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## PART TWO

### CHAPTER 9

#### Summary of Findings of Part Two

PART TWO, DESIGNED TO DETERMINE THE QUANTITATIVE SIGNIFICANCE of the divergences between book profit as shown in publicly available business reports and statutory net income as computed for tax purposes,<sup>1</sup> has three objectives:

- 1) To obtain figures indicating the deviation between book profit (before the deduction of federal income and profits taxes) and statutory net income for a period of years in order to determine the aggregate differences in the amounts of income reported under these two concepts.
- 2a) To examine, from the same viewpoint, the components of net income. For example, depreciation charges claimed for tax purposes and those reported for book purposes are compared to determine which is larger and whether there is a consistent relationship between them over a period of years.
- 2b) To measure the relative importance of the deviations caused by each component.

#### A COMPARISONS IN PART TWO

In measuring the differences between book profit and statu-

<sup>1</sup> In Part Two *statutory net income* is used in place of *taxable income*. For purposes of the statistical comparisons of Part Two the concept of taxable income is adjusted to include all dividends and certain interest as described in Chapter 10, Section D. Hence statutory net income is technically more precise than taxable income for describing the analysis of Part Two. To obtain comparability, book profit is of course taken before the deduction of federal income and profits taxes.

tory net income, several comparisons could, at least in principle, be made. First, at least three sources of data on book profits might be used: annual stockholder reports, reports filed since 1934 with the Securities and Exchange Commission, and, through 1936, the book profit figure reported to the Treasury on a supplementary schedule of the income tax return. The book profit figures derived from any of these sources could be compared with statutory net income data derived from either audited or unaudited tax returns.

Of the various possible comparisons only two are made in detail in this study: statutory net income figures compiled from unaudited tax returns are compared with book profit as reported to the Treasury and as reported to the Securities and Exchange Commission. Supplementary comparisons are made between book profit as reported to the Treasury and to the Securities and Exchange Commission and between statutory net income figures based on audited and unaudited tax returns. These comparisons were selected partly because of their validity in principle and partly because of the limitations imposed by the nature and coverage of the data.

For book profit data, reports to the Securities and Exchange Commission were chosen as the sources rather than annual stockholder reports chiefly because they were more readily available. Differences in book profits derived from these two sources may safely be assumed to be negligible since both sets of data are computed according to the same accounting principles and are customarily audited by the same firms. As the two sources are used interchangeably in the leading investment manuals and by financial analysts, public information on book profits is often based upon data reported to the Securities and Exchange Commission rather than upon data in stockholder reports.

The decision to use statutory net income data compiled from unaudited rather than from audited returns was made solely on grounds of feasibility. All the basic Treasury tabula-

tions of net income data are so compiled. Any effort to make detailed use of audited returns in Part Two would have encountered insuperable problems.

To make the various desired comparisons three distinct samples of data had to be selected. Their nature and the rationale of their selection is explained in the next chapter.

## B CONCLUSIONS

### 1 *Book Profit and Statutory Net Income*

In broad terms, the main findings of the statistical analysis with reference to the over-all relationship between book profit and statutory net income may be summarized as follows:

- a) On the average, for a large number of companies in most industries during the eight years 1929-36, book profit and statutory net income did not differ greatly. Book profit typically exceeded statutory net income, but usually by less than 10 percent. Data on adjustments made to taxable income in the process of audit by the Bureau of Internal Revenue indicate that the slight tendency for book profit to exceed statutory net income in most industries is approximately offset in the auditing. In other words, when book profit is compared with audited statutory net income the two figures tend to be about equal in most industries.
- b) In certain mining and public utilities industries, however, book profit typically exceeded statutory net income by a much wider margin—often 50 percent or more. Differences in depletion and depreciation accounting were probably responsible for most of these extremely large divergences.
- c) The margin between the book and tax data tended to be considerably wider, over the period as a whole, for companies reporting statutory deficits than for companies reporting statutory net incomes. That is, statutory deficits tended to be larger relative to book losses than book profits were relative to statutory net incomes.
- d) Variations between book profit and statutory net income

do not appear to be related to the size of companies in any systematic manner.

e) While the above relationships hold fairly consistently for broad industrial groups over the eight years, the variations are much larger when the data for any one year, or for narrow industrial groups, are examined.

f) The differences (in dollars) between book profit and statutory net income of all corporations and most major industry groups seem not to be systematically related to business cycle phases. However, when the differences are expressed as percentages of statutory net income or deficit (for income and deficit corporations separately) cyclical patterns do appear. For deficit corporations the percentage excess of statutory net deficit over book losses tends to be largest in prosperous years and smallest in depression years. For income corporations the percentage excess of book profit over statutory net income tends to be smallest in prosperous years and largest in depression years.

g) In frequency distributions of divergences between book profit and statutory net income reported by individual companies within any one industrial group there is a marked dispersion about the average divergence for the industry. Nevertheless, except in the mining and public utility groups, the ratios typically cluster about the industrial average.

h) To a substantial degree divergences between book profit and statutory net income reported by a given company in any one year were balanced by offsetting divergences reported by the same company in other years. Nevertheless, some companies in all industrial groups, and a substantial percentage in the mining and public utility groups, showed divergences in the same direction year after year.

## 2 *Individual Sources of Divergences between Book Profit and Statutory Net Income*

The highly diverse nature of the sources of divergence between book profit and statutory net income makes it extremely diffi-

cult to present a brief and meaningful statement of the reasons for the divergences in income reported under the two concepts. Nevertheless, certain fairly well defined conclusions, in addition to a wealth of interesting detail, may be drawn from the data.

The numerous individual sources of divergence were grouped into 15 classes, each of which is discussed in detail:

- |                                      |  |
|--------------------------------------|--|
| 1) Dividends received                | 8) Bad debt accounting                         |
| 2) Capital gains or losses           | 9) Interest paid                               |
| 3) Interest received                 | 10) Taxes paid                                 |
| 4) Inventory accounting              | 11) Rents and royalties paid                   |
| 5) Miscellaneous income items        | 12) Nonallowable reserves                      |
| 6) Depreciable and depletable assets | 13) Miscellaneous deductions                   |
| 7) Intangible assets                 | 14) Scope of accounting unit                   |
|                                      | 15) Reorganizations, mergers, and dissolutions |

The first five classes affect the determination of gross income. The next eight classes represent deductions from gross income. The last two classes concern the scope of the accounting unit with respect to which net income is computed.

Different treatments of assets subject to depreciation and depletion constitute the largest source of divergence. The use of reserves for business accounting that are not recognized for tax purposes stands out rather clearly as the second largest source. Unfortunately, it was impossible to draw a sharp distinction between reserves analogous to those for bad debt expenses and precautionary reserves such as those for contingencies. In general, however, the largest divergences in the 'nonallowable reserves' class fall in the latter category.

Four classes of divergence—capital gains and losses, intangible assets, bad debt expenses, and taxes paid—are close contenders for third place. Bad debt expenses and taxes paid consistently reveal moderate divergences through a wide range of industrial groups. On the whole, divergences in bad debt expenses are slightly larger than divergences in taxes paid. Divergences in capital gains and losses and intangible assets oc-

cur in fewer industrial groups than do divergences in bad debt expenses and taxes paid, but they are likely to be larger. In general, differences in treatment have led to slightly larger divergences in capital gains and losses than in intangible assets. One surprise is the relatively low rank of capital gains and losses as a source of divergence. Similarly, differences in inventory accounting are, perhaps, smaller than might have been expected.

Interest and dividends received are relatively unimportant, but they would have seemed much more important had other definitions of statutory net income been used. Rents and royalties paid are consistently of negligible size. With the pronounced exception of the public utility group, divergences in interest paid are not large. Divergences in Classes 14 and 15 occur infrequently but are occasionally quite large.

In certain industrial groups the divergences are dramatic. For example, over half of the divergences in the mining group can be attributed to the treatment of depletion charges. These divergences systematically tend to cause book profit to exceed statutory net income. Somewhat more surprisingly, different treatments of interest expenses are responsible for approximately half of the divergences in the public utility group; and different treatments of depreciable assets for another 35 percent. Thus, 85 percent of the deviations in the public utility group can be traced to different treatments of depreciable assets and interest expenses. In the finance group half of the divergences are attributable to the treatment of capital gains and losses. Finally, in the trade group differences arising from the use of an installment basis of accounting are responsible for a large proportion, though not a majority, of the divergences.

The miscellaneous classes of divergences cast some doubt on the validity of these findings. The miscellaneous income, miscellaneous deduction, and to a lesser degree the nonallowable reserve categories may contain items that, if more carefully described, would have been classified differently, thus

altering the relationships observed. Nevertheless, the probability that the relative importance of the classes would be altered drastically by a reallocation of doubtful items is slight.

To what extent can these conclusions, derived from a sample of 505 corporations (described in detail in the next chapter) be applied to all corporations? The sample obviously constitutes a negligible portion of all corporations and was selected in an unorthodox manner from the viewpoint of statistical theory. Consequently, an attempt to apply the findings with quantitative precision to the universe from which the sample was drawn would obviously be unwarranted. Nevertheless, in view of the relatively high degree of consistency among industrial groups the general conclusions may be applied in their broad outlines to all corporations, at least for 1936. The mere fact that differences in the treatment of depreciable assets cause the largest divergence among 505 medium-size corporations probably does not justify the inference that such assets are the largest source of divergence among a half million corporations. The case for drawing this conclusion at least tentatively is vastly strengthened, however, when the same relationship is found to hold generally in most of the seventeen industrial groups, except when depreciable assets are known to be small or when isolated cases disturb the relationship.

The application of conclusions drawn from the sample to years other than 1936 is even more questionable. In some specific respects the findings for other years would almost certainly be substantially different. For instance, the large difference in the treatment of interest deductions in the public utility group is probably attributable to the extensive refunding operations that were characteristic of the second half of the 1930's. But, apart from such exceptions, it is difficult to see why the general pattern of the sources of divergence would not have considerable stability. As the years go by, however, more and more changes in the relative importance of various



sources of divergence are likely. For instance, in postwar years the differences arising from the wartime amortization of emergency facilities for tax purposes will constitute a source of divergence not present in 1936.

Though the findings are obviously not ideal for current use, they are presented in detail because they are much more complete than any other material on the sources of divergence between book profit and taxable income. It is to be hoped that future studies, especially the investigation of the concept of income recently announced by the American Institute of Accountants, will provide more complete and up-to-date information. In this connection, as Professor Bonbright has suggested to the authors, greatly improved knowledge on the differences between book profit and taxable income

“. . . would result from the addition of case studies of the two types of income as reported by several [preferably many] individual corporations over a period much longer than that from 1929 to 1936 and including a comparison of taxable income both with reported income *and also* with debits and credits to surplus not cleared through the income account.”

The authors concur in this view and regret that the facilities available to them did not permit such an addition to their analysis. They heartily recommend Professor Bonbright's suggestion to future investigators in the area of income concepts.

Additional information on depreciation, depletion, and bad debt expenses was derived from a separate sample. In most industrial groups the *average* divergences between depreciation charges taken for book purposes and those claimed for tax purposes are remarkably small, but, as noted above, these averages conceal large divergences in both directions reported by individual companies. About a quarter of the manufacturing companies in Sample II (described in Ch. 10) reported identical depreciation charges for book and tax purposes in 1937; 28 percent reported book charges that did not differ from the tax charges by more than about 6 percent. In contrast, about 15 percent reported book charges differing from the tax charges

by 50 percent or more. This general pattern of dispersion is typical of the various manufacturing subgroups and of all other industrial groups, with the pronounced exceptions of mining and public utilities.

The explanation for the atypical character of the mining group is simple. Depletion deductions, computed according to the percentage-of-gross income or the discovery-value methods for tax but not for book purposes, generally account for the excess of the tax depletion and depreciation charges over the book charges.

In the public utility group the differences in the amounts of depreciation and related expenses taken for the two purposes are due largely to the use of retirement accounting in certain fields of utility operations. The depreciation expense taken in an early year for tax purposes should later be balanced by charges for retirement expense on the books, provided the cost of all depreciable property is ultimately charged to income under the retirement accounting plan. In the short run, depreciation charges in a rapidly growing economy usually exceed retirement expenses by a substantial amount. Even in the long run retirement expenses might differ greatly from the depreciation allowed for tax purposes because of reappraisals of assets, surplus and property account adjustments, and reorganizations.

For bad debt expenses the tax deductions are consistently larger, on the average, than the book deductions, except in the public utility group. Thus, the data in general support the *a priori* presumption that the bad debt deductions claimed for tax purposes should exceed the book deductions because of the more inclusive character of the tax concept. There seems to be no explanation for the atypical showing of the public utility group.

A substantial fraction of the companies in all industrial groups report identical book and tax deductions for bad debts. There is, however, a much larger percentage of relatively large

divergences in the amounts reported than is the case for depreciation charges. In most industrial groups the number of companies with tax deductions in excess of their book deductions is considerably larger than the number in which the opposite relationship prevails.