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BOOK II  
EARNINGS OF LARGE  
CORPORATIONS



## CHAPTER 8

### INTRODUCTION

#### 1. CHARACTER OF THE DATA

THE chapters in Book II are concerned with detailed information on the earnings, sales and capital investment of the various major and minor groups that make up the Manufacturing, Trading, Mining and Financial divisions. Data only for fairly large corporations<sup>1</sup> are given here; those for smaller enterprises appear in Book III. In Book II, all of the companies included in each group are identical from year to year. That is to say, each of the minor group tables for Manufacture will contain a portion of the 2,046 corporations for which aggregate data have been presented in various parts of Book I; each of the Trading minor groups contains a portion of the 664 Trading corporations that have been previously discussed; and the Mining and Financial minor groups deal with the subdivisions of the 88 Mining and 346 Financial corporations for which we possess identical data over the ten-year period 1919-28.

With the exception of two broader chapters—Chapter 9, Manufacture and Its Major Groups, and Chapter 14, Trading and Its Minor Groups—each of the chapters that follow presents tabular data in the same general form.

The first table of each chapter describes the size and character of the minor groups that make up the major group; for example, in the major group Food Products, data for such minor groups as Bakery Products and Package Foods appear. Next come the earnings rates for each minor group. Then the proportion of earnings

<sup>1</sup>The arithmetic average and median sizes of the corporations in each group in terms of capital investment will be found in the tables at the close of each chapter. Additional data and comment on their size will be found in Ch. 43, sec. 3.

paid out in cash dividends is given. Finally, frequency distributions of the earnings rates of individual corporations are presented.

These chapters obviously are intended for reading or reference on the part of persons interested in any particular industry or major industrial group. They are not designed primarily for the use of statistical specialists whose concern is rather with more technical questions such as frequency distribution patterns, average deviations and ranges of dispersion. While the data of these chapters invite such extended analyses, what has been undertaken in this direction is placed in Appendix A. Likewise, the more technical questions involving the character of the various samples involved are discussed in Chapters 43-46.

## 2. DEFINITIONS OF TERMS

When the phrase, 'the period as a whole', is used without any specification of dates, the expression refers to the ten years 1919-28. The 'first half of the period' thus refers to the years 1919-23, and the 'second half' to 1924-28. By 'first part' of the period is meant the two or three years starting with 1919, and by 'last part', the years 1926-28. The context will make clear the occasional slight departures from this practice.

The phrase 'earnings upon investment', and the expression 'rate' or 'return' upon capital investment are used indiscriminately to refer either to the percentage of *net income to capitalization* or to the percentage of *total profits to total capital*. It will be recalled that the two latter terms have been defined as involving the rate of earnings before and after fixed charges upon capital respectively, the capital in the one case including, in the other case excluding, funded debt.<sup>2</sup> The reason in these chapters for not distinguishing these two concepts (apart from a few places in which attention is specifically called to the desirability of so doing) is that, in nearly all of the minor groups of the several industrial divisions here under discussion, the difference between the two rates of return is negligible. This would not be true generally of Railroads or Public Utilities; nor is it true of some individual corporations in the industrial divisions here under survey. But, in the main, even with frequency distributions of individual earnings rates, the two ratios amount to one

<sup>2</sup> See Ch. 2 and Glossary.

and the same thing in the fields of Manufacture, Trade, Mining and Finance. (The evidence for this statement is given in Appendix Table 8.) In discussing the average rate of net return upon invested capital in the various minor groups, therefore, the expression 'percentage of net income to capitalization' is avoided because it implies that a difference exists between this return and the 'percentage of total profit to total capital', whereas our findings show that no appreciable difference is evident. The reason is that most Manufacturing, Trading, Mining and Financial groups are characterized by a very low ratio of funded debt to total capital—in sharp contrast to the railroad and public utility fields. The amount of funded debt in each minor group is given in Appendix B, while the rates of earnings upon capital including such debt are shown in the tables at the end of each chapter and may be compared with the 'after charges' figures by any interested reader.

The term 'all', when employed in such phrases as 'all Manufacturing', 'all Food Products corporations', or 'all Trading enterprises', refers to all of the corporations of our sample—not to all corporations in the United States. When in rare instances the latter meaning is intended, the phrase 'all corporations in the country' is used.

Likewise, and this it is hardly necessary to remark, the use of the word 'earned' implies no judgment as to an income, whatever its rate, being deserved or not deserved as a reward for services performed or for any other reason; the word is used simply to denote an amount or rate of income received by the corporations in question or shown by the figures of their profit and loss and balance sheet accounts.

### 3. RELATIVE VERSUS ABSOLUTE CHANGE

The charts on which percentages are plotted are drawn to ordinary or natural scales. Those showing absolute amounts, however, are drawn to semi-logarithmic or ratio scales in which equal vertical distances represent unequal absolute amounts, but equal percentages, of increase or decrease. In these absolute figures it is the comparative rates of change that are important. As a matter of fact, the actual size of these data themselves in some instances are not significant because the corporations in any particular group represent only a sample of the entire industry. Over a period the significance of the rela-

tions between the several series of data involved is not, however, thereby impaired. Again, if these charts, which do not always give a clear picture of the absolute amounts involved, fail to serve the reader's purpose, the actual data can always be found in Appendix B.

While the text discusses the comparative course of these figures rather than their absolute amounts, in the case of each group an actual sales or investment figure is given for at least one year of the period in order to afford some indication of the approximate size of the sample. Incidentally, the word 'actual' is occasionally employed in the text as a synonym for 'absolute'. In this sense it merely affords a contrast to the term comparative or relative but is not intended to imply that the figure in question, especially if it be an investment amount, is necessarily valid, correct, 'real' or final in any basic or ultimate sense. The investment figures in most instances are simply to be taken for what they may be worth. For any individual corporation they reflect, or at least are subject to, the vagaries of corporation accounting. Taken *en masse*, either in aggregate amounts or as the individual data of a frequency distribution, they are probably subject to no error great enough to vitiate the figures with respect to any purposes for which they are here employed; but on this subject the critical reader must consult other portions of the volume.<sup>3</sup>

Then, too, all the sales, income and investment data given as absolute amounts are, of course, expressed in dollars; and a dollar of sales represented more goods in 1921 than it did in 1919 or 1920. No effort is made to correct or adjust the data because of such price changes. To do so for each of the 106 minor groups would involve the use of different index numbers for the commodities of every group, and even then no great accuracy could be attained. It seems wiser, as regards the first part of the period, not to attempt any such wholesale revision of the data; but it is to be borne in mind that declines of dollar sales between 1919 and 1921 do not represent equivalent declines in the physical volume of goods produced and marketed. As regards the last five or six years of the period, price changes are far less important, and fluctuations in sales volume probably represent changes in the course of physical volume with fair accuracy in most instances.

All earnings figures are for net income or profits before the pay-

<sup>3</sup> See Ch. 43-46.

ment of Federal income taxes. The 'after taxes' data were available, but to have given all of the ratios in each form, that is, both before and after taxes, would have entailed the presentation of just twice as much tabular material and it was not believed that, for most purposes of analysis, this would have been justified. The reasons for this decision are given in Appendix A. The amount of Federal income tax paid by each minor group is also shown there; and the reader interested in any particular group or year may readily perform the necessary subtractions and compute the desired percentages.

#### 4. LIMITATIONS OF MINING AND FINANCE SAMPLES

While all of the data represent samples, those for the Manufacturing and Trading groups constitute better samples, on the whole, than those for Mining and Finance. The aggregate capital investments of the corporations in both the Manufacturing and Trading samples are far larger parts of the investment of all the corporations in the country engaged in these fields than is the Finance sample.<sup>4</sup> In Mining, this is not technically true; nevertheless the sample falls far short of representing much typical large-scale mining activity. The reason is that a very large portion of ferrous, as well as non-ferrous, metal mining is carried on by iron and steel companies and by brass, zinc, lead and copper enterprises, which own their own mines. Similarly, many companies classified in Manufacturing, under the head of Petroleum Refining, operate their own oil wells. The extent to which figures for Mining, as carried on by corporations which engage only or predominantly in mining activities, fall short of typifying the entire business of extracting ores, oil, etc., from the earth is shown by comparing the total amount of depletion reported to the Bureau of Internal Revenue by Manufacturing corporations and by corporations classified under Mining and Quarrying. In 1928 the corporations which reported that they were engaged in Mining

<sup>4</sup>The proportions which the investment (capitalization) of the companies in the four samples discussed in Book II bear to the total investment of all of the country's capitalization in these four fields are as follows in 1928: Manufacture, 46 per cent; Trade, 17 per cent; Mining, 17 per cent; Finance, 8 per cent. The absolute investment figures are as follows: our samples—Manufacture, 25 billion; Trade, two and one-half billion; Mining, one and seven-tenths billion; Finance, three billion; all corporations (estimated as explained in Appendix A)—Manufacture, 54 billion; Trade, 15 billion; Mining, 10 billion; Finance, 36 billion.

and Quarrying show total depletion charges of 212 million dollars; while under the head of Manufacturing, total depletion charges of 254 million were reported. Because such companies as the United States Steel Corporation are really mining as well as manufacturing enterprises, there is no good way to accumulate total figures for Mining which would represent all such activity.<sup>5</sup> We obtain a better picture of steel *manufacturing*, as a completely integrated undertaking, because such companies merge their accounts, but a poorer picture of *mining*. A more cumbersome caption but one better descriptive of our Mining division would thus be: 'Mining carried on by corporations which engage only or primarily in mining, but excluding a probably larger volume of mining activity which is carried on by corporations in which mining is integrated with manufacturing operations.' Other comment upon the nature of the Mining data, particularly in respect of qualifications surrounding charges for depletion, appears in Chapter 46.

In the Finance groups no figures for sales or the return upon sales are, of course, given. Instead, the figure employed is 'total gross income'. This is defined more carefully in the Finance chapter, but here it may be said that the term is tantamount to gross profits from sales or turnover, or from services billed as would be sales in a Manufacturing or Trading business, plus profits, both gross and net, from other operations. It excludes, however, the items of interest upon government bonds or other securities which are not taxable under the Federal income tax law. Except in the case of certain individual corporations, this omission is not serious, as the total of such non-taxable interest is probably less than 5 per cent of total gross income.<sup>6</sup>

A final and more serious qualifying factor is the fact that in one of the Finance groups (minor group No. 110, Investments, etc.) the cost of securities purchased for customers may in certain instances be included in total gross income. This practice—to the extent that it prevails—is both unfortunate for our purposes and an utterly incorrect accounting use of the term 'income'. The rate of net re-

<sup>5</sup> See Ch. 46, on classification.

<sup>6</sup> For all Financial corporations reporting to the Bureau of Internal Revenue in 1928 total gross income plus tax exempt interest (termed 'total compiled receipts' in the Bureau's report *Statistics of Income* for that year) amounted to over 20 billion dollars, while non-taxable interest reported by these same corporations was 371 million dollars or less than 2 per cent of the first figure.

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turn upon total gross income in Financial groups is clearly not to be compared with that on sales in Manufacturing or Trading groups. And more serious, as an impairment of the representativeness of the data for Finance as a major group, is that the sample excludes all life insurance companies.