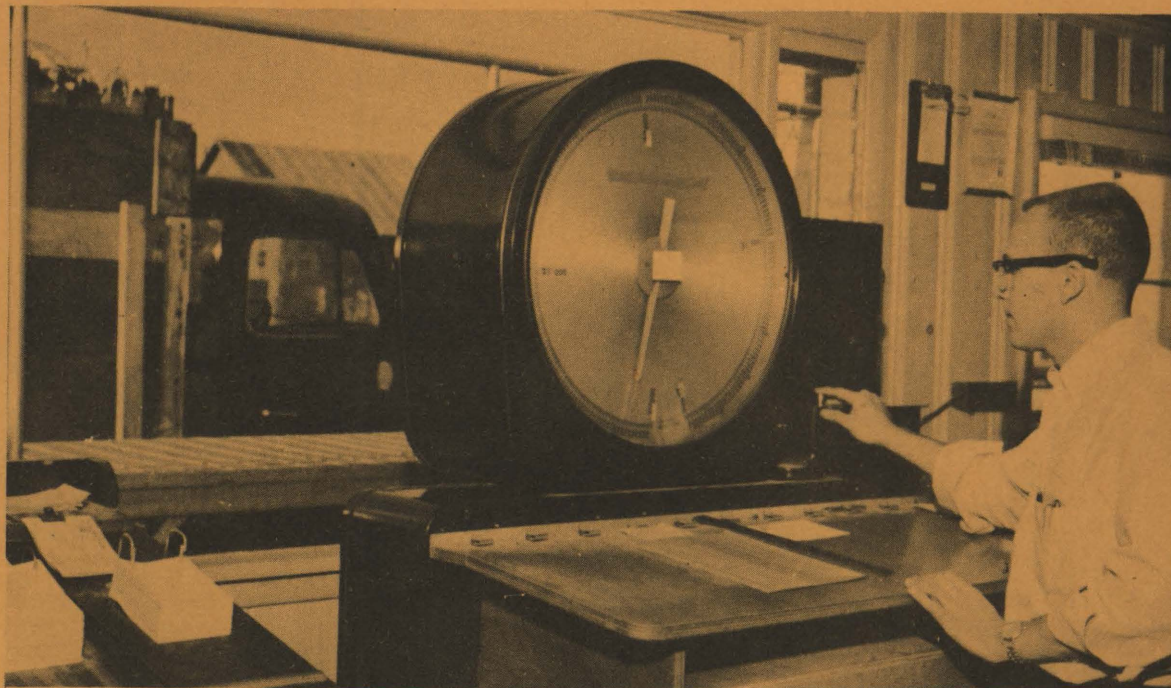


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Let's Weigh the Business, Too



An Analysis of Ohio Grain Elevators

Agricultural Extension Service
The Ohio State University

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An Analysis of Ohio Grain Elevators

With Comparison Tables for Use
by Managers, Directors, and Owners

By Ross Milner^{a/}

Ohio has 804 country elevators. These operate on such a small profit margin that they must weigh their complete operations carefully if they are to succeed financially. Today they face important decisions prompted by rapid developments in business and agriculture.

Farms, from which these elevators directly purchase most of the grain handled, are getting larger and fewer. Grain bought from Ohio farmers in 1946 amounted to only \$155,000,000 compared with \$275,000,000 in 1956. Corn has suddenly become an important cash crop in Ohio. Soybean production has been expanding annually. The government is in the grain business. Transportation costs are changing with truck use expansion, and now the St. Lawrence Seaway project promises cheaper rates to distant markets. Old elevators are getting less desirable as efficiencies continue to develop.

^{a/}Ross Milner is Extension Economist in Grain Marketing and Supply Purchasing, The Department of Agricultural Economics and Rural Sociology, The Ohio State University.

Acknowledgments:

Mr. C. Phillip Baumel, research assistant of the Ohio Agricultural Experiment Station, selected the sample and collected the data from which he prepared a master's thesis.

Dr. John W. Sharp, associate professor, the Ohio Agricultural Experiment Station, supervised the sampling and collection of data. He also made many valuable suggestions in the preparation of this bulletin.

The 100 elevators included in this analysis made an essential contribution by loaning copies of audits and providing other financial information. Appreciation is expressed to all who contributed.

Thus, elevator managers, directors, and owners are confronted with many important decisions which must be made within the next few years. The alternatives are numerous.

Considering these conditions, this analysis of country elevators has the following objectives:

- To determine how the proportion of grain affects the business
- To determine how the volume of sales affects the business
- To provide comparison tables for use by managers, directors, and owners when studying their own businesses.

Nearly every country elevator in Ohio is comparable to one of the 25 groups in this bulletin. Thus, each person may compare his own business with the group that is most similar. These groups have been arranged according to the proportion of sales from grain and supplies and subdivided according to the amount of total sales.

Source of Data Used in the Analysis

Data for this analysis was secured by random selection involving 100 country elevators in Ohio. Of these 76 are cooperative; 21, independent; and 3, independent line-elevators. At least one elevator is included from every principal grain and livestock county of the state.

Each audit represents one elevator location, although many of the elevators operate as multiple units.

All audits are for the fiscal year ending in 1956, with the ending dates ranging from February to December.

The sample was selected and the audits were collected by the Ohio Agricultural Experiment Station.

Part 1-Selected Items from Audits

Elevator managers may use Part 1 by making direct dollar comparisons with their own audits.

The 100 elevators were first sorted into 5 classifications according to type. These were then subdivided by size of business into 25 groups. Each group, regardless of its location in a table, retains the same elevators. This is true throughout the entire analysis. For example, wherever Group 17 is found, it always consists of the same 18 elevators, each having 60-79% of its sales from grain with total sales amounting to \$350,000 to \$699,999.

Elevator managers should first establish which group is most similar to their own elevator in type and size. Direct comparisons may then be made with this group throughout the entire bulletin. (Type is expressed as percent of sales from grain; size, as dollars of total sales).

Part 1 - Elevator managers may make the following dollar comparisons direct from their audits:

Item	Page
• Total Sales	5
• Total Assets	6
• Net Worth	7
• Liabilities	8
• Current Assets	9
• Current Liabilities	10
• Gross Margin	11
• Other Income (other than sales)	12
• Total Expenses	13
• Total Net Income	14

TOTAL SALES RANGED FROM \$73,369 TO \$1,722,209 WITH AN AVERAGE
OF \$639,397 FOR THE 100 ELEVATORS

Table 1 - Total Sales per Elevator

Group No.	No. in Group	Total Sales Arranged by % of Sales from Grain	Total Sales per Elevator		
			Smallest (dollars)	Average (dollars)	Largest (dollars)
<u>0 - 19% of Sales from Grain</u>					
1	2	Under \$350,000 Total Sales	\$ 73,369	\$ 101,751	\$ 130,132
2	2	\$ 350,000 - \$ 699,999	456,089	501,691	547,292
3	0	700,000 - 1,049,999	---	---	---
4	1	1,050,000 - 1,399,999	---	1,166,424	---
5	0	1,400,000 and over	---	---	---
<u>20 - 39% of Sales from Grain</u>					
6	2	Under \$350,000 Total Sales	185,224	221,485	257,746
7	10	\$ 350,000 - \$ 699,999	353,600	459,907	674,711
8	3	700,000 - 1,049,999	800,588	845,072	885,614
9	1	1,050,000 - 1,399,999	---	1,369,893	---
10	0	1,400,000 and over	---	---	---
<u>40 - 59% of Sales from Grain</u>					
11	4	Under \$350,000 Total Sales	101,872	195,051	345,497
12	9	\$ 350,000 - \$ 699,999	375,051	461,962	604,386
13	4	700,000 - 1,049,999	728,383	760,953	813,531
14	1	1,050,000 - 1,399,999	---	1,080,638	---
15	2	1,400,000 and over	1,416,133	1,569,171	1,722,209
<u>60 - 79% of Sales from Grain</u>					
16	6	Under \$350,000 Total Sales	114,791	243,100	317,287
17	18	\$ 350,000 - \$ 699,999	428,970	546,534	692,297
18	12	700,000 - 1,049,999	700,342	870,170	1,012,545
19	2	1,050,000 - 1,399,999	1,090,133	1,169,766	1,249,400
20	1	1,400,000 and over	---	1,402,432	---
<u>80 - 99% of Sales from Grain</u>					
21	4	Under \$350,000 Total Sales	134,923	213,436	327,356
22	6	\$ 350,000 - \$ 699,999	394,276	515,653	647,641
23	5	700,000 - 1,049,999	725,316	872,290	1,012,469
24	3	1,050,000 - 1,399,999	1,194,586	1,244,740	1,316,895
25	2	1,400,000 and over	1,433,552	1,447,542	1,461,532
Average 100			73,369	639,397	1,722,209

Suggestion to Elevator Managers: From your audit, list your total sales beside the group most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

HANDLING GRAIN REQUIRES FEWER DOLLARS OF TOTAL ASSETS

Table 2 shows that total assets decline when larger proportions of grain are handled. This is true for most of the groups in each of the five classifications by total sales.

Table 2 - Total Assets per Elevator

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Total Assets per Elevator		
			Fewest (dollars)	Average (dollars)	Most (dollars)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$ 26,695	\$ 37,111	\$ 47,528
6	2	20 - 39% of Sales from Grain	54,823	82,153	109,483
11	4	40 - 59% of Sales from Grain	63,011	97,823	156,705
16	6	60 - 79% of Sales from Grain	39,400	63,836	84,922
21	4	80 - 99% of Sales from Grain	34,252	44,782	74,321
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	187,127	194,488	201,850
7	10	20 - 39% of Sales from Grain	56,255	147,717	320,933
12	9	40 - 59% of Sales from Grain	105,882	169,156	363,693
17	18	60 - 79% of Sales from Grain	73,360	135,127	221,146
22	6	80 - 99% of Sales from Grain	55,698	112,917	259,750
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	---	---	---
8	3	20 - 39% of Sales from Grain	179,703	325,956	399,134
13	4	40 - 59% of Sales from Grain	141,773	261,510	379,443
18	12	60 - 79% of Sales from Grain	105,426	182,381	264,635
23	5	80 - 99% of Sales from Grain	113,588	160,976	259,047
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	---	332,345	---
9	1	20 - 39% of Sales from Grain	---	612,592	---
14	1	40 - 59% of Sales from Grain	---	232,222	---
19	2	60 - 79% of Sales from Grain	259,694	262,997	266,299
24	3	80 - 99% of Sales from Grain	179,690	247,420	295,910
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	---	---	---
10	0	20 - 39% of Sales from Grain	---	---	---
15	2	40 - 59% of Sales from Grain	479,272	522,467	565,661
20	1	60 - 79% of Sales from Grain	---	420,662	---
25	2	80 - 99% of Sales from Grain	153,824	244,024	334,223
Average 100			26,695	171,067	565,661

Suggestion to Elevator Managers: From your balance sheet, list your total assets beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

LESS NET WORTH IS INVOLVED AS THE PROPORTION
OF GRAIN INCREASES

Although there are some exceptions, Table 3 shows that net worth tends to decrease with increases in the proportion of sales from grain.

Table 3 - Net Worth per Elevator

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Net Worth per Elevator		
			Smallest (dollars)	Average (dollars)	Largest (dollars)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$ 26,355	\$ 35,736	\$ 45,117
6	2	20 - 39% of Sales from Grain	48,509	76,614	104,719
11	4	40 - 59% of Sales from Grain	50,233	76,696	91,244
16	6	60 - 79% of Sales from Grain	22,175	49,172	74,305
21	4	80 - 99% of Sales from Grain	24,138	39,266	69,041
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	97,711	138,304	178,896
7	10	20 - 39% of Sales from Grain	25,065	110,836	194,999
12	9	40 - 59% of Sales from Grain	72,860	109,803	208,013
17	18	60 - 79% of Sales from Grain	64,374	100,945	184,758
22	6	80 - 99% of Sales from Grain	24,916	86,063	240,073
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	---	---	---
8	3	20 - 39% of Sales from Grain	138,443	202,491	264,161
13	4	40 - 59% of Sales from Grain	126,285	159,432	215,655
18	12	60 - 79% of Sales from Grain	73,473	124,411	205,774
23	5	80 - 99% of Sales from Grain	83,244	113,964	169,113
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	---	241,061	---
9	1	20 - 39% of Sales from Grain	---	571,257	---
14	1	40 - 59% of Sales from Grain	---	157,515	---
19	2	60 - 79% of Sales from Grain	146,934	170,764	194,594
24	3	80 - 99% of Sales from Grain	157,227	181,038	199,119
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	---	---	---
10	0	20 - 39% of Sales from Grain	---	---	---
15	2	40 - 59% of Sales from Grain	176,652	249,441	322,229
20	1	60 - 79% of Sales from Grain	---	306,333	---
25	2	80 - 99% of Sales from Grain	66,977	132,244	197,510
Average 100			22,175	119,223	322,229

Suggestion to Elevator Managers: From your audit, list your net worth (owner equity) beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

LIABILITIES PLUS NET WORTH EQUAL TOTAL ASSETS

Tables 2 and 3 show that both assets and net worth decrease as the proportion of grain sales increases. Table 4, however, shows that liabilities vary widely within groups.

Table 4 - Liabilities per Elevator

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Liabilities per Elevator		
			Smallest (dollars)	Average (dollars)	Largest (dollars)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$ 340	\$ 1,375	\$ 2,411
6	2	20 - 39% of Sales from Grain	4,765	5,539	6,314
11	4	40 - 59% of Sales from Grain	2,041	21,128	65,461
16	6	60 - 79% of Sales from Grain	1,257	14,664	62,747
21	4	80 - 99% of Sales from Grain	2,415	5,516	11,303
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	22,954	56,186	89,416
7	10	20 - 39% of Sales from Grain	1,638	36,881	138,399
12	9	40 - 59% of Sales from Grain	16,124	59,353	155,680
17	18	60 - 79% of Sales from Grain	464	34,181	71,183
22	6	80 - 99% of Sales from Grain	16,354	26,854	47,580
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	---	---	---
8	3	20 - 39% of Sales from Grain	41,260	123,465	194,264
13	4	40 - 59% of Sales from Grain	893	102,078	224,534
18	12	60 - 79% of Sales from Grain	16,814	57,969	119,064
23	5	80 - 99% of Sales from Grain	14,107	47,012	89,935
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	---	91,284	---
9	1	20 - 39% of Sales from Grain	---	41,335	---
14	1	40 - 59% of Sales from Grain	---	74,708	---
19	2	60 - 79% of Sales from Grain	71,704	92,232	112,761
24	3	80 - 99% of Sales from Grain	22,464	66,381	109,141
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	---	---	---
10	0	20 - 39% of Sales from Grain	---	---	---
15	2	40 - 59% of Sales from Grain	243,432	273,026	302,620
20	1	60 - 79% of Sales from Grain	---	114,329	---
25	2	80 - 99% of Sales from Grain	86,847	111,780	136,713
Average 100			340	51,844	302,620

Suggestion to Elevator Managers: From your audit, list your liabilities (excluding net worth) beside the group most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

GRAIN HANDLING INVOLVES FEWER CURRENT ASSETS

An ample supply of current assets permits a business to take advantage of good buys. Such opportunities are seldom available to a business that must establish credit for additional funds. The tendency is to have too few available funds.

Table 5 - Current Assets per Elevator

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Current Assets per Elevator		
			Smallest (dollars)	Average (dollars)	Largest (dollars)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$ 8,697	\$ 15,648	\$ 22,599
6	2	20 - 39% of Sales from Grain	28,271	51,621	74,972
11	4	40 - 59% of Sales from Grain	32,434	53,138	75,133
16	6	60 - 79% of Sales from Grain	18,420	37,089	41,699
21	4	80 - 99% of Sales from Grain	13,154	21,359	32,496
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	119,436	135,703	151,968
7	10	20 - 39% of Sales from Grain	19,753	82,282	118,061
12	9	40 - 59% of Sales from Grain	50,390	82,529	129,004
17	18	60 - 79% of Sales from Grain	41,947	71,366	121,309
22	6	80 - 99% of Sales from Grain	28,722	54,963	122,941
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	---	---	---
8	3	20 - 39% of Sales from Grain	87,253	146,867	194,368
13	4	40 - 59% of Sales from Grain	82,937	138,025	227,061
18	12	60 - 79% of Sales from Grain	64,711	85,298	128,341
23	5	80 - 99% of Sales from Grain	41,560	77,720	108,091
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	---	233,290	---
9	1	20 - 39% of Sales from Grain	---	279,482	---
14	1	40 - 59% of Sales from Grain	---	100,146	---
19	2	60 - 79% of Sales from Grain	107,016	129,826	152,636
24	3	80 - 99% of Sales from Grain	77,622	102,331	123,445
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	---	---	---
10	0	20 - 39% of Sales from Grain	---	---	---
15	2	40 - 59% of Sales from Grain	195,392	212,490	229,589
20	1	60 - 79% of Sales from Grain	---	175,227	---
25	2	80 - 99% of Sales from Grain	88,506	97,279	106,052
Average 100			8,697	84,856	229,589

Suggestion to Elevator Managers: Check your current assets from last year's balance sheet. Then list the amount beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

CURRENT LIABILITIES VARY WITHIN GROUPS

Part of the wide range in current liabilities is due to the date that the fiscal year ends. Some elevators in the group are in difficult circumstances. The current ratio (current assets divided by current liabilities) is shown in Table 16.

Table 16 - Current Liabilities per Elevator

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Current Liabilities per Elevator		
			Smallest (dollars)	Average (dollars)	Largest (dollars)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$ 340	\$ 1,275	\$ 2,211
6	2	20 - 39% of Sales from Grain	4,765	5,539	6,314
11	4	40 - 59% of Sales from Grain	2,041	4,082	5,504
16	6	60 - 79% of Sales from Grain	1,257	12,500	49,763
21	4	80 - 99% of Sales from Grain	2,415	5,516	11,303
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	22,954	44,765	66,566
7	10	20 - 39% of Sales from Grain	1,638	21,701	86,399
12	9	40 - 59% of Sales from Grain	339	23,218	80,080
17	18	60 - 79% of Sales from Grain	464	25,669	55,413
22	6	80 - 99% of Sales from Grain	10,116	22,229	41,237
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	---	---	---
8	3	20 - 39% of Sales from Grain	41,260	79,490	104,264
13	4	40 - 59% of Sales from Grain	893	77,389	224,534
18	12	60 - 79% of Sales from Grain	6,749	39,640	80,554
23	5	80 - 99% of Sales from Grain	5,307	19,272	63,538
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	---	79,284	---
9	1	20 - 39% of Sales from Grain	---	41,335	---
14	1	40 - 59% of Sales from Grain	---	6,198	---
19	2	60 - 79% of Sales from Grain	12,629	42,167	71,704
24	3	80 - 99% of Sales from Grain	22,464	41,713	63,641
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	---	---	---
10	0	20 - 39% of Sales from Grain	---	---	---
15	2	40 - 59% of Sales from Grain	62,632	131,949	201,265
20	1	60 - 79% of Sales from Grain	---	114,329	---
25	2	80 - 99% of Sales from Grain	19,094	34,818	50,542
Average 100			339	31,422	224,534

Suggestion to Elevator Managers: Check your current assets from last year's balance sheet. Then list the amount beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

GROSS MARGINS DECREASE AS THE PROPORTION OF GRAIN INCREASES

Gross margin averaged \$58,539 and all "other income" \$17,119 among the 100 elevators. Gross margin, therefore, contributed 77% of the total income.

Table 7 - Gross Margin per Elevator^{a/}

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Gross Margin per Elevator		
			Smallest (dollars)	Average (dollars)	Largest (dollars)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$ 9,489	\$ 13,611	\$ 17,732
6	2	20 - 39% of Sales from Grain	24,196	29,761	35,325
11	4	40 - 59% of Sales from Grain	14,859	26,817	41,223
16	6	60 - 79% of Sales from Grain	11,135	23,665	35,395
21	4	80 - 99% of Sales from Grain	10,761	15,632	28,190
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	67,757	92,266	116,775
7	10	20 - 39% of Sales from Grain	43,407	60,267	69,139
12	9	40 - 59% of Sales from Grain	17,285	51,153	74,285
17	18	60 - 79% of Sales from Grain	26,841	47,077	67,307
22	6	80 - 99% of Sales from Grain	16,866	45,024	103,174
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	---	---	---
8	3	20 - 39% of Sales from Grain	94,343	99,264	107,116
13	4	40 - 59% of Sales from Grain	55,425	73,694	91,719
18	12	60 - 79% of Sales from Grain	52,821	65,416	77,085
23	5	80 - 99% of Sales from Grain	38,319	62,675	122,616
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	---	187,042	---
9	1	20 - 39% of Sales from Grain	---	150,254	---
14	1	40 - 59% of Sales from Grain	---	94,552	---
19	2	60 - 79% of Sales from Grain	65,202	74,791	84,380
24	3	80 - 99% of Sales from Grain	54,412	67,386	89,792
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	---	---	---
10	0	20 - 39% of Sales from Grain	---	---	---
15	2	40 - 59% of Sales from Grain	123,241	155,309	187,378
20	1	60 - 79% of Sales from Grain	---	107,788	---
25	2	80 - 99% of Sales from Grain	68,878	98,671	128,464
Average 100			9,489	58,539	187,378

^{a/} Gross margin is total receipts from sales less cost of goods sold.

Suggestion to Elevator Managers: From your audit list your gross margin beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

OTHER INCOME PROVIDES 23 PERCENT OF TOTAL GROSS INCOME

All "other income" is shown in this table. This, plus gross margin from Table 7 make up total "gross income." Other income averaged \$17,119; gross margin, \$58,539 which equals \$75,658 of average gross income.

Table 8 - Other Income (Gross Income Less Income from Gross Margins)

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Other Income per Elevator		
			Smallest (dollars)	Average (dollars)	Largest (dollars)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$ 4,589	\$11,024	\$17,458
6	2	20 - 39% of Sales from Grain	6,727	8,024	9,321
11	4	40 - 59% of Sales from Grain	4,202	8,959	20,732
16	6	60 - 79% of Sales from Grain	3,484	4,292	7,797
21	4	80 - 99% of Sales from Grain	2,932	4,378	6,525
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	2,459	10,610	18,762
7	10	20 - 39% of Sales from Grain	6,082	17,370	32,636
12	9	40 - 59% of Sales from Grain	6,534	23,758	77,015
17	18	60 - 79% of Sales from Grain	1,419	16,032	31,646
22	6	80 - 99% of Sales from Grain	6,227	15,218	36,456
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	---	---	---
8	3	20 - 39% of Sales from Grain	23,063	32,228	42,736
13	4	40 - 59% of Sales from Grain	18,585	18,873	32,819
18	12	60 - 79% of Sales from Grain	7,695	15,417	28,767
23	5	80 - 99% of Sales from Grain	4,807	11,926	18,070
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	---	41,600	---
9	1	20 - 39% of Sales from Grain	---	63,019	---
14	1	40 - 59% of Sales from Grain	---	26,910	---
19	2	60 - 79% of Sales from Grain	23,260	27,919	32,577
24	3	80 - 99% of Sales from Grain	20,716	23,318	28,220
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	---	---	---
10	0	20 - 39% of Sales from Grain	---	---	---
15	2	40 - 59% of Sales from Grain	11,516	28,550	45,584
20	1	60 - 79% of Sales from Grain	---	47,061	---
25	2	80 - 99% of Sales from Grain	8,919	13,908	18,897
Average 100			1,419	17,119	77,015

Suggestion to Elevator Managers: From your audit, list your "other income" beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

TOTAL EXPENSES TEND TO DECREASE AS THE PROPORTION
OF SALES FROM GRAIN INCREASES

See pages 17 and 26 for an analysis of the relationship of expenses to net income.

Table 9 - Total Expenses per Elevator

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Total Expenses per Elevator		
			Smallest (dollars)	Average (dollars)	Largest (dollars)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$ 12,252	\$ 21,673	\$ 31,094
6	2	20 - 39% of Sales from Grain	23,215	29,390	35,565
11	4	40 - 59% of Sales from Grain	16,301	31,037	56,852
16	6	60 - 79% of Sales from Grain	10,410	20,517	29,242
21	4	80 - 99% of Sales from Grain	9,524	16,448	24,990
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	80,687	88,684	96,682
7	10	20 - 39% of Sales from Grain	41,107	61,946	81,773
12	9	40 - 59% of Sales from Grain	33,106	63,056	150,068
17	18	60 - 79% of Sales from Grain	30,760	47,708	68,530
22	6	80 - 99% of Sales from Grain	22,077	48,749	101,418
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	---	---	---
8	3	20 - 39% of Sales from Grain	112,337	114,422	116,128
13	4	40 - 59% of Sales from Grain	58,598	79,272	94,418
18	12	60 - 79% of Sales from Grain	46,720	61,485	78,361
23	5	80 - 99% of Sales from Grain	20,670	55,557	55,865
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	---	190,384	---
9	1	20 - 39% of Sales from Grain	---	111,219	---
14	1	40 - 59% of Sales from Grain	---	91,042	---
19	2	60 - 79% of Sales from Grain	40,069	49,485	58,901
24	3	80 - 99% of Sales from Grain	62,457	70,620	80,467
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	---	---	---
10	0	20 - 39% of Sales from Grain	---	---	---
15	2	40 - 59% of Sales from Grain	135,736	139,802	143,869
20	1	60 - 79% of Sales from Grain	---	114,701	---
25	2	80 - 99% of Sales from Grain	40,506	67,486	94,465
Average 100			9,524	58,694	150,068

Suggestion to Elevator Managers: From your audit, list your total expenses beside the group that is most similar to your own. For example, if 60-79% of your total sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

TOTAL NET INCOME IS LARGER AMONG THE BIGGER ELEVATORS

Only one of the 37 elevators selling over \$700,000 had less than \$16,964 of net income. Table 10 shows, however, that there is no relationship between proportion of sales from grain and net income. The big variations in net income within each group emphasize that still other management factors are very important. See pages 18 and 27.

Table 10 - Total Net Income per Elevator

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Total Net Income per Elevator		
			Smallest (dollars)	Average (dollars)	Largest (dollars)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$ 1,826	\$ 2,961	\$ 4,096
6	2	20 - 39% of Sales from Grain	6,488	8,395	10,303
11	4	40 - 59% of Sales from Grain	2,209	4,739	7,119
16	6	60 - 79% of Sales from Grain	2,335	7,440	18,631
21	4	80 - 99% of Sales from Grain	-3,207	3,563	7,014
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	5,832	14,192	22,551
7	10	20 - 39% of Sales from Grain	2,299	15,692	29,014
12	9	40 - 59% of Sales from Grain	-9,286	11,855	24,868
17	18	60 - 79% of Sales from Grain	2,099	15,401	30,423
22	6	80 - 99% of Sales from Grain	- 577	11,492	38,212
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	---	---	---
8	3	20 - 39% of Sales from Grain	1,278	17,069	35,050
13	4	40 - 59% of Sales from Grain	-11,613	13,295	23,430
18	12	60 - 79% of Sales from Grain	2,710	19,348	33,379
23	5	80 - 99% of Sales from Grain	11,974	19,043	28,964
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	---	38,258	---
9	1	20 - 39% of Sales from Grain	---	72,054	---
14	1	40 - 59% of Sales from Grain	---	30,420	---
19	2	60 - 79% of Sales from Grain	48,739	53,225	57,710
24	3	80 - 99% of Sales from Grain	12,670	20,084	30,342
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	---	---	---
10	0	20 - 39% of Sales from Grain	---	---	---
15	2	40 - 59% of Sales from Grain	24,956	44,057	63,159
20	1	60 - 79% of Sales from Grain	---	40,148	---
25	2	80 - 99% of Sales from Grain	37,291	45,094	52,896
Average 100			-11,613	16,964	63,159

Suggestion to Elevator Managers: Check your net income from your audit. Then list the amount beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

Part 2

HOW PROPORTION OF GRAIN AND SUPPLIES AFFECTS BUSINESS

The groups in all the tables in Part 2 follow each other in such an order that they clarify consequences due to various proportions of grain and supplies. Notice that size of business is held constant while only the proportions vary. By arranging the groups in this manner, influences caused by size of business are avoided.

As stated in Part 1, each group retains the same elevators throughout the entire analysis. This is true regardless of the order in which the groups are placed in the tables. For example, wherever Group 17 is found, it consists of the same 18 elevators.

Summary of Part 2 - How Proportion of Grain and Supplies Affects Business

	Page
• Smaller Gross Margins Are Taken When Handling Grain	16
• Expenses Are Less When Selling Grain	17
• Any Proportion of Grain and Supplies Can Compete	18
• Proportion of Grain Does Not Determine Earnings of Capital	19
• Grain Is Handled with Smaller Amount of Accounts Receivable	20
• Selling A Dollar's Worth of Grain Requires Less Current Assets	21
• More Grain Can Be Sold per Dollar of Total Assets	22
• Percent of Net Worth to Total Assets Is Not Affected by The Proportion of Sales from Grain	23

SMALLER GROSS MARGINS ARE TAKEN WHEN HANDLING GRAIN

Table 11 shows that gross margins per dollar of sales are generally smaller among elevators that handle larger proportions of grain. This also applies to gross income.^{a/} "Other income" varies irrespective of either proportion of grain handled or size of business.

Table 11 - Gross Margin, Other Income and Gross Income Per Dollar of Sales^{a/}

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Gross Margin per \$ of Sales (cents)	Other Income per \$ of Sales (cents)	Gross Income per \$ of Sales (cents)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	13	11	24
6	2	20 - 39% of Sales from Grain	13	4	17
11	4	40 - 59% of Sales from Grain	14	5	19
16	6	60 - 79% of Sales from Grain	10	2	12
21	4	80 - 99% of Sales from Grain	7	2	9
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	18	2	20
7	10	20 - 39% of Sales from Grain	13	4	17
12	9	40 - 59% of Sales from Grain	11	5	16
17	18	60 - 79% of Sales from Grain	9	3	12
22	6	80 - 99% of Sales from Grain	9	3	12
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	-	-	-
8	3	20 - 39% of Sales from Grain	12	4	16
13	4	40 - 59% of Sales from Grain	10	2	12
18	12	60 - 79% of Sales from Grain	8	2	10
23	5	80 - 99% of Sales from Grain	7	1	8
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	16	4	20
9	1	20 - 39% of Sales from Grain	11	5	16
14	1	40 - 59% of Sales from Grain	9	2	11
19	2	60 - 79% of Sales from Grain	6	2	8
24	3	80 - 99% of Sales from Grain	5	2	7
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	-	-	-
10	0	20 - 39% of Sales from Grain	-	-	-
15	2	40 - 59% of Sales from Grain	10	2	12
20	1	60 - 79% of Sales from Grain	8	3	11
25	2	80 - 99% of Sales from Grain	7	1	8
Average 100			9	3	12

^{a/}Gross income means gross margin income plus all "other income" (before deducting expenses).

Suggestion to Elevator Managers: Calculate and list your gross margin and your "other income" and gross income per dollar of sales. To calculate, divide each item by your total annual sales. Then list the result beside the group most similar to your own. For Example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

EXPENSES ARE LESS WHEN HANDLING GRAIN

Total expenses of selling a dollar's worth of grain are less than those of selling the same amount of supplies. Table 12 shows that within a group there is usually a big variation in expenses per dollar of sales. The proper objective in business is to make a maximum net income from the business. This is accomplished when one continues spending until the last dollar spent just returns itself in gross income. It may not be at the point of smallest expenses per dollar of sales.

Table 12 - Total Expenses per Dollar of Sales

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Total Expenses per Dollar of Sales		
			Smallest (cents)	Average (cents)	Largest (cents)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	17	21	24
6	2	20 - 39% of Sales from Grain	13	13	14
11	4	40 - 59% of Sales from Grain	10	16	20
16	6	60 - 79% of Sales from Grain	7	8	13
21	4	80 - 99% of Sales from Grain	7	8	9
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	18	18	18
7	10	20 - 39% of Sales from Grain	10	14	17
12	9	40 - 59% of Sales from Grain	9	14	29
17	18	60 - 79% of Sales from Grain	7	9	13
22	6	80 - 99% of Sales from Grain	6	10	16
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	-	-	-
8	3	20 - 39% of Sales from Grain	13	14	14
13	4	40 - 59% of Sales from Grain	7	10	13
18	12	60 - 79% of Sales from Grain	6	7	8
23	5	80 - 99% of Sales from Grain	3	6	12
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	-	16	-
9	1	20 - 39% of Sales from Grain	-	10	-
14	1	40 - 59% of Sales from Grain	-	8	-
19	2	60 - 79% of Sales from Grain	4	4	5
24	3	80 - 99% of Sales from Grain	5	6	6
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	-	-	-
10	0	20 - 39% of Sales from Grain	-	-	-
15	2	40 - 59% of Sales from Grain	8	9	10
20	1	60 - 79% of Sales from Grain	-	8	-
25	2	80 - 99% of Sales from Grain	3	5	7
Average 100			3	9	29

Suggestion to Elevator Managers: Calculate and list your total expenses per dollar of sales. To calculate, divide your annual total expenses by your annual total sales. Then list the result beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

ANY PROPORTION OF GRAIN AND SUPPLIES CAN COMPETE

The proportion of grain and supplies sold by these groups of elevators has very little influence on net income per dollar of sales. Table 13 shows that within a group there may be a big variation. Fluctuation in net income per dollar of sales was much greater among elevators selling less than \$1,000,000

Table 13 - Net Income per Dollar of Sales

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Net Income Per Dollar of Sales		
			Smallest (cents)	Average (cents)	Largest (cents)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	2	3	3
6	2	20 - 39% of Sales from Grain	3	4	6
11	4	40 - 59% of Sales from Grain	1	2	4
16	6	60 - 79% of Sales from Grain	1	3	6
21	4	80 - 99% of Sales from Grain	-2	2	3
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	1	3	4
7	10	20 - 39% of Sales from Grain	1	3	6
12	9	40 - 59% of Sales from Grain	-3	3	5
17	18	60 - 79% of Sales from Grain	1	3	7
22	6	80 - 99% of Sales from Grain	0	2	6
<u>\$700,000 - \$1,039,999</u>					
3	0	0 - 19% of Sales from Grain	-	-	-
8	3	20 - 39% of Sales from Grain	0	2	4
13	4	40 - 59% of Sales from Grain	-2	2	3
18	12	60 - 79% of Sales from Grain	0	2	4
23	5	80 - 99% of Sales from Grain	2	2	3
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	-	3	-
9	1	20 - 39% of Sales from Grain	-	5	-
14	1	40 - 59% of Sales from Grain	-	3	-
19	2	60 - 79% of Sales from Grain	4	5	5
24	3	80 - 99% of Sales from Grain	1	2	2
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	-	-	-
10	0	20 - 39% of Sales from Grain	-	-	-
15	2	40 - 59% of Sales from Grain	2	3	4
20	1	60 - 79% of Sales from Grain	-	3	-
25	2	80 - 99% of Sales from Grain	3	3	4
Average 100			-3	3	7

Suggestion to Elevator Managers: Calculate and list your net income per dollar of sales. To calculate, divide your annual total net income by your annual total sales. Then list the result beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

PROPORTION OF GRAIN DOES NOT DETERMINE EARNINGS OF CAPITAL

Net earnings per dollar of assets vary widely both between and within groups. The proportion of grain has little influence on this relationship.

Table 14 - Net Income per Dollar of Total Assets

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Net Income per Dollar of Total Assets		
			Smallest (cents)	Average (cents)	Largest (cents)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	7	8	8
6	2	20 - 39% of Sales from Grain	6	10	19
11	4	40 - 59% of Sales from Grain	3	5	9
16	6	60 - 79% of Sales from Grain	5	12	25
21	4	80 - 99% of Sales from Grain	-9	8	18
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	3	7	11
7	10	20 - 39% of Sales from Grain	2	11	27
12	9	40 - 59% of Sales from Grain	0	7	20
17	18	60 - 79% of Sales from Grain	3	11	25
22	6	80 - 99% of Sales from Grain	-1	10	15
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	-	-	-
8	3	20 - 39% of Sales from Grain	1	5	9
13	4	40 - 59% of Sales from Grain	3	5	14
18	12	60 - 79% of Sales from Grain	6	11	20
23	5	80 - 99% of Sales from Grain	6	12	26
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	-	12	-
9	1	20 - 39% of Sales from Grain	-	12	-
14	1	40 - 59% of Sales from Grain	-	13	-
19	2	60 - 79% of Sales from Grain	18	20	22
24	3	80 - 99% of Sales from Grain	6	8	11
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	-	-	-
10	0	20 - 39% of Sales from Grain	-	-	-
15	2	40 - 59% of Sales from Grain	5	8	11
20	1	60 - 79% of Sales from Grain	-	10	-
25	2	80 - 99% of Sales from Grain	16	19	24
Average 100			-9	10	27

Suggestion to Elevator Managers: Calculate and list your net income per dollar of total assets. To calculate, divide your total net income by your total assets. Then list the result beside the group most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

GRAIN IS HANDLED WITH SMALLER AMOUNT OF ACCOUNTS RECEIVABLE

Accounts receivable per dollar of total annual sales are generally smaller among elevators selling a large proportion of grain. Keep in mind that the amount of accounts receivable shown in the annual report is greatly influenced by the date of the fiscal year for an elevator.

Table 15 - Accounts Receivable Last Day of Accounting Year
per Dollar of Sales for 12 Months

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Accounts Receivable Last Day of Year per \$ of Sales for 12 Months		
			Smallest (cents)	Average (cents)	Largest (cents)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	.3	2.7	7.0
6	2	20 - 39% of Sales from Grain	7.5	8.8	9.8
11	4	40 - 59% of Sales from Grain	3.3	7.2	9.3
16	6	60 - 79% of Sales from Grain	2.0	5.4	9.4
21	4	80 - 99% of Sales from Grain	2.2	4.6	6.9
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	4.3	4.9	5.6
7	10	20 - 39% of Sales from Grain	2.7	6.7	10.9
12	9	40 - 59% of Sales from Grain	2.7	7.0	9.6
17	18	60 - 79% of Sales from Grain	1.3	4.2	10.9
22	6	80 - 99% of Sales from Grain	.6	3.6	7.3
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	-	-	-
8	3	20 - 39% of Sales from Grain	4.8	9.1	11.6
13	4	40 - 59% of Sales from Grain	2.1	4.7	8.7
18	12	60 - 79% of Sales from Grain	1.9	3.0	5.2
23	5	80 - 99% of Sales from Grain	.5	2.4	4.4
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	-	9.1	-
9	1	20 - 39% of Sales from Grain	-	7.8	-
14	1	40 - 59% of Sales from Grain	-	1.5	-
19	2	60 - 79% of Sales from Grain	3.6	4.5	5.3
24	3	80 - 99% of Sales from Grain	1.3	1.7	2.0
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	-	-	-
10	0	20 - 39% of Sales from Grain	-	-	-
15	2	40 - 59% of Sales from Grain	2.5	3.9	5.6
20	1	60 - 79% of Sales from Grain	-	3.6	-
25	2	80 - 99% of Sales from Grain	1.4	1.9	2.4
Average 100			.3	4.4	11.6

Suggestion to Elevator Managers: Calculate and list your accounts receivable per dollar of sales. To calculate, divide your accounts receivable (as shown in your annual report) by your total sales for the year. Then list the result beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 - \$699,999, you are in Group 17.

SELLING A DOLLAR'S WORTH OF GRAIN REQUIRES LESS CURRENT ASSETS

Table 16 compares current assets and current liabilities. From these the "current ratio" is computed by dividing current assets by current liabilities. The ratio is generally "narrower" among elevators selling large proportions of grain. This old ratio gives a quick appraisal of the credit position. It is important to also know the composition of the current assets and the current liabilities. Too narrow a ratio prohibits a manager from taking advantage of "good buys" as they come along. Several elevators in this analysis have this handicap.

**Table 16 - Current Assets, Current Liabilities and Current Assets
Divided by Current Liabilities (Current Ratio)**

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Current Assets (dollars)	Current Liab's (dollars)	Cur. Assets Divided by Cur. Liab's (ratio)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$ 15,648	\$ 1,275	12-1
6	2	20 - 39% of Sales from Grain	51,621	5,539	9-1
11	4	40 - 59% of Sales from Grain	53,138	4,082	13-1
16	6	60 - 79% of Sales from Grain	37,089	12,500	3-1
21	4	80 - 99% of Sales from Grain	21,359	5,516	4-1
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	135,703	44,765	3-1
7	10	20 - 39% of Sales from Grain	82,282	21,701	4-1
12	9	40 - 59% of Sales from Grain	82,539	23,218	4-1
17	18	60 - 79% of Sales from Grain	71,366	25,669	3-1
22	6	80 - 99% of Sales from Grain	54,963	22,229	2-1
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	---	---	---
8	3	20 - 39% of Sales from Grain	146,867	79,490	2-1
13	4	40 - 59% of Sales from Grain	138,025	77,389	2-1
18	12	60 - 79% of Sales from Grain	85,298	39,640	2-1
23	5	80 - 99% of Sales from Grain	77,720	19,272	4-1
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	233,290	79,284	3-1
9	1	20 - 39% of Sales from Grain	279,482	41,335	7-1
14	1	40 - 59% of Sales from Grain	100,146	6,198	16-1
19	2	60 - 79% of Sales from Grain	129,826	42,167	3-1
24	3	80 - 99% of Sales from Grain	102,331	41,713	2-1
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	---	---	---
10	0	20 - 39% of Sales from Grain	---	---	---
15	2	40 - 59% of Sales from Grain	212,490	131,949	2-1
20	1	60 - 79% of Sales from Grain	175,227	114,329	2-1
25	2	80 - 99% of Sales from Grain	97,279	34,818	3-1
Average 100			84,856	31,422	2.7-1

Suggestion to Elevator Managers: List your current assets and current liabilities from your balance sheet. Calculate your "current assets divided by current liabilities" (current ratio). Then list above beside the group most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

MORE GRAIN CAN BE SOLD PER DOLLAR OF TOTAL ASSETS

When a grain elevator handles supplies, it must have much more capital per dollar of sales. Notice that elevators handling larger proportions of grain make more sales per dollar of assets.

Table 17 - Total Sales per Dollar of Total Assets

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Total Sales per Dollar of Total Assets		
			Smallest (dollars)	Average (dollars)	Largest (dollars)
<u>Under \$350,000 Total Sales</u>					
1	2	0 - 19% of Sales from Grain	\$2.74	\$2.74	\$2.75
6	2	20 - 39% of Sales from Grain	2.35	2.70	3.38
11	4	40 - 59% of Sales from Grain	1.62	1.99	2.20
16	6	60 - 79% of Sales from Grain	2.91	3.81	6.81
21	4	80 - 99% of Sales from Grain	3.94	4.77	5.93
<u>\$350,000 - \$699,999</u>					
2	2	0 - 19% of Sales from Grain	2.44	2.58	2.71
7	10	20 - 39% of Sales from Grain	2.10	3.11	6.32
12	9	40 - 59% of Sales from Grain	1.42	2.73	5.29
17	18	60 - 79% of Sales from Grain	2.83	4.04	5.98
22	6	80 - 99% of Sales from Grain	2.49	4.57	8.26
<u>\$700,000 - \$1,049,999</u>					
3	0	0 - 19% of Sales from Grain	-	-	-
8	3	20 - 39% of Sales from Grain	2.01	2.59	4.93
13	4	40 - 59% of Sales from Grain	2.03	2.91	5.14
18	12	60 - 79% of Sales from Grain	3.32	4.77	7.54
23	5	80 - 99% of Sales from Grain	3.91	5.42	8.78
<u>\$1,050,000 - \$1,399,999</u>					
4	1	0 - 19% of Sales from Grain	-	3.51	-
9	1	20 - 39% of Sales from Grain	-	2.24	-
14	1	40 - 59% of Sales from Grain	-	4.65	-
19	2	60 - 79% of Sales from Grain	4.20	4.45	4.69
24	3	80 - 99% of Sales from Grain	4.04	5.03	6.80
<u>\$1,400,000 and over</u>					
5	0	0 - 19% of Sales from Grain	-	-	-
10	0	20 - 39% of Sales from Grain	-	-	-
15	2	40 - 59% of Sales from Grain	2.95	3.00	3.04
20	1	60 - 79% of Sales from Grain	-	3.33	-
25	2	80 - 99% of Sales from Grain	4.37	5.93	9.32
Average 100			1.42	3.74	9.32

Suggestion to Elevator Managers: Calculate and list your total sales per dollar of total assets. To calculate, divide your total sales by your total assets. Then list the result beside the group most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

PERCENT OF NET WORTH TO TOTAL ASSETS IS NOT AFFECTED
BY PROPORTION OF SALES FROM GRAIN

Table 18 shows the proportion of total assets owned by the average elevator. The remainder is borrowed in one form or another. Ownership varies from less than 50% to nearly 100%. Percentage of ownership is somewhat smaller among the larger elevators.

Table 18 - Net Worth as Percent of Total Assets

Group No.	No. in Group	Percent of Grain Sales Arranged by Total Sales	Net Worth as Percent of Total Assets Average (percent)
<u>Under \$350,000 Total Sales</u>			
1	2	0 - 19% of Sales from Grain	96
6	2	20 - 39% of Sales from Grain	93
11	4	40 - 59% of Sales from Grain	78
16	6	60 - 79% of Sales from Grain	77
21	4	80 - 99% of Sales from Grain	88
<u>\$350,000 - \$699,999</u>			
2	2	0 - 19% of Sales from Grain	71
7	10	20 - 39% of Sales from Grain	75
12	19	40 - 59% of Sales from Grain	65
17	18	60 - 79% of Sales from Grain	75
22	6	80 - 99% of Sales from Grain	76
<u>\$700,000 - \$1,049,999</u>			
3	0	0 - 19% of Sales from Grain	--
8	3	20 - 39% of Sales from Grain	62
13	4	40 - 59% of Sales from Grain	61
18	12	60 - 79% of Sales from Grain	68
23	5	80 - 99% of Sales from Grain	71
<u>\$1,050,000 - \$1,399,999</u>			
4	1	0 - 19% of Sales from Grain	73
9	1	20 - 39% of Sales from Grain	93
14	1	40 - 59% of Sales from Grain	68
19	2	60 - 79% of Sales from Grain	65
24	3	80 - 99% of Sales from Grain	73
<u>\$1,400,000 and over</u>			
5	0	0 - 19% of Sales from Grain	--
10	0	20 - 39% of Sales from Grain	--
15	2	40 - 59% of Sales from Grain	48
20	1	60 - 79% of Sales from Grain	73
25	2	80 - 99% of Sales from Grain	54
Average	100		70

Suggestion to Elevator Managers: Calculate and list your net worth as percent of total assets. To calculate, divide your net worth (as shown in your annual report) by your total sales for the year, add two places for percent. Then list the result beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

Part 3

HOW SIZE AFFECTS BUSINESS

The groups in all the tables in Part 3 follow each other in such an order that they clarify consequences due to size of business. Notice that the proportion of grain and supplies is held constant while only the size of business varies. By arranging the groups in this manner, influences caused by proportions of grain and supplies are avoided.

As stated in Part 1, each group retains the same elevators throughout the entire analysis. This is true regardless of the order in which the groups are placed in the tables. For example, wherever Group 17 is found, it always consists of the same 18 elevators.

Summary of Part 3 - How Size Affects Business

	Page
• Larger Elevators Operate On Smaller Gross Margins	25
• Larger Elevators Have Smaller Expenses per Dollar of Sales	26
• Net Income per Dollar of Sales Varies Little Regardless of Size	27
• Size of Business Does Not Determine The Rate of Return to Capital	28

LARGER ELEVATORS OPERATE ON SMALLER GROSS MARGINS

Gross margin per dollar of sales tends to be smaller as the size of business increases (size of business is determined by dollars of total sales). This also applies to gross income.^{a/}

Table 19 - Gross Margin, Other Income and Gross Income per Dollar of Sales^{a/}

Group No.	No. in Group	Total Sales Arranged by % of Sales from Grain	Gross Margin per \$ of Sales (cents)	Other Income per \$ of Sales (cents)	Gross Income per \$ of Sales (cents)
<u>0 - 19% of Sales from Grain</u>					
1	2	Under \$350,000 Total Sales	13	11	24
2	2	\$ 350,000 - \$ 699,999	18	2	20
3	0	700,000 - 1,049,999	--	--	--
4	1	1,050,000 - 1,399,999	16	4	20
5	0	1,400,000 and over	--	--	--
<u>20 - 39% of Sales from Grain</u>					
6	2	Under \$350,000 Total Sales	13	4	17
7	10	\$ 350,000 - \$ 699,999	13	4	17
8	3	700,000 - 1,049,999	12	4	16
9	1	1,050,000 - 1,399,999	11	5	16
10	0	1,400,000 and over	--	--	--
<u>40 - 59% of Sales from Grain</u>					
11	4	Under \$350,000 Total Sales	14	5	19
12	9	\$ 350,000 - \$ 699,999	11	5	16
13	4	700,000 - 1,049,999	10	2	12
14	1	1,050,000 - 1,399,999	9	2	11
15	2	1,400,000 and over	10	2	12
<u>60 - 79% of Sales from Grain</u>					
16	6	Under \$350,000 Total Sales	10	2	12
17	18	\$ 350,000 - \$ 699,999	9	3	12
18	12	700,000 - 1,049,999	8	2	10
19	2	1,050,000 - 1,399,999	6	2	8
20	1	1,400,000 and over	8	3	11
<u>80 - 99% of Sales from Grain</u>					
21	4	Under \$350,000 Total Sales	7	2	9
22	6	\$ 350,000 - \$ 699,999	9	3	12
23	5	700,000 - 1,049,999	7	1	8
24	3	1,050,000 - 1,399,999	5	2	7
25	2	1,400,000 and over	7	1	8
Average 100			9	3	12

^{a/}Gross income means gross margin income plus all "other income" (before deducting expenses).

Suggestion to Elevator Managers: Calculate and list your gross margin and other income per dollar of sales. To calculate, divide each item by your total annual sales. Then list the result beside the group most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

LARGER ELEVATORS HAVE SMALLER EXPENSES PER DOLLAR OF SALES

Expenses per dollar of sales usually decrease as size of business increases. On page 17 it was stated that maximum net income for the business is the proper objective, not smallest expenses per dollar of sales. A comparative study of tables 20 and 21 discloses that groups 18, 21, 23, 24, and 25 had below average expenses per dollar of sales yet had below average net income per dollar of sales.

Table 20 - Total Expenses per Dollar of Sales by Total Sales

Group No.	No. in Group	Total Sales Arranged by % of Sales from Grain	Expenses per Dollar of Sales		
			Smallest (cents)	Average (cents)	Largest (cents)
<u>0 - 19% of Sales from Grain</u>					
1	2	Under \$350,000 Total Sales	17	21	24
2	2	\$ 350,000 - \$ 699,999	18	18	18
3	0	700,000 - 1,049,999	--	--	--
4	1	1,050,000 - 1,399,999	--	16	--
5	0	1,400,000 and over	--	--	--
<u>20 - 39% of Sales from Grain</u>					
6	2	Under \$350,000 Total Sales	13	13	14
7	10	\$ 350,000 - \$ 699,999	10	14	17
8	3	700,000 - 1,049,999	13	14	14
9	1	1,050,000 - 1,399,999	--	10	--
10	0	1,400,000 and over	--	--	--
<u>40 - 59% of Sales from Grain</u>					
11	4	Under \$350,000 Total Sales	10	16	20
12	9	\$ 350,000 - \$ 699,999	9	14	29
13	4	700,000 - 1,049,999	7	10	13
14	1	1,050,000 - 1,399,999	--	8	--
15	2	1,400,000 and over	8	9	10
<u>60 - 79% of Sales from Grain</u>					
16	6	Under \$350,000 Total Sales	7	8	13
17	18	\$ 350,000 - \$ 699,999	7	9	13
18	12	700,000 - 1,049,999	6	7	8
19	2	1,050,000 - 1,399,999	4	4	5
20	1	1,400,000 and over	--	8	--
<u>80 - 99% of Sales from Grain</u>					
21	4	Under \$350,000 Total Sales	7	8	9
22	6	\$ 350,000 - \$ 699,999	6	10	16
23	5	700,000 - 1,049,999	3	6	12
24	3	1,050,000 - 1,399,999	5	6	6
25	2	1,400,000 and over	3	5	7
Average 100			3	9	29

Suggestion to Elevator Managers: Calculate and list your total expenses per dollar of sales. To calculate, divide your annual total expenses by your annual total sales. Then list the result beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

NET INCOME PER DOLLAR OF SALES VARIES LITTLE REGARDLESS OF SIZE

Larger businesses have smaller gross incomes and smaller expenses per dollar of sales. This off-setting influence seems to nullify all relationships between net income per dollar of sales and the size of business.

Table 21 - Net Income per Dollar of Sales

Group No.	No. in Group	Total Sales Arranged by % of Sales from Grain	Net Income per Dollar of Sales		
			Smallest (cents)	Average (cents)	Largest (cents)
<u>0 - 19% of Sales from Grain</u>					
1	2	Under \$350,000 Total Sales	2	3	3
2	2	\$ 350,000 - \$ 699,999	1	3	4
3	0	700,000 - 1,049,999	-	-	-
4	1	1,050,000 - 1,399,999	-	3	-
5	0	1,400,000 and over	-	-	-
<u>20 - 39% of Sales from Grain</u>					
6	2	Under \$350,000 Total Sales	3	4	6
7	10	\$ 350,000 - \$ 699,999	1	3	6
8	3	700,000 - 1,049,999	0	2	4
9	1	1,050,000 - 1,399,999	-	5	-
10	0	1,400,000 and over	-	-	-
<u>40 - 59% of Sales from Grain</u>					
11	4	Under \$350,000 Total Sales	1	2	4
12	9	\$ 350,000 - \$ 699,999	-3	3	5
13	4	700,000 - 1,049,999	-2	2	3
14	1	1,050,000 - 1,399,999	-	3	-
15	2	1,400,000 and over	2	3	4
<u>60 - 79% of Sales from Grain</u>					
16	6	Under \$350,000 Total Sales	1	3	6
17	18	\$ 350,000 - \$ 699,999	1	3	7
18	12	700,000 - 1,049,999	0	2	4
19	2	1,050,000 - 1,399,999	4	5	5
20	1	1,400,000 and over	-	3	-
<u>80 - 99% of Sales from Grain</u>					
21	4	Under \$350,000 Total Sales	-2	2	3
22	6	\$ 350,000 - \$ 699,999	0	2	6
23	5	700,000 - 1,049,999	2	2	3
24	3	1,050,000 - 1,399,999	1	2	2
25	2	1,400,000 and over	3	3	4
Average 100			-3	3	7

Suggestion to Elevator Managers: Calculate and list your net income per dollar of sales. To calculate, divide your annual total net income by your annual total sales. Then list the result beside the group that is most similar to your own. For example, if 60-79% of your sales were from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.

SIZE OF BUSINESS DOES NOT DETERMINE RATE OF RETURN TO CAPITAL

The rate of earnings of capital is not related to the size of business. The quality of other management decisions determines the net return per dollar of total assets. Among the 100 elevators, net income per dollar of total assets averaged 10 cents but varied from a loss of 9 cents to a return of 27 cents.

Table 22 - Net Income per Dollar of Total Assets

Group No.	No. in Group	Total Sales Arranged by % of Sales from Grain	Net Income per Dollar of Assets		
			Smallest (cents)	Average (cents)	Largest (cents)
<u>0 - 19% of Sales from Grain</u>					
1	2	Under \$350,000 Total Sales	7	8	9
2	2	\$ 350,000 - \$ 699,999	3	7	11
3	0	700,000 - 1,049,999	--	--	--
4	1	1,050,000 - 1,399,999	--	12	--
5	0	1,400,000 and over	--	--	--
<u>20 - 39% of Sales from Grain</u>					
6	2	Under \$350,000 Total Sales	6	10	19
7	10	\$ 350,000 - \$ 699,999	2	11	27
8	3	700,000 - 1,049,999	1	5	9
9	1	1,050,000 - 1,399,999	--	12	--
10	0	1,400,000 and over	--	--	--
<u>40 - 59% of Sales from Grain</u>					
11	4	Under \$350,000 Total Sales	3	5	9
12	9	\$ 350,000 - \$ 699,999	-9	7	20
13	4	1 700,000 - 1,049,999	-3	5	14
14	1	1,050,000 - 1,399,999	--	13	--
15	2	1,400,000 and over	5	8	11
<u>60 - 79% of Sales from Grain</u>					
16	6	Under \$350,000 Total Sales	5	12	25
17	18	\$ 350,000 - \$ 699,999	1	11	25
18	12	700,000 - 1,049,999	1	11	20
19	2	1,050,000 - 1,399,999	18	20	22
20	1	1,400,000 and over	--	10	--
<u>80 - 99% of Sales from Grain</u>					
21	4	Under \$350,000 Total Sales	-9	8	18
22	6	\$ 350,000 - \$ 699,999	-1	10	15
23	5	700,000 - 1,049,999	6	12	26
24	3	1,050,000 - 1,399,999	6	8	11
25	2	1,400,000 and over	16	19	24
Average 100			-9	10	27

Suggestion to Elevator Managers: Calculate and list your net income per dollar of total assets. To calculate, divide your annual total net income by your total assets at the end of the year. Then list the result beside the group that is most similar to your own. For example, if 60-79% of your sales are from grain and your total sales amounted to \$350,000 to \$699,999, you are in Group 17.