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Depreciation, Profits, and Rates of Return in Manufacturing Industries

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I. INTRODUCTION

In earlier work funded by the Treasury Department [2,3], I attempted to estimate service lives and depreciation patterns of capital goods employed in manufacturing industries which on average best accounted for observed fluctuations in capital spending. I have referred to these as the service lives and depreciation patterns revealed or indicated by investment behavior.

This study explores some of the implications of my previous findings.[1/] By applying the revealed services lives and depreciation patterns to capital expenditures in each industry, I have prepared estimates of annual depreciation flows which are not only consistent over time, but which also reflect actual service lives and actual losses in efficiency of capital goods as they age. Two variants of these depreciations flows are considered, the first based on historical cost of assets and the second on current, or replacement, cost of assets. Section II details the assumptions and algebraic formulas appropriate to each measure. The estimates are presented in Section III, where they are compared with the Bureau of Economic Analysis (BEA) data on capital consumption allowances. Section III also compares profit estimates based on my measures of depreciation with BEA profit estimates.

I have drawn a distinction in my previous papers between replacement requirements and depreciation. Replacement requirements measure the amount of real capital expenditures needed to maintain the productive capacity of the existing stock of capital, whereas depreciation reflects the decline in value of the existing stock of capital over the

accounting period. I have shown that replacement requirements and depreciation are the same only under conditions of constant geometric decay of productive capacity of capital goods and constant prices. Since constant geometric decay of productive capacity was not revealed by investment behavior in any manufacturing industries, and since prices do change over time, the empirical relation between replacement requirements and depreciation is worth exploring. Section IV presents my estimates of replacement requirements valued at current prices and compares them with both my series and the BEA series on depreciation.

In applying my revealed service lives and depreciation patterns to capital expenditures, it is possible to estimate not only annual flows of depreciation but also the value of equipment and structures in existence at the end of each year - what I shall call the "book value" of those assets. Taking the ratio of my estimate of profits (including net interest) to the average of book value of assets at the beginning and end of the year, I arrive at estimates of the rate of return on capital which embody consistent measurements of depreciation and book values - not only consistent over time, but consistent with my findings on service lives and patterns of loss of efficiency of capital goods. These new estimates of rates of return in manufacturing industries are presented in Section V.

II. HISTORICAL AND CURRENT-COST CONCEPTS OF ECONOMIC DEPRECIATION

A. The Historical-Cost Concept. In my initial study, I showed how a capacity depreciation pattern, depicting the loss of efficiency of a capital good as it ages, can be translated into a pattern of economic depreciation, depicting the loss in value of the capital good as it ages. To illustrate, consider an asset whose service life is three years. Let d_j be the loss of productive capacity of the asset in year j of its life relative to its efficiency when new. Suppose that the asset adds X units to real net output (net of material costs, labor, and other costs) and that the output's selling price, P, remains constant through time. The asset will then give rise to the following stream of net money returns.

Year of Service Life	Net Money Return
1	PX
2	$PX(1-d_1)$
3	$PX(1-d_1-d_2)$

The value of the asset at the end of each year is given by the present value of the stream of net money returns from that year to the end of the service life. If r is the discount rate (assumed constant over time), then for the asset being considered we have,

$$C_0 = \frac{PX}{1+r} + \frac{PX(1-d_1)}{(1+r)^2} + \frac{PX(1-d_1-d_2)}{(1+r)^3} \tag{1}$$

$$Z_1 = \frac{PX(1-d_1)}{1+r} \quad \frac{PX(1-d_1-d_2)}{(1+r)^2} \tag{2}$$

$$Z_2 = \frac{PX(1-d_1-d_2)}{1+r} \tag{3}$$

$$Z_3 = 0 \ , \tag{4}$$

where C_0 is the original cost of the asset, Z_1 is the value of the asset at the end of its first year of service, and so forth. Depreciation each year, D_j, defined as the loss in value of the asset, is given by

$$D_1 = C_0 - Z_1 \tag{5}$$

$$D_2 = Z_1 - Z_2 \tag{6}$$

$$D_3 = Z_2 - Z_3. \tag{7}$$

What property do these measures of depreciation possess? In each year of the asset's life, it generates a certain amount of money receipts. The problem of depreciation accounting is to decompose these receipts into two components, one of which we call income, the other depreciation. If we define income as the portion of receipts which <u>could be</u> consumed (or withdrawn for some other purpose) and still leave the owner with the same real wealth at the end of the year as he possessed at the beginning of the year, then the depreciation method proposed is the appropriate one, <u>provided that the price of a comparable new asset is not changing over time</u>.

To establish that this proposition is correct, let us examine the situation in the first year of the asset's life. Suppose we denote income in year 1, as income was defined above, by Y_1. The owner's nominal wealth at the beginning of year 1 is simply C_0, and his real wealth is one capital good. If the price of new capital goods of this type is constant through time, then we require that the owner's wealth at the

end of year 1 be C_0, so that his real wealth will not have changed. He will, of course, have a used asset worth Z_1 at that time, and he will have $PX - Y_1$ in cash. Thus, if his wealth at the end of year 1 is to be C_0, then we must have

$$PX - Y_1 + Z_1 = C_0 \ . \tag{8}$$

But $PX - Y_1$ is what we would identify as depreciation in year 1, D_1, so that

$$D_1 = C_0 - Z_1 \ . \tag{9}$$

Receipts in the second year are composed of two flows: (1) the net money return generated by the asset, $PX(1-d_1)$, and (2) interest on depreciation set aside in year 1, rD_1. Also, the owner's wealth at the end of year 2 is composed of two items: (1) the two-year old asset worth Z_2, and (2) the amount of cash set aside for depreciation in year 1, D_1. Again assuming that the price of a new capital good similar to the used one has not changed, we require that the owner's wealth at the end of year 2 be C_0. Thus,

$$PX(1-d_1) + rD_1 - Y_2 + Z_2 + D_1 = C_0 \tag{10}$$

Since D_2 is $PX(1-d_1) + rD_1 - Y_2$, that is, total receipts minus income, we have

$$D_2 = C_0 - Z_2 - D_1 = C_0 - Z_2 - C_0 + Z_1 = Z_1 - Z_2 \ . \tag{11}$$

Similar reasoning would lead to the conclusion that $D_3 = Z_2 - Z_3$.

With depreciation in each year defined by these expressions, it can easily be shown that income in each year of the asset's life is the same and equal to rC_0.

Thus, under the assumption of constant prices, the calculation of depreciation is straightforward. For our purposes, it is convenient to normalize the depreciation flows in the above example on the initial value of the asset. This gives us a set of parameters v_j, defined as

$$v_1 = \frac{C_0 - Z_1}{C_0} \tag{12}$$

$$v_2 = \frac{Z_1 - Z_2}{C_0} \tag{13}$$

$$v_3 = \frac{Z_2 - Z_3}{C_0} \quad , \tag{14}$$

which characterize the pattern of economic depreciation on the asset. In other words, the v_j depict the pattern of economic depreciation on an asset costing one dollar when new. Depreciation in each year and the value of the asset at the end of each year can then be expressed in terms of the original value of the asset:

$$D_1 = v_1 C_0 \qquad Z_1 = (1-v_1)C_0 \tag{15}$$

$$D_2 = v_2 C_0 \qquad Z_2 = (1-v_1-v_2)C_0 \tag{16}$$

$$D_3 = v_3 C_0 \qquad Z_3 = 0 \ . \tag{17}$$

This approach, based as it is on the assumption of constant prices, is rather unrealistic. Its implementation results in depreciation measures reflecting the historical, or original, cost of assets. In times of changing prices, historical-cost depreciation will be incorrect in the sense that the measure of income associated with it will not properly indicate how much of current receipts can be consumed and still

leave real wealth intact. Nonetheless, the simplicity of historical-cost depreciation and its conceptual similarity to tax accounting practices in the U.S. are desirable features.

To explain how this approach is applied in the present study, I employ the following notation:

I^e_{tk} = equipment expenditures in current prices in year t for industry k.

I^s_{tk} = structures expenditures in current prices in year t for industry k.

v^e_{ik} = loss in value of one dollar of equipment used by industry k in the i-th year after the equipment is acquired.

v^s_{ik} = loss in value of one dollar of structures used by industry k in the i-th year after the structures are acquired.

D^e_{tk} = total economic depreciation (loss in value) of all equipment used by industry k in year t.

D^s_{tk} = total economic depreciation of all structures used by industry k in year t.

D_{tk} = total economic depreciation of all equipment and structures used by industry k in year t.

The v's, which indicate the patterns of economic depreciation on equipment and structures, are derived from the service lives and capacity depreciation patterns revealed by investment behavior, according to the procedure described above. The index k runs from 1 to 21, covering the 21 two-digit manufacturing industries in the Standard Industrial Classification. We then have

$$D^e_{tk} = \sum_{i=1}^{n^e_k} v^e_{ik} \; I^e_{t-i,k} \tag{18}$$

$$D^s_{tk} = \sum_{i=1}^{n^s_k} v^s_{ik} \; I^s_{t-i,k} \tag{19}$$

$$D_{tk} = D^e_{tk} + D^s_{tk} \; , \tag{20}$$

where n^e_k and n^s_k are, respectively, the service lives of equipment and structures indicated by investment behavior in industry k. Summing the D_{tk} over all 21 industries, we have an estimate of the flow of economic depreciation for total manufacturing in year t.

B. The Current-Cost Concept. Capital goods prices commonly change over time, raising serious difficulties in the measurement of depreciation and income. Any approach to depreciation measurement under circumstances of changing prices is necessarily arbitrary. We can formulate a set of assumptions and examine their implications, but it must be recognized that a different, and perhaps equally plausible, set of assumptions may lead to different results.

I shall make the following assumptions for the purposes of this study:

(a) Changes in capital goods prices result solely from changes in prices of the outputs which they produce.

(b) Changes in product prices are entirely unforeseen by the owners of capital goods.

(c) The value of a capital good is equal to the present value of the expected stream of net money returns which it will produce.

(d) Product price expectations are completely inelastic. That is, actual or potential owners of capital goods expect present prices of products to prevail into the indefinite future.

We shall develop the implications of these assumptions in a fashion which parallels the discussion in the previous section.

Suppose an individual owns a new capital good for which he paid C_0 dollars. The capital good has a three-year life, and its capacity depreciation in year j is d_j. The current price of output produced by this piece of capital is P_0, which the owner expects to remain at this level. Thus, at the time of purchase, the owner anticipates that the value of this asset at the end of each year will be

$$C_0 = \frac{P_0X}{1+r} + \frac{P_0X(1-d_1)}{(1+r)^2} + \frac{P_0X(1-d_1-d_2)}{(1+r)^3} \tag{21}$$

$$Z_1^0 = \frac{P_0X(1-d_1)}{1+r} + \frac{P_0X(1-d_1-d_2)}{(1+r)^2} \tag{22}$$

$$Z_2^0 = \frac{P_0X(1-d_1-d_2)}{1+r} . \tag{23}$$

We now place a superscript "0" on Z_1 and Z_2 to indicate that they are anticipations held at the end of year 0. The actual value of the asset at the end of year 1 may not be Z_1^0, however, owing to an unforeseen change in the product price. If the product price turns out to be P_1, in year 1, and if participants in the capital-goods market revise their expectations and believe that the future output price will be P_1, then the value of the asset at the end of year 1 will be

$$Z_1^1 = \frac{P_1X(1-d_1)}{1+r} + \frac{P_1X(1-d_1-d_2)}{(1+r)^2} \neq Z_1^0 . \tag{24}$$

Thus, an unexpected change has occurred in the value of the capital good. Note also that a new capital good of the same type should sell at the end of year 1 at the price

$$C_1 = \frac{P_1X}{1+r} + \frac{P_1X(1-d_1)}{(1+r)^2} + \frac{P_1X(1-d_1-d_2)}{(1+r)^3} . \tag{25}$$

If the owner of the capital good is to have the same real wealth (that is, one capital good) at the end of period 1 as at the end of period 0, his nominal wealth at the end of period 1 must be C_1. His nominal income in year 1 is then implicitly defined by

$$P_1X - Y_1 + Z_1^1 = C_1, \tag{26}$$

so depreciation in year 1 is

$$D_1 = C_1 - Z_1^1 . \tag{27}$$

However, given the definition of the v_j in the previous section, we see that $Z_1^1 = (1-v_1)C_1$ and

$$D_1 = v_1C_1 = v_1C_0 \left(\frac{C_1}{C_0}\right) . \tag{28}$$

The expression $v_1 C_0$ is the historical-cost depreciation in the first year on an asset purchased at the end of year 0. The factor (C_1/C_0) inflates this historical-cost depreciation to the level of capital goods prices prevailing at the end of period 1. I shall refer to such a depreciation measure as current-cost depreciation. The form derived here for the first year is in accord with a frequently heard policy proposal, namely, that firms should be permitted to adjust their historical-cost depreciation to reflect the level of current capital goods prices.

However, moving on to the second year, the situation is no longer so simple.

Suppose that the price of output changes in year 2 to P_2 and that, as a consequence, the price of a new capital good of the original type changes to C_2 at the end of year 2. Income in year 2 is implicitly defined by

$$P_2X(1-d_1) + rD_1 - Y_2 + D_1 + Z_2^2 = C_2 \ , \tag{29}$$

where Z_2^2 is the market value of the two-year old asset and $Z_2^2 \neq Z_2^0$. In particular, we have

$$Z_2^2 = \frac{P_2X(1-d_1-d_2)}{1+r} \ . \tag{30}$$

Depreciation in year 2 is then

$$D_2 = C_2 - D_1 - Z_2^2 \ . \tag{31}$$

Again recalling the definition of the v_j, we have $Z_2^2 = (1-v_1-v_2)C_2$ so that

$$\begin{aligned} D_2 &= (v_1+v_2)C_2 - v_1C_0\left(\frac{C_1}{C_0}\right) \qquad (32) \\ &= v_2C_2 + v_1C_2 - v_1C_0\left(\frac{C_1}{C_0}\right) \\ &= v_2C_0\left(\frac{C_2}{C_0}\right) + \left[v_1C_0\left(\frac{C_2}{C_0}\right) - v_1C_0\left(\frac{C_1}{C_0}\right)\right] \ . \end{aligned}$$

Depreciation in the second year contains two elements. The first is the historical-cost depreciation on a two-year old asset revalued to reflect the price of a new capital good at the end of year two. The second is the first-year historical-cost depreciation valued at year 2's

capital goods price less the same historical-cost depreciation valued at year 1's capital goods price. This second element can be interpreted as an adjustment factor for the first-year depreciation, taking account of the change in the price of a new capital good between years 1 and 2.

By the same logic, depreciation in the third year can be shown to be

$$D_3 = v_3C_0 \left(\frac{C_3}{C_0}\right) + \left[v_2C_0\left(\frac{C_3}{C_0}\right) - v_2C_0\left(\frac{C_2}{C_0}\right)\right] + \left[v_1C_0\left(\frac{C_3}{C_0}\right) - v_1C_0\left(\frac{C_2}{C_0}\right)\right] . \tag{33}$$

The three components of D_3 may be interpreted as follows. The first is the third-year historical-cost depreciation revalued to the current price level. The second is the adjustment of second-year historical-cost depreciation required to revalue it to the current price level. And the third is the adjustment of first-year historical-cost depreciation required to revalue it to the current price level, recognizing that it had already been adjusted to year 2's price level in calculating depreciation in year 2. The concept of current-cost depreciation implied by our assumptions does not merely involve the revaluation of historical-cost depreciation in each year to reflect the current price of a new capital good. It involves this revaluation plus continued adjustments of past depreciation estimates to place them on a current-cost basis. Depreciation over the service life, according to this approach, sums to C_3, which is the cost of purchasing a new capital good of the original type at the end of year 3 (the end of the service life).[2/] In other words, the present concept of current-cost depreciation leads to a stream of depreciation charges which sum to the eventual replacement cost of the asset.

To show how this approach is implemented in the current study, I shall use the notation given in the preceding section. Additionally, C^e_{tk} can be defined as the price index for new equipment purchased by industry k in year t, and C^s_{tk} as the price index for new structures purchased by industry k in year t. We then have the following expressions for current-cost depreciation:

$$D^e_{tk} = \sum_{i=1}^{n^e_k} v^e_{ik} \, I^e_{t-i,k} \frac{C^e_{tk}}{C^e_{t-i,k}} + \sum_{i=1}^{n^e_k-1} v^e_{ik} \sum_{j=i+1}^{n^e_k} I^e_{t-j,k} \frac{C^e_{tk}-C^e_{t-1,k}}{C^e_{t-j,k}} \tag{34}$$

$$D^s_{tk} = \sum_{i=1}^{n^s_k} v^s_{ik} \, I^s_{t-i,k} \frac{C^s_{tk}}{C^s_{t-i,k}} + \sum_{i=1}^{n^s_k-1} v^s_{ik} \sum_{j=i+1}^{n^s_k} I^s_{t-j,k} \frac{C^s_{tk}-C^s_{t-1,k}}{C^s_{t-j,k}} \tag{35}$$

$$D_{tk} = D^e_{tk} + D^s_{tk} \, . \tag{36}$$

III. ESTIMATES OF ECONOMIC DEPRECIATION AND PROFITS

A. Estimates of Depreciation. Table 1 presents estimates of historical- and current-cost depreciation for 1947-71, prepared according to the preceding formulas. Only the totals for manufacturing as a whole are given; the detailed estimates by industry and by type of asset appear in appendix tables C.1 - C.3 (historical cost) and C.5 - C.7 (current cost). In addition, Table 1 gives the BEA series on capital consumption, which reflects depreciation reported on business income tax returns.

(1) Historical-Cost Estimates. At the beginning of the period, the historical-cost estimates exceed the BEA figures, since many assets acquired during World War II were amortized under emergency provisions enacted during the war. By 1951-52, the two series do not differ significantly; but the combination of accelerated amortization of emergency facilities during and after the Korean War and of accelerated depreciation beginning in 1954 created an excess of tax depreciation charges over historical-cost estimates by about 20 percent. Adoption of the guideline lives in 1962 once again boosted tax depreciation charges, eventually to levels exceeding my estimates by about 45 percent. The impact of the Asset Depreciation Range (ADR) system, adopted in 1971, appears to be rather small, but additional observations are required before conclusive judgments can be drawn.

(2) Current-Cost Estimates. The erratic behavior of the current-cost estimates is striking. The formula used in computing them reveals that the current-year change in prices of new capital goods plays a

Table 1

Comparison of BEA and Coen Estimates of Capital Consumption,

Total Manufacturing, 1947-71
(Billions of Dollars)

Year	BEA	Capital Consumption Coen Historical Cost	Capital Consumption Coen Current Cost	Excess of BEA over Coen (percent) Historical Cost	Excess of BEA over Coen (percent) Current Cost
1947	2.418	2.749	10.103	-12.0	-76.1
48	2.855	3.182	5.693	-10.3	-49.8
49	3.242	3.620	4.819	-10.4	-32.7
50	3.492	3.869	8.348	- 9.7	-58.2
51	4.044	4.125	11.298	- 2.0	-64.2
52	4.698	4.634	8.164	1.4	-42.5
53	5.567	5.125	7.520	8.6	-26.0
54	6.372	5.585	6.746	14.1	- 5.5
55	7.171	6.024	8.850	19.0	-19.0
56	7.741	6.440	14.161	20.2	-45.3
57	8.551	7.154	13.966	19.5	-38.8
58	9.103	7.745	10.011	17.5	- 9.1
59	9.426	8.045	10.810	17.2	-12.8
60	9.831	8.249	9.792	19.2	0.4
61	10.405	8.612	10.679	20.8	- 2.6
62	12.189	8.854	11.576	37.7	5.3
63	12.765	9.176	11.582	39.1	10.2
64	13.734	9.565	13.073	43.6	5.1
65	14.693	10.073	13.884	45.9	5.8
66	15.584	10.945	15.682	44.9	1.1
67	17.354	12.222	18.898	42.0	- 8.2
68	18.977	13.222	19.409	43.5	- 2.2
69	20.681	14.095	26.356	46.7	-21.5
70	21.714	15.146	29.212	43.4	-25.7
71	23.440	16.037	32.705	46.2	-28.3

crucial role in determining year-to-year changes in the series. Thus, the high rate of inflation immediately following World War II pushed the estimates to levels greatly exceeding both tax allowances and my historical-cost estimates. As the postwar inflation subsided, the excess of current- over historical-cost depreciation diminished although it remained large; however, the Korean inflation once again widened the gap. Moderation of price increases in the 1954 recession, in conjunction with the introduction of accelerated depreciation for tax purposes in that year, brought tax allowances and current-cost depreciation into fairly close alignment, but only until prices began to rebound in the mid-1950's. During the period of sluggish activity and stable prices extending from the late 1950's to the mid-1960's, current-cost depreciation grew slowly (it even fell in two years). As a consequence, tax depreciation actually overtook current-cost depreciation for a few years, and the two figures were nearly identical in 1966. Finally, the inflation commencing in the Vietnam War period again generated very high levels of current-cost depreciation, with tax allowances falling 28 percent below current-cost depreciation by the end of the period.

It is interesting to note the strong countercyclical movements in the current-cost estimates. During periods of rapid economic expansion and high employment, prices rise relatively sharply, thus augmenting the depreciation estimates. The retardation of inflation during recessions generally reverses this effect, although 1971 stands as an important exception. By contrast, the measures based on historical cost display a rather smooth upward trend. Hence, if firms were permitted to depreciate

assets on a current-cost basis similar to the procedure employed here, tax depreciation allowances would become a destabilizing influence on aggregate economic activity. When the economy is booming and prices are rising, the rapid growth in depreciation allowances would reduce business tax liabilities below what they would be under historical-cost accounting. As the economy weakens in recessions, stable or declining prices would reduce current-cost depreciation, and would enlarge tax liabilities to levels above those associated with historical-cost accounting.

(3) Estimates by Industry. The detailed estimates by industry contained in the appendix display widely varying patterns which are difficult to summarize in a few words. Some salient points may be noted, however. My historical-cost estimates exceed tax allowances in 1947 in ten of the 21 industries covered, but the various liberalizations of tax allowances during the 1950's and early 1960's vastly changed the situation. By the mid-1960's, every industry was enjoying tax allowances which exceed my historical-cost estimates, and this relationship persisted through 1971, except in the rubber industry. Two industries - tobacco and non-electrical machinery - appear to be receiving especially favorable treatment in 1971. On the other hand, current-cost depreciation exceeded tax allowances in 1947 in all but two industries - lumber and miscellaneous manufacturing. Liberalization of tax allowances, in conjunction with changes in inflation rates, brought tax allowances into line with current-cost depreciation by the mid-1960's in most industries, the notable exceptions being textiles, paper, rubber, primary metals, transportation equipment, and miscellaneous manufacturing. The high inflation rates

toward the end of the period again lead to substantial excesses of current-cost over tax depreciation in all but two industries - tobacco and non-electrical machinery. Note that the two industries that appear to be most favorably treated in 1971 on the basis of the historical-cost estimates also appear to be most favorably treated on the basis of the current-cost estimates. However, the least favorably treated industry in 1971 in the former case is rubber, while in the latter case it is petroleum.

B. Estimates of Profits. My estimates of historical- and current-cost depreciation can readily be used to derive new estimates of profits in manufacturing industries. In keeping with the BEA profits series to which I wish to compare my own, profits are defined as gross product originating less indirect business taxes, compensation of employees, net interest, and capital consumption allowances. The data used in calculations are those supplied by the BEA, except that I substituted my series on economic depreciation for the BEA series on capital consumption.

Table 2 presents the BEA and my own profits estimates for total manufacturing. Detailed estimates by industry appear in appendix tables D.1 - D.2 (historical cost) and D.3 - D.4 (current cost). Of course, whenever my estimate of economic depreciation exceeds BEA's capital consumption, my profits estimate must lie below BEA's, and conversely. The historical-cost based measures indicate overestimation of profits by BEA by about 2 percent in the period 1947-50, while in 1951-52 our estimates do not differ significantly. Continued liberalization of tax depreciation after 1952 leads to growing underestimation of profits by BEA, with the underestimates reaching about 28 percent by the end of the period. When

Table 2

Comparison of BEA and Coen Estimates of Profits

Total Manufacturing, 1947-71
(Billions of Dollars)

	Profits			Excess of Coen Over BEA (percent)	
		Coen			
Year	BEA	Based on Historical-Cost Depreciation	Based on Current-Cost Depreciation	Based on Historical-Cost Depreciation	Based on Current-Cost Depreciation
1947	13.128	12.797	5.443	-2.5	-58.5
48	16.243	15.916	13.405	-2.0	-17.5
49	15.352	14.974	13.775	-2.5	-10.3
50	19.785	19.408	14.929	-1.9	-24.6
51	23.568	23.487	16.314	-0.3	-30.8
52	20.844	20.908	17.378	0.3	-16.6
53	21.006	21.448	19.053	2.1	- 9.3
54	18.395	19.182	18.021	4.3	- 2.0
55	24.144	25.291	22.465	4.8	- 7.0
56	22.542	23.843	16.122	5.8	-28.5
57	21.903	23.300	16.488	6.4	-24.7
58	17.452	18.810	16.544	7.8	- 5.2
59	24.312	25.693	22.928	5.7	- 5.7
60	22.586	24.168	22.625	7.0	0.2
61	21.319	23.112	21.045	8.4	- 1.3
62	24.615	27.950	25.228	13.5	2.5
63	26.760	30.349	27.943	13.4	4.4
64	30.410	34.579	31.071	13.7	2.2
65	36.889	41.509	37.698	12.5	2.2
66	40.082	44.991	40.254	12.2	0.4
67	36.316	41.448	34.772	14.1	- 4.3
68	38.709	44.464	38.277	14.9	- 1.1
69	33.036	39.622	27.361	19.9	-17.2
70	23.798	30.366	16.300	27.6	-31.5
71	26.604	34.007	17.339	27.8	-34.8

I speak of an "underestimate" here, I mean the following: if firms had calculated historical-cost depreciation allowances consistently at rates implied by revealed service lives and depreciation patterns, then (with other things equal) they would have recorded profits 28 percent higher in 1970-71.

A different picture emerges from the current-cost based estimates. In this case the BEA profit series exceeds my own by substantial margins until 1954. The inflationary period in the mid-1950's once again leads to large overestimates of profits by BEA, but from 1958 through 1968 the two series are quite similar. Then with the resumption of high inflation rates in the late 1960's, a sizable gap reappears, with my estimate falling 35 percent below BEA's by 1971.

Since discrepancies between BEA profits and my own estimates simply reflect differences in our measures of depreciation, I shall not comment on the detailed findings by industry.

IV. ECONOMIC DEPRECIATION AND REPLACEMENT REQUIREMENTS

Business firms frequently complain that tax depreciation allowances, which must be calculated at historical cost, do not keep pace with the rising expense of replacing capital goods in times of inflation. Of course, this argument loses some of its force if firms are permitted to write off assets more rapidly than is warranted by actual economic depreciation, even though only the historical cost of the asset can eventually be written off. The purpose of this section is to explore the relationship between replacement requirements valued at current prices and depreciation allowances for tax purposes. Comparisons of replacement requirements with my depreciation estimates are also made.

In my work on investment behavior, I have obtained estimates of replacement requirements which best account for the observed fluctuations in gross capital expenditures in manufacturing industries. To illustrate, let

d^e_{ik} = capacity depreciation (loss of efficiency) of equipment used in industry k in the i-th year after they are acquired.

d^s_{ik} = capacity depreciation (loss of efficiency) of structures used in industry k in the i-th year after they are acquired.

R^e_{tk} = real (constant dollar) replacement requirements for equipment used in industry k in year t.

R^s_{tk} = real replacement requirements for structures used in industry k in year t.

C^e_{tk} = price index of new equipment used in industry k in year t.

C^s_{tk} = price index of new structures used in industry k in year t.

The capacity depreciation patterns (the d's) were established in my examination of investment behavior [3] and:

$$R^e_{tk} = \sum_{i=0}^{n^e_k} d^e_{ik} \frac{I^e_{t-i,k}}{C^e_{t-i,k}} \tag{37}$$

$$R^s_{tk} = \sum_{i=0}^{n^s_k} d^s_{ik} \frac{I^s_{t-i,k}}{C^s_{t-i,k}} \tag{38}$$

Total replacement requirements valued at current prices are then given by:

$$R_{rk} = C^e_{tk} R^e_{tk} + C^s_{tk} R^s_{tk} , \tag{39}$$

Summing over all 21 industries, we have an estimate of replacement requirements valued at current prices for total manufacturing in year t.

My estimates of current and constant (1958) dollar replacement requirements in total manufacturing for 1948-71 are given in the first two columns of Table 3.[3/] When the current-dollar estimates are compared with the BEA capital consumption series in column 3, replacement requirements substantially exceed capital consumption for 1948-53. This finding might again be partially explained by amortization of defense facilities during World War II, which tended to depress tax depreciation allowances in the immediate postwar years. From 1954 until 1962, BEA capital consumption was roughly in line with replacement requirements, indicating that the influence of rising capital goods prices on the cost of

Table 3

Comparison of Replacement Requirements in Current Dollars with BEA and Coen Estimates of Capital Consumption Allowances
Total Manufacturing, 1948-71

Year	Replacement Requirements		Current Dollar Replacement as Percent of Capital Consumption		
	Billions of 1958 Dollars	Billions of Dollars	BEA Capital Consumption	Coen Capital Consumption	
				Historical Cost	Current Cost
1948	6.217	4.215	147.6	132.6	74.0
49	6.597	4.578	141.2	126.5	95.0
50	6.697	4.882	139.8	126.2	58.5
51	6.897	5.538	136.9	134.3	49.0
52	7.217	5.917	125.9	127.7	72.5
53	7.637	6.377	114.6	124.4	84.8
54	7.908	6.642	104.2	118.9	98.5
55	8.183	7.066	98.5	117.3	79.8
56	8.505	7.928	102.4	123.1	56.0
57	9.272	9.151	107.0	127.9	65.5
58	9.483	9.483	104.2	122.4	94.7
59	9.492	9.653	102.4	120.0	89.3
60	9.278	9.485	96.5	115.0	96.9
61	9.386	9.641	92.7	111.9	90.3
62	9.308	9.660	79.3	109.1	83.4
63	9.526	9.950	77.9	108.4	85.9
64	9.834	10.441	76.0	109.2	79.9
65	10.292	11.145	75.9	110.6	80.3
66	11.214	12.497	78.8	114.2	79.7
67	12.177	14.080	81.1	115.2	74.5
68	12.703	15.121	79.7	114.4	77.9
69	13.017	16.317	78.9	115.8	61.9
70	13.503	17.915	82.5	118.3	61.3
71	13.829	19.357	82.6	120.7	60.3

replacement was offset during this period by the impact of accelerated depreciation on tax write-offs. Liberalization of tax depreciation in 1962 reduced replacement requirements to about 80 percent of tax depreciation charges, a relation that persisted throughout the late 1960's and early 1970's, despite the rapid inflation which characterized these years. Thus, tax depreciation allowances in 1971 were about as generous, relative to replacement requirements, as they have ever been in the postwar period, and the relationship between tax allowances and replacement has not changed much in the last ten years.

The fourth column of Table 3 illustrates the behavior of current-dollar replacement requirements relative to my series on historical-cost depreciation. There is much less variation in this relationship than in the relationship between current-dollar replacement and BEA capital consumption, because my series applies consistent accounting practices throughout the period. However, current-dollar replacement requirements exceed my estimates of historical-cost depreciation in every year, the average excess being around 20 percent.

By contrast, there is a high degree of variation in the relationship between current-dollar replacement requirements and current-cost depreciation as shown in the fifth column of Table 3. Throughout the period, replacement requirements fell short of current-cost depreciation, often by large amounts, although the two are roughly similar in 1949, 1954, 1958, and 1960.

In assessing these empirical findings, one should bear in mind some basic theoretical relationships between replacement and depreciation. First of all, if capital goods prices were constant over time, and if real gross expenditures were growing at a constant rate, then replacement would forever

be less than depreciation. This is because the productive capacity of capital goods declines more slowly than their value, since their value reflects the discounted stream of future net revenues. A light bulb represents an extreme example of this; it loses no productive capacity (generates no replacement requirements) until the final hour of its life, but it loses value (generates depreciation) during each hour of its life. If a firm acquired a constant number of new light bulbs each hour, its replacement requirements and depreciation per hour would eventually be identical; but if it acquired a constantly increasing number of new light bulbs, its depreciation would forever exceed its replacement requirements.

Now suppose that capital goods prices are rising at a constant rate and again consider the extreme case of a light bulb. Current-dollar replacement requirements for a particular bulb will still be zero until the end of its service life. Yet as we have seen above, current-cost depreciation will be greater, relative to the case of no inflation, in each hour of its service life. Hence, inflation, as well as growth in real capital expenditures, can drive a wedge between current-dollar replacement and current-cost depreciation, causing the latter to exceed the former.

If all capital goods were like light bulbs and real capital expenditures were constant over time, then a constant rate of inflation would not cause current-dollar replacement to exceed <u>forever</u> current-cost depreciation, since the total of current-cost depreciation over the life of a bulb is exactly equal to the total of replacement requirements, namely, the cost of replacing the bulb at the end of the service life. If, however, unlike light bulbs, capital goods lose efficiency over their service lives, then the total of current-cost depreciation must exceed the total of current-dollar replacement requirements over the life of each asset: total depreciation equals the

cost of a new asset of the same type at the end of the service life, whereas total replacement can be thought of as the sum of the expenditures required each period to replace a fraction of the asset's productive capacity by purchasing a fraction of a new asset of the same type. Thus, in the case of assets that lose efficiency over their service lives, inflation, even with constant real capital expenditures, will cause current-cost depreciation to exceed forever current-dollar replacement requirements.

In conclusion, it appears that tax depreciation allowances were not large enough to meet replacement requirements in the late 1940's and early 1950's, but they were more than adequate in the 1960's and early 1970's. If firms had instead been required to depreciate assets for tax purposes at historical costs using service lives and depreciation patterns revealed by investment behavior, then throughout the postwar period, tax allowances would not have covered replacement requirements. Finally, if firms had been permitted to adjust consistent historical-cost depreciation to reflect changes in capital goods prices, as in my current-cost measure of depreciation, then tax allowances would have been on the whole extremely generous when viewed relative to current-dollar replacement requirements.

V. ESTIMATES OF GROSS RATES OF RETURN

The measures of economic depreciation of equipment and structures by industry described in Section II may be used to estimate the values of stocks of equipment and structures held by each industry at the end of each year. Let B^e_{tk} and B^s_{tk} denote the book values of equipment and structures, respectively, held by industry k at the end of year t. In the case of historical-cost accounting, we have

$$B^e_{tk} = \sum_{i=0}^{n^e_k} (I^e_{t-i,k} - D^e_{t-i,k}) \tag{40}$$

$$B^s_{tk} = \sum_{i=0}^{n^s_k} (I^s_{t-i,k} - D^s_{t-i,k}) , \tag{41}$$

where D^e and D^s are given by previous equations. In the case of current-cost accounting, we have

$$B^e_{tk} = \sum_{i=0}^{n^e_k} [I^e_{t-i,k} (\frac{C^e_{tk}}{C^e_{t-i,k}}) - D^e_{t-i,k}] \tag{42}$$

$$B^s_{tk} = \sum_{i=0}^{n^s_k} [I^s_{t-i,k} (\frac{C^s_{tk}}{C^s_{t-i,k}}) - D^s_{t-i,k}] . \tag{43}$$

Adding the value of inventory stocks at the end of each year, we have estimates of total assets, excluding land and any residential structures held by manufacturing concerns.

I have approximated the rate of return on total assets by relating the flow of profits plus net interest during each year to the average of total assets on hand at the beginning and end of the year. The resulting estimates of the rate of return are gross of taxes, and are shown in percentage and index form (1948=100) for total manufacturing in Table 4. Detailed estimates of book values of total assets and rates of return by industry are given in appendix tables E.1-E.2 (historical cost) and E.3-E.4 (current cost). By way of comparison, BEA estimates [4] of the gross rate of return for all nonfinancial corporations are given in percentage and index form in the last two columns of Table 4.

My estimates of the rate of return based on historical-cost accounting are about double those of Gorman in every year. This discrepancy results in part from differences in coverage of the two series, but a more important factor is the difference between historical- and replacement-cost accounting. The historical-cost series also exhibits some striking differences in its movements during the postwar years as compared to Gorman's. While Gorman's estimates never regain or surpass their 1948 peak level, my historical-cost series peaks in 1951 and indicates rates of return in 1965-66 that were roughly the same as in 1948. On the other hand, the two series yield some strikingly similar conclusions. They both fall to their postwar lows in 1970, and the 1970 levels are about the same relative to the 1948 levels. Also, both series indicate that each of the postwar recessions (1954, 1958, and 1971) pulled the rate of return down to a lower level than the preceding recession.

Table 4

Estimates of Gross Rates of Return
Total Manufacturing, 1948-71[a]

Year	Gross Rate of Return: Based on Historical-Cost Depreciation, Percent	Gross Rate of Return: Based on Historical-Cost Depreciation, Index 1948 = 100	Gross Rate of Return: Based on Current-Cost Depreciation, Percent	Gross Rate of Return: Based on Current-Cost Depreciation, Index 1948 = 100	BEA Estimate of Gross Rate of Return Nonfinancial Corporations[b], Percent	BEA Estimate of Gross Rate of Return Nonfinancial Corporations[b], Index 1948 = 100
1948	30.0	100	22.4	100	17.6	100
49	26.7	89	22.0	98	14.8	84
50	32.7	109	22.5	100	17.0	97
51	34.3	114	21.1	94	16.8	95
52	27.3	91	20.1	90	14.1	80
53	26.1	87	20.8	93	13.5	77
54	22.5	75	19.3	86	12.7	72
55	28.5	95	23.3	104	15.7	89
56	24.7	82	15.3	68	13.6	77
57	22.4	75	14.4	64	12.3	70
58	17.8	59	14.2	63	10.5	60
59	23.6	79	19.3	86	13.1	74
60	21.6	72	18.7	83	12.0	68
61	20.2	67	17.3	77	11.8	67
62	23.8	79	20.3	91	13.5	77
63	24.8	83	21.8	97	14.0	80
64	27.2	91	23.4	104	15.1	86
65	30.7	102	26.6	119	16.3	93
66	30.3	101	26.0	116	16.2	92
67	25.7	86	20.8	93	14.1	80
68	25.8	86	21.2	95	13.8	78
69	22.1	74	14.8	66	11.6	66
70	16.8	56	9.2	41	9.4	53
71	17.6	59	8.9	40	9.9	56

a/ Gross rate of return is profits before taxes (excluding inventory valuation adjustment) plus net interest divided by simple average of book value of assets at the beginning and the end of the year.

b/ From John A. Gorman, "Non-Financial Corporations: New Measures of Output and Input," Survey of Current Business, March 1972, Table 5, pp. 26-27.

It should be noted, however, that while Gorman's results seem to point to a secular decline in the rate of return, the sharp 1965-66 recovery in my historical-cost series casts some doubt on this hypothesis.

The estimates based on current-cost accounting exceed Gorman's estimates (although not by as wide a margin as the historical-cost measures) in all but the last two years. However, they display variations over time that are notably different than both Gorman's estimates and my historical-cost estimates. The current-cost based measure scarcely declines at all in the 1949 recession, and by 1955 it achieves a peak well above the 1948 level. As in the other two series, a trough occurs in 1958, but at a somewhat higher level relative to 1948. Thereafter, the current-cost based rate of return recovers even more dramatically than the historical-cost measure, reaching a peak in 1965 that is 19 percent above the 1948 level. Thereafter, a precipitous decline sets in, carrying the rate of return to a level absolutely lower than Gorman's by 1971. There is even less support in the current-cost estimates for the hypothesis of secular decline in the rate of return.

The detailed results by industry appearing in Tables E.2 and E.4 reveal wide variations among industries as well as over time. Since data on inventories were not available for some industries in selected years (see Table B.3 for the missing observations), rates of return could not be calculated for the entire period in all cases. One curious aspect of the tables is the preponderance of negative rates of return in petroleum. Discussions with Jack Gottsegen of the Commerce Department confirmed my suspicion that the problem is one of industrial classification.

Data supplied by the industry is not adequate to accurately allocate firms' activities between mining and manufacturing, in part because firms follow internal transfer pricing policies that are intended to maximize depletion allowances in their mining operations. Therefore, the petroleum industry is excluded from the following discussion.

In the early years of the postwar period, the historical-cost based rates of return are comparable in most industries to those for manufacturing as a whole. However, rates of return in the furniture, paper, rubber, stone, clay, and glass, and auto industries are significantly above average, while those in textiles and miscellaneous manufacturing are well below average. By 1971, rankings have changed and the amount of variation has also increased.[4/] Tobacco, lumber, printing and publishing, autos, and instruments record quite high rates relative to the average, while textiles, furniture, paper, rubber, primary metals, and transportation equipment display quite low rates.

Variation in the current-cost measures is somewhat larger in 1953 and much larger in 1971.[5/] The industries displaying unusually high rates of return in the early part of the period are lumber, paper, rubber, stone, clay, and glass, electrical machinery, and autos, and those with unusually low rates of return are textiles and miscellaneous manufacturing. At the end of the period, tobacco, autos, and instruments show especially high rates of return, while paper, rubber, primary metals, and transportation equipment show especially low ones. Thus, on the basis of either historical- or current-cost accounting, four industries record extraordinary rates of return in the earlier years (paper, rubber, stone,

clay, and glass; and autos), while two industries record extraordinarily low rates - (textiles and miscellaneous manufacturing). By 1971, three industries appear to enjoy exceptionally high rates under either measure (tobacco, autos, and instruments), and four exceptionally low rates (paper, rubber, primary metals, and transportation equipment). The specific characteristics of the 1971 recession no doubt influence the rankings in that year, so one must be cautious in drawing conclusions from these comparisons.

VI. CONCLUSION

It is important to stress once again that the current-cost accounting procedure applied in this study is based on a very special set of assumptions - in brief, that all changes in capital goods prices result from changes in prices of output, that these changes are completely unanticipated, and that price expectations are completely inelastic. I personally consider these assumptions to be rather extreme, and I would regard the current-cost concept employed here as a polar case. It no doubt produces estimates of current-cost depreciation that are more sensitive to price changes than other reasonable alternatives. In the near future I hope to examine some of these alternatives. Until comparative analyses of different concepts are completed, I am reluctant to draw firm conclusions from the present investigation.

Table A.1

Standard Industrial Classification Codes and Descriptions of Industries Included in This Study

SIC Code	Descriptions
20	Food and Kindred Products
21	Tobacco Manufactures
22	Textile Mill Products
23	Apparel and Related Products
24	Lumber and Wood Products, except Furniture
25	Furniture and Fixtures
26	Paper and Allied Products
27	Printing and Publishing
28	Chemical and Allied Products
29	Petroleum and Related Industries
30	Rubber and Miscellaneous Plastic Products
31	Leather and Leather Products
32	Stone, Clay, and Glass Products
33	Primary Metal Industries
34	Fabricated Metal Products
35	Machinery, except Electrical
36	Electrical Machinery
37+19-371[a]	Transportation Equipment and Ordnance, except Motor Vehicles
371	Motor Vehicles and Equipment
38	Instruments and Related Products
39	Miscellaneous Manufacturing Industries

[a] Referred to in later tables as "837". Total manufacturing is designated by a "0" in later tables.

Table A.2

Service Lives and Capacity Depreciation Patterns
Revealed by Investment Behavior

SIC Industry Code	Equipment		Structures	
	Service Life	Capacity Depreciation Pattern	Service Life	Capacity Depreciation Pattern
20	12	SL	20	SL
21	10	SL	20	SYD
22	18	GD-FIN	20	OHS
23	10	SYD	40	GD-FIN
24	8	SL	50	GD-FIN
25	20	GD-FIN	50	OHS
26	10	GD-FIN	30	SL
27	22	SL	20	SYD
28	14	GD-FIN	25	SL
29	10	SL	45	GD-FIN
30	10	SYD	40	GD-FIN
31	10	GD-FIN	20	GD-FIN
32	10	GD-FIN	35	GD-FIN
33	16	GD-FIN	40	GD-FIN
34	10	GD-FIN	45	SL
35	10	GD-FIN	20	GD-FIN
36	6	SL	30	SL
37+19-371	8	SYD	40	GD-FIN
371	8	GD-FIN	45	GD-FIN
38	10	GD-FIN	20	GD-FIN
39	20	SL	25	SYD

TABLE B.1 BEA ESTIMATES OF CAPITAL CONSUMPTION, EQUIPMENT AND STRUCTURES, 1947-71

YEAR	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
SIC													
20	352.	433.	497.	522.	579.	604.	616.	664.	741.	761.	808.	989.	1045.
21	9.	11.	13.	14.	15.	14.	17.	19.	21.	24.	27.	31.	36.
22	131.	157.	173.	192.	208.	216.	229.	240.	267.	281.	299.	289.	282.
23	46.	55.	64.	66.	71.	73.	77.	79.	87.	89.	82.	95.	95.
24	103.	144.	174.	188.	229.	242.	247.	250.	292.	304.	330.	295.	322.
25	45.	37.	43.	46.	54.	57.	58.	63.	71.	71.	70.	78.	87.
26	114.	140.	162.	177.	206.	233.	266.	314.	386.	423.	480.	531.	546.
27	82.	103.	123.	135.	151.	161.	175.	184.	217.	235.	265.	295.	311.
28	216.	279.	331.	374.	435.	548.	672.	801.	931.	987.	1058.	1144.	1252.
29	124.	107.	148.	135.	128.	135.	156.	276.	252.	351.	443.	451.	462.
30	60.	65.	58.	60.	80.	90.	103.	118.	142.	157.	180.	213.	213.
31	20.	23.	26.	24.	26.	28.	27.	26.	29.	33.	35.	36.	38.
32	84.	105.	121.	136.	159.	186.	230.	250.	288.	305.	383.	478.	484.
33	325.	352.	384.	422.	514.	711.	1057.	1229.	1313.	1347.	1400.	1290.	1212.
34	150.	164.	179.	192.	234.	264.	296.	318.	361.	362.	397.	437.	453.
35	214.	258.	291.	319.	376.	441.	493.	566.	649.	711.	780.	796.	910.
36	83.	114.	120.	136.	157.	187.	226.	258.	304.	342.	380.	431.	425.
837	55.	62.	71.	68.	98.	137.	168.	187.	204.	220.	261.	317.	351.
371	132.	154.	167.	190.	200.	234.	309.	374.	433.	519.	633.	640.	623.
38	19.	21.	23.	27.	47.	56.	60.	66.	79.	107.	116.	134.	143.
39	54.	71.	74.	69.	77.	81.	85.	90.	104.	112.	124.	133.	136.
0	2418.	2855.	3242.	3492.	4044.	4698.	5567.	6372.	7171.	7741.	8551.	9103.	9426.

YEAR	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
SIC												
20	1081.	1134.	1298.	1323.	1426.	1487.	1687.	1618.	1716.	1933.	2008.	2189.
21	40.	42.	52.	59.	60.	61.	66.	70.	70.	118.	158.	173.
22	290.	320.	339.	349.	376.	389.	425.	472.	484.	616.	658.	708.
23	92.	107.	121.	123.	134.	144.	169.	185.	204.	193.	195.	227.
24	339.	331.	347.	353.	417.	488.	490.	528.	522.	557.	649.	738.
25	91.	92.	99.	91.	93.	111.	118.	120.	124.	152.	132.	141.
26	568.	622.	750.	755.	823.	835.	879.	944.	1004.	1074.	1097.	1192.
27	340.	355.	430.	460.	507.	534.	563.	609.	680.	758.	717.	792.
28	1244.	1366.	1660.	1768.	1810.	1953.	1998.	2080.	2310.	2434.	2584.	2819.
29	413.	419.	469.	603.	721.	834.	879.	962.	1100.	1093.	1122.	1193.
30	224.	249.	297.	309.	318.	334.	363.	397.	409.	536.	570.	614.
31	42.	38.	37.	31.	47.	49.	56.	59.	55.	64.	59.	62.
32	538.	549.	633.	653.	700.	728.	731.	759.	787.	975.	989.	1037.
33	1328.	1384.	1723.	1778.	1948.	2022.	2188.	2361.	2518.	2704.	2663.	2801.
34	501.	523.	648.	667.	677.	742.	779.	870.	978.	1005.	1020.	1162.
35	945.	1008.	1159.	1122.	1304.	1416.	1483.	1763.	1895.	2132.	2728.	3027.
36	460.	522.	591.	664.	701.	757.	891.	1042.	1207.	1597.	1767.	1781.
837	392.	404.	445.	463.	515.	550.	598.	864.	1099.	896.	1127.	1136.
371	621.	615.	740.	768.	794.	856.	1048.	1148.	1214.	1105.	963.	993.
38	160.	209.	232.	256.	237.	276.	328.	389.	461.	507.	249.	360.
39	122.	116.	119.	130.	126.	127.	115.	114.	140.	232.	259.	295.
0	9831.	10405.	12189.	12765.	13734.	14693.	15854.	17354.	18977.	20681.	21714.	23440.

TABLE B.2 BEA ESTIMATES OF PROFIT-TYPE INCOME, 1947-71

YEAR	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
SIC													
20	1596.	2119.	1888.	1729.	1552.	1959.	2026.	1886.	2363.	1903.	1951.	2230.	2518.
21	134.	184.	246.	207.	247.	269.	363.	341.	344.	364.	412.	471.	557.
22	1405.	1478.	801.	704.	1172.	711.	504.	273.	526.	523.	406.	423.	608.
23	686.	535.	479.	336.	574.	561.	482.	420.	444.	500.	386.	489.	416.
24	731.	829.	600.	901.	950.	721.	654.	629.	870.	815.	587.	612.	822.
25	39.	189.	206.	224.	291.	277.	206.	214.	283.	316.	281.	198.	267.
26	945.	875.	706.	1044.	1530.	1149.	1106.	1085.	1274.	1569.	1219.	1057.	1311.
27	761.	746.	750.	757.	758.	802.	858.	851.	1016.	1042.	1117.	924.	1132.
28	1250.	1703.	1814.	2368.	2836.	2320.	2217.	2251.	3081.	2852.	2868.	2611.	3649.
29	208.	620.	-17.	258.	516.	42.	315.	-117.	6.	-5.	-861.	-1081.	-689.
30	212.	186.	159.	186.	554.	510.	443.	249.	364.	495.	420.	401.	484.
31	142.	234.	138.	61.	263.	194.	157.	186.	127.	169.	160.	101.	116.
32	458.	551.	595.	894.	911.	753.	875.	954.	1333.	1244.	1123.	1075.	1369.
33	1066.	1265.	1397.	2102.	2966.	1767.	2399.	1504.	2701.	2744.	2957.	1746.	2378.
34	783.	976.	792.	1259.	1500.	1128.	1057.	1014.	1113.	1136.	1193.	1037.	1161.
35	1016.	1319.	1389.	1657.	2495.	2605.	2109.	1887.	1735.	2355.	2153.	1545.	2219.
36	597.	639.	753.	1193.	1264.	1523.	1384.	1209.	1029.	1148.	1533.	1383.	1831.
837	-212.	132.	209.	322.	359.	675.	780.	994.	761.	610.	988.	852.	427.
371	948.	1231.	2026.	3024.	2181.	2220.	2466.	1916.	4017.	1993.	2338.	625.	2745.
38	71.	98.	139.	183.	278.	309.	318.	374.	399.	429.	346.	407.	604.
39	292.	334.	282.	376.	371.	349.	287.	275.	358.	340.	326.	346.	387.
0	13128.	16243.	15352.	19785.	23568.	20844.	21006.	18395.	24144.	22542.	21903.	17452.	24312.

YEAR	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
SIC												
20	2390.	2443.	2357.	2702.	2981.	2717.	3140.	3179.	3082.	2761.	3458.	3180.
21	556.	599.	651.	723.	677.	581.	603.	682.	725.	747.	861.	916.
22	640.	426.	592.	584.	821.	1000.	1109.	730.	957.	1021.	885.	791.
23	527.	594.	605.	616.	706.	783.	979.	943.	996.	910.	871.	1009.
24	660.	562.	644.	778.	863.	1024.	950.	794.	1219.	1407.	843.	875.
25	259.	267.	294.	309.	345.	439.	477.	482.	439.	528.	351.	303.
26	1250.	1181.	1182.	1031.	1173.	1349.	1667.	1386.	1516.	1546.	1073.	842.
27	1197.	1111.	1228.	1170.	1723.	1826.	2035.	1871.	2099.	2098.	1742.	1864.
28	3326.	3320.	3428.	3574.	3933.	4864.	5028.	4636.	5298.	4438.	3999.	4380.
29	-549.	-735.	-831.	-633.	-504.	-138.	174.	598.	75.	-697.	-746.	-1211.
30	486.	461.	486.	471.	520.	543.	698.	689.	848.	808.	281.	465.
31	193.	89.	190.	224.	175.	157.	286.	332.	265.	198.	213.	166.
32	1095.	1036.	1010.	1125.	1199.	1216.	1026.	781.	944.	1091.	764.	951.
33	2029.	1389.	1437.	1727.	2285.	3030.	3430.	2786.	1881.	1351.	732.	386.
34	931.	1166.	1250.	1266.	1536.	2102.	2613.	2604.	2408.	2043.	1268.	1257.
35	1945.	1997.	2492.	2542.	3464.	4081.	4798.	4313.	4310.	3586.	2647.	1865.
36	1459.	1471.	1567.	1598.	1567.	2593.	3085.	3012.	3020.	2746.	1680.	1745.
837	399.	550.	974.	969.	1220.	1368.	1378.	1269.	1290.	-122.	-324.	-176.
371	2904.	2409.	3997.	4889.	4655.	6005.	4812.	3511.	5284.	4385.	1517.	5283.
38	576.	544.	653.	776.	786.	1064.	1419.	1328.	1659.	1651.	1305.	1332.
39	313.	439.	409.	319.	285.	285.	375.	390.	394.	540.	378.	381.
0	22586.	21319.	24615.	26760.	30410.	36889.	40082.	36316.	38709.	33036.	23798.	26604.

TABLE B.3 CENSUS ESTIMATES OF INVENTORY STOCKS, END OF YEAR, 1947-71

YEAR SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	4079.	n.a.	3760.	4351.	4913.	4614.	4692.	4670.	4737.	5139.	5311.	5547.	5588.
21	1118.	n.a.	1225.	1335.	1426.	1606.	1628.	1702.	1712.	1718.	1527.	2064.	2165.
22	1788.	n.a.	1839.	2414.	2776.	2460.	2252.	2147.	2184.	2315.	2228.	2086.	2176.
23	1257.	n.a.	1217.	1677.	1635.	1533.	1555.	1464.	1617.	1726.	1702.	1636.	1754.
24	654.	n.a.	765.	839.	1034.	1121.	1151.	1143.	1205.	1366.	1270.	1285.	1309.
25	401.	n.a.	366.	516.	584.	571.	596.	582.	664.	715.	681.	685.	717.
26	714.	n.a.	669.	787.	1019.	1055.	1089.	1091.	1179.	1367.	1441.	1441.	1515.
27	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	816.	1160.	1169.	1216.
28	2063.	n.a.	2102.	2291.	2946.	3056.	2948.	2853.	3031.	3321.	3072.	3003.	3239.
29	889.	n.a.	1185.	1229.	1371.	1436.	1627.	1430.	1481.	1673.	1884.	1676.	1745.
30	414.	n.a.	408.	406.	599.	648.	618.	590.	692.	734.	957.	928.	1029.
31	508.	n.a.	461.	586.	592.	497.	510.	489.	508.	528.	529.	531.	586.
32	495.	n.a.	565.	635.	811.	776.	823.	806.	878.	1013.	1263.	1232.	1364.
33	1968.	n.a.	2210.	2476.	2800.	3278.	3649.	3648.	4118.	4926.	5371.	5451.	5392.
34	1500.	n.a.	1506.	1878.	2445.	2442.	2741.	2482.	2943.	3348.	3768.	3548.	3624.
35	3354.	n.a.	3074.	3623.	5173.	5288.	5294.	4698.	5345.	6526.	5974.	5397.	5956.
36	1490.	n.a.	1237.	1593.	2423.	2735.	2826.	2472.	2763.	3177.	3707.	3383.	3903.
837	1149.	n.a.	n.a.	1446.	1558.	1827.	1960.	1605.	2234.	2193.	2140.	1922.	2333.
371	1228.	n.a.	2130.	1076.	2206.	3181.	4001.	3869.	3832.	4715.	4871.	4436.	4386.
38	429.	n.a.	460.	516.	747.	761.	797.	747.	798.	896.	1000.	984.	1088.
39	631.	n.a.	622.	798.	1270.	1823.	2089.	1853.	1795.	1756.	1582.	1536.	1457.
0	25897.	28543.	26321.	31078.	39306.	41136.	43948.	41612.	45069.	50642.	51871.	50070.	52707.

YEAR SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	5761.	6171.	6511.	6761.	6901.	6753.	7240.	7749.	8282.	8601.	9047.	9601.
21	2280.	2504.	2501.	2407.	2402.	2377.	2304.	2378.	2324.	2299.	2201.	2271.
22	2240.	2361.	2530.	2567.	2599.	2800.	2967.	3093.	3502.	3556.	3518.	3690.
23	1783.	1781.	2051.	2165.	2287.	2469.	2672.	2753.	3135.	3281.	3308.	3554.
24	1329.	1261.	1336.	1353.	1379.	1341.	1466.	1466.	1600.	1861.	1847.	1987.
25	717.	713.	792.	827.	870.	922.	1080.	1130.	1222.	1417.	1465.	1546.
26	1550.	1584.	1699.	1759.	1783.	1937.	2176.	2263.	2313.	2608.	2745.	2841.
27	1268.	1279.	1199.	1315.	1392.	1476.	1667.	1860.	2005.	2203.	2214.	2293.
28	3376.	3463.	3702.	3826.	4004.	4438.	4997.	5349.	5585.	6237.	6765.	6923.
29	1709.	1760.	1829.	1818.	1803.	1805.	1861.	2030.	2113.	2170.	2291.	2408.
30	1046.	1056.	1160.	1190.	1280.	1397.	1601.	1670.	1852.	2046.	2156.	2210.
31	560.	573.	566.	552.	572.	610.	667.	654.	710.	754.	729.	718.
32	1440.	1447.	1471.	1522.	1611.	1681.	1803.	1851.	1935.	2052.	2247.	2311.
33	5796.	6123.	6014.	6057.	6301.	6582.	7470.	8001.	7988.	8512.	9348.	9390.
34	3618.	3637.	3784.	3954.	4240.	4887.	5430.	5654.	6157.	6537.	7096.	7342.
35	5895.	5879.	6554.	6803.	7669.	8691.	10139.	10917.	11449.	13207.	13993.	13731.
36	4145.	4356.	5149.	5240.	5475.	6192.	7916.	8527.	8929.	9770.	10044.	9595.
837	2208.	2219.	2480.	2627.	3139.	3518.	3480.	3527.	3894.	4089.	4225.	4215.
371	4025.	3859.	4541.	4876.	5166.	5457.	7595.	10109.	11871.	11463.	11802.	11030.
38	1196.	1222.	1122.	1178.	1263.	1436.	1633.	1978.	2057.	2190.	2384.	2473.
39	1609.	1490.	1077.	1116.	1135.	1238.	1360.	1447.	1581.	1785.	1859.	1977.
0	53814.	54939.	58213.	60043.	63386.	68221.	77965.	84655.	90875.	97074.	101645.	102445.

TABLE C.1 COEN ESTIMATES OF HISTORICAL-COST DEPRECIATION, EQUIPMENT, 1947-71

YEAR	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
SIC													
20	182.	253.	308.	353.	389.	426.	447.	467.	500.	531.	562.	582.	605.
21	4.	8.	9.	11.	12.	12.	14.	16.	17.	19.	21.	24.	26.
22	49.	70.	111.	136.	153.	171.	181.	185.	186.	191.	198.	202.	203.
23	26.	35.	41.	43.	46.	48.	49.	49.	51.	55.	59.	64.	65.
24	43.	65.	86.	96.	115.	132.	138.	140.	147.	162.	176.	173.	177.
25	14.	18.	19.	20.	22.	23.	24.	26.	27.	29.	31.	33.	36.
26	69.	100.	130.	153.	174.	201.	228.	256.	289.	320.	376.	416.	434.
27	121.	121.	123.	126.	130.	132.	134.	138.	143.	150.	157.	165.	174.
28	217.	259.	284.	311.	338.	396.	457.	514.	556.	577.	625.	663.	697.
29	145.	137.	144.	145.	138.	140.	155.	169.	184.	188.	195.	211.	208.
30	55.	65.	72.	72.	79.	90.	101.	110.	119.	126.	140.	145.	149.
31	13.	15.	17.	18.	18.	19.	18.	19.	20.	21.	22.	22.	22.
32	66.	85.	104.	117.	135.	161.	182.	197.	213.	247.	301.	334.	343.
33	253.	269.	316.	340.	356.	418.	500.	546.	570.	597.	670.	754.	789.
34	86.	107.	117.	129.	145.	162.	182.	202.	223.	251.	275.	294.	308.
35	108.	137.	162.	176.	191.	223.	256.	287.	322.	358.	398.	427.	446.
36	92.	129.	154.	164.	178.	205.	223.	255.	279.	296.	331.	348.	347.
837	202.	160.	132.	105.	87.	95.	105.	117.	137.	161.	201.	232.	238.
371	109.	129.	157.	164.	186.	217.	245.	293.	341.	377.	461.	504.	497.
38	24.	28.	33.	36.	40.	44.	48.	52.	55.	58.	63.	67.	70.
39	14.	17.	19.	20.	22.	24.	25.	27.	30.	33.	36.	37.	41.
0	1891.	2206.	2538.	2733.	2956.	3339.	3710.	4062.	4410.	4746.	5297.	5696.	5876.

YEAR	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
SIC												
20	629.	655.	683.	724.	761.	811.	859.	929.	973.	1010.	1056.	1117.
21	29.	31.	34.	36.	38.	41.	43.	44.	44.	43.	43.	43.
22	209.	221.	230.	243.	254.	272.	294.	326.	344.	359.	382.	405.
23	66.	66.	65.	67.	73.	77.	89.	104.	114.	129.	148.	166.
24	187.	199.	197.	200.	212.	223.	252.	280.	291.	312.	345.	363.
25	38.	39.	41.	43.	46.	49.	53.	59.	63.	68.	72.	80.
26	457.	481.	501.	530.	551.	587.	648.	719.	778.	812.	864.	917.
27	183.	194.	203.	213.	225.	235.	249.	271.	293.	313.	337.	361.
28	718.	769.	823.	873.	926.	1006.	1116.	1257.	1358.	1435.	1524.	1629.
29	202.	193.	181.	178.	167.	161.	163.	178.	212.	277.	320.	365.
30	158.	179.	194.	221.	238.	260.	299.	349.	388.	430.	486.	523.
31	23.	24.	25.	26.	27.	28.	29.	31.	32.	35.	36.	37.
32	363.	380.	392.	407.	425.	449.	468.	494.	500.	513.	538.	563.
33	783.	825.	848.	877.	909.	973.	1063.	1201.	1314.	1410.	1485.	1561.
34	324.	336.	339.	351.	364.	390.	420.	459.	501.	542.	597.	641.
35	468.	494.	505.	519.	538.	564.	624.	701.	776.	845.	931.	1003.
36	361.	393.	412.	439.	475.	512.	603.	742.	835.	900.	991.	1034.
837	238.	236.	240.	258.	274.	296.	317.	428.	515.	564.	606.	590.
371	490.	496.	480.	449.	457.	450.	505.	590.	613.	628.	671.	702.
38	77.	85.	90.	98.	106.	110.	119.	132.	146.	161.	175.	189.
39	45.	48.	52.	56.	60.	65.	70.	77.	82.	88.	95.	103.
0	6050.	6345.	6534.	6808.	7127.	7558.	8284.	9370.	10171.	10871.	11702.	12394.

TABLE C.2 COEN ESTIMATES OF HISTORICAL-COST DEPRECIATION, STRUCTURES, 1947-71

YEAR SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	91.	111.	134.	151.	162.	176.	183.	190.	201.	208.	216.	225.	237.
21	2.	3.	4.	5.	5.	6.	6.	6.	6.	6.	8.	8.	9.
22	16.	15.	15.	16.	18.	20.	23.	26.	28.	31.	34.	37.	40.
23	7.	9.	10.	10.	11.	12.	12.	12.	13.	14.	14.	14.	15.
24	20.	26.	30.	31.	34.	38.	39.	40.	43.	47.	51.	51.	55.
25	1.	2.	2.	2.	2.	2.	2.	2.	2.	2.	3.	3.	3.
26	21.	27.	30.	32.	34.	38.	40.	43.	48.	52.	59.	67.	73.
27	52.	56.	56.	57.	58.	60.	61.	60.	60.	60.	64.	67.	76.
28	71.	88.	97.	105.	112.	126.	141.	153.	164.	174.	185.	199.	212.
29	96.	117.	147.	164.	165.	169.	176.	204.	232.	251.	280.	317.	340.
30	11.	14.	15.	15.	16.	17.	19.	20.	21.	22.	23.	24.	26.
31	4.	5.	6.	6.	6.	6.	6.	6.	6.	6.	7.	7.	7.
32	32.	43.	47.	49.	51.	57.	59.	63.	67.	77.	98.	115.	117.
33	173.	183.	197.	198.	197.	229.	268.	291.	293.	293.	314.	360.	382.
34	18.	20.	22.	24.	27.	29.	32.	36.	39.	43.	48.	51.	55.
35	53.	66.	74.	77.	78.	92.	105.	117.	125.	127.	137.	158.	166.
36	26.	30.	33.	35.	37.	43.	48.	54.	58.	63.	69.	78.	84.
837	101.	95.	90.	84.	79.	83.	92.	95.	94.	96.	107.	121.	124.
371	45.	49.	51.	49.	50.	60.	71.	71.	76.	81.	94.	96.	94.
38	9.	10.	12.	12.	13.	15.	17.	19.	20.	23.	26.	30.	31.
39	8.	10.	11.	11.	12.	14.	14.	15.	16.	18.	20.	21.	23.
0	858.	977.	1082.	1135.	1170.	1295.	1415.	1523.	1613.	1694.	1857.	2048.	2169.

YEAR SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	246.	253.	257.	270.	279.	289.	298.	306.	316.	331.	354.	382.
21	10.	11.	11.	11.	11.	11.	12.	12.	12.	11.	12.	12.
22	43.	47.	50.	56.	62.	70.	76.	78.	76.	73.	76.	78.
23	16.	17.	17.	18.	19.	21.	23.	26.	29.	35.	41.	44.
24	57.	60.	60.	62.	68.	70.	72.	74.	75.	76.	80.	83.
25	3.	3.	3.	4.	4.	4.	4.	5.	5.	5.	5.	5.
26	77.	82.	86.	91.	95.	100.	108.	117.	127.	135.	145.	151.
27	80.	83.	87.	91.	94.	98.	102.	110.	122.	131.	145.	158.
28	219.	229.	241.	246.	258.	271.	289.	313.	335.	361.	388.	411.
29	335.	338.	342.	339.	335.	329.	339.	347.	365.	370.	390.	417.
30	27.	29.	31.	33.	36.	40.	45.	51.	59.	70.	81.	91.
31	7.	7.	7.	7.	7.	8.	8.	9.	10.	11.	12.	13.
32	120.	123.	124.	125.	128.	128.	133.	140.	145.	146.	152.	157.
33	374.	383.	380.	368.	370.	374.	389.	406.	430.	453.	471.	483.
34	58.	61.	63.	66.	70.	74.	79.	84.	91.	97.	106.	112.
35	167.	172.	173.	177.	179.	187.	199.	228.	254.	275.	293.	315.
36	89.	96.	103.	109.	116.	123.	131.	146.	162.	178.	193.	206.
837	124.	123.	124.	127.	131.	132.	137.	159.	179.	191.	208.	214.
371	90.	92.	93.	98.	104.	113.	139.	154.	160.	162.	173.	175.
38	32.	35.	39.	42.	44.	44.	47.	53.	62.	72.	78.	87.
39	24.	25.	26.	27.	28.	29.	31.	34.	38.	41.	44.	47.
0	2199.	2267.	2320.	2368.	2438.	2515.	2661.	2852.	3052.	3224.	3444.	3643.

TABLE C.3 COEN ESTIMATES OF HISTORICAL-COST DEPRECIATION, EQUIPMENT AND STRUCTURES, 1947-71

YEAR SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	273.	364.	443.	503.	552.	602.	630.	657.	701.	739.	778.	807.	842.
21	6.	11.	14.	16.	17.	18.	20.	22.	24.	25.	29.	32.	35.
22	65.	85.	126.	152.	171.	192.	204.	210.	214.	222.	232.	238.	243.
23	33.	44.	51.	53.	56.	60.	60.	61.	64.	68.	73.	78.	80.
24	63.	91.	115.	128.	150.	170.	176.	180.	190.	209.	226.	224.	232.
25	16.	19.	21.	22.	24.	25.	27.	28.	30.	31.	34.	36.	39.
26	91.	127.	159.	185.	209.	239.	268.	300.	337.	372.	435.	483.	507.
27	173.	176.	179.	183.	188.	193.	195.	198.	203.	210.	221.	232.	251.
28	287.	347.	381.	416.	450.	522.	598.	667.	720.	750.	810.	862.	910.
29	241.	254.	292.	309.	304.	310.	331.	373.	416.	440.	475.	528.	548.
30	66.	79.	87.	87.	95.	107.	119.	129.	140.	148.	163.	169.	175.
31	17.	19.	22.	24.	24.	25.	24.	25.	27.	27.	29.	29.	29.
32	98.	128.	151.	166.	186.	218.	241.	259.	280.	325.	399.	448.	461.
33	425.	452.	513.	538.	553.	647.	768.	837.	863.	890.	984.	1114.	1171.
34	104.	127.	139.	153.	171.	192.	214.	238.	262.	294.	322.	345.	363.
35	161.	203.	236.	253.	270.	315.	362.	404.	447.	485.	535.	585.	613.
36	118.	158.	187.	200.	216.	248.	271.	309.	337.	359.	401.	426.	431.
837	303.	255.	221.	189.	166.	178.	197.	212.	231.	257.	308.	353.	361.
371	154.	178.	208.	213.	237.	277.	316.	364.	417.	458.	555.	600.	591.
38	33.	38.	44.	48.	53.	59.	65.	71.	76.	80.	89.	97.	102.
39	21.	27.	30.	32.	35.	38.	40.	42.	46.	50.	56.	59.	65.
0	2749.	3182.	3620.	3869.	4125.	4634.	5125.	5585.	6024.	6440.	7154.	7745.	8045.

YEAR SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	875.	908.	941.	993.	1040.	1100.	1156.	1235.	1289.	1341.	1410.	1498.
21	39.	42.	45.	47.	49.	52.	54.	56.	56.	55.	55.	55.
22	252.	268.	280.	299.	316.	342.	371.	404.	420.	432.	457.	483.
23	82.	82.	82.	85.	93.	98.	112.	131.	143.	163.	189.	210.
24	244.	259.	257.	262.	280.	293.	324.	354.	366.	388.	425.	446.
25	41.	43.	44.	46.	50.	53.	57.	64.	68.	73.	77.	86.
26	534.	563.	588.	621.	646.	687.	755.	836.	906.	948.	1008.	1068.
27	263.	277.	291.	305.	319.	334.	351.	382.	415.	445.	482.	520.
28	937.	998.	1064.	1119.	1184.	1276.	1406.	1570.	1693.	1796.	1912.	2040.
29	537.	530.	523.	517.	502.	490.	502.	525.	577.	647.	710.	782.
30	184.	208.	225.	254.	274.	300.	344.	400.	447.	500.	566.	614.
31	30.	31.	32.	34.	34.	35.	37.	40.	42.	46.	48.	50.
32	483.	503.	516.	532.	554.	577.	601.	634.	644.	659.	690.	721.
33	1157.	1208.	1227.	1245.	1279.	1347.	1452.	1607.	1744.	1862.	1956.	2045.
34	382.	397.	402.	418.	434.	464.	498.	543.	592.	638.	702.	753.
35	635.	666.	678.	696.	716.	751.	823.	929.	1030.	1120.	1224.	1319.
36	450.	489.	516.	548.	591.	634.	735.	887.	997.	1078.	1183.	1240.
837	363.	359.	364.	385.	405.	428.	453.	587.	695.	755.	814.	804.
371	581.	588.	574.	548.	561.	563.	644.	744.	772.	789.	843.	877.
38	109.	119.	129.	140.	150.	154.	166.	185.	209.	232.	253.	276.
39	69.	73.	77.	83.	89.	94.	102.	110.	120.	128.	139.	150.
0	8249.	8612.	8854.	9176.	9565.	10073.	10945.	12222.	13222.	14095.	15146.	16037.

TABLE C.4 RATIOS OF COEN ESTIMATES OF HISTORICAL-COST DEPRECIATION, EQUIPMENT AND STRUCTURES, TO BEA ESTIMATES OF CAPITAL CONSUMPTION

YEAR / SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	.7743	.8412	.8906	.9645	.9533	.9969	1.0223	.9893	.9456	.9707	.9634	.8160	.8055
21	.7110	.9986	1.0482	1.1314	1.1402	1.2955	1.1600	1.1611	1.1395	1.0496	1.0749	1.0173	.9755
22	.4958	.5415	.7292	.7919	.8240	.8879	.8922	.8761	.8026	.7885	.7760	.8251	.8609
23	.7091	.7926	.7942	.8012	.7935	.8178	.7857	.7702	.7309	.7682	.8881	.8205	.8423
24	.6152	.6321	.6626	.6785	.6537	.7026	.7142	.7194	.6502	.6891	.6858	.7584	.7193
25	.3475	.5164	.4894	.4765	.4366	.4435	.4581	.4438	.4173	.4434	.4819	.4642	.4441
26	.7962	.9058	.9836	1.0436	1.0133	1.0247	1.0081	.9541	.8732	.8801	.9071	.9096	.9280
27	2.1141	1.7114	1.4537	1.3589	1.2424	1.1970	1.1154	1.0737	.9374	.8942	.8340	.7864	.8064
28	1.3297	1.2421	1.1516	1.1129	1.0353	.9530	.8895	.8326	.7733	.7604	.7659	.7535	.7265
29	1.9432	2.3729	1.9717	2.2873	2.3716	2.2928	2.1200	1.3502	1.6507	1.2522	1.0719	1.1710	1.1860
30	1.0926	1.2209	1.5040	1.4512	1.1840	1.1935	1.1587	1.0949	.9833	.9414	.9060	.7944	.8198
31	.8695	.8405	.8541	.9828	.9385	.8771	.8925	.9765	.9159	.8249	.8225	.8042	.7682
32	1.1615	1.2180	1.2475	1.2194	1.1703	1.1741	1.0484	1.0372	.9732	1.0644	1.0424	.9377	.9518
33	1.3092	1.2834	1.3369	1.2741	1.0763	.9101	.7265	.6807	.6574	.6605	.7028	.8636	.9650
34	.6935	.7770	.7765	.7948	.7310	.7262	.7226	.7479	.7255	.8110	.8122	.7901	.8007
35	.7521	.7873	.8108	.7942	.7176	.7145	.7336	.7144	.6881	.6827	.6858	.7350	.6733
36	1.4228	1.3864	1.5592	1.4679	1.3743	1.3239	1.1997	1.1966	1.1091	1.0500	1.0551	.9885	1.0144
837	5.5078	4.1084	3.1159	2.7837	1.6912	1.2978	1.1729	1.1311	1.1347	1.1673	1.1790	1.1132	1.0299
371	1.1680	1.1579	1.2451	1.1202	1.1837	1.1840	1.0222	.9734	.9621	.8823	.8763	.9367	.9484
38	1.7498	1.8104	1.9329	1.7814	1.1261	1.0531	1.0809	1.0733	.9566	.7511	.7659	.7230	.7102
39	.3981	.3784	.4041	.4606	.4485	.4646	.4654	.4713	.4443	.4492	.4482	.4415	.4759
0	1.1368	1.1147	1.1166	1.1079	1.0201	.9863	.9207	.8765	.8400	.8319	.8367	.8508	.8535

YEAR / SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	.8092	.8009	.7248	.7507	.7292	.7398	.6855	.7632	.7512	.6938	.7023	.6844
21	.9799	.9975	.8582	.7955	.8220	.8560	.8255	.8047	.7966	.4649	.3499	.3182
22	.8696	.8376	.8270	.8581	.8405	.8799	.8718	.8568	.8677	.7018	.6950	.6828
23	.8950	.7707	.6775	.6874	.6937	.6814	.6623	.7060	.7006	.8451	.9673	.9250
24	.7212	.7827	.7401	.7423	.6714	.5996	.6611	.6704	.7013	.6960	.6543	.6043
25	.4464	.4627	.4458	.5062	.5324	.4763	.4857	.5298	.5505	.4786	.5860	.6089
26	.9401	.9048	.7834	.8230	.7854	.8227	.8595	.8853	.9019	.8823	.9192	.8959
27	.7742	.7793	.6759	.6621	.6301	.6246	.6243	.6268	.6099	.5869	.6729	.6560
28	.7535	.7305	.6409	.6329	.6540	.6536	.7035	.7550	.7329	.7378	.7399	.7238
29	1.2994	1.2659	1.1150	.8567	.6963	.5879	.5717	.5457	.5248	.5919	.6326	.6556
30	.8236	.8366	.7570	.8219	.8612	.8990	.9484	1.0066	1.0931	.9330	.9937	1.0001
31	.7146	.8106	.8555	.6589	.7334	.7236	.6541	.6697	.7630	.7189	.8156	.8062
32	.8979	.9168	.8156	.8144	.7912	.7924	.8225	.8354	.8185	.6754	.6974	.6948
33	.8716	.8729	.7123	.7001	.6565	.6663	.6635	.6805	.6926	.6888	.7346	.7299
34	.7625	.7586	.6202	.6260	.6412	.6257	.6397	.6247	.6048	.6353	.6887	.6479
35	.6717	.6606	.5850	.6204	.5492	.5306	.5550	.5271	.5434	.5252	.4488	.4356
36	.9793	.9365	.8723	.8258	.8426	.8379	.8248	.8515	.8257	.6749	.6697	.6961
837	.9252	.8884	.8187	.7969	.7859	.7777	.7583	.6792	.6320	.8422	.7224	.7076
371	.9348	.9567	.7751	.7131	.7060	.6576	.6141	.6479	.6361	.7145	.8757	.8834
38	.6828	.5702	.5581	.5481	.6317	.5575	.5071	.4748	.4525	.4582	1.0157	.7678
39	.5697	.6329	.6494	.6396	.7043	.7404	.8834	.9691	.8546	.5529	.5375	.5093
0	.8391	.8277	.7264	.7188	.6964	.6856	.6903	.7043	.6968	.6815	.6975	.6842

TABLE C.5 COEN ESTIMATES OF CURRENT-COST DEPRECIATION, EQUIPMENT, 1947-71

YEAR SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	398.	437.	444.	455.	677.	541.	567.	566.	699.	902.	959.	830.	844.
21	7.	11.	12.	14.	19.	15.	18.	19.	24.	30.	33.	31.	33.
22	101.	123.	157.	179.	285.	211.	245.	248.	299.	389.	404.	328.	342.
23	42.	50.	54.	55.	79.	56.	61.	59.	70.	91.	94.	82.	82.
24	63.	91.	113.	121.	182.	161.	168.	164.	194.	244.	260.	230.	227.
25	21.	27.	29.	30.	45.	33.	36.	36.	47.	66.	66.	54.	58.
26	115.	149.	173.	198.	299.	244.	297.	323.	401.	526.	597.	552.	574.
27	320.	341.	257.	256.	423.	197.	228.	223.	293.	394.	405.	311.	322.
28	376.	432.	434.	457.	718.	523.	660.	695.	838.	1148.	1210.	999.	1017.
29	277.	247.	224.	214.	311.	189.	216.	203.	236.	286.	298.	273.	274.
30	84.	98.	100.	100.	151.	105.	128.	133.	156.	207.	220.	188.	193.
31	19.	22.	23.	25.	34.	23.	26.	27.	31.	35.	36.	30.	29.
32	123.	133.	147.	153.	223.	206.	233.	241.	285.	387.	456.	440.	445.
33	356.	548.	532.	606.	901.	601.	713.	719.	879.	1306.	1307.	1108.	1187.
34	96.	152.	161.	179.	255.	229.	236.	239.	290.	391.	398.	365.	382.
35	122.	193.	214.	243.	338.	291.	334.	348.	431.	604.	618.	549.	572.
36	112.	163.	185.	202.	260.	236.	259.	278.	320.	403.	439.	406.	403.
837	331.	274.	214.	172.	219.	110.	130.	130.	158.	219.	264.	269.	276.
371	135.	173.	194.	209.	297.	267.	310.	353.	418.	543.	622.	613.	616.
38	27.	38.	43.	49.	69.	57.	64.	66.	77.	98.	98.	88.	90.
39	19.	25.	27.	30.	44.	33.	37.	38.	49.	71.	73.	60.	66.
0	3144.	3728.	3738.	3949.	5830.	4330.	6966.	5108.	6195.	8342.	8857.	7805.	8035.

YEAR SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	749.	745.	763.	798.	845.	914.	1042.	1194.	1163.	1347.	1497.	1611.
21	35.	35.	38.	41.	43.	46.	53.	57.	52.	59.	62.	63.
22	322.	304.	329.	357.	368.	388.	481.	529.	436.	575.	618.	657.
23	77.	71.	72.	73.	81.	86.	107.	130.	130.	164.	194.	219.
24	217.	219.	213.	217.	230.	245.	291.	340.	336.	398.	456.	488.
25	55.	53.	54.	55.	64.	71.	84.	93.	91.	107.	124.	128.
26	564.	551.	581.	605.	639.	683.	805.	909.	908.	1065.	1190.	1279.
27	307.	287.	305.	311.	329.	350.	425.	471.	388.	536.	590.	632.
28	942.	912.	981.	986.	1093.	1217.	1451.	1676.	1710.	1943.	2255.	2357.
29	238.	204.	198.	179.	181.	174.	192.	220.	249.	333.	408.	465.
30	187.	193.	212.	234.	262.	292.	362.	435.	464.	554.	666.	691.
31	29.	28.	28.	30.	31.	32.	35.	39.	37.	45.	48.	51.
32	422.	424.	429.	434.	471.	504.	553.	603.	608.	672.	749.	786.
33	1074.	1007.	1075.	985.	1196.	1324.	1591.	1783.	1916.	2069.	2421.	2344.
34	386.	381.	386.	372.	417.	451.	508.	573.	631.	690.	823.	829.
35	578.	576.	588.	558.	624.	671.	781.	870.	969.	1064.	1263.	1292.
36	400.	413.	434.	439.	500.	552.	683.	850.	966.	1055.	1225.	1244.
837	265.	246.	254.	258.	291.	321.	364.	499.	603.	674.	781.	754.
371	589.	567.	550.	479.	509.	498.	579.	694.	741.	782.	904.	919.
38	94.	97.	103.	104.	119.	128.	147.	163.	182.	201.	237.	241.
39	65.	63.	67.	66.	79.	88.	103.	114.	117.	132.	157.	159.
0	7594.	7375.	7661.	7582.	8371.	9036.	10635.	12243.	12700.	14468.	16669.	17210.

TABLE C.6 COEN ESTIMATES OF CURRENT-COST DEPRECIATION, STRUCTURES, 1947-71

YEAR SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	529.	204.	160.	375.	443.	364.	292.	232.	295.	499.	460.	268.	304.
21	7.	5.	5.	8.	10.	10.	8.	7.	8.	14.	14.	9.	11.
22	67.	30.	24.	40.	50.	46.	44.	40.	48.	73.	74.	56.	62.
23	44.	15.	10.	32.	41.	30.	20.	13.	21.	44.	39.	15.	19.
24	393.	68.	10.	222.	289.	175.	85.	25.	86.	270.	216.	37.	69.
25	12.	5.	4.	9.	12.	10.	8.	6.	8.	13.	12.	8.	9.
26	140.	50.	35.	101.	124.	97.	72.	54.	79.	149.	138.	81.	96.
27	536.	120.	52.	198.	212.	150.	103.	67.	94.	190.	160.	71.	90.
28	198.	136.	124.	227.	289.	261.	230.	199.	252.	427.	411.	254.	293.
29	1216.	269.	115.	766.	971.	621.	351.	182.	392.	995.	849.	304.	414.
30	64.	23.	15.	47.	59.	44.	31.	21.	31.	66.	58.	25.	32.
31	25.	9.	7.	15.	18.	14.	10.	7.	10.	17.	16.	8.	9.
32	189.	71.	49.	143.	180.	137.	97.	68.	101.	211.	209.	121.	139.
33	2264.	468.	140.	1290.	1623.	1007.	557.	251.	554.	1496.	1217.	326.	488.
34	146.	45.	26.	101.	129.	94.	65.	46.	72.	150.	136.	66.	81.
35	148.	95.	86.	149.	181.	168.	151.	134.	168.	277.	267.	178.	201.
36	194.	60.	37.	128.	155.	117.	86.	65.	93.	180.	162.	93.	109.
837	442.	171.	107.	305.	374.	264.	178.	110.	172.	388.	338.	131.	166.
371	295.	89.	48.	193.	244.	173.	119.	71.	120.	273.	244.	97.	117.
38	20.	15.	14.	23.	29.	27.	24.	22.	27.	47.	48.	33.	37.
39	32.	15.	12.	27.	33.	28.	22.	17.	22.	39.	39.	24.	28.
0	6958.	1965.	1081.	4399.	5469.	3834.	2554.	1638.	2655.	5819.	5109.	2206.	2775.

YEAR SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	269.	340.	379.	396.	452.	472.	486.	582.	572.	887.	928.	1124.
21	10.	13.	15.	15.	17.	18.	18.	22.	21.	34.	35.	42.
22	59.	73.	79.	89.	107.	121.	131.	145.	137.	176.	180.	207.
23	15.	24.	29.	31.	37.	40.	42.	59.	61.	114.	126.	159.
24	40.	100.	129.	130.	164.	166.	170.	237.	229.	456.	466.	567.
25	8.	10.	11.	11.	12.	13.	14.	17.	18.	28.	30.	35.
26	89.	114.	132.	140.	161.	171.	184.	239.	252.	428.	466.	584.
27	75.	105.	123.	125.	144.	149.	153.	192.	202.	325.	357.	443.
28	257.	338.	393.	402.	466.	487.	509.	650.	670.	1092.	1162.	1435.
29	298.	498.	607.	608.	717.	717.	730.	1002.	990.	1917.	2004.	2519.
30	26.	41.	49.	52.	63.	69.	75.	103.	111.	199.	220.	282.
31	8.	10.	11.	11.	13.	13.	13.	17.	17.	27.	29.	35.
32	119.	161.	186.	188.	217.	221.	231.	304.	309.	554.	594.	748.
33	314.	616.	760.	750.	903.	904.	916.	1250.	1206.	2301.	2317.	2771.
34	70.	99.	117.	123.	144.	152.	160.	211.	219.	389.	425.	535.
35	175.	223.	248.	254.	283.	297.	315.	399.	420.	667.	728.	908.
36	100.	130.	152.	162.	189.	202.	218.	285.	305.	516.	575.	724.
837	122.	196.	239.	244.	294.	300.	309.	443.	453.	859.	905.	1135.
371	84.	137.	167.	173.	210.	222.	251.	345.	351.	639.	685.	851.
38	33.	44.	53.	57.	63.	65.	70.	88.	98.	159.	177.	225.
39	25.	32.	37.	39.	46.	47.	50.	65.	69.	120.	133.	165.
0	2198.	3304.	3915.	3999.	4702.	4848.	5047.	6655.	6709.	11889.	12542.	15495.

TABLE C.7 COEN ESTIMATES OF CURRENT-COST DEPRECIATION, EQUIPMENT AND STRUCTURES, 1947-71

YEAR SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	926.	641.	604.	830.	1121.	905.	859.	799.	993.	1401.	1420.	1098.	1149.
21	15.	15.	17.	22.	30.	25.	26.	26.	33.	44.	48.	39.	44.
22	168.	153.	181.	219.	334.	257.	289.	288.	347.	462.	478.	384.	404.
23	86.	65.	64.	88.	120.	86.	80.	72.	91.	136.	133.	97.	102.
24	456.	159.	123.	344.	471.	336.	253.	189.	280.	513.	476.	267.	296.
25	33.	32.	34.	39.	57.	43.	43.	42.	55.	79.	78.	62.	67.
26	255.	199.	207.	300.	423.	341.	369.	377.	479.	675.	736.	633.	670.
27	856.	461.	309.	454.	636.	347.	332.	289.	387.	584.	565.	381.	412.
28	574.	568.	557.	684.	1006.	783.	890.	894.	1090.	1575.	1621.	1253.	1310.
29	1493.	516.	339.	980.	1283.	811.	567.	385.	628.	1281.	1147.	577.	688.
30	148.	121.	115.	147.	210.	149.	159.	153.	168.	273.	278.	213.	225.
31	44.	31.	30.	39.	51.	37.	36.	34.	41.	53.	51.	38.	39.
32	312.	204.	196.	296.	403.	342.	330.	309.	386.	597.	664.	561.	584.
33	2619.	1016.	673.	1895.	2524.	1608.	1271.	971.	1433.	2802.	2524.	1435.	1676.
34	242.	197.	188.	279.	384.	323.	302.	285.	362.	541.	535.	431.	463.
35	270.	288.	300.	392.	519.	458.	485.	483.	599.	881.	886.	727.	773.
36	306.	224.	223.	330.	415.	353.	345.	343.	413.	583.	602.	499.	512.
837	773.	446.	321.	477.	593.	374.	309.	240.	331.	607.	602.	400.	442.
371	430.	262.	243.	402.	541.	440.	429.	424.	538.	816.	866.	710.	733.
38	47.	53.	57.	72.	98.	85.	89.	88.	105.	145.	146.	121.	128.
39	50.	40.	39.	57.	77.	61.	59.	56.	71.	110.	112.	84.	94.
0	10103.	5693.	4819.	8348.	11298.	8164.	7520.	6746.	8850.	14161.	13966.	10011.	10810.

YEAR SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	1018.	1085.	1143.	1194.	1297.	1386.	1528.	1776.	1735.	2234.	2425.	2736.
21	45.	48.	52.	56.	60.	64.	71.	79.	74.	93.	98.	105.
22	381.	377.	408.	446.	475.	509.	612.	674.	573.	751.	799.	865.
23	92.	96.	101.	104.	118.	126.	149.	189.	192.	278.	320.	378.
24	257.	319.	343.	346.	394.	411.	461.	577.	564.	854.	922.	1055.
25	63.	63.	66.	67.	76.	84.	98.	110.	109.	134.	153.	163.
26	652.	665.	713.	744.	801.	855.	990.	1148.	1160.	1493.	1656.	1863.
27	382.	392.	428.	436.	473.	499.	578.	663.	590.	862.	947.	1075.
28	1199.	1249.	1373.	1388.	1559.	1704.	1960.	2326.	2380.	3035.	3417.	3793.
29	536.	702.	806.	787.	898.	892.	922.	1221.	1238.	2249.	2411.	2984.
30	213.	234.	261.	286.	325.	361.	437.	538.	575.	754.	887.	974.
31	36.	37.	39.	41.	44.	46.	49.	55.	55.	72.	77.	85.
32	541.	586.	614.	623.	688.	725.	783.	907.	917.	1227.	1343.	1534.
33	1388.	1623.	1835.	1735.	2099.	2228.	2507.	3023.	3122.	4371.	4738.	5116.
34	456.	480.	503.	495.	561.	603.	668.	784.	850.	1079.	1247.	1364.
35	753.	799.	837.	812.	907.	968.	1096.	1269.	1389.	1732.	1992.	2200.
36	501.	543.	586.	601.	689.	754.	901.	1135.	1272.	1571.	1801.	1968.
837	387.	442.	493.	502.	586.	621.	673.	942.	1056.	1533.	1686.	1889.
371	674.	704.	717.	652.	718.	720.	829.	1040.	1091.	1422.	1589.	1770.
38	128.	140.	156.	160.	182.	193.	217.	251.	280.	360.	414.	466.
39	90.	95.	104.	106.	124.	135.	153.	179.	187.	252.	290.	323.
0	9792.	10679.	11576.	11582.	13073.	13884.	15682.	18898.	19409.	26356.	29212.	32705.

TABLE C.8 RATIOS OF COEN ESTIMATES OF CURRENT-COST DEPRECIATION, EQUIPMENT AND STRUCTURES, TO BEA ESTIMATES OF CAPITAL CONSUMPTION

YEAR / SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	2.6314	1.4805	1.2151	1.5905	1.9356	1.4985	1.3946	1.2031	1.3406	1.8404	1.7571	1.1103	1.0992
21	1.6335	1.3870	1.2806	1.5689	1.9860	1.7690	1.5243	1.3915	1.5646	1.8413	1.7609	1.2592	1.2105
22	1.2800	.9766	1.0443	1.1429	1.6077	1.1896	1.2617	1.1986	1.2988	1.6456	1.5983	1.3276	1.4316
23	1.8665	1.1890	.9969	1.3272	1.6913	1.1733	1.0454	.9080	1.0418	1.5248	1.6201	1.0246	1.0692
24	4.4282	1.1020	.7071	1.8281	2.0585	1.3891	1.0230	.7562	.9597	1.6887	1.4411	.9061	.9200
25	.7251	.8758	.7806	.8567	1.0534	.7459	.7440	.6639	.7721	1.1111	1.1164	.7991	.7725
26	2.2340	1.4241	1.2808	1.6945	2.0524	1.4638	1.3878	1.2014	1.2421	1.5966	1.5323	1.1929	1.2278
27	10.4338	4.4732	2.5158	3.3619	4.2105	2.1551	1.8944	1.5720	1.7838	2.4866	2.1333	1.2920	1.3255
28	2.6575	2.0365	1.6839	1.8296	2.3134	1.4297	1.3238	1.1156	1.1708	1.5960	1.5317	1.0953	1.0459
29	12.0406	4.8236	2.2907	7.2572	10.0205	6.0039	3.6351	1.3960	2.4921	3.6501	2.5900	1.2784	1.4892
30	2.4631	1.8622	1.9781	2.4554	2.6245	1.6536	1.5427	1.3002	1.3219	1.7380	1.5451	1.0008	1.0571
31	2.2236	1.3337	1.1571	1.6423	1.9754	1.3347	1.3401	1.3061	1.4114	1.5982	1.4688	1.0493	1.0160
32	3.7166	1.9442	1.6226	2.1793	2.5359	1.8412	1.4338	1.2356	1.3406	1.9589	1.7344	1.1740	1.2065
33	8.0589	2.8858	1.7521	4.4916	4.9108	2.2619	1.2022	.7897	1.0917	2.0804	1.8026	1.1122	1.3826
34	1.6120	1.2036	1.0493	1.4540	1.6430	1.2251	1.0186	.8953	1.0028	1.4948	1.3467	.9856	1.0222
35	1.2633	1.1174	1.0305	1.2294	1.3806	1.0387	.9838	.8527	.9228	1.2398	1.1354	.9129	.8499
36	3.6890	1.9624	1.8551	2.4259	2.6450	1.8881	1.5253	1.3280	1.3601	1.7040	1.5830	1.1584	1.2045
837	14.0529	7.1886	4.5252	7.0187	6.0537	2.7296	1.8369	1.2845	1.6215	2.7604	2.3062	1.2630	1.2598
371	3.2558	1.7032	1.4533	2.1180	2.7056	1.8817	1.3884	1.1346	1.2425	1.5726	1.3688	1.1093	1.1770
38	2.4954	2.5132	2.4603	2.6673	2.0956	1.5126	1.4762	1.3315	1.3250	1.3549	1.2621	.9037	.8929
39	.9282	.5698	.5265	.8201	1.0025	.7482	.6942	.6196	.6829	.9857	.9029	.6297	.6946
0	4.1781	1.9940	1.4863	2.3907	2.7939	1.7378	1.3507	1.0587	1.2342	1.8293	1.6333	1.0997	1.1469

YEAR / SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	.9418	.9572	.8806	.9022	.9095	.9324	.9056	1.0979	1.0113	1.1558	1.2076	1.2497
21	1.1160	1.1445	1.0045	.9441	.9945	1.0477	1.0708	1.1331	1.0530	.7878	.6172	.6082
22	1.3122	1.1774	1.2024	1.2778	1.2628	1.3093	1.4389	1.4288	1.1837	1.2195	1.2136	1.2213
23	1.0053	.8959	.8321	.8435	.8828	.8723	.8811	1.0218	.9389	1.4406	1.6403	1.6669
24	.7583	.9645	.9872	.9816	.9440	.8416	.9400	1.0925	1.0812	1.5326	1.4207	1.4296
25	.6882	.6814	.6636	.7327	.8188	.7586	.8265	.9198	.8794	.8843	1.1619	1.1579
26	1.1486	1.0694	.9507	.9860	.9732	1.0235	1.1258	1.2163	1.1557	1.3905	1.5095	1.5628
27	1.1245	1.1056	.9942	.9484	.9327	.9338	1.0269	1.0889	.8674	1.1367	1.3212	1.3576
28	.9635	.9145	.8273	.7853	.8614	.8726	.9812	1.1183	1.0303	1.2471	1.3224	1.3454
29	1.2988	1.6750	1.7178	1.3053	1.2450	1.0692	1.0492	1.2693	1.1259	2.0580	2.1493	2.5012
30	.9531	.9380	.8790	.9257	1.0213	1.0796	1.2049	1.3546	1.4053	1.4062	1.5556	1.5856
31	.8632	.9816	1.0529	.8106	.9364	.9333	.8707	.9402	.9943	1.1307	1.3057	1.3789
32	1.0048	1.0670	.9707	.9534	.9824	.9960	1.0716	1.1954	1.1654	1.2583	1.3580	1.4790
33	1.0454	1.1727	1.0647	.9760	1.0777	1.1018	1.1458	1.2847	1.2398	1.6164	1.7791	1.8264
34	.9099	.9185	.7763	.7424	.8292	.8133	.8579	.9010	.8695	1.0740	1.2229	1.1741
35	.7969	.7924	.7218	.7235	.6952	.6836	.7392	.7200	.7332	.8122	.7301	.7267
36	1.0888	1.0396	.9916	.9056	.9822	.9965	1.0117	1.0892	1.0535	.9838	1.0191	1.1050
837	.9861	1.0937	1.1077	1.0396	1.1372	1.1285	1.1259	1.0901	.9607	1.7110	1.4959	1.6627
371	1.0847	1.1449	.9693	.8486	.9046	.8416	.7915	.9056	.8988	1.2864	1.6505	1.7821
38	.7974	.6715	.6717	.6266	.7699	.7008	.6610	.6454	.6081	.7092	1.6632	1.2950
39	.7398	.8175	.8757	.8133	.9860	1.0604	1.3285	1.5685	1.3340	1.0872	1.1186	1.0953
0	.9960	1.0264	.9497	.9073	.9519	.9449	.9892	1.0890	1.0228	1.2744	1.3453	1.3953

TABLE D.1 COEN ESTIMATES OF PROFIT-TYPE INCOME BASED ON HISTORICAL-COST DEPRECIATION, 1947-71

YEAR	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
SIC													
20	1675.	2188.	1942.	1748.	1579.	1961.	2012.	1893.	2403.	1925.	1981.	2412.	2721.
21	137.	184.	245.	205.	245.	265.	360.	338.	341.	363.	410.	470.	558.
22	1471.	1550.	848.	744.	1209.	735.	529.	303.	579.	582.	473.	474.	647.
23	699.	546.	442.	349.	589.	574.	499.	438.	467.	521.	395.	506.	431.
24	771.	882.	659.	961.	1029.	793.	725.	699.	972.	910.	691.	683.	912.
25	68.	207.	228.	248.	321.	309.	237.	249.	324.	356.	317.	240.	315.
26	968.	888.	709.	1036.	1527.	1143.	1104.	1099.	1323.	1620.	1264.	1105.	1350.
27	670.	673.	694.	709.	721.	770.	838.	837.	1030.	1067.	1161.	987.	1192.
28	1179.	1635.	1764.	2326.	2821.	2346.	2291.	2385.	3292.	3089.	3116.	2893.	3991.
29	91.	473.	-161.	84.	340.	-133.	140.	-214.	-158.	-94.	-893.	-1158.	-775.
30	206.	172.	130.	159.	539.	493.	427.	238.	366.	504.	437.	445.	522.
31	145.	238.	142.	61.	265.	197.	160.	187.	129.	175.	166.	108.	125.
32	444.	528.	565.	864.	884.	721.	864.	945.	1341.	1224.	1107.	1105.	1392.
33	966.	1165.	1268.	1986.	2927.	1831.	2688.	1896.	3151.	3201.	3373.	1922.	2419.
34	829.	1013.	832.	1298.	1563.	1200.	1139.	1094.	1212.	1204.	1268.	1129.	1251.
35	1069.	1374.	1444.	1723.	2601.	2731.	2240.	2049.	1937.	2581.	2398.	1756.	2516.
36	562.	595.	686.	1129.	1205.	1462.	1339.	1158.	996.	1131.	1512.	1388.	1825.
837	-460.	-61.	59.	201.	291.	634.	751.	969.	734.	573.	941.	816.	417.
371	926.	1207.	1985.	3001.	2884.	2177.	2459.	1926.	4033.	2054.	2416.	665.	2777.
38	57.	81.	118.	162.	272.	306.	313.	369.	402.	456.	373.	444.	645.
39	325.	378.	326.	413.	413.	392.	332.	323.	416.	402.	394.	420.	458.
0	12797.	15916.	14974.	19408.	23487.	20908.	21448.	19182.	25291.	23843.	23300.	18810.	25693.

YEAR	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
SIC												
20	2596.	2669.	2714.	3032.	3367.	3104.	3671.	3562.	3509.	3353.	4056.	3871.
21	557.	599.	658.	735.	688.	590.	615.	696.	739.	810.	964.	1034.
22	678.	478.	651.	634.	881.	1047.	1163.	798.	1021.	1205.	1086.	1016.
23	537.	619.	644.	654.	747.	829.	1036.	997.	1057.	940.	877.	1026.
24	755.	634.	734.	869.	1000.	1219.	1116.	968.	1375.	1576.	1067.	1167.
25	309.	316.	349.	354.	388.	497.	538.	538.	495.	607.	406.	358.
26	1284.	1240.	1344.	1165.	1350.	1497.	1791.	1494.	1614.	1672.	1162.	966.
27	1274.	1189.	1367.	1325.	1911.	2026.	2247.	2098.	2364.	2411.	1977.	2136.
28	3633.	3688.	4024.	4223.	4559.	5541.	5620.	5146.	5915.	5076.	4671.	5159.
29	-673.	-846.	-885.	-547.	-285.	206.	551.	1035.	598.	-251.	-334.	-800.
30	526.	502.	558.	526.	564.	577.	717.	686.	810.	844.	285.	465.
31	205.	96.	195.	241.	188.	171.	305.	351.	278.	216.	224.	178.
32	1150.	1082.	1127.	1246.	1345.	1367.	1156.	906.	1087.	1407.	1063.	1267.
33	2200.	1565.	1933.	2260.	2954.	3705.	4166.	3540.	2655.	2193.	1439.	1142.
34	1050.	1292.	1496.	1515.	1779.	2380.	2894.	2931.	2794.	2410.	1586.	1666.
35	2255.	2339.	2973.	2968.	4052.	4746.	5458.	5147.	5175.	4598.	4151.	3573.
36	1469.	1504.	1642.	1714.	1677.	2716.	3241.	3167.	3230.	3265.	2264.	2286.
837	428.	595.	1055.	1067.	1330.	1490.	1523.	1546.	1694.	19.	-11.	156.
371	2944.	2436.	4163.	5109.	4888.	6298.	5216.	3915.	5726.	4701.	1637.	5399.
38	627.	634.	756.	892.	873.	1186.	1581.	1532.	1911.	1926.	1301.	1416.
39	366.	482.	451.	366.	322.	318.	388.	394.	414.	644.	498.	526.
0	24168.	23112.	27950.	30349.	34579.	41509.	44991.	41448.	44464.	39622.	30366.	34007.

TABLE D.2 RATIOS OF COEN ESTIMATES OF PROFIT-TYPE INCOME BASED ON HISTORICAL-COST DEPRECIATION TO BEA ESTIMATES OF PROFIT-TYPE INCOME, 1947-71

YEAR / SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	1.0498	1.0325	1.0288	1.0107	1.0174	1.0009	.9932	1.0038	1.0171	1.0117	1.0151	1.0816	1.0807
21	1.0194	1.0001	.9975	.9911	.9915	.9846	.9925	.9910	.9915	.9967	.9951	.9989	1.0016
22	1.0470	1.0487	1.0585	1.0567	1.0312	1.0341	1.0490	1.1089	1.1002	1.1137	1.1650	1.1195	1.0645
23	1.0195	1.0213	.9231	1.0391	1.0255	1.0237	1.0342	1.0432	1.0527	1.0413	1.0238	1.0349	1.0360
24	1.0542	1.0639	1.0978	1.0671	1.0835	1.0998	1.1079	1.1115	1.1174	1.1160	1.1766	1.1164	1.1099
25	1.7529	1.0947	1.1066	1.1075	1.1045	1.1145	1.1526	1.1638	1.1462	1.1251	1.1291	1.2111	1.1811
26	1.0246	1.0151	1.0038	.9926	.9982	.9950	.9980	1.0133	1.0384	1.0323	1.0366	1.0454	1.0300
27	.8800	.9018	.9256	.9360	.9517	.9605	.9765	.9841	1.0134	1.0239	1.0394	1.0682	1.0532
28	.9430	.9603	.9723	.9822	.9946	1.0111	1.0335	1.0596	1.0685	1.0829	1.0864	1.1080	1.0938
29	.4377	.7631	9.4598	.3264	.6598	-3.1554	.4453	1.8261	-26.3315	18.7064	1.0370	1.0714	1.1247
30	.9738	.9228	.8162	.8545	.9734	.9659	.9631	.9550	1.0065	1.0186	1.0403	1.1092	1.0793
31	1.0184	1.0157	1.0275	1.0068	1.0061	1.0177	1.0185	1.0033	1.0192	1.0342	1.0388	1.0698	1.0759
32	.9704	.9585	.9497	.9666	.9703	.9570	.9873	.9903	1.0058	.9842	.9855	1.0277	1.0170
33	.8057	.9211	.9074	.9450	.9868	1.0362	1.1205	1.2610	1.1665	1.1667	1.1407	1.1007	1.0173
34	1.0587	1.0375	1.0505	1.0313	1.0420	1.0641	1.0777	1.0791	1.0890	1.0602	1.0625	1.0885	1.0778
35	1.0522	1.0416	1.0396	1.0396	1.0426	1.0483	1.0623	1.0857	1.1167	1.0958	1.1138	1.1365	1.1340
36	.9412	.9311	.9109	.9467	.9535	.9602	.9674	.9580	.9678	.9851	.9863	1.0036	.9967
837	2.1695	-.4600	.2812	.6233	.8113	.9396	.9628	.9753	.9639	.9397	.9527	.9579	.9754
371	.9766	.9802	.9798	.9924	.9556	.9806	.9972	1.0052	1.0041	1.0307	1.0335	1.0648	1.0117
38	.7994	.8263	.8456	.8847	.9787	.9904	.9847	.9871	1.0086	1.0621	1.0785	1.0912	1.0686
39	1.1113	1.1321	1.1564	1.0990	1.1145	1.1243	1.1583	1.1730	1.1614	1.1814	1.2099	1.2147	1.1842
0	.9748	.9798	.9754	.9810	.9965	1.0031	1.0210	1.0428	1.0475	1.0577	1.0638	1.0778	1.0568

YEAR / SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	1.0863	1.0924	1.1515	1.1221	1.1296	1.1424	1.1690	1.1205	1.1386	1.2144	1.1729	1.2172
21	1.0014	1.0002	1.0113	1.0107	1.0158	1.0151	1.0191	1.0200	1.0196	1.0845	1.1193	1.1288
22	1.0591	1.1220	1.0991	1.0848	1.0731	1.0467	1.0491	1.0926	1.0669	1.1799	1.2268	1.2839
23	1.0183	1.0413	1.0645	1.0624	1.0581	1.0586	1.0583	1.0577	1.0613	1.0329	1.0073	1.0169
24	1.1432	1.1280	1.1401	1.1169	1.1588	1.1908	1.1748	1.2192	1.1279	1.1203	1.2661	1.3337
25	1.1945	1.1852	1.1866	1.1454	1.1260	1.1324	1.1272	1.1171	1.1270	1.1501	1.1557	1.1820
26	1.0272	1.0502	1.1374	1.1296	1.1506	1.1097	1.0741	1.0781	1.0650	1.0817	1.0826	1.1474
27	1.0641	1.0705	1.1135	1.1329	1.1088	1.1098	1.1039	1.1215	1.1264	1.1493	1.1346	1.1462
28	1.0922	1.1109	1.1739	1.1816	1.1592	1.1391	1.1178	1.1099	1.1165	1.1438	1.1681	1.1778
29	1.2252	1.1516	1.0649	.8635	.5656	-1.4906	3.1638	1.7308	7.9701	.3600	.4475	.6607
30	1.0813	1.0883	1.1485	1.1168	1.0849	1.0621	1.0268	.9962	.9551	1.0444	1.0129	.9999
31	1.0621	1.0808	1.0281	1.0777	1.0716	1.0863	1.0677	1.0587	1.0492	1.0909	1.0511	1.0724
32	1.0502	1.0441	1.1155	1.1077	1.1219	1.1243	1.1265	1.1599	1.1513	1.2901	1.3917	1.3328
33	1.0840	1.1267	1.3449	1.3087	1.2929	1.2227	1.2146	1.2707	1.4115	1.6229	1.9654	2.9598
34	1.1278	1.1083	1.1969	1.1971	1.1582	1.1321	1.1074	1.1254	1.1605	1.1794	1.2504	1.3254
35	1.1595	1.1713	1.1930	1.1676	1.1697	1.1629	1.1375	1.1933	1.2007	1.2823	1.5680	1.9161
36	1.0065	1.0225	1.0482	1.0724	1.0704	1.0473	1.0506	1.0514	1.0697	1.1891	1.3474	1.3102
837	1.0735	1.0820	1.0828	1.1012	1.0904	1.0894	1.1049	1.2184	1.3135	-.1591	.0345	-.8873
371	1.0139	1.0110	1.0416	1.0451	1.0501	1.0488	1.0840	1.1151	1.0836	1.0720	1.0789	1.0219
38	1.0881	1.1651	1.1570	1.1491	1.1111	1.1148	1.1139	1.1538	1.1521	1.1664	.9970	1.0627
39	1.1677	1.0970	1.1020	1.1469	1.1307	1.1157	1.0358	1.0090	1.0517	1.1921	1.3169	1.3799
0	1.0700	1.0841	1.1355	1.1341	1.1371	1.1252	1.1225	1.1413	1.1487	1.1994	1.2760	1.2783

TABLE D.3 COEN ESTIMATES OF PROFIT-TYPE INCOME BASED ON CURRENT-COST DEPRECIATION, 1947-71

YEAR SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	1022.	1911.	1781.	1421.	1610.	1658.	1783.	1751.	2111.	1263.	1339.	2121.	2414.
21	128.	180.	242.	199.	232.	258.	354.	334.	332.	344.	391.	463.	549.
22	1368.	1482.	793.	677.	1046.	670.	444.	225.	446.	342.	227.	328.	486.
23	646.	525.	429.	314.	525.	548.	479.	427.	440.	453.	335.	487.	409.
24	378.	814.	651.	745.	708.	627.	648.	690.	882.	606.	441.	640.	848.
25	51.	194.	215.	231.	288.	291.	221.	235.	299.	308.	273.	214.	287.
26	804.	816.	661.	921.	1313.	1041.	1003.	1022.	1181.	1317.	963.	955.	1187.
27	-13.	388.	564.	438.	273.	616.	701.	746.	846.	693.	817.	838.	1031.
28	892.	1414.	1588.	2058.	2265.	2085.	1999.	2158.	2922.	2264.	2305.	2502.	3591.
29	-1161.	211.	-208.	-587.	-639.	-634.	-96.	-226.	-370.	-935.	-1565.	-1207.	-915.
30	124.	130.	102.	99.	424.	451.	387.	214.	318.	379.	322.	401.	472.
31	118.	226.	134.	46.	238.	185.	148.	178.	115.	149.	144.	99.	115.
32	230.	452.	520.	734.	667.	597.	775.	895.	1235.	952.	842.	992.	1269.
33	-1228.	681.	1108.	629.	956.	870.	2185.	1762.	2581.	1289.	1833.	1601.	1914.
34	691.	943.	783.	1172.	1350.	1069.	1051.	1047.	1112.	957.	1055.	1043.	1151.
35	960.	1289.	1380.	1584.	2352.	2588.	2117.	1970.	1785.	2185.	2047.	1614.	2356.
36	374.	529.	650.	999.	1006.	1357.	1265.	1124.	920.	907.	1311.	1315.	1744.
837	-930.	-252.	-41.	-87.	-136.	438.	639.	941.	634.	223.	647.	769.	336.
371	650.	1123.	1950.	2812.	1780.	2014.	2346.	1866.	3912.	1696.	2105.	555.	2635.
38	43.	66.	105.	138.	227.	280.	289.	352.	373.	391.	316.	420.	619.
39	296.	365.	317.	388.	371.	369.	313.	309.	391.	342.	338.	395.	429.
0	5443.	13405.	13775.	14929.	16314.	17378.	19053.	18021.	22465.	16122.	16488.	16544.	22928.

YEAR SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	2453.	2492.	2512.	2831.	3110.	2818.	3299.	3021.	3063.	2460.	3041.	2633.
21	551.	593.	651.	726.	677.	578.	598.	673.	721.	772.	921.	984.
22	549.	369.	523.	487.	722.	880.	922.	528.	868.	886.	744.	634.
23	527.	605.	625.	635.	722.	801.	999.	939.	1008.	825.	746.	858.
24	742.	574.	648.	785.	886.	1101.	979.	745.	1177.	1110.	570.	558.
25	287.	296.	327.	333.	362.	466.	497.	492.	454.	546.	330.	281.
26	1166.	1138.	1219.	1042.	1195.	1329.	1556.	1182.	1360.	1127.	514.	171.
27	1155.	1074.	1230.	1194.	1757.	1861.	2020.	1817.	2189.	1994.	1512.	1581.
28	3371.	3437.	3715.	3954.	4184.	5113.	5066.	4390.	5228.	3837.	3166.	3406.
29	-672.	-1018.	-1168.	-817.	-681.	-196.	131.	339.	-63.	-1853.	-2035.	-3002.
30	497.	476.	522.	494.	513.	516.	624.	548.	682.	590.	-36.	105.
31	199.	90.	188.	234.	178.	160.	293.	336.	265.	190.	195.	143.
32	1092.	999.	1029.	1155.	1211.	1219.	974.	633.	814.	839.	410.	454.
33	1969.	1150.	1325.	1770.	2134.	2824.	3111.	2114.	1277.	-316.	-1343.	-1929.
34	976.	1209.	1395.	1438.	1652.	2241.	2724.	2690.	2536.	1969.	1041.	1055.
35	2137.	2206.	2814.	2852.	3861.	4529.	5185.	4807.	4816.	3986.	3383.	2692.
36	1418.	1450.	1572.	1661.	1579.	2596.	3075.	2919.	2955.	2772.	1646.	1558.
837	404.	512.	926.	950.	1149.	1297.	1303.	1191.	1333.	-759.	-883.	-929.
371	2851.	2320.	4020.	5005.	4731.	6141.	5031.	3619.	5407.	4068.	891.	4506.
38	608.	613.	729.	872.	841.	1147.	1530.	1466.	1840.	1798.	1140.	1226.
39	345.	460.	424.	343.	287.	277.	337.	325.	347.	520.	347.	353.
0	22625.	21045.	25228.	27943.	31671.	37698.	40254.	34772.	38277.	27361.	16300.	17339.

TABLE D.4 RATIOS OF COEN ESTIMATES OF PROFIT-TYPE INCOME BASED ON CURRENT-COST DEPRECIATION TO BEA ESTIMATES OF PROFIT-TYPE INCOME, 1947-71

YEAR / SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	.6402	.9018	.9434	.8217	.6510	.8463	.8800	.9285	.8932	.6639	.6864	.9511	.9588
21	.9574	.9769	.9852	.9615	.9401	.9600	.9754	.9782	.9655	.9445	.9501	.9829	.9864
22	.9739	1.0025	.9904	.9610	.8922	.9424	.8811	.8254	.8483	.6531	.5594	.7762	.7998
23	.9419	.9806	.8960	.9357	.9145	.9775	.9928	1.0173	.9918	.9066	.8683	.9952	.9842
24	.5170	.9823	1.0849	.8272	.7448	.8694	.9913	1.0969	1.0135	.7431	.7520	1.0453	1.0314
25	1.3172	1.0243	1.0458	1.0294	.9901	1.0523	1.0721	1.0989	1.0572	.9750	.9710	1.0792	1.0741
26	.8511	.9321	.9356	.8822	.8583	.9060	.9067	.9417	.9266	.8392	.7904	.9031	.9051
27	-.0165	.5205	.7514	.5788	.3604	.7681	.8176	.8763	.8326	.6647	.7311	.9068	.9106
28	.7136	.8302	.8752	.8690	.7985	.8985	.9019	.9589	.9484	.7937	.8039	.9582	.9842
29	-5.5819	.3401	12.2369	-2.2741	-1.2376	-15.0840	-.3050	1.9342	-61.6696	187.0361	1.8181	1.1161	1.3281
30	.5859	.6987	.6432	.5305	.7654	.8847	.8738	.8578	.8744	.7659	.7664	.9996	.9749
31	.8277	.9672	.9704	.7473	.9036	.9517	.9415	.9572	.9061	.8832	.8975	.9824	.9947
32	.5018	.8201	.8734	.8206	.7319	.7922	.8860	.9383	.9264	.7649	.7495	.9226	.9270
33	-1.1521	.4753	.7933	.2990	.3223	.4922	.9109	1.1719	.9554	.4696	.6200	.9171	.8050
34	.8828	.9658	.9888	.9308	.8997	.9473	.9948	1.0328	.9991	.8423	.8846	1.0060	.9914
35	.9445	.9770	.9936	.9558	.9426	.9934	1.0038	1.0442	1.0289	.9276	.9510	1.0449	1.0616
36	.6262	.8283	.8637	.8374	.7957	.8910	.9142	.9300	.8936	.7903	.8555	.9506	.9525
837	4.3864	-1.9068	-.1976	-.2710	-.3796	.6489	.8197	.9465	.8334	.3651	.6550	.9021	.7864
371	.6859	.9120	.9626	.9298	.8161	.9071	.9513	.9737	.9739	.8509	.9001	.8881	.9598
38	.5998	.6757	.7584	.7540	.8148	.9071	.9102	.9415	.9357	.9115	.9121	1.0317	1.0254
39	1.0133	1.0915	1.1243	1.0330	.9995	1.0584	1.0906	1.1245	1.0921	1.0047	1.0369	1.1423	1.1073
0	.4146	.8253	.8973	.7545	.6922	.8337	.9071	.9797	.9304	.7152	.7528	.9480	.9431

YEAR / SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	1.0263	1.0199	1.0658	1.0479	1.0433	1.0370	1.0507	.9502	.9937	.8909	.8794	.8281
21	.9917	.9899	.9996	1.0046	1.0005	.9950	.9922	.9863	.9949	1.0335	1.0702	1.0740
22	.8585	.8667	.8841	.8340	.8796	.8797	.8318	.7228	.9071	.8676	.8412	.8019
23	.9991	1.0188	1.0336	1.0313	1.0223	1.0235	1.0205	.9957	1.0125	.9066	.8567	.8500
24	1.1242	1.0209	1.0069	1.0084	1.0271	1.0755	1.0309	.9385	.9652	.7891	.6761	.6377
25	1.1096	1.1098	1.1133	1.0787	1.0488	1.0610	1.0429	1.0200	1.0341	1.0333	.9391	.9265
26	.9325	.9634	1.0313	1.0102	1.0188	.9855	.9337	.8527	.8969	.7288	.4791	.2033
27	.9646	.9663	1.0020	1.0203	1.0198	1.0194	.9926	.9711	1.0430	.9506	.8678	.8480
28	1.0136	1.0352	1.0836	1.1062	1.0638	1.0512	1.0075	.9469	.9868	.8645	.7917	.7777
29	1.2248	1.3848	1.4051	1.2908	1.3504	1.4185	.7514	.5667	-.8460	2.6592	2.7285	2.4789
30	1.0216	1.0335	1.0739	1.0487	.9870	.9510	.8935	.7957	.8045	.7306	-.1271	.2268
31	1.0298	1.0078	.9897	1.0431	1.0171	1.0208	1.0253	1.0106	1.0012	.9578	.9153	.8585
32	.9976	.9645	1.0184	1.0271	1.0103	1.0024	.9490	.8101	.8621	.7692	.5365	.4777
33	.9703	.8279	.9224	1.0247	.9337	.9320	.9070	.7588	.6790	-.2337	-1.8345	-4.9969
34	1.0485	1.0366	1.1159	1.1357	1.0753	1.0659	1.0424	1.0331	1.0530	.9636	.8207	.8390
35	1.0987	1.1048	1.1294	1.1220	1.1147	1.1098	1.0806	1.1145	1.1173	1.1116	1.2781	1.4436
36	.9720	.9860	1.0032	1.0392	1.0080	1.0010	.9966	.9691	.9786	1.0094	.9799	.8928
837	1.0137	.9311	.9508	.9803	.9421	.9483	.9454	.9387	1.0335	6.2218	2.7250	5.2773
371	.9819	.9630	1.0057	1.0238	1.0163	1.0226	1.0454	1.0309	1.0233	.9278	.5871	.8530
38	1.0563	1.1262	1.1166	1.1232	1.0694	1.0776	1.0784	1.1039	1.1089	1.0893	.8735	.9203
39	1.1014	1.0482	1.0362	1.0761	1.0062	.9731	.8992	.8338	.8813	.9625	.9188	.9262
0	1.0017	.9871	1.0249	1.0442	1.0217	1.0219	1.0043	.9575	.9888	.8282	.6849	.6517

TABLE E.1 COEN ESTIMATES OF BOOK VALUE OF ASSETS BASED ON HISTORICAL-COST DEPRECIATION, END OF YEAR, 1947-71

YEAR SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	6713.	n.a.	7485.	8343.	9170.	8905.	9032.	9210.	9426.	10030.	10342.	10812.	11069.
21	1185.	n.a.	1317.	1430.	1523.	1709.	1743.	1824.	1839.	1869.	1690.	2247.	2369.
22	2710.	n.a.	3523.	4300.	4886.	4693.	4531.	4439.	4522.	4722.	4659.	4490.	4618.
23	1475.	n.a.	1472.	1944.	1917.	1814.	1838.	1765.	1941.	2070.	2066.	2009.	2140.
24	1184.	n.a.	1453.	1626.	1914.	2011.	2045.	2092.	2270.	2521.	2394.	2461.	2553.
25	761.	n.a.	776.	958.	1054.	1068.	1122.	1138.	1259.	1364.	1382.	1430.	1503.
26	1765.	n.a.	2158.	2416.	2876.	3057.	3266.	3498.	3816.	4443.	4921.	5093.	5314.
27	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2758.	3203.	3394.	3558.
28	5396.	n.a.	5921.	6319.	7575.	8289.	8694.	8938.	9223.	9910.	10174.	10529.	10830.
29	2622.	n.a.	3402.	3422.	3629.	3870.	4434.	4606.	4851.	5326.	5978.	5956.	5913.
30	789.	n.a.	807.	835.	1088.	1189.	1200.	1214.	1347.	1455.	1699.	1695.	1838.
31	632.	n.a.	613.	741.	747.	640.	654.	638.	669.	699.	702.	708.	768.
32	1445.	n.a.	1776.	1961.	2346.	2413.	2544.	2633.	3021.	3696.	4324.	4337.	4558.
33	5770.	n.a.	6696.	7072.	8281.	9878.	10867.	11024.	11613.	13194.	14784.	15271.	15110.
34	2658.	n.a.	2846.	3397.	4165.	4338.	4878.	4836.	5533.	6210.	6846.	6744.	6936.
35	4796.	n.a.	4821.	5429.	7286.	7699.	8012.	7661.	8459.	9957.	9772.	9330.	9917.
36	2302.	n.a.	2260.	2686.	3702.	4167.	4480.	4261.	4664.	5296.	6019.	5752.	6385.
837	2508.	n.a.	n.a.	2450.	2649.	3049.	3249.	2953.	3666.	3860.	4036.	3842.	4247.
371	2377.	n.a.	3462.	2485.	3841.	5001.	6014.	6287.	6465.	7998.	8275.	7600.	7347.
38	700.	n.a.	787.	865.	1134.	1172.	1239.	1220.	1309.	1475.	1632.	1645.	1792.
39	917.	n.a.	944.	1140.	1634.	2195.	2481.	2277.	2252.	2259.	2107.	2119.	2082.
0	49988.	56179.	55789.	62132.	74150.	79334.	85178.	85576.	91345.	101789.	107436.	107594.	111006.

YEAR SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	11424.	11981.	12655.	13174.	13702.	13917.	14955.	15802.	16663.	17462.	18538.	19682.
21	2495.	2728.	2733.	2649.	2657.	2642.	2576.	2642.	2578.	2555.	2455.	2556.
22	4754.	4927.	5191.	5307.	5522.	5981.	6655.	7042.	7669.	8093.	8365.	8871.
23	2172.	2168.	2455.	2612.	2765.	3013.	3310.	3449.	3938.	4215.	4338.	4693.
24	2643.	2552.	2657.	2796.	2883.	2996.	3254.	3286.	3499.	3926.	3993.	4359.
25	1541.	1569.	1698.	1796.	1896.	2040.	2322.	2489.	2679.	2984.	3175.	3351.
26	5474.	5634.	5917.	6072.	6337.	6989.	7919.	8607.	8894.	9573.	10020.	10173.
27	3743.	3885.	3944.	4210.	4423.	4696.	5231.	5758.	6189.	6750.	7108.	7542.
28	11332.	11943.	12489.	13052.	13929.	15538.	17621.	19067.	20196.	21737.	23299.	24163.
29	5844.	5876.	5920.	5826.	5737.	5869.	6106.	6670.	7176.	7627.	8215.	8732.
30	1965.	2046.	2275.	2387.	2595.	2908.	3357.	3641.	4078.	4577.	4904.	5021.
31	747.	764.	762.	749.	772.	822.	904.	907.	995.	1054.	1040.	1044.
32	4715.	4775.	4835.	4962.	5125.	5377.	5834.	5993.	6111.	6424.	6800.	7010.
33	15946.	16271.	16082.	16299.	17115.	18220.	20374.	22142.	23251.	24562.	26034.	26084.
34	7029.	7065.	7338.	7655.	8231.	9195.	10166.	10863.	11738.	12696.	13632.	14099.
35	9945.	9942.	10681.	11038.	12128.	13638.	15966.	17513.	18631.	21027.	22348.	22350.
36	6820.	7186.	8127.	8398.	8815.	9965.	12388.	13510.	14290.	15601.	16134.	15750.
837	4091.	4126.	4481.	4717.	5308.	5793.	6354.	6865.	7464.	7928.	8024.	7772.
371	6899.	6587.	7220.	7688.	8269.	9332.	12050.	14612.	16356.	16146.	16519.	15600.
38	1964.	2061.	2025.	2135.	2227.	2476.	3016.	3334.	3577.	3846.	4203.	4380.
39	2267.	2181.	1823.	1916.	1987.	2167.	2376.	2548.	2757.	3060.	3236.	3447.
0	114070.	116470.	121456.	125569.	132597.	143785.	162973.	176992.	189099.	202277.	212740.	217017.

TABLE E.2 COEN ESTIMATES OF GROSS RATES OF RETURN BASED ON HISTORICAL-COST DEPRECIATION, 1947-71

YEAR / SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	n.a.	n.a.	n.a.	.2250	.1860	.2219	.2275	.2113	.2616	.2015	.1990	.2324	.2521
21	n.a.	n.a.	n.a.	.1639	.1801	.1775	.2232	.2029	.1988	.2086	.2461	.2502	.2500
22	n.a.	n.a.	n.a.	.1899	.2662	.1556	.1161	.0699	.1316	.1308	.1068	.1086	.1454
23	n.a.	n.a.	n.a.	.2050	.3090	.3062	.2724	.2421	.2539	.2601	.1915	.2473	.2101
24	n.a.	n.a.	n.a.	.6284	.5854	.4086	.3618	.3418	.4499	.3856	.2904	.2897	.3720
25	n.a.	n.a.	n.a.	.2861	.3205	.2909	.2168	.2204	.2722	.2726	.2311	.1713	.2150
26	n.a.	n.a.	n.a.	.4492	.5719	.3814	.3448	.3230	.3609	.3924	.2724	.2259	.2628
27	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.3828	.2932	.3381
28	n.a.	n.a.	n.a.	.3756	.4014	.2951	.2695	.2714	.3631	.3224	.3111	.2828	.3750
29	n.a.	n.a.	n.a.	.0250	.0934	-.0396	.0294	-.0477	-.0387	-.0251	-.1622	-.1943	-.1356
30	n.a.	n.a.	n.a.	.1924	.5578	.4327	.3613	.2019	.2915	.3662	.2833	.2709	.3008
31	n.a.	n.a.	n.a.	.0921	.3582	.2846	.2517	.2919	.2012	.2599	.2414	.1603	.1759
32	n.a.	n.a.	n.a.	.4593	.4071	.3003	.3449	.3615	.4693	.3607	.2747	.2549	.3112
33	n.a.	n.a.	n.a.	.2865	.3792	.2043	.2652	.1770	.2785	.2590	.2425	.1339	.1631
34	n.a.	n.a.	n.a.	.4125	.4105	.2812	.2466	.2245	.2330	.2063	.1952	.1680	.1847
35	n.a.	n.a.	n.a.	.3311	.4055	.3637	.2843	.2601	.2388	.2797	.2425	.1849	.2615
36	n.a.	n.a.	n.a.	.4486	.3736	.3717	.3080	.2653	.2232	.2293	.2712	.2384	.3002
837	n.a.	n.a.	n.a.	n.a.	.1135	.2254	.2401	.3127	.2195	.1523	.2448	.2133	.1121
371	n.a.	n.a.	n.a.	.9878	.6397	.4800	.4336	.3050	.6216	.2740	.2887	.0780	.3600
38	n.a.	n.a.	n.a.	.1935	.2692	.2654	.2605	.3002	.3175	.3288	.2440	.2771	.3808
39	n.a.	n.a.	n.a.	.3994	.3018	.2086	.1452	.1390	.1858	.1825	.1862	.2046	.2220
0	n.a.	.2996	.2672	.3269	.3433	.2726	.2609	.2253	.2854	.2470	.2240	.1777	.2362

YEAR / SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	.2339	.2321	.2257	.2399	.2572	.2339	.2669	.2461	.2351	.2222	.2539	.2216
21	.2380	.2363	.2491	.2795	.2641	.2282	.2440	.2805	.2978	.3530	.4262	.4446
22	.1487	.1035	.1359	.1281	.1721	.1893	.1987	.1312	.1565	.1727	.1443	.1219
23	.2508	.2887	.2855	.2678	.2868	.3015	.3483	.3179	.3149	.2549	.2194	.2410
24	.3028	.2587	.3011	.3381	.3744	.4428	.3863	.3226	.4321	.4558	.3100	.3154
25	.2053	.2067	.2178	.2054	.2137	.2592	.2571	.2313	.1976	.2268	.1395	.1159
26	.2418	.2300	.2388	.2010	.2249	.2323	.2513	.1964	.2026	.1993	.1365	.1105
27	.3415	.3053	.3468	.3256	.4400	.4431	.4518	.3855	.4000	.3800	.2894	.2955
28	.3264	.3184	.3312	.3330	.3409	.3815	.3461	.2919	.3134	.2553	.2194	.2250
29	-.1241	-.1494	-.1544	-.0994	-.0581	.0322	.0953	.1741	.1092	-.0123	-.0479	-.0925
30	.2837	.2586	.2676	.2377	.2353	.2216	.2441	.2150	.2319	.2209	.0875	.1155
31	.2812	.1353	.2652	.3394	.2702	.2416	.3818	.4202	.3239	.2509	.2606	.1795
32	.2495	.2297	.2361	.2566	.2695	.2653	.2139	.1662	.1928	.2412	.1794	.1953
33	.1454	.0993	.1231	.1427	.1793	.2129	.2218	.1758	.1306	.1121	.0809	.0697
34	.1535	.1859	.2116	.2063	.2288	.2791	.3067	.2876	.2596	.2136	.1385	.1349
35	.2282	.2359	.2888	.2745	.3522	.3722	.3733	.3180	.2951	.2420	.2108	.1775
36	.2221	.2163	.2173	.2098	.1980	.2955	.3003	.2634	.2558	.2456	.1748	.1729
837	.1152	.1546	.2560	.2407	.2720	.2726	.2592	.2571	.2541	.0182	.0393	.0740
371	.3958	.3474	.5874	.6656	.6148	.7252	.5079	.3115	.3848	.3093	.1385	.3499
38	.3380	.3180	.3737	.4350	.4627	.5078	.5832	.4933	.5563	.5226	.3287	.3317
39	.1736	.2192	.2281	.2037	.1754	.1637	.1855	.1749	.1758	.2461	.1899	.1819
0	.2156	.2022	.2376	.2484	.2720	.3066	.3031	.2575	.2583	.2213	.1682	.1758

TABLE E.3 COEN ESTIMATES OF BOOK VALUE OF ASSETS BASED ON CURRENT-COST DEPRECIATION, END OF YEAR, 1947-71

YEAR / SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	7307.	n.a.	8032.	8968.	10872.	9775.	9804.	9832.	10023.	10818.	11234.	11568.	11729.
21	1193.	n.a.	1326.	1442.	1541.	1725.	1757.	1835.	1850.	1885.	1710.	2264.	2304.
22	2926.	n.a.	3775.	4605.	5371.	5166.	4997.	4873.	4985.	5325.	5355.	5138.	5229.
23	1522.	n.a.	1514.	1992.	1982.	1874.	1892.	1809.	1985.	2129.	2133.	2067.	2191.
24	1320.	n.a.	1583.	1774.	2116.	2205.	2219.	2237.	2412.	2715.	2620.	2656.	2724.
25	911.	n.a.	936.	1148.	1299.	1327.	1379.	1383.	1509.	1665.	1720.	1754.	1818.
26	2000.	n.a.	2407.	2714.	3314.	3475.	3662.	3846.	4172.	4944.	5520.	5632.	5818.
27	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3271.	3768.	3911.	4039.
28	6218.	n.a.	6816.	7328.	8928.	9588.	9932.	10031.	10306.	11313.	11756.	11951.	12146.
29	3350.	n.a.	3994.	4102.	4473.	4709.	5205.	5258.	5476.	6151.	6912.	6753.	6827.
30	861.	n.a.	873.	909.	1189.	1280.	1283.	1284.	1418.	1559.	1821.	1798.	1929.
31	660.	n.a.	640.	771.	788.	677.	686.	664.	692.	729.	734.	734.	791.
32	1661.	n.a.	1998.	2215.	2694.	2752.	2853.	2891.	3273.	4057.	4775.	4751.	4943.
33	7146.	n.a.	8012.	8568.	10173.	11726.	12612.	12567.	13160.	15235.	17083.	17327.	17007.
34	2381.	n.a.	3176.	3791.	4699.	4903.	5417.	5310.	6016.	6851.	7575.	7402.	7549.
35	5011.	n.a.	5061.	5740.	7738.	8141.	8418.	7998.	8805.	10477.	10376.	9838.	10365.
36	2506.	n.a.	2440.	2908.	4002.	4467.	4759.	4497.	4899.	5638.	6419.	6088.	6682.
837	3045.	n.a.	n.a.	2921.	3192.	3584.	3742.	3380.	4068.	4336.	4548.	4283.	4639.
371	2600.	n.a.	3688.	2759.	4217.	5358.	6338.	6554.	6738.	8416.	8797.	8054.	7751.
38	740.	n.a.	834.	924.	1219.	1254.	1313.	1279.	1367.	1559.	1732.	1728.	1865.
39	960.	n.a.	999.	1207.	1730.	2289.	2571.	2357.	2333.	2367.	2229.	2228.	2184.
0	56580.	63098.	62202.	69525.	84832.	88966.	94165.	93371.	99115.	112116.	119249.	118054.	120571.

YEAR / SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	11931.	12397.	13021.	13505.	14039.	14280.	15394.	16413.	17355.	18507.	19945.	21513.
21	2507.	2738.	2742.	2658.	2667.	2653.	2590.	2662.	2599.	2583.	2490.	2597.
22	5302.	5413.	5638.	5719.	5911.	6345.	7036.	7500.	8131.	8749.	9231.	9988.
23	2214.	2204.	2490.	2647.	2862.	3053.	3357.	3512.	4008.	4326.	4491.	4397.
24	2780.	2672.	2772.	2909.	3007.	3132.	3412.	3485.	3716.	4233.	4386.	4848.
25	1838.	1860.	1991.	2092.	2266.	2367.	2674.	2892.	3128.	3568.	3907.	4269.
26	5904.	6003.	6261.	6397.	6677.	7354.	8363.	9196.	9546.	10530.	11286.	11770.
27	4175.	4265.	4291.	4530.	4731.	5005.	5581.	6191.	6621.	7338.	7858.	8474.
28	12446.	12881.	13335.	13794.	14657.	16294.	18517.	20253.	21569.	23710.	25975.	27565.
29	6432.	6419.	6465.	6372.	6324.	6494.	6772.	7455.	8057.	8874.	9816.	10777.
30	2039.	2107.	2334.	2445.	2662.	2986.	3459.	3783.	4242.	4828.	5257.	5474.
31	766.	779.	776.	761.	785.	834.	918.	927.	1016.	1087.	1085.	1102.
32	5023.	5036.	5071.	5176.	5351.	5621.	6122.	6377.	6567.	7068.	7633.	8040.
33	17610.	17751.	17472.	17520.	18344.	19511.	21832.	23865.	25222.	27139.	29357.	30027.
34	7572.	7576.	7847.	8151.	8767.	9783.	10829.	11670.	12682.	13971.	15296.	16166.
35	10311.	10245.	10952.	11258.	12365.	13912.	16317.	17994.	19240.	21904.	23548.	23817.
36	7066.	7416.	8368.	8643.	9099.	10289.	12767.	13999.	14872.	16465.	17300.	17261.
837	4423.	4429.	4778.	5006.	5611.	6110.	6690.	7267.	7924.	8574.	8862.	8819.
371	7229.	6854.	7453.	7889.	8482.	9578.	12364.	15035.	16861.	16829.	17396.	16643.
38	2023.	2111.	2073.	2176.	2275.	2534.	3090.	3436.	3704.	4038.	4471.	4721.
39	2355.	2257.	1892.	1977.	2048.	2233.	2457.	2652.	2880.	3228.	3459.	3722.
0	122204.	123617.	128167.	131758.	138985.	150582.	170779.	186814.	200311.	217985.	233407.	242828.

TABLE E.4 COEN ESTIMATES OF GROSS RATES OF RETURN BASED ON CURRENT-COST DEPRECIATION, 1947-71

YEAR / SIC	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
20	n.a.	n.a.	n.a.	.1710	.1114	.1716	.1850	.1818	.2160	.1246	.1256	.1901	.2104
21	n.a.	n.a.	n.a.	.1583	.1698	.1716	.2178	.1991	.1927	.1969	.2333	.2441	.2446
22	n.a.	n.a.	n.a.	.1612	.2124	.1291	.0888	.0479	.0928	.0705	.0478	.0670	.0967
23	n.a.	n.a.	n.a.	.1799	.2681	.2828	.2536	.2298	.2337	.2209	.1577	.2308	.1947
24	n.a.	n.a.	n.a.	.4476	.3675	.2943	.2972	.3133	.3832	.2417	.1741	.2501	.3226
25	n.a.	n.a.	n.a.	.2213	.2363	.2220	.1632	.1703	.2083	.1954	.1612	.1236	.1606
26	n.a.	n.a.	n.a.	.3562	.4311	.3031	.2771	.2703	.2937	.2891	.1864	.1758	.2102
27	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.2264	.2130	.2550
28	n.a.	n.a.	n.a.	.2872	.2747	.2246	.2046	.2170	.2878	.2091	.2006	.2139	.2992
29	n.a.	n.a.	n.a.	-.1447	-.1515	-.1415	-.0230	-.0436	-.0736	-.1667	-.2433	-.1767	-.1413
30	n.a.	n.a.	n.a.	.1096	.4014	.3655	.3060	.1711	.2407	.2607	.1964	.2298	.2580
31	n.a.	n.a.	n.a.	.0660	.3074	.2521	.2214	.2668	.1727	.2144	.2004	.1419	.1579
32	n.a.	n.a.	n.a.	.3454	.2688	.2169	.2734	.3085	.3961	.2561	.1895	.2080	.2602
33	n.a.	n.a.	n.a.	.0741	.1003	.0816	.1848	.1433	.2007	.0915	.1147	.0983	.1149
34	n.a.	n.a.	n.a.	.3332	.3153	.2215	.2032	.1945	.1957	.1498	.1473	.1411	.1556
35	n.a.	n.a.	n.a.	.2885	.3456	.3252	.2549	.2388	.2109	.2261	.1958	.1607	.2332
36	n.a.	n.a.	n.a.	.3662	.2877	.3205	.2728	.2432	.1957	.1743	.2212	.2126	.2727
837	n.a.	n.a.	n.a.	n.a.	-.0452	.1317	.1759	.2642	.1684	.0530	.1513	.1795	.0836
371	n.a.	n.a.	n.a.	.8525	.4928	.4091	.3890	.2817	.5781	.2142	.2367	.0604	.3224
38	n.a.	n.a.	n.a.	.1547	.2086	.2267	.2263	.2716	.2814	.2686	.1954	.2485	.3497
39	n.a.	n.a.	n.a.	.3549	.2560	.1873	.1317	.1288	.1689	.1496	.1523	.1827	.1979
0	n.a.	.2238	.2197	.2246	.2113	.2010	.2082	.1927	.2329	.1527	.1436	.1419	.1932

YEAR / SIC	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
20	.2102	.2087	.2029	.2185	.2323	.2079	.2347	.2040	.1996	.1617	.1850	.1447
21	.2345	.2330	.2455	.2753	.2593	.2229	.2366	.2699	.2887	.3350	.4043	.4182
22	.1080	.0732	.1014	.0926	.1330	.1504	.1516	.0865	.1277	.1234	.0942	.0697
23	.2409	.2776	.2732	.2567	.2737	.2881	.3320	.2958	.2964	.2217	.1831	.1959
24	.2812	.2244	.2566	.2948	.3209	.3855	.3271	.2413	.3521	.3086	.1694	.1533
25	.1588	.1630	.1736	.1657	.1712	.2094	.2065	.1831	.1561	.1734	.0946	.0736
26	.2023	.1973	.2045	.1709	.1899	.1968	.2086	.1493	.1620	.1290	.0633	.0279
27	.2746	.2485	.2853	.2711	.3771	.3811	.3809	.3121	.3456	.2925	.2028	.1970
28	.2729	.2727	.2851	.2937	.2969	.3355	.2978	.2372	.2614	.1817	.1383	.1340
29	-.1117	-.1629	-.1853	-.1331	-.1153	-.0335	.0227	.0585	.0122	-.2000	-.2227	-.2900
30	.2573	.2380	.2441	.2185	.2096	.1945	.2064	.1696	.1912	.1549	.0187	.0398
31	.2656	.1239	.2508	.3235	.2535	.2252	.3621	.3951	.3041	.2194	.2246	.1386
32	.2206	.2003	.2051	.2277	.2328	.2269	.1732	.1136	.1381	.1384	.0725	.0683
33	.1171	.0670	.0786	.1041	.1213	.1522	.1560	.1011	.0646	.0066	-.0260	-.0423
34	.1320	.1620	.1845	.1836	.1997	.2472	.2716	.2475	.2197	.1627	.0874	.0301
35	.2078	.2153	.2660	.2580	.3293	.3485	.3475	.2904	.2672	.2035	.1674	.1303
36	.2060	.2018	.2018	.1976	.1811	.2738	.2767	.2363	.2272	.2028	.1277	.1174
837	.1007	.1247	.2114	.2023	.2227	.2253	.2117	.1926	.1921	-.0773	-.0640	-.0566
371	.3640	.3163	.5468	.6332	.5800	.6893	.4780	.2816	.3536	.2609	.0886	.2778
38	.3171	.2993	.3523	.4163	.3799	.4801	.5516	.4597	.5183	.4682	.2731	.2685
39	.1572	.2022	.2072	.1852	.1524	.1398	.1579	.1418	.1444	.1938	.1338	.1211
0	.1872	.1728	.2029	.2175	.2335	.2663	.2598	.2075	.2123	.1484	.0924	.0886

FOOTNOTES

1/ The revealed service lives and depreciation patterns employed here are given in the appendix. They correspond to those reported in [3].

2/ A little algebraic manipulati-n reveals that nominal income in this case is rC_1 in year 1, rC_2 in year 2, rC_3 in year 3.

3/ Detailed estimates of replacement requirements by industry are not presented in this paper.

4/ The standard deviation of the rates of return is 7.5 percent in 1953, or 29 percent of the mean, versus 10.2 percent in 1971, or 58 percent of the mean. These values exclude petroleum.

5/ For the case of current-cost accounting, the standard deviation of the rates of return is 7.0 percent in 1953, or 34 percent of the mean, versus 11.4 percent in 1971, or 128 percent of the mean.

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