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# Financial Operations of a Group of Oklahoma Farmers' Elevators 1930-1932 

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This preliminary report presents some of the results of a study of a group of farmers' elevators in Oklahoma. It has been prepared for the use of those interested in the financial problems of local elevator associations. Copies will be sent free to anyone upon request to the Department of Agricultural Economics, Oklahoma A. \& M. College, Stillwater.

# FINANCIAL OPERATIONS OF A GROUP OF OKLAHOMA FARMERS' ELEVATORS, 1930-1932 ${ }^{1}$ 

During the past several years, the Oklahoma Agricultural Experiment Station has been conducting a study of a group of farmers' elevators in Oklahoma. The data collected relate mostly to the business operations of the elevators during the fiscal years 1930, 1931, and 1932; although certain phases of the study cover earlier years. A detailed analysis has been made from the data secured from each elevator each year, and a confidential report submitted to each of the cooperating elevators.

The purposes of this project are to assist local grain marketing associations to improve their financial conditions, and to encourage them to follow sound business practices and policies, so that they may render the greatest possible service to their farmer members. This summary has been prepared for distribution to the managers and patrons of farmers' elevators in Oklahoma and in other states who may be interested.

## Gross Sales

From 1928 to 1932 the average gross sales of cooperative elevators in Oklahoma steadily declined, largely because of the declining prices of grain and other commodities handled by the elevators. Table 1 shows the average gross sales of all commodities for 31 associations in 1928, 1929, and 1930, and for 44 associations in 1931 and 1932. The percent decline in gross sales from 1928 to 1930 was greatest among the elevators with the smallest volume of business and least among the elevators with the largest volume. The data for the last two years are not strictly comparable with the data for the earlier years, because of the difference in the number of elevators. While the volume of business continued to decline from 1931 to 1932, the decline was at a slower rate, particularly for the elevators with the smallest volume of business.

Table 2 shows the gross sales of wheat, other grains, and sidelines of groups of farmers' elevators in 1930, 1931, and 1932. The declining volume of sales is illustrated by the fact that in 1930 only 20 percent of the elevators studied had sales of less than $\$ 50,000$. In 1931, 32 percent had sales less than this amount; and in 1932, 37 percent of all the elevators studied were in this class. From 1930 to 1932 the average volume of wheat sales declined from $\$ 74,659$ to $\$ 40,518$ or 45.7 percent. The decline in the sales of other grains amounted to 76.7 percent, while the decline in the sales of sidelines was only 1.2 percent. Sideline sales did not decline nearly as much as grain sales, largely because the prices of these articles did not decline as much as grain prices.

The percentage distribution of the sales of these elevators during the three-year period is shown in Table 3. In 1930 the gross sales of all these elevators were distributed as follows: wheat, 70.4 percent; other grains, 10.1 percent; and sidelines, 19.5 percent. In 1932 wheat sales had decreased to 66.1 percent and sales of other grains to 4.1 percent of the total sales, while sideline sales increased to 29.8 percent. In general, the percentage of wheat sales was larger for those elevators with a large volume of business than for other elevators. This was particularly true in 1930. However, the situation was reversed in 1932 when the wheat sales of seven elevators with total sales of $\$ 100,000$ or over amounted to only 58.6 percent of the total sales, while the wheat sales of 19 elevators with sales of less than $\$ 50,000$ amounted to 68.5 percent of the total sales.

[^0]TABLE 1.-Average Total Sales of Cooperative Elevators and Percent Decline in Sales

| Volume of sales per elevator in ${ }_{1931}$ and | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { elevators } \end{aligned}$ | AVERAGE SALES PER ELEVATOR |  |  | $\begin{aligned} & \text { DECLINE IN } \\ & \text { SALES } \end{aligned}$ |  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { elevators } \end{aligned}$ | AVERAGE SALES PER ELEVATOR |  | $\begin{aligned} & \text { Decline } \\ & \text { in } \\ & \text { sales } \\ & 1931 \text { to } \\ & 1932 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1928 | 1929 | 1930 | $\begin{gathered} 1928 \\ \text { to } \\ 1929 \end{gathered}$ | $\begin{gathered} 1929 \\ \text { to } \\ 1930 \end{gathered}$ |  | 1931 | 1932 |  |
| Dollars |  | Dollars | Dollars | Dollars | Percent | Percent |  | Dollars | Dollars | Percent |
| 0-49,999 | 6 | 96,437 | 93,293 | 32,864 | 3.3 | 65.9 | 16 | 30,944 | $29,526$ | 4.6 |
| 50,000-99,999 | 8 | 132,718 | 125,615 | 69,553 | 5.4 | 47.6 | 22 | 77,889 | 69,673 | 10.6 |
| 100,000-149,999 | 10 | 230,085 | 184,459 | 130,392 | 19.8 | 43.3 | $6^{1}$ | 143,091 | 131,312 | 8.4 |
| 150,000 and over | $\mathrm{r} \quad 7$ | 285,593 | 261,856 | 187,220 | 8.3 | 34.4 | --- |  | 131,312 | 8.4 |
| 411 elevators | 31 | 191,625 | 169,111 | 109,399 | 11.7 | 42.9 | 44 | 69,710 | 63,479 | 8.9 |

1Includes all elevators with sales of $\$ 100,000$ or over.

TABLE 2.-Average Sales of Different Commodities by Cooperative Elevators

| Number of elevators, year, and class of sales | AVERAGE VOLUME OF SALES PER ELEVATOR (DOLLARS) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 0- \\ 49.999 \end{gathered}$ | $\begin{aligned} & 50,000- \\ & 99,999 \end{aligned}$ | $\begin{aligned} & 100,000 \\ & \text { and over } \end{aligned}$ | All <br> Elevators |
| Number of elevators |  |  |  |  |
| 1930 | 7 | 9 | 19 | 35 |
| 1931 | 17 | 26 | 10 | 53 |
| 1932 | 19 | 26 | 7 | 52 |
| Wheat sales | Dollars | Dollars | Dollars | Dollars |
| 1930 | 18,187 | 43,884 | 110,042 | 74,659 |
| 1931 | 18,637 | 57,761 | 100,349 | 53,247 |
| 1932 | 18,041 | 46,892 | 77,855 | 40,518 |
| Sales of other grain |  |  |  |  |
| 1930 | 3,512 | 7,040 | 15,042 | 10,678 |
| 1931 | 4,084 | 4,409 | 1,531 | 3,762 |
| 1932 | 2,762 | 2,068 | 3,333 | 2,492 |
| Sideline sales |  |  |  |  |
| 1930 | 11,525 | 13,802 | 27,433 | 20,746 |
| 1931 | 6,924 | 14,942 | 38,366 | 16,790 |
| 1932 | 5,526 | 18,673 | 51,572 | 18,322 |
| Total sales |  |  |  |  |
| 1930 | 33,224 | 64,726 | 152,517 | 106,083 |
| 1931 | 29,645 | 77,112 | 140,246 | 73,799 |
| 1932 | 26,329 | 67,633 | 132,940 | 61,332 |

In 1930, sideline sales formed the smallest percentage of total sales for those elevators with the largest amount of business, while in 1932 the elevators with the smallest amount of business had the smallest percentage of sideline sales. The situation in 1932 is different from what would normally be expected. It was probably caused by the exceptionally low price of wheat that year. Because of these low grain prices, the only elevators that had a large volume of sales were those that had developed their sideline business extensively.

## Gross Income

Table 4 shows the average gross income of elevators from wheat, other grains, sidelines, and miscellaneous sources for the three-year period. The average gross income of the elevators from all sources did not decline during the three-year period, and it was even slightly larger in 1932 than in 1930. The gross income from wheat and other grains did decline slightly. However, gross income from sidelines and from miscellaneous sources increased over the previous year in both 1931 and 1932. Throughout the period covered by the study, the average gross income of the elevators was larger for those elevators with a large volume of sales than for the smaller elevators. This was true of the gross income from both grain and sidelines. It was usually true of miscellaneous incomes, although the relation was less consistent in that case.

The percentage distribution of gross income for the three-year period is shown in Table 5. In 1930, 46.6 percent of the total gross income was secured from wheat. In 1931, this increased to 49.1 percent, but in 1932 it
decreased to 41.3 percent. The percentage of gross income secured from other grains was largest in 1930 and smallest in 1931. There was very little change in the percentage of gross income secured from sidelines during the three years. However, the percentage of income secured from miscellaneous sources increased from 11.0 percent in 1930 to 19.4 percent in 1932.

In 1930 the group of elevators with the smallest volume of sales secured 31 percent of their gross income from wheat, while the group with the largest volume of sales secured 49.4 percent of their gross income from this source. In 1932 the situation of these groups of elevators was reversed. The group with the smallest volume of business secured 45.6 percent of their gross income from wheat, while the group with the largest volume secured only 35.6 percent of their gross income from this source. The situation with respect to other grains was similar to that for wheat. The percent of total gross income secured from sidelines decreased regularly during the threeyear period for those elevators with sales of less than $\$ 50,000$; while for elevators with sales of $\$ 100,000$ or more, the percentage of income secured from sidelines increased, particularly from 1930 to 1931.

The margin or spread between the purchase price and the sale price of commodities handled by the elevators is measured by the gross income per dollar of sales, which is shown in Table 6. In 1930, the average gross income per dollar of sales for all elevators was 6.5 cents. In 1931, this increased to 8.9 cents and in 1932 to 10.5 cents. It seems likely that these

TABLE 3.-Percentage Distribution of Sales of Cooperative Elevators

| Number of elevators, year, and class of sales | average volume of sales per elevator (DOLLARS) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 0- \\ 49,999 \end{gathered}$ | $\begin{aligned} & 50,000- \\ & 99,999 \end{aligned}$ | $\begin{aligned} & 100,000 \\ & \text { and over } \end{aligned}$ | All <br> Elevators |
| Number of elevators |  |  |  |  |
| 1930 | 7 | 9 | 19 | 35 |
| 1931 | 17 | 26 | 10 | 53 |
| 1932. | 19 | 26 | 7 | 52 |
| Percent wheat sales of sales total |  |  |  |  |
| 1930 | 54.7 | 67.8 | 71.7 | 70.4 |
| 1931. | 62.9 | 74.9 | 71.5 | 72.2 |
| 1932 | 68.5 | 69.3 | 58.6 | 66.1 |
| Percent sales of other grain of total sales |  |  |  |  |
| 1930 | 10.6 | 10.9 | 9.3 | 10.1 |
| 1931 | 13.8 | 5.7 | 1.1 | 5.1 |
| 1932 | 10.5 | 3.1 | 2.5 | 4.1 |
| Percent sideline sales of total sales |  |  |  |  |
|  |  |  |  |  |
| 1930 | 34.7 | 21.3 | 19.0 | 19.5 |
| 1931 | 23.3 | 19.4 | 27.4 | 22.7 |
| 1932 | 21.0 | 27.6 | 38.9 | 29.8 |
| Total sales |  |  |  |  |
| 1930 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1931 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1932 | 100.0 | 100.0 | 100.0 | 100.0 |

increased margins were necessary because of the rapid decrease in volume of sales during this period. Generally speaking, the elevators were not able to reduce their expenses as rapidly as their sales declined, and consequently had to secure a wider margin from the products handled in order to be able to pay expenses. In each of the three years the margin secured on wheat sales was lower than the margin secured on the sales of other grains or sidelines. However, the margin on wheat sales increased from 4.8 cents per dollar of sales in 1930 to 8.1 cents in 1932. The margins on other grains increased from 7.5 cents per dollar of sales in 1930 to 21.0 cents in 1932. In 1930 and 1931 the margin secured on other grains was less than that secured on sidelines, but it was higher in 1932. The average margin secured on sidelines increased from 11.9 cents per dollar of sales in 1930 to 14.8 cents in 1931, but decreased to 14.2 cents in 1932.

TABLE 4.-Average Gross Income of Cooperative Elevators

| Number of elevators, year and source of gross income | average volume of sales per elevator (DOLLARS) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 0- \\ 49,999 \end{gathered}$ | $\begin{aligned} & 50,000- \\ & 99,999 \end{aligned}$ | $\begin{aligned} & 100,000 \\ & \text { and over } \end{aligned}$ | $\begin{gathered} \text { All } \\ \text { Elevators } \end{gathered}$ |
| Number of elevators |  |  |  |  |
| 1930 | 7 | 9 | 19 | 35 |
| 1931 | 17 | 26 | 10 | 53 |
| 1932 | 19 | 26 | 7 | 52 |
| Gross income |  |  |  |  |
| 1930 | 1,108 | 2,116 | 5,221 | 3,600 |
| 1931 | 1,765 | 3,798 | 6,553 | 3,666 |
| 1932 | 1,729 | 3,701 | 5,968 | 3,285 |
| Gross income |  |  |  |  |
| from other grain |  |  |  |  |
| 1930 | 125 | 301 | 1,278 | 797 |
| 1931 | 295 | 544 | 105 | 381 |
| 1932 | 486 | 609 | 315 | 524 |
| Gross income from sidelines |  |  |  |  |
| 1930 | 1,865 | 1,619 | 3,112 | 2,478 |
| 1931 | 999 | 2,113 | 5,992 | 2,488 |
| 1932 | 856 | 2,593 | 7,401 | 2,606 |
| Gross miscel- |  |  |  |  |
| laneous income |  |  |  |  |
| 1930 | 481 | 1,118 | 862 | 852 |
| 1931 | 575 | 1,130 | 1,012 | 929 |
| 1932 |  |  |  |  |
| Total gross income |  |  |  |  |
| 1930 | 3,579 | 5,154 | 10,473 | 7,727 |
| 1931 | 3,634 | 7,585 | 13,662 | 7,464 |
| 1932 | 3,798 | 8,622 | 16,764 | 7,955 |

In each of the three years the average margin secured on wheat sales was higher for those elevators with sales of less than $\$ 50,000$ than it was for the elevators with larger sales. This relation did not hold consistently with respect to other grains, but it was true of sideline sales, except in 1931. Elevators normally take a much wider margin on sidelines than on grains,
because the expenses of handling a dollar's worth of sidelines are much larger.

TABLE 5.-Percentage Distribution Among Commodities of the Gross Income of Cooperative Elevators

| Number of <br> elevators, year, <br> and source of <br> gross income | AVERAGE | VOLUME OF SALES <br> (DOLLARS) | PER ELEVATOR |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 49,999 |  | $50,000-$ <br> 99,999 | 100,000 <br> and over |
| Number of |  |  |  | All <br> Elevators |
| elevators |  |  |  |  |
| 1930 | 7 | 9 | 19 |  |
| 1931 | 17 | 26 | 10 | 35 |
| 1932 | 19 | 26 | 7 | 53 |

Percent of gross
income received

| from wheat |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| 1930 | 31.0 | 41.1 | 49.4 | 46.6 |
| 1931 | 48.6 | 50.1 | 48.0 | 49.1 |
| 1932 | 45.6 | 42.9 | 35.6 | 41.3 |

Percent of gross
income received
from other grains

| 1930 | 3.5 | 5.8 | 11.5 | 10.3 |
| :--- | ---: | ---: | ---: | ---: |
| 1931 | 8.1 | 7.1 | 0.7 | 5.2 |
| 1932 | 12.6 | 7.1 | 1.9 | 6.6 |

Percent of gross
income received
from sidelines

| 1930 |  | 52.1 | 31.4 | 30.4 |
| :--- | :--- | :--- | :--- | :--- |
| 1931 | 27.5 | 27.9 | 43.9 | 32.1 |
| 1932 | 22.6 | 30.1 | 44.1 | 32.3 |

Percent of gross income received from miscellaneous sources

| 1930 | 13.4 | 21.7 | 8.7 | 11.0 |
| :--- | :--- | :--- | ---: | :--- |
| 1931 | 15.8 | 14.9 | 7.4 | 12.4 |
| 1932 | 19.2 | 19.9 | 18.4 | 19.4 |

Total gross income

| 1930 | 100.0 | 100.0 | 100.0 | 100.0 |
| :--- | :--- | :--- | :--- | :--- |
| 1931 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1932 | 100.0 | 100.0 | 100.0 | 100.0 |

## Expenses

As shown in Table 7 the average expenses of the elevators studied were $\$ 6,821$ in 1930, $\$ 7,005$ in 1931, and $\$ 6,942$ in 1932. The total expenses of the elevators, therefore, showed no tendency to decrease during the course of generally declining prices from 1930 to 1932. However, the expenses for salaries and labor did decrease from an average of $\$ 3,860$ in 1930 to 3,389 in 1932. This is a decrease of only 1.2 percent. Expenses on buildings showed
no significant tendency to decrease or increase, while the other expenses of the elevators increased from an average of $\$ 1,425$ in 1930 to $\$ 2,049$ in 1932. Apparently the elevators were not able to reduce any of their expenses during this period, except their expenses for salaires and labor. It is probable that the reduction in expenses for salaries was accomplished very largely by reducing the wages of those employed, rather than by reducing the amount of labor employed.

TABLE 6.-Average Gross Income per Dollar of Sales of Cooperative Elevators

| Number of elevators, year, and source of gross income | AVERAGE VOLUME OF SALES PER ELEVATOR (DOLLARS) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 0- \\ 49,999 \end{gathered}$ | $\begin{aligned} & 50,000- \\ & 99,999 \end{aligned}$ | $\begin{aligned} & 100.000 \\ & \text { and over } \end{aligned}$ | All <br> Elevators |
| Number of elevators |  |  |  |  |
| 1930 | 7 | 9 | 19 | 35 |
| 1931 | 17 | 26 | 10 | 53 |
| 1932 | 19 | 26 | 7 | 52 |
| Gross income |  |  |  |  |
| from wheat per |  |  |  |  |
| dollar of sales | Cents | Cents | Cents | Cents |
| 1930 | 6.1 | 4.8 | 4.8 | 4.8 |
| 1931 | 9.5 | 6.6 | 6.5 | 6.9 |
| 1932 | 9.6 | 7.9 | 7.7 | 8.1 |

Gross income
from other
grains per dollar
of sales

| 1930 | 3.6 | 4.3 | 7.7 | 7.5 |
| ---: | ---: | ---: | ---: | ---: |
| 1931 | 7.2 | 12.3 | 6.8 | 10.1 |
| 1932 | 17.6 | 29.4 | 9.5 | 21.0 |


| Gross income |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| from sidelines |  |  |  |  |
| per dollar of sales |  |  |  |  |
| 1930 | 16.2 | 11.7 | 11.4 | 11.9 |
| 1931 | 14.4 | 14.1 | 15.6 | 14.8 |
| 1932 | 15.5 | 13.9 | 14.3 | 14.2 |
| Total gross income |  |  |  |  |
| per dollars of sale ${ }^{1}$ |  |  |  |  |
| 1930 | 9.3 | 6.2 | 6.3 | 6.5 |
| 1931 | 10.3 | 8.4 | 9.0 | 8.9 |
| 1932 | 11.7 | 10.2 | 10.3 | 10.5 |
| The gross income used in calculating these totals does not include income from miscel |  |  |  |  |

${ }^{1}$ The gross income used in calculating these totals does not include income from miscellaneous sources.

The expenditures for salaries and labor included the compensation paid to officers and directors, as well as wages paid to the manager and other employees of the elevator. Expenses on buildings included depreciation, repairs, insurance, taxes, and rent where rent was paid. All other expenditures were classified as other expenses and include office supplies, telephone, telegraph, interest, donations, advertising, and other unclassified expenditures.

# TABLE \%.-Average Distribution of Expenses of Cooperative Elevators 

| Number of elevators, year and kind of expense | AVERAGE VOLUME OF SALES PER ELEVATOR (DOLLARS) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 0- \\ 49,999 \end{gathered}$ | $\begin{gathered} 50,000- \\ 99,999 \end{gathered}$ | $\begin{aligned} & 100,000 \\ & \text { and over } \end{aligned}$ | All Elevators |
| Number of elevators |  |  |  |  |
| 1930 | 7 | 9 | 19 | 35 |
| 1931 | 17 | 26 | 10 | 53 |
| 1932 | 19 | 26 | 7 | 52 |
| Expenses for salaries and |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| 1930 | 2,491 | 3,310 | 4,625 | 3,860 |
| 1931 | 1,914 | 3,675 | 5,619 | 3,477 |
| 1932 | 1,751 | 3,401 | 7,789 | 3,389 |
| Expenses on buildings |  |  |  |  |
| 1930 | 1,165 | 1,316 | 1,776 | 1,536 |
| 1931 | 1,392 | 1,556 | 2,222 | 1,629 |
| 1932 | 884 | 1,755 | 2,254 | 1,504 |
| Other expenses |  |  |  |  |
| 1930 | 720 | 1,123 | 1,828 | 1,425 |
| 1931 | 1,120 | 1,891 | 3,244 | 1,899 |
| 1932 | 1,188 | 2,207 | 3,803 | 2,049 |
| Total expenses |  |  |  |  |
| 1930 | 4,376 | 5,749 | 8,229 | 6,821 |
| 1931 | 4,426 | 7,122 | 11,085 | 7,005 |
| 1932 | 3,823 | 7,363 | 13,846 | 6,942 |

Table 7 shows that the average expenses of the elevator increased with the volume of sales of the elevator, but at a much slower rate. For instance, in 1932 the 19 elevators with sales of less than $\$ 50,000$ had average expenses of $\$ 3,823$, while seven elevators with sales of $\$ 100,000$ or over had average expenses of $\$ 13,846$. The average volume of sales of the latter group was more than 4.4 times those of the former group, while expenses were only about 3.6 times as much. This relation was even more marked in 1930 and 1931 than in 1932.

The average expenses per dollar of gross sales for these elevators are shown in Table 8 and Figure 1. In 1930 the average expenses per dollar of sales of the elevators were only 6.43 cents. In 1931 this increased to 9.49 cents, and in 1932 it had further increased to 11.32 cents. The increase in expenses per dollar of sales during this period occurred because the average sales of the elevators declined 42.2 percent, while the average expenses of the elevators actually increased 1.8 percent.

The expenses for salaries and labor per dollar of sales increased from 3.64 cents in 1930 to 5.53 cents in 1932. This is an increase of 51.9 percent as compared with an increase of 76.0 percent for the total expenses per dollar of sales. In contrast to expenses for salaries and labor, expenses on buildings per dollar of sales increased 69.0 percent while other expenses increased 149.3 percent.

TABLE 8.-Average Expenses per Dollar of Sales of Cooperative Elevators

| Number of elevators, year and kind of expense | AVERAGE VOLUME OF SALES PER ELEVATOR (DOLLARS) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 0- \\ 49,999 \end{gathered}$ | $\begin{aligned} & 50,000- \\ & 99,999 \end{aligned}$ | $\begin{aligned} & 100,000 \\ & \text { and over } \end{aligned}$ | $\begin{gathered} \text { All } \\ \text { Elevators } \end{gathered}$ |
| Number of elevators |  |  |  |  |
| 1930 | 7 | 9 | 19 | 35 |
| 1931 | 17 | 26 | 10 | 53 |
| 1932 | 19 | 26 | 7 | 52 |
| Expenses for salaries and labor per dollar of sales <br> Cents <br> Cents <br> Cents <br> Cents |  |  |  |  |
|  |  |  |  |  |
| 1930 | 7.50 | 5.12 | 3.14 | 3.64 |
| 1931 | 6.46 | 4.77 | 4.01 | 4.71 |
| 1932 | 6.65 | 5.03 | 5.86 | 5.53 |
| Expenses on buildings per dollar of sales |  |  |  |  |
| 1930 | 3.51 | 2.03 | 1.20 | 1.45 |
| 1931 | 4.70 | 2.02 | 1.58 | 2.21 |
| 1932 | 3.36 | 2.59 | 1.70 | 2.45 |
| Other expenses per dollar of sales |  |  |  |  |
| 1930 | 2.16 | 1.73 | 1.21 | 1.34 |
| 1931 | 3.77 | 2.45 | 2.31 | 2.57 |
| 1932 | 4.51 | 3.26 | 2.86 | 3.34 |
| Total expenses per dollar of sales |  |  |  |  |
| 1930 | 13.17 | 8.88 | 5.55 | 6.43 |
| 1931 | 14.93 | 9.24 | 7.90 | 9.49 |
| 1932 | 14.52 | 10.88 | 10.42 | 11.32 |

Each year the total expenses per dollar of sales were much higher for the group of elevators with sales of less than $\$ 50,000$ than for the other groups. This is clearly shown in Figure 1. However, the decrease in expenses for the elevators with the larger volume of business was somewhat more marked in 1930 and 1931 than in 1932. Also the decline in expenses was greater between the group of elevators with sales of less than $\$ 50,000$ and the group with sales between $\$ 50,000$ and $\$ 100,000$, than it was between the other groups.

The principal reason why expenses per dollar of sales decrease as the volume of sales increases is that the large volume plants operate more rearly at maximum capacity. This means that buildings and equipment are more fully utilized and labor is used more efficiently. At least one man must normally be employed at the elevator throughout the year, even though the volume of business is insufficient to keep him busy all the time. In such cases more business could be handled at no increase in labor cost, and labor costs amounted to 56.7 percent of all expenses in 1930 and to 48.8 percent in 1932. Even where an increase in the labor force is necessary, additional help can usually be obtained at a lower rate of pay, because helpers do not need to be as skilled as the manager. Of course, some ele-



Figure 1. Relationship Between Volume of Sales and Expenses per Dollar of Sales of Farmers' Elevators in 1930, 1931, and 1932.
vators may be situated in such a way that an increase in volume will make necessary a more than proportionate outlay for labor. For instance, an increase that resulted in overcrowded conditions might impair rather than improve the efficiency of labor. However, such a situation occurs only rarely among elevators.

Expenses on buildings will ordinarily decrease as volume of business increase, provided additional business does not necessitate the erection of new buildings. The additional annual costs attached to any new buildings, including depreciation, repairs and taxes, will ordinarily cause an increase in expenses per dollar of sales, at least temporarily, or until the addditional facilities are fully utilized.

Expenses per dollar of sales for other things than labor and plant overhead show less tendency to decrease as the volume of business increases. Expenses for office supplies and many miscellaneous items are likely to increase in about the same proportion as volume of business.

## Net Gains

The net gain or loss of each elevator was calculated by subtracting the expenses from gross income. In cases where the expenses exceeded gross income, the elevator of course suffered a loss. The profit or loss of cooperative institutions cannot be properly considered as having the same meaning as for non-cooperative businesses. The principal purposes of a cooperative elevator is to return to its farmer-members as high a price as possible for their grain, and at the same time give adequate service to the members and maintain the financial integrity of the organization. However, farmers' elevators in Oklahoma purchase grain outright from their members; and in order for the elevator to maintain its financial position, it is necessary for it to purchase its grain and other commodities at a price which will leave the elevatior a sufficient operating margin to cover expenses when the commodities are sold. Elevators that showed a net loss in any year were apparently unable because of competition or other circumstances to do this. An elevator which is losing money can continue to operate only by using some of the reserves which it has built up in the past or by levying assessments against its members. A cooperative elevator losing money may go bankrupt and have to cease operation as soon as any other type of grain elevator or other business, in spite of the fact that its principal object is not to make money for the elevator as such.

The years 1930, 1931, and 1932 appear to have been difficult ones financially for farmers' elevators in Oklahoma ,as they undoubtedly were for most other kinds of business. Table 9 shows that in 1930 the average gain of the elevators studied was $\$ 906$. In 1931 this declined to $\$ 460$, while in 1932 it recovered to $\$ 958$. In 1930, 37.1 percent of the elevators showed a loss, while in 1931 and 1932, 35.8 percent and 36.5 percent respectively showed losses. Each year, on an average, those elevators with sales of less than $\$ 50,000$ showed losses, while elevators with sales of $\$ 100,000$ or more showed gains. While the elevators with the larger volumes of business were more likely to show profits than the other elevators, each year a few elevators with a large volume of sales showed losses, and these losses were greater than the average loss suffered by the elevators with sales of less than $\$ 50,000$. This means that when an elevator with a large volume of business is so unfortunate as to lose money, it is likely to lose more money than it would lose if its volume of business were smaller.

Table 10 shows the average net gains and losses per dollar of sales for cooperative elevators during the three-year period. In 1930 the average gain per dollar of sales for all the elevators studied was 0.85 cent. In 1931 this decreased to 0.62 cent, but in 1932 it had increased to 1.56 cents.

Each year the elevators with the largest volume of sales had the largest net gains per dollar of sales, while the elevators with the smallest volume of sales suffered losses. Ordinarily cooperative elevators distribute their net earnings after providing for reserves and reasonable interest on capital stock in the form of patronage dividends, which are measured according to the number of dollar's worth of business each member does with the elevator. The figures in Table 10 show approximately the amount of earnings available for each dollar of sales to be used in the establishment of reserves and in payment of patronage dividends to members. Apparently the members of the elevators doing a large volume of business were much more likely to receive satisfactory patronage dividends than the members of

TABLE 9.-Average Net Gains and Losses of Cooperative Elevators

| Number of elevators, year, and gains or losses | AVERAGE VOLUME OF SALES PER ELEVATOR (DOLLARS) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 0- \\ 49,999 \end{gathered}$ | $\begin{aligned} & 50,000- \\ & 99,999 \end{aligned}$ | $\begin{aligned} & 100,000 \\ & \text { and over } \end{aligned}$ | All Elevators |
| Number of elevators |  |  |  |  |
| 1930 | 9 | 9 | 19 | 35 |
| 1931 | 17 | 26 | 10 | 53 |
| 1932 | 19 | 26 | 7 | 52 |

Average net gain or
loss of all elevators
(dollars) ${ }^{1}$

| 1930 | -797 | -595 | $+2,244$ | +906 |
| :--- | :--- | :--- | :--- | :--- |
| 1311 | -791 | +463 | $+2,577$ | +460 |
| 1932 | -36 | $+1,157$ | $+2,918$ | +958 |


| Number of elevators showing gain |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1930 | 2 | 5 | 15 | 22 |
| 1931 | 6 | 19 | 9 | 34 |
| 1932 | 8 | 20 | 5 | 33 |

Average gain of elevators showing gain (dollars)

| 1930 | 1,722 | 1,506 | 3,517 | 2,897 |
| ---: | ---: | ---: | ---: | ---: |
| 1931 | 809 | 2,213 | 4,067 | 2,456 |
| 1932 | 868 | 2,028 | 5,719 | 2,306 |

Number of
elevators showing
loss loss

| 1930 | 5 | 4 | 4 | 13 |
| :--- | ---: | ---: | ---: | ---: |
| 1931 | 11 | 7 | 1 | 19 |
| 1932 | 11 | 6 | 2 | 19 |


| Average loss of <br> elevators showing |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| loss (dollars) |  |  |  |  |
| 1930 | 1,804 | 3,222 | 2,532 | 2,464 |
| 1931 | 1,665 | 4,286 | 10,835 | 3,113 |
| 1932 | 694 | 1,748 | 4,085 | 1,384 |

[^1]
# TABLE 10.-Average Net Gains and Losses per Dollar of Sales of Cooperative Elevators 

| Volume of sales <br> per elevator | 1930 |  | 1931 |  | 1932 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number <br> of ele- <br> vators | Average <br> net <br> nain | Number <br> of ele- <br> vators | Average <br> net <br> gain | Number <br> of ele- <br> vators | Average <br> net <br> nain |
| Dollars |  | Cents |  | Cents |  | Cents |
| $0-49,999$ | 7 | -2.40 | 17 | -2.67 | 19 | -0.14 |
| $50,000-99,999$ | 9 | -0.92 | 26 | +0.60 | 26 | +1.71 |
| $100,000-149,999$ | 11 | +0.98 | $10^{2}$ | +1.84 | $7^{2}$ | +2.19 |
| 150,000 and over | 8 | +1.94 | -53 | +0.62 | -52 | +1.56 |
| Total | 35 | +0.85 | 53 |  |  |  |

${ }^{1}$ A minus ( - ) sign denotes loss; a plus ( + ) sign, gain per dollar of sales.
${ }^{2}$ Includes all elevators with sales of $\$ 100,000$ or over.
the other elevators; although it should be remembered that some of the elevators with large volumes of sales made no net gains, while some of the elevators with a small volume of business did make satisfactory net gains.

## Summary

The analysis of the business operations of farmers' elevators during the years 1930, 1931, and 1932 has shown that the volume of their sales in terms of dollars has declined considerably. This is particularly true of the sales of wheat and other grains. This decline in volume was largely caused by declines in prices rather than changes in the physical volume of the commodities handled. In 1930 the elevators doing a relatively small volume of business were more dependent upon sidelines than the larger companies. This situation was changed in 1932, because of the more severe declines in grain prices than in sideline prices. The gross receipts per dollar of sales of the elevators increased each year. This was necessary because expenses on wheat were considerably smaller than the margins on other commodities, while the margins taken on sidelines were larger than any of those taken on the grains, except in 1932 when the margins taken on grains other than wheat were somewhat larger than sideline margins.

The average expensese of the elevators did not decrease from 1930 to 1932. While there was some decrease in the amount spent for salaries and labor, there was some increase in other expensese of the elevators. The average expenses per dollar of sales were much less for those elevators with a large volume of sales than for the other elevators, because salaries, wages, and overhead expenses on buildings did not increase in proportion to the increased business of the larger companies. The average net gain of the elevators was smallest in 1931 and largest in 1932. Each year a majority of the companies with sales of less than $\$ 50,000$ showed losses, while a majority of those with sales of $\$ 100,000$ or over showed profits. Members of the farmers' elevators with large volumes of business were much more likely to receive satisfactory patronage dividends than were memebers of the smaller companies.


[^0]:    ${ }^{\mathbf{3}} \mathrm{Mr}$. W. J. Hart, while a representative of the Division of Cooperative Marketing of the Federal Farm Board, assisted in planning the research on which this report is based and in collecting and analyzing the data for the years 1930 and 1931.

[^1]:    ${ }^{1}$ A minus ( - ) sign denotes loss; a plus ( + ) sign, gain.

