted for 2.50 percent of the total costs. In 1948, the telephone and telegraph cost at the Hobart station declined to \$1,523 accounting for 2.21 percent of the total costs. The telephone and telegraph cost tends to fluctuate directly with the amount of wheat sales. Too, the Hobart station transacts most of the wheat selling functions, thereby incurring a larger telephone and telegraph cost than the other stations.

The telephone and telegraph cost item at the Roosevelt, Babbs, Komalty, and Cold Springs stations is of relatively minor importance. Telephone and telegraph expense at the Roosevelt station amounted to \$326.00 in 1946, composing 1.06 percent of the total station costs. This cost item increased to \$427.00 in 1947, due to the larger volume of wheat handled and increased sideline activities, accounting for 1.05 percent of the total costs.

Telephone and telegraph declined slightly to \$411.00 in 1948, accounting for .94 percent of the total costs. The telephone and telegraph cost for the Babbs, Komalty, and Cold Springs stations respectively was \$31.00 in 1946, \$32.00 in 1947 and \$34.00 in 1948. These telephone and telegraph costs accounted for .42 percent of the Babbs station costs in 1946, .34 percent in 1947, and .38 percent of the total costs in 1948. The telephone and telegraph cost accounted for .36 percent of the Komalty total costs in 1946, .27 percent in 1947, and .34 percent in 1948. The Cold Springs station telephone and telegraph cost accounted for 1.20 percent of the total costs in 1946, .85 percent in 1947, and .56 percent in 1948. The slightly larger percent amount accounted for by telephone and telegraph costs at the Cold Springs station is due to the smaller total station costs at Cold Springs as compared to the Babbs and Komalty stations. The actual amount of telephone and telegraph cost was the same at each of these three stations for the period studied.

#### Repairs and Supplies

Repairs and supplies is concerned principally with the elevator repairs and supplies used. The cost incurred at the Hobart and Roosevelt stations is greater than the three smaller stations. This is a result of the Hobart and Roosevelt stations being in operation the year round and doing a much larger business, whereas, the Babbs, Komalty, and Cold Springs stations operate only during the wheat season.

The repair and supply cost increased in each of the years studied at the Hobart station. This is a result of the larger volume of wheat handled in 1947, and increased sideline facilities in 1948, necessitating more up-keep and repairs. Repairs and supply cost was \$2,466.00 in 1946, accounting for 5.23 percent of the total station costs (Table 9). In 1947, the cost

of repairs and supplies increased to \$3,761.00 composing 5.51 percent of the total annual costs. The cost of repairs and supplies raised to \$4,103.00 accounting for 5.83 percent of the total station costs in 1948. This increase is a result of the greater purchase price of repairs and supplies in 1948.

Repair and supply costs increased at the Roosevelt station in each of the years studied. Factors causing the steady increase in repair and supply cost were the steady increase in the volume of wheat handled, and greatly expanded sideline facilities. The cost of repairs and supplies was \$1,648.00 in 1946, accounting for 5.32 percent of the total station costs. This cost item increased in 1947 to \$2,514.00 composing 6.17 percent of the annual station costs. As the volume of wheat handled increased and sideline facilities were increased in 1948, the repair and supply cost increased to \$2,735.00 accounting for 6.25 percent of the total costs.

The Babbs, Komalty, and Cold Springs stations were allocated the same amount of repair and supply cost for each of the years studied. These stations incurred a repair and supply cost of \$150.00 in 1946, \$229.00 in 1947, and \$253.00 in 1948. These cost amounts accounted for 2.04 percent of the Babbs station's total costs in 1946, 2.35 percent in 1947, and 2.80 percent in 1948. The repair and supply cost composed 1.70 percent of the Komalty station's total costs in 1946, 1.90 percent in 1947, and 2.56 percent in 1948. The repair and supply cost amount was the same at the Cold Springs station as at the Babbs and Komalty stations. However, the percentage that repairs and supply accounted for of the total costs was much greater at the Cold Springs station. In 1946, the repairs and supplies accounted for 5.79 percent of the total station costs, increasing to 5.96 percent in 1947, declining to 4.11 percent in 1948 (Table 9). The greater percentage figure at the

Cold Springs station is due to the much smaller amount of total expenses incurred as compared to the Babbs and Komalty stations. Factors contributing toward the steady increase in repairs and supply costs were an increasing volume of wheat handled at the station, necessitating more repairs and supplies and an increasing price structure on the repairs and supplies purchased.

#### Advertising

The association carries on an extensive schedule of advertising which is unusual for this type of organization. An institutional method of advertising is followed, explaining the cooperative method and purpose to both members and non-members alike. Also, the association has an enlightened policy toward membership relations. A circular, "The Cooperative Consumer," is sent four or five times a year to each member. Post cards are also sent to the members. As evidence of the value of this type of membership policies, of the 1542 members, approximately 80 percent did some amount of business with the association during 1948.

Advertising cost at the Hobart station increased in each of the years studied. In 1946, the advertising cost was \$815.00 accounting for 1.73 percent of the total station costs (Table 9). Advertising cost increased substantially in 1947, amounting to \$1,532.00, which composed 2.24 percent of the total costs. Advertising costs were further increased for the Hobart station the following year. In 1948, advertising cost was \$1,990.00 accounting for 2.85 percent of the total annual station costs. The increase in advertising in each year is due to the increasing importance attached to it by both management and member.

The Roosevelt station also incurred an increasing advertising cost for the period studied. In 1946, the advertising cost was \$777.00 which composed 2.52 percent of the total station costs. In 1947, the advertising cost

amounted to \$1,253.00 which accounted for 3.03 percent of the total costs. In 1948, as the sideline facilities were completed to be identical with those of the Hobart station, the advertising cost increased to \$1,990.00 accounting for 4.54 percent of the total costs. As sideline facilities expanded to equal those of the Hobart station, advertising was increased comparable to that of the Hobart station.

Advertising costs at the three wheat handling stations followed the sales volume of the stations. Babbs advertising cost in 1946 was \$253.00, which composed 3.43 percent of the total costs. As the sales volume increased in 1947, advertising cost increased to \$393.00 accounting for 4.03 percent of the annual costs. With a drop in sales volume the advertising cost declined to \$331.00 in 1948, accounting for 3.69 percent of the Babbs station's total costs.

Cost of advertising at the Komalty station amounted to \$333.00 in 1946, accounting for 3.77 percent of the total station costs (Table 9). Advertising cost increased substantially in 1947 as the sales volume increased. Advertising cost was \$542.00 in 1947, accounting for 4.47 percent of the total costs. Following the sales decline at Komalty in 1948, the advertising cost declined to \$331.00 which composed 3.33 percent of the total costs.

The Cold Springs station was the only station showing a continuous increase in sales volume. The advertising cost followed the pattern of sales volume, increasing approximately four times in amount during the period studied. Advertising cost amounted to \$82.00 in 1946, which composed 3.16 percent of the total station costs. In 1947, advertising costs increased to \$153.00, accounting for 3.99 percent of the total costs. Advertising costs more than doubled in 1948 amounting to \$311.00 which accounted for 5.37 percent of the total annual station costs.

### Truck Expense

Truck expense is attributable to the sideline operations. Due to this, only the Hobart and Roosevelt stations incur truck expense. The truck expense was divided half and half between the two stations as the sideline endeavors are the same at both places.

For the year 1946, the truck expense amounted to \$604.00 at both Hobart and Roosevelt (Table 9). Truck expense increased to \$1,074.00 in 1947 as the sideline sales volume greatly increased. In 1948, the cost of truck expense declined slightly to \$1,056.00 for Hobart and Roosevelt. Truck expense accounted for 1.28 percent of the Hobart station's total annual costs in 1946, 1.57 percent in 1947, declining slightly to 1.52 percent in 1948. Truck expense accounted for 1.95 percent of the Roosevelt station's total annual costs in 1946, 2.64 percent in 1947, and 2.41 percent in 1948. The decline in 1948 is a result of a smaller side line sales volume, reducing the truck expenses incurred.

### Administrative and Selling

The administrative and selling cost item is composed of minor cost items that do not occur regularly. These cost items are: donations, director's fees, loss on accounts charged off, office expense, produce expense, legal and audit, travel and entertainment, dues and subscriptions, rent paid, annual meeting expense, bank-exchange, and miscellaneous cost items.

The Hobart station accounted for the greatest portion of the administrative and selling costs. The Hobart station has the largest sales volume, thereby incurring greater selling costs. The amount of administrative and selling cost in 1946 was \$4,368.00 composing 9.28 percent of the total annual station costs (Table 9). In 1947, with a large increase in sales

volume, the administrative and selling costs increased to \$8,222.00 accounting for 12.04 percent of the total costs. The administrative and selling cost declined to \$4,203 in 1948, accounting for 6.02 percent of the total annual costs. The decline in 1948 is a result of a smaller sales volume made at the Hobart station.

Administrative and selling costs at the Roosevelt station amounted to approximately one-half the amount at the Hobart station. Here too, the administrative and selling costs closely following the volume of sales made, increasing and decreasing with the amount of sales. In 1946, the administrative and selling cost was \$2,266.00 accounting for 7.32 percent of the total station costs. The cost increased to \$4,695.00 in 1947, which composed 11.53 percent of the total station costs. This increased cost is a result of a greater sales volume at the Roosevelt station in 1947. Administrative and sales cost declined to \$3,203 in 1948, accounting for 7.32 percent of the total station costs. The decline is due to a smaller sales volume, which tends to decrease selling costs.

The Babbs station has a much smaller amount of administrative and selling costs than the Hobart and Roosevelt stations. Here too, the volume of sales tended to regulate the amount of administrative and selling costs. In 1946, the administrative and selling cost was \$634.00 accounting for 9.26 percent of the total annual station costs. This cost increased in 1947 to \$1,401 which comprised 14.35 percent of the total costs (Table 9). With a decline in sales volume in 1948, the administrative and selling cost dropped to \$913.00 which accounted for 10.15 percent of the total station costs.

The pattern of administrative and selling costs at the Komalty station was similar to that of the Hobart, Roosevelt, and Babbs stations. In 1946, the administrative and selling costs were \$398.00 accounting for 10.16 percent

of the total station costs. The cost increased substantially because of a greatly increased sales volume, to \$1,929.00 in 1947, which comprised 15.92 percent of the total costs. With a decline in sales volume in 1948, the administrative and selling cost declined to \$1,115.00 accounting for 11.20 percent of the total annual costs.

The administrative and selling costs increased in each of the years studied at the Cold Springs station. Too, the Cold Springs station was the only station which increased sales volume in each of the years studied. In 1946, the administrative and selling costs were \$221.00, accounting for 8.52 percent of the total station costs. In 1947, this cost increased to \$547.00 which comprised 14.18 percent of the station costs. With an increase in sales in 1948, the administrative and selling costs increased to \$644.00 which accounted for 10.45 percent of the total annual costs. While the amount of administrative and selling costs increased, the percentage it accounted for of the total station costs decreased. This is a result of a greater proportionate increase in the total station costs.

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## SEASONAL COSTS

The seasonal costs represent the monthly expenditures made by the association. The individual monthly expense amounts are an arithmetic average of the similar monthly expense amounts for 1946, 1947, and 1948. The seasonal pattern of expenses was similar in each of the three years. The seasonal pattern of the association's total expenditures is generally followed by most of the individual expense items. This is a result of the association having fairly regularly recurring times of greater activity and periods of lesser activity with many of the cost items being variable with business activity.

Total seasonal costs of the association reached their maximum in the month of June and their minimum amount in November (Figure 1). The maximum peak of the association's expenditures, which occur in June, is a result of the wheat harvest reaching its maximum effort in June. The wheat harvest increases the amount of many of the cost items. The low point of the association's total costs occur in November. Most of the fall planting operations have been completed in November and farming operations are reduced to a minimum. In the month of May the total expenses began to increase in preparation for the wheat harvest. After the peak of expenses in June, the association's total expenses declined rapidly in July. July was the third highest month for the total expenses. This is due to the wheat handling expenses for turning and shipping. The total expenses declined substantially in August. Most farming operations were limited in August. The association's total costs increased slightly in both September and October as

farming operations picked up in preparation for fall planting. After the low point in the total costs in November, the association's total costs increased in December and January. The association's costs declined in both February and March as farming operations were curtailed. Costs began increasing in April as cotton planting stimulated farm operations giving more business to the association, thereby increasing costs.

Salaries and wages are the largest cost item of the association, constituting slightly less than one-half of the total costs (Figure 1). Too, the seasonal pattern of salaries and wages closely followed the seasonal pattern of the association's total costs. The maximum peak of the salary and wage cost occurred in the month of June. The wheat harvest volume was greatest in June necessitating considerable extra harvest labor. Salaries and wages declined from the June peak of \$7,276.00 to \$5,319.00 in July. The wheat department was still incurring substantial costs, particularly salaries and wages, in the handling of the wheat. Salaries and wages declined in August to \$4,172.00. In September salaries increased slightly and from that period on, salaries and wages declined in amount each succeeding month through February. In February the salaries and wages cost reached the lowest amount for the year amounting to \$3,879.00. The volume of business is less during the winter months allowing the association to function with less extra labor. Salaries increased slightly in April with the preparation for the wheat harvest and general increase in business activity. In the month of May the cost of salaries and wages increased substantially with the beginning of wheat harvest. Extra labor was hired to handle the wheat volume.

The depreciation, interest, and tax costs were calculated to be the same amount each month for their respective costs. The depreciation cost was \$955.21 for each month (Figure 2). Interest cost amounted to \$1,040.92 for

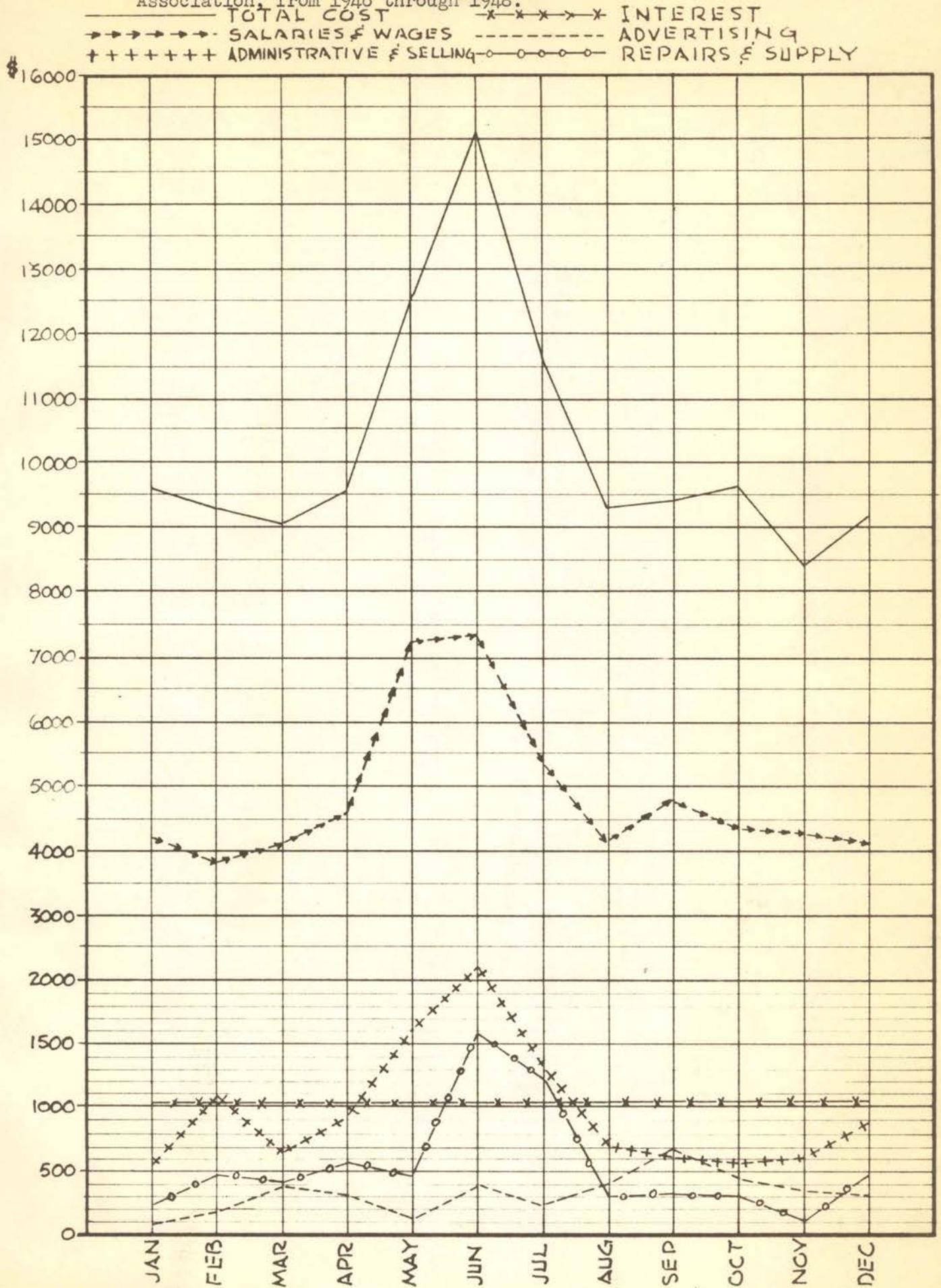
each month, while the tax cost to the association was \$477.72 each month. These costs are paid but once each year. The dividing of these costs into equal monthly amounts was assumed to be the most equitable method by which to allocate these costs. They are illustrated by the straight lines on the graphs.

The utilities cost, administrative and selling costs, repairs and supplies, and truck expense seasonal pattern followed the seasonal pattern of the total costs. These cost items reached their high peak in June (Figure 2). These costs are all quite variable, dependent on the volume of business. With the greatest volume of business occurring with the wheat harvest in June, these costs reached their peak in June. These costs except utilities reached their low point in November. With the sales volume being approximately six times as great in June as in November, it is understandable that these costs would be much less in November. The utility's cost was at its low point in May. The elevators were cleaned out and relatively little wheat handling was being done, thereby allowing the utility's cost to be low. The utility's cost reached its second greatest peak in April as the elevators were being cleared out for the spring wheat harvest.

Advertising costs reached their maximum amount in September after which they declined steadily to the low point in January. After January, advertising costs increased until September. Most of the advertising was done through the spring and summer months when business volume is greatest. Insurance costs were quite erratic. This is caused by the insurance being paid whenever it falls due during the year. The maximum peak of insurance costs occurred in January, declining to a low in September. Insurance costs reached a second high peak in October.

The percentage that each individual cost item accounted for of its total

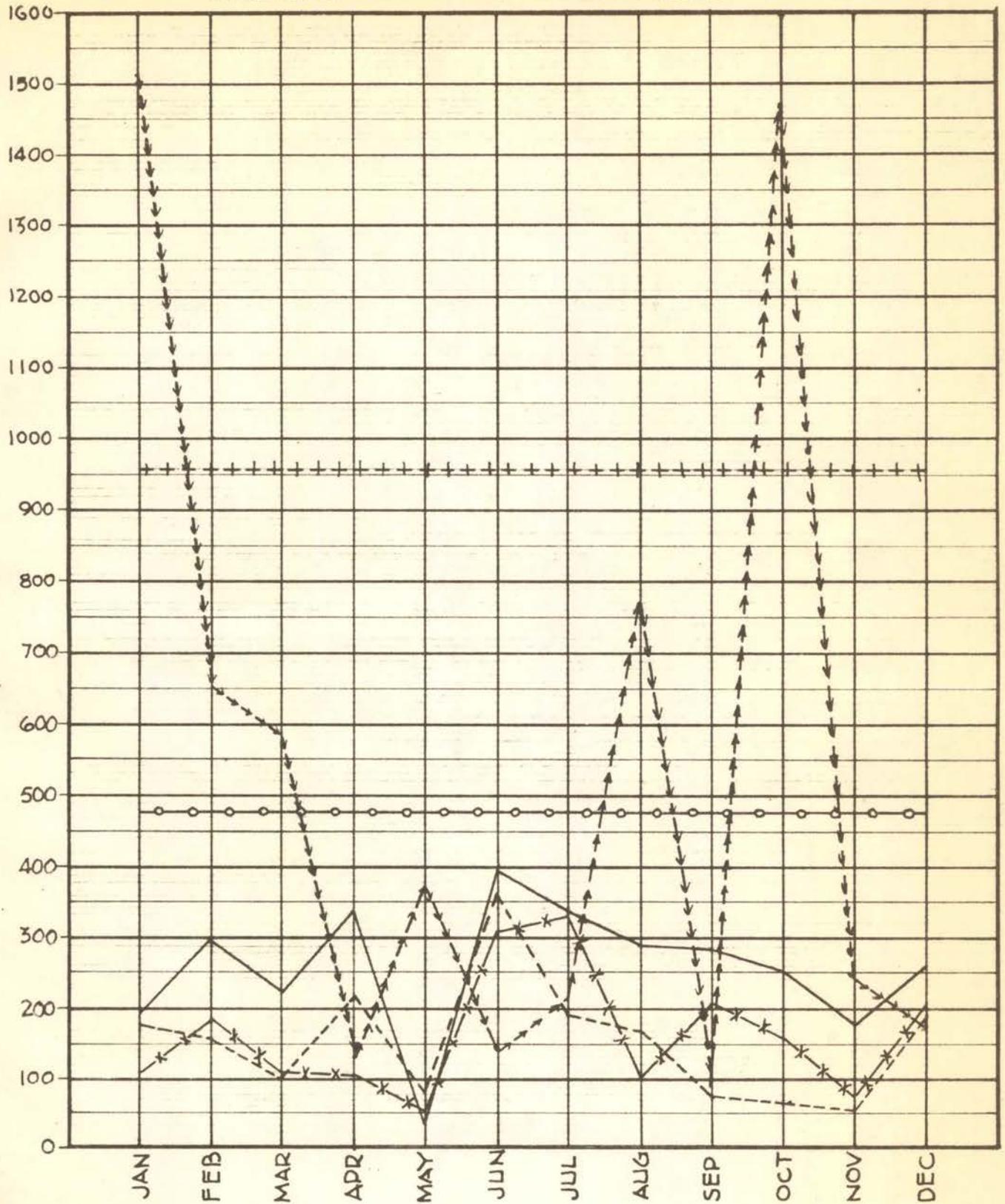
Figure 1. Average Seasonal Variation of Expenses for the Farmers Cooperative Association, from 1946 through 1948.



Source: Table 13

Figure 2. Average Seasonal Variation of Expenses for the Farmers Cooperative Association, from 1946 through 1948.

+++++ DEPRECIATION      -x-x-x-x TELEPHONE & TELEGRAPH  
 ->->->-> INSURANCE & BONDS      - - - - TRUCK EXPENSE  
 \_\_\_\_\_ UTILITIES      o-o-o-o-o TAXES



Source: Table 13

monthly costs presents a different relationship of the costs. (Figure 3). Each individual cost is compared with the other costs incurred in that particular month. Actually a particular cost item may be of a greater amount in one month over the preceding month, yet the larger cost item may account for a smaller percent of its particular monthly costs. The percent of each cost item is dependent upon the size of the other cost items for that month.

Salaries and wages accounted for 47.47 percent of the association's total costs for the period studied. They accounted for the greatest portion of monthly expenses in May. (Figure 3). In this month, the salaries and wages were increasing substantially for the harvest season. Too, they were increasing at a greater rate than were the other cost items. Salaries and wages accounted for 57.38 percent of the total monthly costs in May. Salaries and wages declined in the percent of the total monthly costs in June to 47.79 percent. However, the actual amount of salaries paid in June was slightly greater than those paid in May. This decline in percent of salaries in June is a result of the other cost items increasing substantially, thereby increasing the total monthly cost at a greater rate than the salaries increased. Salaries reached their third greatest percentage peak in September accounting for 50.62 percent of the total monthly costs. Fall planting was underway giving more sales volume to the association. The second high peak for salaries and wages came in November. This is a result of the other cost items declining at a faster rate than did salaries. The actual amount of salaries was considerably greater in September than in November. The low point for salaries came in February when salaries accounted for 41.63 percent of the monthly costs. Business volume was low as the farming operations were not active in February. No extra labor was needed at this time.

Depreciation, taxes, and interest were calculated as \$955.21, \$477.72, and \$1,040.92 respectively for each of the twelve months. However, the percent each of these cost items accounted for in the months varied substantially. For example, the actual amount of depreciation cost paid was \$955.21 each month, but the percent of the total monthly costs that depreciation accounted for fluctuated from a low of 6.24 percent in June to a peak of 11.27 percent in November. This fluctuation in percent is a result of the individual cost item being held constant while the total monthly costs are fluctuating. The same situation is also true for taxes and interest.

Administrative and selling and repairs and supplies followed the sales pattern of the association. Both of these cost items reached the peak in the percent of the total monthly costs in June. Also, the actual amount paid was greatest in June. (Figure 3). The wheat harvest increased these costs, which are variable with the volume of business. These cost items declined until administrative and selling reached its low point in October while repairs and supplies reached their low in November. At this time the business volume had declined with the coming of winter and the need for repairs and supplies had declined.

Insurance and bonds fluctuated considerably. The high peak of insurance and bonds was in January while the low point came in June. In January insurance and bonds accounted for 16.01 percent of the total costs for that month, too, the actual amount paid was greatest during January. In June insurance and bonds accounted for .98 percent of the total monthly costs. The amount paid was much less in June and, too, the total costs were much greater. Both of these factors tended to reduce the percent the individual cost item accounted for of the total costs. Insurance and bonds were paid whenever

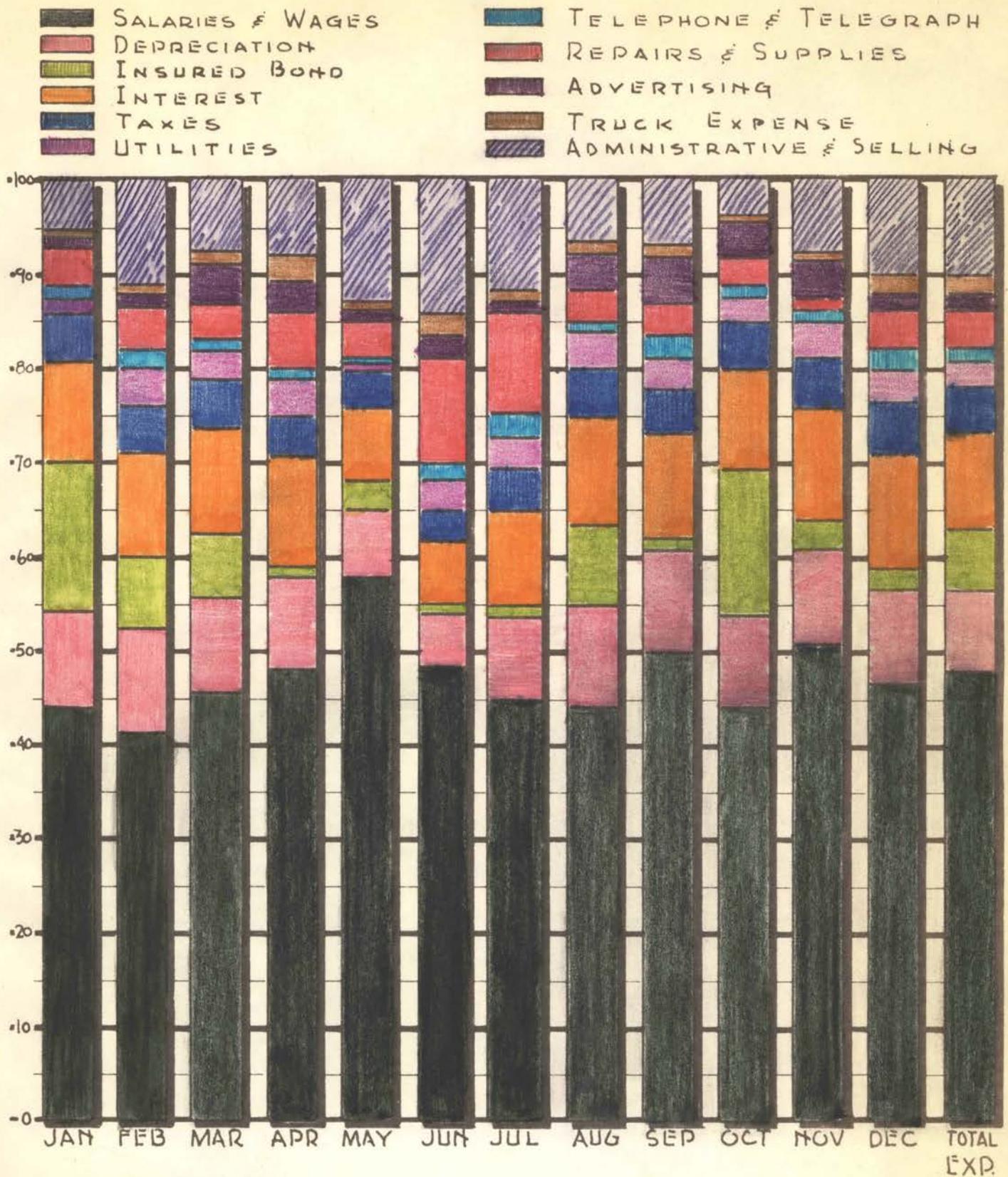
they came due, explaining the erratic fluctuation of this cost item.

Utilities and telephone and telegraph remained fairly constant for the period studied. The actual amounts paid were greatest during June and July. However, the percent was less for utilities these months as the total costs for June and July increased at a faster rate than did utilities. Utilities reached its greatest percentage peak in April accounting for 3.49 percent of the total monthly costs. The wheat was being moved out of the elevators in April in preparation for the summer harvest. The low point for utilities was in May when utilities accounted for .25 percent of the total costs. The elevators were not in use in May allowing the electricity cost to be very low. The high peak for telephone and telegraph came in July. This is a result of the selling operations involved in the wheat department. Telephone and telegraph cost accounted for 2.83 percent of the total monthly costs in July. (Figure 3). The low point for telephone and telegraph came in May accounting for .40 percent of the total costs. There was relatively little telephone and telegraph cost incurred in the wheat department in May as the wheat had been moved out.

For the period studied the salaries and wages, depreciation and interest costs accounted for 66.36 percent of the total costs. The repairs and supplies, and administrative and selling costs tended to vary with the volume of the association's business. Increasing in the harvest season and declining in the winter season. Insurance and bonds were quite erratic as a result of the payment of the insurance whenever the policies came due. The smaller cost items, taxes, advertising, truck expense remained fairly constant for the period studied. Advertising and truck expense increased slightly in the spring and summer months and declined during the winter

season. The administrative and selling cost fluctuated with the sales volume of the association. The general trend was an increase in the spring with the maximum peak being reached in May and June as a result of wheat harvest; the low point coming in October and January when the selling season was at a low point.

Figure 3. Average Monthly Percentage Variation of the Individual Expenses of the Total Monthly Expenses.



Source: Table 13

## FIXED AND VARIABLE COSTS

The cost items of the association were divided into fixed costs and variable costs. The costs which are incurred without regard to business volume are regarded as fixed. Those costs which fluctuate as a result of changing amounts of business volume are variable costs. "Fixed costs are those which are stationary for a particular production period of time, while variable costs are not, for the same period. Fixed costs are independent of output within this production period, while variable costs are a function of output although not necessarily proportional to it."<sup>1</sup>

The fixed and variable amount of each cost item was arrived at by estimates based upon the nature of each cost item over one year's operation. For example, the manager's salary was deemed more fixed than was the salary of an extra harvest laborer. The difficulty in replacing a competent manager is greater than in replacing extra hired labor. However, over a long period of time, all costs would be variable, while the reverse would be true for a short period of time. In the determination of the amount of fixity in the total costs of the association, each individual cost item was evaluated as to the position it held in regard to the business operations, its flexibility during the year, and the effect its absence would have on the business volume. Estimates of the amount of fixity were made to the nearest five percent. Department costs were considered as to the ability

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<sup>1</sup> Adlowe L. Larson, "The Fixity Gradient: A Tool for Fixed and Variable Cost Analysis," Journal of Farm Economics, Vol. XXVIII, No. 3, August, 1926.

to substitute or omit the individual costs, the degree of responsibility the cost item might have to the total operations of the department, and the length of time which the cost item ran. The fixity of costs to the stations were estimates based on the type of business operations done at the station, the effect of the individual cost item on the business of the station, flexibility of the cost item and the period of time over which it occurred. The division of costs into fixed and variable is an estimate based on the nature of the cost in a year's business operation. It is assumed that the organization will continue in existence at approximately the same level of operation.

#### Fixed and Variable Costs by Departments

The fixed cost amount for the wheat department was \$35,042.71, which accounted for 57.32 percent of the total costs incurred in the operation of the wheat department. (Table 10). Variable wheat costs were \$25,564.92, which comprised 42.18 percent of the total wheat costs. A greater portion of the wheat costs were fixed than were variable. This is a result of the depreciation, insurance, interest, and taxes being more fixed than variable. These cost items were caused principally by the wheat elevators, and are not influenced by fluctuations in sales volume. The amount of variable cost per bushel of wheat handled was 1.9 cents. This was calculated by dividing the amount of variable wheat cost by the total bushels of wheat handled by the association.

The fixed cost amount for the sideline department was \$43,388.51, which accounted for 55.52 percent of the total sideline expenses. The variable sideline costs were \$34,767.46, which accounted for 44.43 percent of the total sideline costs. The principal cost items which caused more of the sideline costs to be fixed than variable were depreciation, insurance, and advertising. The variable cost per dollar of sideline sale was 6.9 cents.

This was calculated by dividing the sideline variable costs by the sideline sales.

The variable cost of a dollar of sideline sale was five cents greater than the variable cost per bushel of wheat handled. This is a result of the sideline department incurring greater total costs, and a greater percentage of variable costs than does the wheat department. Too, the amount of sideline sales is approximately one-half as great as the number of bushels of wheat handled. The nature of the sideline costs causes them to be more variable than the wheat costs. The interest on commodities, telephone and telegraph, repairs and supplies, and truck expense are all quite variable with the amount of sideline sales.

The fixed cost amount for the departments would tend to remain constant, with small fluctuations in the volume of wheat handled and sideline sales. The variable costs would fluctuate up or down to compensate for changes in volume and sales. If the volume of wheat handled or sideline sales increased substantially, causing new facilities to be purchased, the fixed cost would increase. These cost divisions are approximations only. However, for small fluctuations in business, the variable cost will go up or down with the business volume, as the fixed cost tends to remain constant.

#### Fixed and Variable Costs by Stations

The Hobart and Roosevelt stations had more of their costs variable than fixed. The amount of total costs that was fixed at the Hobart station was \$34,848.30, which amounted to 49.90 percent of the total costs. (Table 11). The amount of the total costs which were fixed at the Roosevelt station was \$21,025.75, which accounted for 48.00 percent of the total costs. The three stations which have only a wheat department have a greater amount of their total costs fixed than variable. The Babbs station had 56.72 percent of its

costs fixed, the Komalty and Cold Springs stations had 54.95 and 53.79 percent respectively fixed. The reason a higher percent of the costs are fixed at the three small stations, than at the two large stations, is that the sideline costs, which make up the major portion of the Hobart and Roosevelt costs, have a tendency to be more variable than the wheat costs. This causes the amount of variable costs to be greater than the fixed costs at the two stations which have sideline departments.

The amount of variable cost per dollar of sale at the Hobart station was 4.5 cents in 1948. This is the greatest variable cost per dollar of sale of any of the stations. The reason the variable cost is greater at the Hobart station is that virtually all cost items are greater, particularly salaries. The amount of variable cost per dollar of sale at the Roosevelt station is 3.4 cents. The Roosevelt station has the same physical facilities but does not have as great a sales volume as does Hobart. Due to this smaller sales volume, the cost items are less than the similar cost items at Hobart. The variable cost per dollar of sale at the Babbs, Komalty, and Cold Springs stations was similar. The variable cost for Babbs was 2.0 cents, for Komalty 1.9 cents, and for Cold Springs 2.1 cents per dollar of sales. The cause of the smaller variable cost per dollar of sale at Komalty is the larger volume of sale which they have as compared to Babbs and Cold Springs. The cause of the greater variable cost per dollar of sale at Cold Springs is due to the smaller volume of sales which they have as compared to Babbs and Komalty.

#### Fixed and Variable Costs for the Association

Fixed costs to the association in 1948 were \$30,387.80. This fixed amount accounted for 57.93 percent of the association's total expenses. (Table 12). The variable expense was \$53,375.80. The variable cost amount was 42.07 percent of the association's costs in 1948. The principal cost items

which caused the association to have a greater amount of fixed costs than variable costs were the manager's salary, interest on facilities, ad valorem taxes, and depreciation, all of which were 100 percent fixed.

The amount of variable cost per dollar of sale for the association in 1943 was 2.9 cents. This was calculated by dividing the amount of variable cost by the total sales of the association. To calculate the changes in the total costs of the association caused by fluctuations in the variable cost amount the following formula was used:

Total costs = fixed costs + (variable cost per dollar of sale x volume of sale)

Assume that the volume of sales increased to \$2,225,000.00 and substituting in the formula, the total costs would be:

$$\begin{aligned} \text{T. C.} &= \$80,387.80 + (.029 \times \$2,225,000) \\ &= 80,387.80 + 64,525.00 \\ &= \$144,912.80 \end{aligned}$$

This is an increase of \$6,149.20 in variable costs for an increase in sales volume of \$211,015.52. Assuming the sales volume declined to \$2,000,000.00 and substituting in the formula:

$$\begin{aligned} \text{T. C.} &= \$80,387.80 + (0.29 \times \$2,000,000) \\ &= 80,387.80 + 58,000.00 \\ &= \$138,387.80 \end{aligned}$$

This is a decrease in variable cost amount of \$375.80 with a decline in sales amount of \$13,934.43.

The results from substituting in the formula are only approximations of the variations in costs that would take place with these variations in sales volume. The fixed cost amount for the association would remain unchanged for these small fluctuations in the volume of sales. If sales

volume increased substantially, necessitating increased physical facilities to handle the increased sales volume, the fixed cost amount would increase, or if more capable labor and management had to be hired, the fixed cost amount would tend to increase. However, for small fluctuations in business, the variable cost amount will fluctuate up or down to compensate for the changes in business volume.

Table 10. Fixed Expense Amount by Departments of the Farmers Cooperative Association, for 1948

	Wheat					Sidelines				
	: Total : Expense	: Pct. : Fixed	: Fixed : Amount	: Pct. : Variable	: Amount : Variable	: Total : Expense	: Pct. : Fixed	: Fixed : Amount	: Pct. : Variable	: Amount : Variable
Salaries and Wages	\$22,822.65	50.	\$11,411.30	50.	\$11,411.32	\$42,384.92	50.	\$21,192.46	50.	\$21,192.46
Depreciation	6,814.03	100	5,814.03			6,814.02	100.	6,814.02		
Insurance and Bonds	4,117.95	75.	3,088.46	25.	1,029.49	4,117.94	75.	3,088.46	25.	1,029.48
Interest	6,907.10	75.	5,180.33	25.	1,726.77	7,375.62	50.	3,687.81	50.	3,687.81
Taxes	4,899.78	75.	3,674.84	25.	1,224.94	2,638.34	75.	1,978.76	25.	659.58
Utilities	2,130.93	30.	639.28	70.	1,491.65	913.25	30.	273.98	70.	639.27
Telephone and Telegraph	1,029.32	40.	411.73	60.	617.59	1,029.31	20.	205.86	80.	823.45
Repairs and Supplies	4,559.50	40.	1,823.80	60.	2,735.70	3,039.67	30.	911.90	70.	2,127.77
Advertising	995.01	10.	99.50	90.	895.51	3,980.05	90.	3,582.05	70.	398.00
Truck Expense	—	—	—	—	—	2,112.88	25.	528.22	75.	1,584.66
Administrative and Selling	6,331.36	30.	1,899.41	70.	4,431.95	3,749.97	30.	1,124.99	70.	2,624.98
Total	\$60,607.63	57.82	35,042.71	42.18	25,564.92	78,155.97	55.52	43,388.51	44.48	34,767.46

SOURCE: Estimates

Table 11. Fixed Expense Amount by Stations of the Farmers Cooperative Association, for 1948

	HOBART					ROOSEVELT					BABBS				
	Exp.	% Fixed	Fixed Amt.	% Var.	Amt. Var.	Exp.	% Fixed	Fixed Amt.	% Var.	Amt. Var.	Exp.	% Fixed	Fixed Amt.	% Var.	Amt. Var.
Salaries and Wages	35,135.24	40%	14,054.09	60%	21,081.15	19,373.49	40%	7,749.40	60%	11,624.09	3,765.32	40%	1,506.13	60%	2,259.19
Depreciation	7,237.72	100%	7,237.72	--	--	3,390.54	100%	3,390.54	--	--	1,186.88	100%	1,186.88	--	--
Insurance	4,326.10	50%	2,163.05	50%	2,163.05	2,589.93	50%	1,294.97	50%	1,294.96	426.98	50%	213.49	50%	213.49
Interest	5,554.55	75%	4,165.91	25%	1,388.64	4,761.86	75%	3,571.40	25%	1,190.46	1,356.86	90%	1,221.17	10%	135.69
Taxes	3,927.79	90%	3,535.01	10%	392.78	2,307.58	90%	2,076.82	10%	230.76	629.63	90%	566.67	10%	62.96
Utilities	761.05	20%	152.21	80%	608.84	1,978.72	20%	395.74	80%	1,582.98	101.47	20%	20.29	80%	81.18
Telephone and Telegraph	1,543.97	25%	385.99	75%	1,157.98	411.73	25%	102.93	75%	308.80	34.31	20%	6.86	80%	27.45
Repairs and Supplies	4,103.55	30%	1,231.07	70%	2,872.48	2,735.69	30%	820.71	70%	1,914.98	253.31	30%	75.99	70%	177.32
Advertising	1,990.03	20%	398.01	80%	1,592.02	1,990.02	20%	398.00	80%	1,592.02	331.67	10%	33.17	90%	298.50
Truck Expense	1,056.44	25%	264.11	75%	792.33	1,056.44	25%	264.11	75%	792.33	--	--	--	--	--
Administrative and Selling	4,203.78	30%	1,261.13	70%	2,942.65	3,203.77	30%	961.13	70%	2,242.64	913.84	30%	274.15	70%	639.69
<b>Total</b>	<b>69,840.22</b>	<b>49.90%</b>	<b>34,848.30</b>	<b>50.10%</b>	<b>34,991.92</b>	<b>43,799.77</b>	<b>48.00%</b>	<b>21,025.75</b>	<b>52%</b>	<b>22,774.02</b>	<b>9,000.27</b>	<b>56.72%</b>	<b>5,104.80</b>	<b>43.28%</b>	<b>3,895.47</b>

	KOMALTY					COLD SPRINGS				
	Exp.	% Fixed	Fixed Amt.	% Var.	Amt. Var.	Exp.	% Fixed	Fixed Amt.	% Var.	Amt. Var.
Salaries and Wages	4,468.89	40%	1,787.56	60%	2,681.33	2,464.63	40%	985.85	60%	1,478.78
Depreciation	1,019.36	100%	1,019.36	--	--	793.55	100%	793.55	--	--
Insurance	436.80	50%	218.40	50%	218.40	456.08	50%	228.04	50%	228.04
Interest	1,649.65	90%	1,484.69	10%	164.96	959.80	90%	863.82	10%	95.98
Taxes	541.86	90%	487.67	10%	54.19	131.26	90%	118.13	10%	13.13
Utilities	101.47	20%	20.29	80%	81.18	101.47	20%	20.29	80%	81.18
Telephone and Telegraph	34.31	20%	6.86	80%	27.45	34.31	20%	6.86	80%	27.45
Repairs and Supplies	253.31	30%	75.99	70%	177.32	253.31	30%	75.99	70%	177.32
Advertising	331.67	10%	33.17	90%	298.50	331.67	10%	33.17	90%	298.50
Truck Expense	--	--	--	--	--	--	--	--	--	--
Administrative and Selling	1,115.18	30%	334.55	70%	780.63	644.76	30%	193.43	70%	451.33
<b>Total</b>	<b>9,952.50</b>	<b>54.95%</b>	<b>5,468.54</b>	<b>45.05%</b>	<b>4,483.96</b>	<b>6,170.84</b>	<b>53.79%</b>	<b>3,319.13</b>	<b>46.21%</b>	<b>2,851.71</b>

Source: Estimates.

Table 12. Fixed Expense Amount for the Farmers Cooperative Association  
for 1948

	Total	Percent Fixed	Amount Fixed	Percent Variable	Amount Variable
<b>Salaries:</b>					
Sid Barnes	\$ 3,000.00	100	\$ 3,000.00		
Other Salaries	58,751.11	50	29,375.56	50	29,375.55
Commission (S. B.)	3,456.46			100	3,345.46
<b>Overhead:</b>					
Interest	14,282.72				
Facility	7,603.86	100	7,603.86		
Operating	4,622.23	50	2,311.11	50	2,311.12
Commodity	2,056.63			100	2,056.63
Store Expense	321.04	75	615.78	25	205.26
Repairs and Supplies	7,599.17	30	2,279.75	70	5,319.42
Utilities	3,044.18	20	608.84	80	2,435.34
Truck Repair	2,112.88	25	528.22	75	1,584.66
Insurance	8,235.89	75	6,176.92	25	2,058.97
Office Expense	2,349.26	25	587.32	75	1,761.95
Telephone and Telegraph	2,058.63	25	514.66	75	1,543.97
Advertising	4,975.06	50	2,487.53	50	2,487.53
Produce Expense	670.54	25	167.64	75	502.91
Legal and Audit	420.00	100	420.00		
Travel and Meetings	848.59	50	424.29	50	424.30
Dues and Subscriptions	580.93	90	522.84	10	58.09
Rent	462.00	100	462.00		
Loss on Bad Debts				100	108.83
Director's Fees	300.00	100	300.00		
Donations	1,053.91	50	526.96	50	526.95
Bank Exchange	2,466.23	50	1,233.12	50	1,233.11
<b>Taxes:</b>					
Corporation	285.00	100	285.00		
Sales				100	
Use	185.70			100	185.70
Ad valorem	5,521.21	100	5,521.21		
Excise	200.98			100	200.98
Social Security	667.81	60	400.69	40	267.13
Unemployment	677.42	60	406.45	40	270.96
Depreciation	13,628.05	100	13,628.05		
<b>Total</b>	<b>138,763.60</b>	<b>57.93</b>	<b>80,387.80</b>	<b>42.07</b>	<b>58,375.80</b>

SOURCE: Estimates.

## SUMMARY AND CONCLUSIONS

The Farmers Cooperative Association of Hobart, Oklahoma was organized in 1919. It was incorporated at \$25,000.00. The association began operations with one grain elevator at Hobart. During its thirty years of operations, the association expanded to include five stations handling a wide assortment of commodities. The capital stock was increased to \$200,000.00, and the membership to approximately 1800.

The original facilities at Hobart were expanded and the association in 1948 had facilities at Roosevelt, Babbs, Komalty, and Cold Springs. The services offered to the members were expanded from wheat marketing to include produce, feed and seed, and farm supplies. The elevator capacity for the association was 139,000 bushels in May, 1950, and a new 150,000 bushel elevator was then nearing completion.

The total assets of the association were 44 percent greater in 1948 than in 1946. The current assets increased 48 percent in the same period, while the permanent assets were increasing 29 percent. The total liabilities of the association increased 42 percent during the period studied. The current liabilities accounted for the major portion of the associations total liabilities.

The balance sheet shows the association to be financially sound. The total net worth has increased approximately 46 percent during the period studied. The factor which contributed most to the increase in net worth was the capital stock outstanding, which more than doubled in the period studied. Also, the surplus fund of the association showed a steady increase in each

of the years studied.

The annual operations of the association have fluctuated considerably. Total sales of the association reached their maximum peak in 1947, being 39 percent greater than in 1946. Sales in 1948, which was the peak year in so far as volume of wheat handled was concerned, were only 85 percent of the sales of 1946. The decline in sales value in 1948 was a result of the generally lower price received for wheat, and a decline in sideline sales. The operating expenses of the association increased in each of the years studied. The association expanded the facilities and services offered, which was the principle cause of the increased operating costs. Also, the cost of many of the expense items increased, particularly labor, in the period studied. The net earnings of the association tended to fluctuate directly with the sales volume. For the period studied, net earnings were 2.23 percent of the associations sales. Net earnings for 1947, which was the peak year of sales, were 2.62 percent of the sales. The sales of 1948 were the lowest for the period studied, and the amount of net earnings for 1948 were also the lowest for the period studied.

The operations of the departments, wheat and sidelines, showed a wide variation. For the three year period, the wheat department accounted for 43.69 percent of the total operating costs of the association. For the similar period, the wheat department accounted for 76.50 percent of the associations total sales. The cost per dollar of wheat sale for the three year period averaged 3 cents. The sideline department accounted for 56.3 percent of the total operating costs for the three year period. For the similar period, sideline sales accounted for 23.50 percent of the associations total sales. The cost per dollar of sideline sales for the period studied

averaged 12 cents. The wheat department, which accounts for the greatest portion of the associations sales, accounts for the smallest portion of the associations total operating costs. The wheat department is mechanized to a large extent and there are apparently economies in large scale operations. The sideline operations are diverse and fluctuate irregularly and labor must be used extensively, resulting in a higher unit cost for the sideline department. However, the sideline sales items are high margin items offering an excellent year round addition to the associations operations, which would be highly seasonal without sideline operations. A large amount of expansion in the sideline department would probably be unwise at this time. The items sold in sideline operations are highly competitive items, which have many other satisfactory outlets in the same area. Also, the problem of inventory is to be considered in this period of declining prices. A large investment in inventory combined with a decline in retail prices could cause the association to lose money.

An analysis of the station operations of the association shows that for the three year period, the Hobart station accounted for an average of 49 percent of the associations total costs. The Roosevelt station accounted for 31 percent of the total costs, followed by Komalty, Babbs, and Cold Springs, which accounted for 8,7, and 4 percent respectively of the total costs. The average cost per dollar of sale for the three year period was 6.6 cents at Hobart, 5 cents at Roosevelt, 3.6 cents at Babbs, 3.3 cents at Komalty, and 3.6 cents at Cold Springs. The Hobart and Roosevelt stations have costs incurred as a result of sideline operations. These costs are greater per dollar of sideline sale than similar costs per dollar of wheat sale. This causes the cost per dollar of total sales to be greater at the

Hobart and Roosevelt stations. The cost per dollar of sales at the three stations, which handle only wheat, are similar. The average operating costs for the period studied were greater at Hobart than at Roosevelt. The factors causing the greater operating costs at Hobart were a combination of a larger total sales volume and a greater portion of the total sales being sideline sales. The Komalty, Babbs, and Cold Springs stations are similar in size and operation. The difference in the amount of wheat handled among these stations is greater than the difference in their operating costs. During the period studied the Komalty station's sales were approximately 3 percent greater than the sales at the Babbs station. However, the operating costs were only 1 percent greater. The variable costs tend to increase at a slower rate than does the volume.

The seasonal variation of the associations total costs shows the maximum peak of expenditures occurring in June. The biggest portion of the wheat harvest business occurs at this point, causing the operating costs to increase. Operating costs are above average during May and July, but they are below the June costs. The association incurs extra costs in May in preparation for the wheat harvest. Operating costs remain high in July as a result of the costs of handling the wheat in storage. Operating costs for the association were the least in November. Farming operations were at a minimum for this area at this time, reducing the volume of business done. This allowed the more variable costs such as utilities and operating wages to be reduced.

A study of the average monthly percentage variation of the individual expense items of the total monthly expenses, showed the salaries and wages accounted for the largest portion of each month's expenses for the period studied. Salaries and wages accounted for an average of 47.47 percent of

the associations total costs for the period studied. Salaries and wages, depreciation, interest, and administrative and selling costs combined accounted for approximately  $2/3$  of the total costs. Depreciation and interest costs were the same amount, respectively, for each of the months. However, the percentage which they accounted for of each months total expenditures fluctuated, being dependent on the total amount of the monthly expenditures. The administrative and selling cost item tended to fluctuate with the associations volume of sales. Administrative and selling costs accounted for their greatest portion of monthly costs in June, and amounted to only slightly less in May and July.

An analysis of the fixed and variable costs of the association disclosed that more of the costs were fixed than variable. For the period studied, 57.93 percent of the total association costs were fixed, with 42.07 percent being variable. The cost items which caused more of the total costs to be fixed than variable were: interest on facilities, ad valorem taxes, and depreciation. These costs were considered 100 percent fixed. In the operations of the wheat and sideline departments a greater portion of the costs were fixed than variable. For the wheat department, 57.82 percent of the costs were fixed and 42.18 percent were variable. For the sideline department, 55.52 percent of the costs were fixed and 44.48 percent were variable. A greater portion of the costs were variable than fixed at the Roosevelt and Hobart stations. The Roosevelt and Hobart stations have sideline costs, which tend to be more variable than wheat costs, causing the total station costs to be slightly more variable than fixed. The three stations, which handle only wheat had a greater portion of their total costs fixed than variable. Those costs that are fixed will tend to remain constant with small fluctuations in

the associations operations. With small variations in the sales, the variable costs will tend to move up or down to compensate for these changes in operations.

The Farmers Cooperative Association of Hobart, has shown an excellent record of financial growth and development. It has made substantial savings for its members and provided numerous services. The organization is still in the process of growth and further expansion could be successfully accomplished.

## APPENDIX

Table 13. Three-Year Average of the Monthly Costs of the Farmers Cooperative Association, from 1946 through 1948

	: Jan.	: Per-:	Feb.	: Per-:	March	: Per-:	April	: Per-:	May	: Per-:	June	: Per-:	July	: Per-:
	:	: cent:	:	: cent:	:	: cent:	:	: cent:	:	: cent:	:	: cent:	:	: cent:
Salaries & Wages	4,229.45	44.11	3,879.24	41.68	4,109.15	45.57	4,579.91	47.79	7,211.43	57.38	7,276.08	47.79	5,319.85	45.59
Depreciation	955.21	9.96	955.21	10.26	955.21	10.59	955.21	9.97	955.21	9.97	955.21	6.24	955.21	8.19
Insurance & Bonds	1,535.18	16.01	653.91	7.03	586.51	6.51	130.39	1.36	371.63	2.96	147.80	.98	217.82	1.87
Interest	1,040.92	10.36	1,040.92	11.19	1,040.92	11.54	1,040.92	10.86	1,040.92	8.28	1,040.92	6.84	1,040.92	8.92
Taxes	477.72	4.98	477.72	5.13	477.72	5.30	477.72	4.99	477.72	3.80	477.72	3.14	477.72	4.09
Utilities	192.24	2.01	293.00	3.15	221.34	2.45	334.34	3.49	31.07	.25	395.83	2.61	339.73	2.91
Telephone & Teleg.	104.52	1.09	180.41	1.94	117.12	1.30	109.97	1.15	50.11	.40	319.54	2.10	330.80	2.83
Rep. & Supplies	217.08	2.26	427.58	4.59	347.42	3.86	547.46	5.71	484.17	3.85	1,636.77	11.08	1,238.35	10.61
Advertising	95.14	.99	153.21	1.65	364.74	4.04	330.15	3.45	133.24	1.06	358.41	2.35	227.38	1.95
Truck	172.44	1.80	159.85	1.72	100.15	1.11	232.28	2.42	78.37	.62	356.02	2.34	193.90	1.66
Adm. & Selling	568.39	5.93	1,085.26	11.66	696.72	7.73	844.51	8.81	1,734.79	13.80	2,210.49	14.53	1,328.45	11.38
Total	9,588.29	100%	9,306.31	100%	9,017.00	100%	9,582.86	100%	12,568.66	100%	15,224.79	100%	11,670.13	100%
	: Aug.	: Per-:	Sept.	: Per-:	Oct.	: Per-:	Nov.	: Per-:	Dec.	: Per-:		Total	: Per-:	
	:	: cent:	:	: cent:	:	: cent:	:	: cent:	:	: cent:	:	:	: cent:	
Salaries & Wages	4,172.05	44.79	4,777.73	50.62	4,469.59	44.04	4,348.61	51.31	4,250.53	46.42		58,623.62	47.47	
Depreciation	955.21	10.25	955.21	10.12	955.21	9.41	955.21	11.27	955.21	10.43		11,462.52	9.28	
Insurance & Bonds	770.45	8.27	98.85	1.05	1,473.14	14.52	240.00	2.83	177.47	1.94		6,403.15	5.19	
Interest	1,040.92	11.17	1,040.92	11.03	1,040.92	10.26	1,040.92	12.28	1,040.92	11.37		12,491.04	10.11	
Taxes	477.72	5.13	477.72	5.06	477.72	4.71	477.72	5.64	477.72	5.22		5,732.64	4.64	
Utilities	295.05	3.17	286.31	3.03	252.35	2.48	197.67	2.33	256.92	2.81		3,095.85	2.51	
Telephone & Teleg.	96.18	1.03	209.48	2.22	163.41	1.61	123.70	1.46	201.39	2.20		2,007.13	1.63	
Rep. & Supplies	311.48	3.34	312.53	3.31	276.12	2.72	106.13	1.25	422.29	4.61		6,377.38	5.16	
Advertising	356.06	3.83	600.92	6.37	429.56	4.13	342.16	4.04	323.45	3.53		3,704.42	3.00	
Truck	133.24	1.43	82.62	.87	68.25	.67	56.22	.67	190.30	2.08		1,823.64	1.48	
Adm. & Selling	707.00	7.59	596.90	6.32	552.80	5.45	586.34	6.92	860.62	9.39		11,772.27	9.53	
Total	8,315.36	100%	9,439.19	100%	10,149.07	100%	8,474.68	100%	9,157.32	100%		123,493.66	100%	

SOURCE: Monthly trial balances from 1946 through 1948.

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## PRIMARY DATA

- Annual Audits of the Farmers Cooperative Association of Hobart, Oklahoma from 1946 through 1948.
- Minutes of the Board of Directors Meetings of the Farmers Cooperative Association of Hobart, Oklahoma from 1921 through 1948.
- Monthly trial balances of the Farmers Cooperative Association of Hobart, Oklahoma from 1947 through 1948.

Typist: Grace Peebles