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V EARNING POWER IN RELATION TO SIZE OF ENTERPRISE

DOES any relationship exist between earning power and size of enterprise? For the purpose of answering this question, if possible, a tabulation by size groups was made of the earning rates of all the companies embraced in this study.

PREPARATION OF TABLE IV

The earning rates as prepared for Table I were used, as such rates are believed to be more comparable in respect of size than the other measures of earning power available. The average rates for the three-year period were employed on the assumption that they are more significant in this connection than yearly figures for such a short period as that covered. Had data been available for a longer period it might have been feasible to attempt to discover the relation, if any, between stability of earnings and size. In this tabulation the earning rates were classified into the three main groups, manufacturing, trading, and all other, and each group was then subdivided into five size groups in terms of net book assets (total assets as shown by the books less reserves for depreciation and other valuation accounts). In each range the first figure is excluded.

Group 1	$ 0–$ 200,000
Group 2	200,000– 500,000
Group 3	500,000– 1,500,000
Group 4	1,500,000– 5,000,000
Group 5	Above 5,000,000

Rates for each size grouping were then distributed into five classes: below 0; 0 to 10 per cent; 10 to 20 per cent; 20 to 30 per cent; above 30 per cent. Next, percentages were computed and were substituted for the absolute numbers so as to make the various size groups directly comparable in terms of the different classes of earning rates. As a final step an average rate for each size group was computed. A simple

TABLE IV

AVERAGE EARNING RATES BY SIZE GROUPS

(ratio of three-year aggregates)

PERCENTAGE DISTRIBUTION OF COMPANIES BY EARNING RATES

SIZE GROUP	NO. OF COS.	BELOW 0	0 TO 10%	10 TO 20%	20 TO 30%	ABOVE 30%	AVERAGE RATE
Manufacturing							
1	78	14.1	37.2	29.5	11.5	7.7	11.34
2	53	3.8	49.0	30.2	15.1	1.9	10.69
3	85	9.4	63.5	17.3	8.2	1.2	7.30
4	79	6.3	59.5	27.8	5.1	1.3	8.27
5	46	4.4	63.0	26.1	6.5	0	8.60
Trading							
1	66	15.2	69.7	9.1	1.5	4.5	6.37
2	61	13.1	73.8	9.8	3.3	0	5.43
3	44	0	79.5	20.5	0	0	7.24
4	35	8.6	77.1	11.4	2.9	0	6.51
5	16	12.5	62.5	25.0	0	0	7.23
All Companies[1]							
1	198	14.1	52.5	19.2	7.6	6.6	9.40
2	140	10.7	60.0	18.6	8.6	2.1	7.81
3	160	5.6	67.5	18.8	5.6	2.5	8.07
4	129	7.8	64.3	22.5	4.6	.8	7.58
5	72	6.9	62.5	25.0	5.6	0	8.02
Total	699	9.6	60.6	20.2	6.6	3.0	8.32

[1] Including also companies other than manufacturing and trading.

average was deemed to be most significant in this connection, in view of the fact that the individual rates had already been distributed into relatively homogeneous size groups. Table IV summarizes the results. 'All companies' include manufacturing, trading, and all other companies not placed under these two headings.

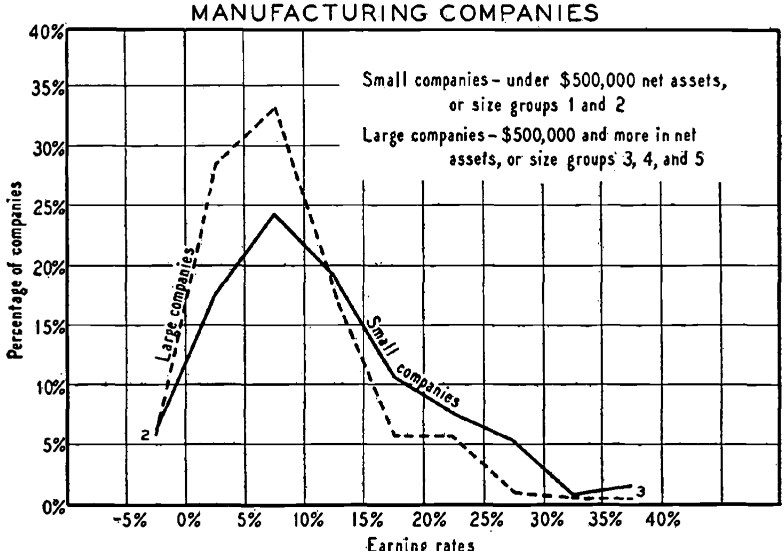
VARIATIONS BY SIZE GROUPS AND INDUSTRIES

While for all companies the final averages for the various size groups do not show any very striking dispersion, it is evident that the smallest size group, 198 companies, has an average rate of about 1.3 per cent in excess of the average rate of any other group. For the other four size groups the range is from approximately 7.6 to 8.1 per cent, or slightly less than .5 per cent.

For the 341 manufacturing companies the smallest size group, 78 companies, shows an average rate of 11.34 per cent, and the rate for Group 2 is 10.69 per cent. The other three groups under manufacturing exhibit decided inferiority in earning power, the rates ranging from 7.3 to 8.6 per cent. That the middle group shows the lowest rate of the five is a matter of interest. In the trading companies, on the other hand, the smallest size group shows a relatively low earning rate, and the rate in Group 2 is the lowest of the five divisions. The range of average rates in the five size groups in the trading field is less than 2 per cent, while in the manufacturing field the range is slightly over 4 per cent. For the 136 companies other than manufacturing and trading included in 'all companies' the distribution of average earning rates by size groups is as follows. For these companies, evidently, there are two conspicuously high-earning size groups, numbers 1 and 3.

GROUP	NUMBER OF COMPANIES	AVERAGE RATE
1	54	10.31
2	26	7.40
3	31	11.46
4	16	6.45
5	10	6.61

Figure 4
COMPARATIVE DISTRIBUTION OF THREE-YEAR AVERAGE EARNING RATES[1] OF LARGE AND SMALL MANUFACTURING COMPANIES



[1]Computed in connection with Table I.

[2]Below -5% rate: 3.8% of total small companies, 1.4% of total large companies.

[3]Above 40% rate: 3.1% of total small companies, 0.5% of total large companies.

Figure 4 shows the distribution, in percentage of companies, of the 'small' and 'large' manufacturing corporations over classes of earning rates ranging from negative 5 per cent to positive 40 per cent. The earning rates used in making this chart, as throughout the consideration of the relation of earnings to size of enterprise, are those computed in the preparation of Table I. By 'small' companies is here meant the first two size groups, by 'large' companies the last three size groups.

FURTHER ANALYSIS OF GROUP I

To check further the apparent conclusion that by and large in the period covered the high-earning companies are those with assets of $200,000 or less rather than the large companies, a separate tabulation was made of the 29 companies embraced in the study whose net book assets were under $50,000 each. It was found that the average of the three-year average earning rates for these companies was only 8.18 per cent, or about 1.2 per cent less than the average for Group 1 as a whole. Further, one of these 29 companies, a small contractor, showed an average rate of over 109 per cent. The elimination of this unusual figure reduces the average rate for the remaining 28 companies to only 4.57 per cent. The 169 companies with assets in the range $50,000 to $200,000 have an average rate of 9.6 per cent, showing clearly that they possess the highest earning power for the three years covered.

In the manufacturing group the concerns with assets of less than $50,000 earned 8.32 per cent; those with assets in the range $50,000 to $200,000 earned 11.68 per cent. In the trading group those with assets of less than $50,000 show a rate of 3.52 per cent; the average earning rate for those with average assets of from $50,000 to $200,000 is 6.92.

CONCLUSION

It is of course possible that there is something peculiar about the accounting methods of these small concerns which would tend to modify this conclusion. The fact that all the companies in the study are regular clients of public accountants, having fairly definite standards with respect to valuation and accounting practice in general, would seem to make it unlikely that there is any definite tendency towards an unusual degree of understatement in the property values, or overstatement in their earnings. It is true that the smaller concerns have not in general gone through consolidations and reconsolidations to the degree experienced by the larger companies—a process in which a more or less unreasonable expansion of book values of assets is common. On the other hand, in small concerns, with stock closely held among a few individuals, there is a tendency to treat a relatively large part of the gross earnings as managerial salaries. To the extent that this is done here the net earnings of the small companies as reported tend to be understated rather than overstated in comparison with the earnings of large corporations.[7]

[7] Colonel Rorty makes the statistical comment on the question of earnings in relation to size of corporations that "successful corporations may tend to grow in size and may thus even tend to expand beyond the optimum of magnitude. Also a large company, which is often in effect a composite of small companies, tends to have more stable earnings. Furthermore, the smaller concerns perhaps more often fail—and concerns in positive distress have perhaps automatically been excluded from the reports. This may tend to bias the figures to show higher earnings for the smaller concerns reported, whereas a true average of all small concerns might show different figures."