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## AGRICULTURAL EXTENSION DIVISION UNIVERSITY OF MINNESOTA

#### F. W. Peck, Director

#### MINNESOTA FARM BUSINESS NOTES

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COSTS AND INCOMES OF FARMERS! ELEVATOR COMPANIES

Prepared by L. L. Ullyot

The annual reports or auditors' records of eighty-four representative farmers' elevator companies in Minnesota for the 1929-30 crop year were analyzed for the purpose of obtaining information on costs and incomes of each company. Some of the more important facts obtained are given below.

#### Volume

The volume of grain handled was determined by adding the number of bushels sold and the number of bushels in the inventory at the and of the crop year.

Seventy-six elevators showed a range in total bushels of grain handled from 15,678 to 539,969 bushels. The average volume handled was 177,573 bushels. Three of these elevators handled over 400,000 bushels, six elevators handled between 300,000 and 400,000 bushels, nineteen elevators handled between 200,000 and 300,000 bushels, twenty-three elevators handled between 100,000 and 200,000 bushels, and twenty-five elevators handled less than 100,000 bushels.

It is significant to note that there is a tendency for elevators to handle sidelines when the volume of grain handled decreases. This is quite evident with the elevator companies in central and southeastern Minnesota. With a smaller volume of business a wider operating margin per bushel must be obtained, or the income must be supplemented by the handling of sidelines or other activities on a profitable margin.

#### Valuo of Grain and Sidelines Handled Per Dollar of Manager's Salary

Fifty-six elevators showed a range in value of grain handled per dollar of manager's salary from \$16.97 to \$143.57, with an average of \$60.25. Fifty-four elevators showed a range in value of sidelines handled per dollar of manager's salary from \$.81 to \$92.91, with an average of \$17.37. Fifty-six elevators showed a range in the total value of grain and sidelines handled from \$17.14 to \$201.87, with an average of \$77.00.

#### Total Gross Income, Total Expense and Net Income

Total gross income includes the income, resulting from the nurchase and sale of grain and sidelines, plus the receipts from grinding, storing,

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handling, cleaning, and other miscellaneous receipts, before expenses are deducted. Total expense is the total of all expense of operation. Federal income taxes and dividends are not included in the total expense. Net income is the difference between total gross income and total expense.

Eighty-four elevators showed a range in total gross income from a loss of \$3,721 to a gain of \$29,071, with an average gross gain of \$7,564. Total expense for these same elevators ranged from \$3,226 to \$20,436 with an average of \$7,564. Net income, before dividends and federal income taxes were deducted, ranged from a loss of \$10,378 to a gain of \$14,186, with an average net income of \$1,698.

#### Sources of Gross Income

Eighty-one elevators showed a range in gross trading profit on grain, from a loss of \$7,207 to a gain of \$14,494. The average was a gross trading profit of \$4,116. Eighty elevators showed a range in gross trading profit on sidelines from \$61 to \$19,170. The average was \$3,353. Seventy-two elevators showed a range in total receipts from grinding, storing, cleaning, and other miscellaneous receipts, from \$2 to \$8,964. The average was \$1,973.

#### Relation of Gross Profit, Total Expense, and Volume

Those familiar with elevator operation will readily recognize the importance of volume in its effect on total expense per bushel. In general, the study shows that large volumes are accompanied by a lower expense per bushel, and that smaller volumes have a higher expense per bushel.

In the figures given in Table 1 expenses were not allocated to sidelines because of the large amount of time and expense that would be involved in making such allocations, and at best, such allocation would be only an approximation. In studying these results one must bear in mind that total expenses are charged to the grain business and that income from sidelines and other enterprises is regarded as profit. In some cases, although a loss was shown on grain handled, the final result of the year's operation showed a net profit, due to the handling of sidelines and other profitable enterprises.

The high net income in cents per bushel (4.5¢) for the group of eight elevators with the smallest volume arises from the fact that the clevators handled a considerably larger volume of sidelines than they did grain. Under the method of analysis employed the gress profits and not income of the elevators studied were distributed on the basis of the grain handled. This makes it appear as though those clevators had an unusually profitable grain business. In order to determine the profitableness and efficiency of these elevators in handling only grain it would be necessary to allocate expense to sidelines, which was not done in this study.

Table 1.		of Gross Profit, Tot	al Expense, and Volume	
Number of	Average	Average Total Gross	Average Total Expense	Net Income in
Elevators	Volume	Profit in Cents per	in Cents per Bushel	Cents per
		Bushel	,	Bushel
3 .	516,660	3,22	2,10	1.12
17	304,756	4.47	3,33	1.14
31	166,013	4.82	4.10	.72
17	78,015	7.76	7.54	.22
8	36,508	19,98	15,48	4.50

The study shows that approximately fifty per cent of the elevators showed losses on the purchase and sale of wheat and rye. Several reasons could be given for this, such as operating on too small a margin, market conditions, and inadequate hedging.

Table 2. Gains	and Losse	s on Pi	ırchase	and Sale	of Grain		
	Wheat	Flax	Rye	Oats	Barley	Corn	All Grains
	Durum						
Total No. Elevators	71	75	68	78	78	61	81
No. Showing Gains	38	71	32	68	67	59	76
No. Showing Losses	33	4	36	1.0	11	2	5
Average of the Gains	\$1,373	\$1,050	\$ 275	\$1,200	\$ 925	\$1,591	\$4 <b>,</b> 523
Greatest Gain	4,984	3,335	1,943	5,052	4,277	6,008	14,494
Least Gain	6	23	6	2	17	3	120
Average of the Losses	<b>\$ 6</b> 88	\$1,384	\$ 307	\$1,002	\$ <b>4</b> 80	\$ 99	ೈ2 <b>,</b> 070
Greatest Loss	3,727	4,794	1,416	5,345	1,425	132	7,207
Least Loss	6	76	5	147	1.43	66	14

#### Ratio of Current Assets to Current Liabilities

Current assets include both cash and other assets that are readily convertible into cash. Current liabilities are those obligations that will have to paid within a relatively short period of time.

The ratio of current assets to current liabilities is a ratio that is widely used by bankers as one of several standards in determining the financial status of business concerns. By experience bankers have found that a ratio of two dollars of current assets for every dollar of current liabilities is satisfactory in most cases. A ratio of less than two to one is not considered satisfactory.

The study shows that there are a large number of elevators that have a ratio of current assets to current liabilities of less than two to one. However, due to the fact that we do not have sufficient data to determine what a satisfactory current ratio for elevator companies should be, we have taken the ratios of those companies having a ratio of current assets to liabilities greater than one to one and those having a current ratio of less than one to one. A current ratio of less than one to one means that part of the fixed assets would have to be sold in order to satisfy the obligations of the company if payment were demanded by the creditors.

Fif ty-six elevators reported a ratio of current assets to liabilities of one or more. Nineteen reported a ratio of less than one to one. The range of ratios for the fif ty-six elevators was 1.02 to 675.15, with an average of 23.78. The range of ratios for the nineteen elevators was 0.27 to 0.96 with an average of 0.69.

### Net Gains and Losses from Operations

Fifty-six elevators showed a net gain and twenty-eight a loss from the year's operations. The gains ranged from \$47 to \$14,186. The average gain for the fifty-six elevators was \$3,392. The losses ranged from \$35 to \$10,378. The average loss for the twenty-eight elevators was \$1,692.

#### Surplus and Deficit

Seventy elevators reported a surplus and nine reported a deficit. The range in surplus was from \$100 to \$59,020. The average surplus for the seventy elevators was \$14,394. The deficits ranged from \$1,503 to \$23,463. The average deficit for the nine elevators was \$5,136.

#### MINNESOTA FARM PRICES FOR MAY 1931 Prepared by D. D. Kittredge and A. E. Erickson

The index number of Minnesota farm prices for the month of May 1931 was 63.5. When the average of farm prices of the three Mays of 1924-25-26 is represented by 100, the indexes for May of each year from 1924 to date are as follows:

May 1924 - 84.3
" 1925 - 106.1
" 1926 - 110.1
" 1927 - 109.0
" 1928 - 113.4
" 1929 - 112.6
" 1930 - 98.7\*

1931 - 63.5\*

#### \*Preliminary

The price index of 63.5 for the past month is the net result of decreases in the prices of farm products in May 1931 over the average of May 1924-25-26 weighted according to their relative importance. These decreases range from 68 per cent to 11. The products ranked according to the size of their percentage decreases in this comparison are shown in the following list:

Principal Farm Products which Showed Price Decreases in May 1931 when Compared with Average Prices in May 1924-25-26 (arranged in descending order of percentage change)

Decreases: Rye, wheat, barley, eggs, butterfat, flax, oats, lambs-sheep, hogs, corn, chickens, hay, milk, potatoes, cattle, calves.

Although the Minnesota index for May 1931 does not measure price changes from April 1931, a comparison of month to month changes in price has

been made. The increases range from 3 per cent to 2, and the decreases from 27 per cent to 3. The products ranked according to the size of their percentage increases or decreases in May 1931 over April 1931 are shown in the following list:

Principal Farm Products which Shoved Price Increases and Decreases in May 1931 when Compared with April 1931 (listed in descending order of percentage change)

Increases: Rye, lambs-sheep, calves, wheat.

Decreases: Eggs, butterfat, chickens, hogs, cats, cattle, corn, milk, barley.

No Change: Flax, potatees, hay.