brought to you by TCORE

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Dividends Under the Income Tax

Volume Author/Editor: Daniel M. Holland

Volume Publisher: UMI

Volume ISBN: 0-870-14455-3

Volume URL: http://www.nber.org/books/holl62-1

Publication Date: 1962

Chapter Title: Dividend Receipts and Income Tax Liability

Chapter Author: Daniel M. Holland

Chapter URL: http://www.nber.org/chapters/c1950

Chapter pages in book: (p. 110 - 137)

CHAPTER 3

Dividend Receipts and Income Tax Liability

Variations in Tax Liability Attributable to Dividend Receipts

For every year from 1918 through 1957, the total tax liability has been apportioned among the various components of taxpayers' adjusted gross income. The method, while quite elaborate, essentially involved prorating the tax liability of each income class proportionately among the sources of income reported in that class with due allowance for a number of special features of the tax law including the earned income credit, the special treatment of capital gains, the exemption of dividends from normal tax up to 1936, etc.¹

The total tax liability attributable to dividend receipts is the resultant of a complex set of relations—the absolute amount of corporate dividend payments, their distribution among taxpayers, the height and progressivity of the personal income tax schedule, and the specific provisions, if any, relating to the taxation of dividends contained in the revenue law.² The following illustrates the varied range of results: The amount of dividends reported on taxable returns was about the same in 1926, 1940, and 1942—\$3.5 billion. In 1926, the tax liability attributable to dividend receipts came to \$208 million, in 1940 to \$557 million, and in 1942 to just under \$1 billion.

During the 1920's, the tax liability traceable to taxpayers' dividend

¹ Only one feature of the method needs particular mention here. Because of changes introduced in the tax revision of 1954 and in the tabulations of tax return data, the dividend tax liability from 1954 on relates only to persons, whereas prior to that date fiduciaries were also included. Thus the estimates for 1954–1957 are not strictly comparable with the other years covered by our study.

² In this chapter and the following one no adjustment is made in the tax liability measurements for dividend underreporting.

receipts ran between \$150 and \$300 million. In the early thirties, a smaller amount was raised from dividends (as from the other sources of income)—something between \$125 and \$200 million. In the later thirties about \$300 to \$500 million of tax liability was due to the dividend income of taxpayers. The sharp increases in tax rates in the forties and the increase in dividend payments in the years following World War II show up in the sharply increased tax liability on taxpayers' dividend receipts in this period which ranged between \$1 and over \$2 billion (see Table 29 and Chart 4).

These data are more significant when related to total personal income tax liability. The distribution of dividends is highly concentrated and the personal income tax has always been progressive; on these grounds, then, tax liability on dividends would be expected to constitute a higher percentage of total tax liability than dividends comprise of adjusted gross income. Tending to offset this, up to 1936, was the exemption of dividends from normal tax. But even before 1936, and certainly thereafter, the proportionate share of dividend tax liability in total tax liability ranged between one and a half and over two and a half times higher than the proportionate share of dividends in adjusted gross income (see Table 29).

Through 1941 the tax liability traceable to dividend receipts constituted a very sizable proportion of the annual total personal income tax levy. During the twenties the proportion ranged between 22 and 29 per cent. In the early thirties, while the amount of the dividend tax liability was considerably lower than in the previous decade (as was the total personal income tax assessment), it comprised from 30 to over 50 per cent of total tax liability (the latter proportion being found in 1931 during the period when dividend receipts were exempt from normal tax). Over the rest of the thirties too, a very high proportion of the personal income tax assessment was attributable to dividend receipts—about 40 per cent. Starting in 1941, however, it fell rapidly until it reached 7 or 8 per cent (although its absolute level continued to increase) because of the more rapid rise in the wages and salaries and entrepreneurial income components of the adjusted gross income of taxpayers.

These figures, in conjunction with the data presented in an earlier chapter, indicate that throughout the period under analysis, 1918–1957, there was a magnification effect in moving from (1) the dividend fraction of personal income to (2) the dividend proportion of adjusted gross income of taxable returns to (3) the share of dividend tax liability

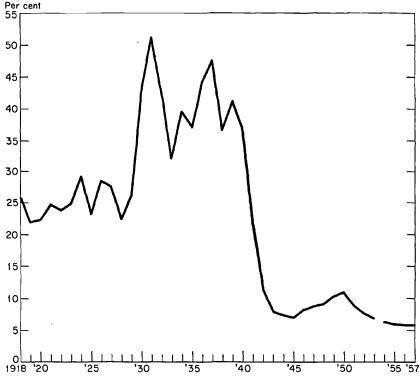
TABLE 29
SELECTED DATA ON DIVIDENDS AND DIVIDEND TAX LIABILITY, 1918-1957

1918 290 12.5 25.7 14.8 1.7 1919 279 12.1 21.9 11.4 1.9 1920 240 9.4 22.3 10.9 2.0 1921 177 8.6 24.6 13.4 1.8 1922 206 9.0 23.9 13.3 1.8 1923 164 6.1 24.8 13.3 1.9	66 79 78 70
1919 279 12.1 21.9 11.4 1.9 1920 240 9.4 22.3 10.9 2.0 1921 177 8.6 24.6 13.4 1.8 1922 206 9.0 23.9 13.3 1.8 1923 164 6.1 24.8 13.3 1.9	79 78
1920 240 9.4 22.3 10.9 2.0 1921 177 8.6 24.6 13.4 1.8 1922 206 9.0 23.9 13.3 1.8 1923 164 6.1 24.8 13.3 1.9	78
1921 177 8.6 24.6 13.4 1.8 1922 206 9.0 23.9 13.3 1.8 1923 164 6.1 24.8 13.3 1.9	
1922 206 9.0 23.9 13.3 1.8 1923 164 6.1 24.8 13.3 1.9	
1923 164 6.1 24.8 13.3 1.9	77
	71
1924 207 7.3 29.3 12.6 2.3	74
1925 170 5.5 23.2 15.5 1.5	70
1926 208 5.9 28.5 17.7 1.6	74
1927 229 6.0 27.5 18.7 1.5	76
1928 261 6.4 22.4 17.3 1.3	75
1929 262 6.1 26.2 18.6 1.4	74
1930 203 5.3 42.6 24.4 1.7	71
1931 126 4.8 51.2 24.8 2.1	63
1932 140 8.5 42.4 18.4 2.3	62
1933 120 9.3 32.1 16.0 2.0	62
1934 202 12.1 39.5 17.7 2.2	65
1935 245 12.9 37.3 16.7 2.2	66
1936 536 15.4 44.2 21.9 2.0	78
1937 543 14.3 47.6 21.8 2.2	81 78
1938 280 11.3 36.6 17.2 2.1 1939 384 12.8 41.3 16.8 2.5	78 79
1940 557 16.0 37.2 13.4 2.8	79 88
1940 557 16.0 57.2 15.4 2.8 1941 847 21.4 21.7 8.0 2.7	89
1941 847 21.4 21.7 8.0 2.7 1942 999 28.3 11.2 4.8 2.3	81
1942 999 26.5 11.2 4.6 2.5 1943 1,133 32.0 7.8 3.3 2.3	78
1944 1,167 31.8 7.2 3.2 2.3	79
1945 1,182 31.7 6.9 3.1 2.2	79
1946 1,333 29.2 8.2 3.9 2.2	79
1947 1,594 30.1 8.7 3.9 2.2	81
1948 1,339 21.2 9.1 4.1 2.2	82
1949 1,510 24.0 10.3 4.5 2.3	84
1950 2,031 27.1 10.9 4.7 2.3	81
1951 2,120 28.6 8.7 4.0 2.2	82
1952 2,109 28.9 7.5 3.7 2.1	82
1953 1,995 27.7 6.7 3.4 2.0	78
EXCLUDING FIDUCIARIES	
1954 1,672 24.2 6.2 3.3 1.9	71
1955 1,765 23.0 5.9 3.3 1.8	69
1956 1,937 22.9 5.8 3.4 1.7	70
1957 1,992 22.4 5.8 3.4 1.7	71

Note: The exclusion of fiduciaries from 1954 on explains the difference for these years between the values in column 7 of this table and column 8 of Table 1.

CHART 4

Tax Liability Attributable to Dividends as a Percentage of Total Personal Income Tax Liability, 1918–1957



Note: From 1954 on, tax liability is for individuals only; in prior years it is for individuals and fiduciaries.

in total tax liability. Dividends constituted a higher percentage of the adjusted gross income of taxable returns than of personal income receipts, while the share of dividends in total tax liability was higher than their share in adjusted gross income (see column 6 of Table 29). We note parenthetically here that the decline in the effective rate of tax on dividends (column 3 of Table 29) from 1954 on is due to the dividend exclusion and credit.

Effect of Dividends on Revenue Flexibility of Tax Structure

If dividend tax liability fluctuated relatively more than the share of dividends in the tax base (measured by the adjusted gross income

of taxable returns), the relations noted under 2 and 3 in the preceding paragraph suggest that dividends have added to the revenue flexibility of the personal income tax. More particularly, revenue flexibility is defined as the ratio of proportionate change in tax liability to that in tax base. This discussion, of course, deals with changes in tax liability and tax base associated with changes in dividends. Revenue flexibility—designated Φ —so conceived is an elasticity measure, and values of Φ measure the degree of revenue flexibility. Throughout this discussion, tax liability and tax revenue mean the same thing, although in practice, of course, the liability on tax returns and the tax revenue of the Treasury Department are not identical.

Let:

D = dividends

B = tax base (adjusted gross income of taxable returns)

 $T_d = \tan \text{liability attributable to dividend receipts}$

T = total income tax liability

 Φ = revenue flexibility.

Then we define:

$$\Phi = \frac{\Delta T_d/T}{\Delta D/B}.$$

Both the ratios entering into Φ may be expressed as themselves the product of ratios. Examining these component relationships will permit some a priori judgments of the value of Φ .

Thus,

$$\frac{\Delta T_d}{T} = \frac{\Delta T_d}{T_d} \cdot \frac{T_d}{T},$$

and

$$\frac{\Delta D}{B} = \frac{\Delta D}{D} \cdot \frac{D}{B}.$$

If these terms are rearranged, Φ can now be defined as

$$\Phi = \left(\frac{\Delta T_d/T_d}{\Delta D/D}\right) \left(\frac{T_d}{T} \cdot \frac{B}{D}\right).$$

We know that dividends have accounted for a higher fraction of tax liability than of tax base. (See Table 24, columns 4 and 5.) In terms of the symbols used here, $T_d/T > D/B$. So we also know ⁸ that

$$\frac{T_d}{T} \cdot \frac{B}{D} > 1.$$

Thus Φ will certainly exceed 1; i.e., dividends will have imparted revenue flexibility to the personal income tax structure, if ⁴

$$\frac{\Delta T_d/T_d}{\Delta D/D} > 1.$$

The next step, then, is to measure the ratio

$$\frac{\Delta T_d/T_d}{\Delta D/D}$$
.

But more than arithmetic is involved here. For the revenue laws—specifically the exemption and rate structure of the personal income tax—changed frequently over the period of our study. So year-to-year changes in the tax liability attributable to dividends and in the amount of dividends in the adjusted gross income of taxable returns could be the net resultant of a number of factors, most of them extraneous to the "stable" relationship we are seeking to measure; that is, it would be impossible under these conditions to isolate the revenue flexibility effect of the particular relation under discussion—the differential importance of dividends in the tax base and tax liability. However, this difficulty can be circumvented by restricting examination of the ratio of proportionate changes in dividend tax liability and dividends to those two-year periods over which the provisions of the revenue law remained unchanged.

Table 30 contains the values of

$$\frac{T_d/T_d}{\Delta D/D}$$

³ By dividing both sides of the inequality by D/B.

 $^{^4\}Phi$ could, of course, be greater than 1 even if this ratio fell below 1, if the excess of $(T_d/T)(B/D)$ over 1 is large enough. But this depends on particular values for each expression and cannot, therefore, be asserted as a general result a priori.

TABLE 30

Comparison of Percentage Changes in Dividends Reported on Taxable Returns and Dividend Tax Liability

(per cent)

			-
	Percentage		
	Change in	Percentage	
Years of	Dividends	Change in	
Similar	Reported	Tax Liability	Ratio of
Tax	on Taxable	Attributable	Col. 3 to
Treatment	Returns	to Dividends	Col. 2
(1)	(2)	(3)	(4)
1919–1920	+10.6	-13.8	-1.30
1925-1926	+13.8	+21.8	+1.58
1926-1927	+8.9	+10.1	+1.13
1930-1931	-32.6	-38.0	+1.17
1932-1933	-21.6	-14.8	+0.69
1934-1935	-14.1	+21.3	+1.51
1936-1937	+9.0	+1.3	+0.14
1938-1939	+21.1	+37.2	+1.76
1944-1945	+1.5	+1.3	+0.87
1946-1947	+16.1	+19.6	+1.22
1948-1949	+6.7	+11.2	+1.67
1952-1953	-0.99	- 5.4	+5.45
1955-1956 *	+10.2	+9.7	+0.95
1956-1957	+5.3	+2.8	+0.53

^a Tax rates applying to dividends were not invariant between 1954 and 1955, because the exclusion and credit applied for the whole of 1955, but only the latter half of 1954. Hence we do not include 1954–1955.

computed on this basis; they are listed in column 4. Of the fourteen two-year periods of invariant tax provisions, eight show a value greater than 1, and hence a Φ greater than 1. In one case, dividends moved one way, and dividend tax liability the other (hence, a negative value in column 4); this result is nonsense in the context of revenue flexibility, since the measure is based on "reasonable" conditions, i.e., those instances where a larger amount of an income type in the tax base leads to a higher tax liability on it. In the remaining five instances, the sign is right, but more investigation is needed to determine whether Φ is greater than 1 or not. Φ must be calculated.

The computed values of Φ for the thirteen (of the total of fourteen) periods in which the response of tax liability to dividend change was "correct," i.e., in the same direction, are given in Table 31. For all

TABLE 31

Derivation of Measure of Revenue Flexibility

Year	$rac{\Delta T_d/T_d}{\Delta D/D}$	$\frac{T_d}{T}$	$\frac{B}{D}$	$ \Phi = $ $ (2) \times (3) \times (4) $
(1)	(2)	(3) a	(4) a	(5)
1925–1926	1.58	0.29	5.65	2.59
1926-1927	1.13	0.27	5.35	1.63
1930-1931	1.17	0.51	4.03	2.40
1932-1933	0.69	0.32	6.25	1.38
1934-1935	1.51	0.37	5.99	3.35
1936-1937	0.14	0.48	4.59	0.31
1938-1939	1.76	0.41	5.95	4.29
1944-1945	0.87	0.07	32.26	1.96
1946-1947	1.22	0.09	25.64	2.82
1948-1949	1.67	0.10	22.22	3.71
1952-1953	5.45	0.07	29.41	11.22
1955-1956	0.95	0.06	29.51	1.68
1956-1957	0.53	0.06	29.46	0.78

a In second year of period.

but two of these periods, Φ had a value greater than 1. Thus we may conclude that, in a majority (eleven out of fourteen) of the periods for which it is legitimate to make such a comparison, the proportionate change in tax liability due to dividends was a multiple of the relative change in the tax base due to the change in dividend receipts. As a general rule dividends have imparted revenue flexibility to the personal income tax structure. To take a specific example or two: In 1926 when Φ was 2.6, a small change in the tax base due to dividends, say a 1 per cent change in tax base, would have meant a change in tax liability of over 2.6 per cent; in 1953 something like an 11 per cent change in tax liability would have been associated with a 1 per cent change in tax base due to dividends.

But to give some sense of the relative importance of dividend change and associated tax liability change in the revenue structure, we must go beyond the simple measure of Φ and relations of the kind discussed above. For Φ , a pure measure of elasticity, is divorced from the absolute size of the magnitudes involved. To revert to the numbers just cited, a 1 per cent change in tax base in 1926 attributable to dividends would have required an increase of about \$200 million (less than 6 per cent)

TABLE 32

Personal Dividend Receipts Before and After Taxes, 1918–1957

Year	Personal Dividend Receipts (million dollars)	Dividend Tax Liability	Personal Dividend Receipts After Taxes on Dividends (col. 2 — col. 3)	After-Tax Personal Dividend Receipts as a Percentage of Before-Tax Personal Dividend Receipts (col. 4 ÷ col. 2)
(1)	(2)	(3)	(4)	(5)
1918	3,518	290	3,228	92
1919	2,882	278	2,604	90
1920	3,211	240	2,971	93
1921	2,959	177	2,782	94
1922	3,044	206	2,838	93
1923	3,837	164	3,673	96
1924	3,811	207	3,604	95
1925	4,421	170	4,251	96
1926	4,721	210	4,511	96
1927	5,046	228	4,818	95
1927	5,485	261	5,224	95
1926	5,823	262	5,561	95 95
	5,500	203	5,297	96
1930	4,098	126	3,972	90 97
1931	•	140		97 95
1932	2,574		2,434	
1933	2,066	120	1,946	94
1934	2,592	202	2,390	92
1935	2,872	245	2,627	91
1936	4,557	536	4,021	88
1937	4,693	543	4,150	88
1938	3,195	280	2,915	91
1939	3,796	384	3,412	90
1940	4,049	557	3,492	86
1941	4,465	847	3,618	81
1942	4,297	999	3,298	77
1943	4,493	1,133	3,360	75
1944	4,680	1,167	3,513	75
1945	4,699	1,182	3,517	75
1946	5,808	1,333	4,475	77
1947	6,561	1,594	4,967	76
1948	7,248	1,339	5,909	82
1949	7,458	1,510	5,948	80
1950	9,208	2,031	7,177	78
1951	9,029	2,120	6,909	77
1952	8,954	2,109	6,845	76
1953	9,225	1,995	7,230	78
		EXCLUD	ING FIDUCIARIES	
1953	9,225	1,832	7,393	81
1954	9,839	1,672	8,167	83
1955	11,215	1,765	9,450	84
1956	12,132	1,937	10,195	84
1957	12,588	1,992	10,596	84

in dividends on taxable returns. To produce a 1 per cent change in tax base in 1953, however, an increase of over \$2 billion (about 30 per cent) in dividends would have been necessary. Clearly the one case illustrates a variation that could very well happen between one year and the next; the other represents a highly unusual event.

That the value of Φ alone is insufficient for assessing the importance of the revenue flexibility imparted by dividends can be seen in another way. Consider a given absolute amount of increase in dividends, say \$100 million, to have taken place in 1927 or 1945. (Dividends reported on taxable returns came to about the same figure in both these years; thus the \$100 million increase would have meant the same percentage change-less than 3 per cent-in dividends in both years.) In 1927 this increase in dividends would have increased the tax base by 0.5 per cent, and, with Φ at 1.63, personal income tax liability by about 0.8 per cent. But in 1945, the tax base would have increased by less than 0.1 per cent, and tax liability by less than 0.2 per cent. A given dividend change would have been much less powerful in its relative effect on tax revenue in 1945 than in 1927 despite the higher φ in 1945. This result, of course, reflects the fact that in 1945 the income tax base covered most persons and their income, while in 1927 it did not. With over three-quarters of personal dividends showing up in both years, dividends comprised a much more important component of the tax base in 1927.

Dividend Receipts After Taxes

How much of the net outflow of dividends from the corporate system was left to the recipients can be estimated by subtracting the tax liability due to dividends from the aggregate of personal dividend receipts. This calculation (see Table 32) shows more than 95 per cent of total personal dividend receipts left after taxes in the twenties and early thirties, around 90 per cent in the middle thirties, about 75 per cent from 1942 to 1954, and an increase to around 84 per cent from 1954 on, due to the tax relief provided for dividends in the Internal Revenue Code of 1954. A specific contrast will point up these sharp changes. In both 1929 and 1946, personal dividend receipts came to \$5.8 billion. In the peak year of the "golden" twenties all but a quarter of a billion of this was available for reinvestment or for consumption after the government had made its reckoning with tax-

payers.⁵ In 1946, however, over a billion dollars less was available after taxes. But in all years, a much lower percentage of any "small" increase in dividends would have remained with taxpayers.

This, of course, is saying nothing more than that under a progressive tax structure the rate that applies to the highest bracket of taxable income exceeds the weighted average of the rates that apply to each of the brackets into which taxable income falls. Yet for dividends it is worth noting because the divergence between the marginal rate and the effective rate has been so large, and because the marginal rate is the more appropriate evidence in connection with a number of problems.

That there has been a wide divergence between effective and marginal rates stands out clearly from the data of Table 33. The rates in column 2 of that table—average rate applying to all dividend receipts—are taken from column 3 of Table 29. They are to be interpreted this way: In the aggregate for all taxpayers in 1929, the federal personal income tax liability that can be traced to their dividend receipts amounted to 6.1 per cent of such receipts. Or, after taxes attributable to them, about 94 per cent of the dividends received by taxpayers were left. This is familiar ground. (But note that the paragraph above considers what is left over from all dividend receipts, not merely those of taxpayers.)

TABLE 33

WEIGHTED-AVERAGE MARGINAL AND AGGREGATE AVERAGE RATES OF TAX ON DIVIDENDS, SELECTED YEARS, 1929–1952

	per	cent	
ı		COLL	

Year	Weighted- Average Marginal Rate (1)	Aggregate Average Rate (2)	
1929	13.2	6.1	
1936	28.0	15.4	
1941	35.1	21.4	
1947	49.6	30.1	
1952	55.6	28.9	

⁵ Throughout this chapter we discuss only the personal income tax on dividends received, taking no account of the corporate income tax on earnings out of which these dividends are paid. This latter matter is covered in Chapter 4.

The values in column 1-weighted-average marginal rate-are a measure of the tax liability that would be associated with a small increase in aggregate dividend payments distributed among taxpayers in the same proportions as the actual total of dividends. In computing it, the marginal rate in each stockholder income class was multiplied by the amount of dividends in that class (using for this purpose the income classes of Table 7). The fact that the values in column 1 exceed considerably those of column 2 follows from the progressive personal income tax rate schedule. The entries of column 1 should be read this way. In 1929, for example, had all dividend recipients experienced a 0.1 per cent increase in dividends, in the aggregate 13.2 per cent of this would have gone for taxes; by 1952 the tax liability would have been almost 56 per cent of the small proportionate increase in aggregate dividend payments. And between these dates there was a steady upward movement in the marginal rate that applied to the aggregate of all taxpayers.

The marginal rate on dividends increased more than the average rate in absolute amount; the latter between 1929 and 1952 rose by 23 percentage points, the marginal rate by 42.6 (But the average rate increased relatively more than the marginal rate.)

In broad terms the marginal rate can be considered as applying to the aggregate of dividend-receiving taxpayers, a factor that should enter into the decision surrounding corporate dividend payments. In this context it is interesting to know that "small" step-ups in dividends would have led on average to about half as large an increase in stockholders' income after tax in 1952 as in 1929. It would be unwarranted within this study's scope to go any further than to note that this suggests that personal income taxes represented a stronger deterrent to dividend payments in the last twenty years or so than they did in an earlier period. To conclude that corporations have, as a general rule, responded to this incentive with lower dividend pay-outs would not necessarily follow: first, because many factors—tax and otherwise—other than those we have cited enter into the determination of the

⁶ The disparity between 1947 and 1952—average rate lower in 1952 and marginal rate higher—can be explained this way: The income-splitting which permitted married persons to file jointly (instituted in 1948) makes for lower effective rates, but dividends have moved up with incomes to a point where the marginal rate is weighted more heavily by higher income class dividends. (Thus Table 2 shows a slight fall between 1947 and 1952 in the absolute amount of dividends in the under-\$5,000 class, but a rise of \$1.2 billion in the \$5,000-to-\$50,000 class, and a rise of \$900 million in the over-\$50,000 class.)

level of dividends; second, because, in fact, it seems that no real downward revision of pay-out rates can be said to have occurred in the last generation, taking due account of the war and its aftermath; and third, because it appears that the dividend pay-out ratio for the corporate system as a whole can be substantially explained by a model that gives no explicit weight to stockholders' marginal rates.⁷

Comparison of Tax Liability Attributable to Dividends and Other Sources of Income

With reference to dividends, the effect of personal income taxes on the distribution of income can be examined from at least two points of view: comparison of the effects of taxation on dividends and on all personal income or specific components thereof, and analysis of the change in the distribution of dividends among taxpayers.

Reflecting the concentration of dividends in the hands of taxpayers in the upper income brackets, the tax system led to a change in their relative importance in personal income. Dividends, after the deduction of the tax liability traceable to them, comprised a smaller proportion of after-tax than of before-tax personal income (see Table 34). This effect was most pronounced between 1942 and 1953. In 1929, for instance, the respective before- and after-income tax percentages that dividends comprised of personal income were 7.1 and 6.8—their share of total income was reduced 4 per cent by taxation; in 1937 the reduction was 10 per cent; in 1941, 14 per cent; in 1947 the after-tax share was 17 per cent lower than the pre-tax proportion; in 1953, the difference was 13 per cent. The dividend tax relief provided in 1954, of course, shows up in the smaller change in the before- and after-tax proportion of dividends in the years 1954—1956.

This matter can be probed further by examining the redistribution effect for several components of personal income and comparing the results for dividends with what happened in the case of the other im-

⁷ John Lintner, "Distribution of Incomes of Corporations among Dividends, Retained Earnings, and Taxes," American Economic Review, May 1956, pp. 97-113. This is not to deny the possibility that for particular enterprises the controlling or predominant stockholders' marginal rate of personal income tax may not be an important consideration in determining the amount of dividend payments. Moreover, since Lintner's published work on this subject to date has dealt with aggregate data, one cannot rule out the possibility that sharp differences in payout rates and dividend behavior might characterize different subgroups of corporations.

portant sources of income. In general, the income tax made wages and salaries a slightly more important component of personal income, left interest and rents and royalties about as important (relatively) as they were before taxes up to 1940 and raised their share thereafter, and led to a slight fall in the relative importance of entrepreneurial income (Table 34). By far the most pronounced change caused by taxation in the relative proportion of each component in personal income took place in dividends.

Equalizing Effect of Taxes on Dividends

To how great an extent was the distribution of dividends among the recipients thereof equalized by the personal income tax? The equalizing effect (defined in terms of the movement of a Lorenz curve closer to the line of complete "equality") exercised by the personal income tax is a function of two variables: (1) the degree of concentration of dividends and (2) the progressivity of the income tax rate schedule. For a given tax schedule, the more concentrated the distribution of dividend receipts, the greater the push toward "equality." Similarly, for a given distribution of dividends, the more progressive the tax system, the more powerful its equalizing effect.

For five years—1934, 1937, 1941, 1947, and 1952—we computed the coefficient of inequality of the distribution of dividends among dividend recipients arrayed by income classes both before and after the personal income tax liability on dividends.8 A comparison of these coefficients will indicate the strength of the equalization effect. For any given distribution of dividends, under a progressive tax system dividends will be more evenly distributed after taxes. But the degree of equalization accomplished, i.e., the proportionate "push" toward equality will vary with rate structures and their progressivity.

The entries in Table 35 summarize the results of these calculations. In every year for which this particular point was investigated, the income class distribution of dividends approached equality more closely after taxes than before. Worth noting is the tendency for the pre-tax distribution to become more uniform over time (column 2), and the more pronounced equalization effects from 1941 on (column 4).

⁸ The reader is reminded that the Gini coefficient of inequality is measured by the ratio between the area under the outer boundary of the Lorenz curve and the diagonal line, and the area between the diagonal and the X and Y axes. Its value ranges between 1 (complete "inequality") and 0 (complete "equality").

TABLE COMPARISON OF PERCENTAGE SHARES OF SELECTED COMPONENTS

(per

	Wa	ges and Sal	aries, etc.	En	trepreneuria	l Income
Year	Before Tax	After Tax	After-Tax Share as Per Cent of Before- Tax Share	Before Tax	After Tax	After-Tax Share as Per Cent of Before- Tax Share
 1918	54.5	55.0	100.7	27.4	27.4	100.0
1919 a	52.3	52.8	101.0	30.8	30.8	100.0
1919	56.6	57.2	101.1	28.0	28.0	100.0
1920	63.4	63.9	100.8	20.4	20.3	99.5
1921	63.6	64.0	100.6	15.9	15.9	100.0
1922	61.7	62.1	100.6	18.5	18.5	100.0
1923	62.5	62.8	100.5	18.3	18.3	100.0
1924	61.8	62.2	100.6	18.5	18.5	100.0
1925	60.8	61.2	100.7	19.6	19.6	100.0
1926	62.6	63.0	100.6	18.4	18.4	100.0
1927	62.8	63.3	100.8	17.6	17.7	100.6
1928	62.6	63.3	101.1	17.6	17.7	100.6
1929 a	62.6	63.2	101.0	17.3	17.3	100.0
1929	62.5	63.1	101.0	17.6	17.6	100.0
1930	64.1	64.3	100.3	15.4	15.4	100.0
1931	65.9	66.0	100.2	13.7	13.7	100.0
1932	68.1	68.3	100.3	11.1	11.1	100.0
1933	68.6	68.9	100.4	12.5	12.4	99.2
1934	69.9	70.3	100.6	13.7	13.7	100.0
1935	67.5	67.9	100.6	18.0	18.0	100.0
1936	69.0	69.9	101.3	16.0	16.0	100.0
1937	67.8	68.5	101.0	17.7	17.8	100.6
1938	69.3	69.7	100.6	16.7	16.8	100.6
1939	69.5	70.0	100.7	16.5	16.5	100.0
1940	69.6	70.3	101.0	17.0	17.0	100.0
1941	69.6	70.5	101.3	18.5	18.4	99.5
1942	70.5	71.5	101.4	19.7	19.4	98.5
1943	72.8	74.0	101.6	18.8	18.2	96.8
1944	73.9	75.1	101.6	18.0	17.5	97.2
1945	73.6	75.1	102.0	18.2	17.5	96.2
1946	70.2	71. 1	101.3	20.5	20.0	97.6
1947	71.8	72.6	101.1	18.7	18.2	97.3
1948	71.3	72.0	101.0	19.3	18.8	97.4
1949	72.4	73.1	101.0	17.4	17.0	97.7
1950	72.9	73.3	100.5	16.5	16.6	100.6
1951	73.6	73.7	100.1	16.6	16.8	101.2
1952	74.8	75.0	100.3	15.6	15.6	100.0
1953	76.2	76.3	100.1	14.3	14.2	99.3
						EXCLUDING
1953	76.2	76.2	100.0	14.3	14.2	99.3
1954	75.9	75.9	100.0	14.1	13.9	98.6
1955	76.3	76.4	100.1	13.7	13.6	99.3
1956	77.2	77.3	100.1	13.0	12.8	98.5

34
IN PERSONAL INCOME, BEFORE AND AFTER TAXES, 1918-1956 cent)

Dividends		lends		Intere	est	Rents		
Before Tax	After Tax	After-Tax Share as Per Cent of Before- Tax Share	Before Tax	After Tax	After-Tax Share as Per Cent of Before- Tax Share	Before Tax	After Tax	After-Tax Share as Per Cent of Before- Tax Share
6.0	5.6	93.3	3.4	3.3	97.1	8.6	8.7	101.2
4.8	4.5	93.8	3.9	3.8	97.4	8.2	8.2	100.0
4.4	4.1	93.2	4.9	4.8	98.0	6.1	6.1	100.0
4.6	4.3	93.5	5.4	5.3	98.1	6.2	6.2	100.0
5.4	5.1	94.4	7.0	6.9	98.6	8.1	8.1	100.0
5.0	4.7	94.0	6.7	6.6	98.5	8.2	8.2	100.0
5.5	5.3	96.4	6.1	6.0	98.4	7.5	7.5	100.0
5.4	5.2	96.3	6.3	6.2	98.4	8.0	8.0	100.0
5.9	5.8	98.3	6.2	6.2	100.0	7.4	7.5	101.4
6.1	5.9	96.7	6.1	6.1	100.0	6.7	6.7	100.0
6.6	6.4	97.0	6.4	6.3	98.4	6.6	6.7	101.5
7.0	6.7	95.7	6.7	6.7	100.0	6.2	6.3	101.6
7.6	7.3	96.1	6.7	6.7	100.0	5.9	5.9	100.0
7.0	6.8	97.1	6.4	6.4	100.0	6.5	6.6	101.5
7.4	7.1	95.9	6.7	6.7	100.0	6.4	6.5	101.6
6.5	6.3	96.9	7.9	7.9	100.0	6.0	6.0	100.0
5.5	5.2	94.5	9.6	9.6	100.0	5.7	5.7	100.0
						4.4		100.0
4.7	4.4	93.6	9.8	9.8	100.0		4.5	
5.1	4.7	92.2	8.0	8.0	100.0	3.3	3.3	100.0
5.0	4.6	92.0	6.6	6.6	100.0	2.9	3.0	103.4
6.8	6.1	89.7	5.5	5.5	100.0	2.7	2.8	103.7
6.6	5.9	89.4	5.0	5.0	100.0	2.9	2.9	100.0
4.8	4.4	91.7	5.3	5.3	100.0	3.9	3.9	100.0
5.4	4.9	90.7	4.8	4.8	100.0	3.8	3.8	100.0
5.2	4.6	88.5	4.3	4.3	100.0	3.8	3.8	100.0
4.8	4.1	85.4	3.4	3.4	100.0	3.7	3.8	102.7
3.5	2.9	82.9	2.6	2.6	100.0	3.7	3.8	102.7
2.9	2.5	86.2	2.1	2.1	100.0	3.4	3.6	105.9
2.9	2.4	82.8	1.9	2.0	105.3	3.3	3.5	106.1
2.8	2.3	82.1	2.2	2.3	104.5	3.3	3.5	106.1
3.3	2.8	84.8	2.5	2.5	100.0	3.5	3.6	102.9
3.6	2.9	85.3	2.6	2.7	103.8	3.5	3.6	102.9
3.5	3.1	88.6	2.4	2.5	104.2	3.5	3.6	102.9
3.6	3.1	86.1	2.5	2.6	104.0	4.1	4.2	102.4
4.0	3.4	85.0	2.6	2.7	103.8	4.0	4.1	102.5
3.5	3.0	85.7	2.5	2.6	104.0	3.8	3.9	102.6
3.3	2.8	84.8	2.5	2.6	104.0	3.8	4.0	105.3
3.2	2.8	87.5	2.6	2.8	107.7	3.7	3.9	105.4
FIDUCIA	RIES							
3.2	2.9	90.6	2.6	2.8	107.7	3.7	3.9	105.4
3.4	3.2	94.1	2.8	3.0	107.2	3.8	4.0	105.3
3.7	3.4	91.9	2.8	3.3	117.9	3.5	3.7	105.7
3.7	3.5	94.6	2.8	2.9	103.6	3.3	3.5	106.1

Notes to Table 34

Source: Personal income data: 1918-1929, Daniel Creamer, Personal Income During Business Cycles, Princeton for NBER, 1956, pp. 116-117; 1929-1951, National Income, 1954; 1952-1956, Survey of Current Business, July 1957, both adjusted as follows:

- (a) Labor income = Sum of Table 3, lines 2, 3, and 7 minus Table 4, line 19.
- (b) Entrepreneurial income = Table 1, line 10.
- (c) Dividends = Table 1, line 20.
- (d) Interest = Table 37, personal interest income less imputed interest (line 12 plus line 6 minus line 4).
 - (e) Rent = Table 1, line 15.

Tax liability: as computed for Personal Income Tax Study.

^a Two values for 1919 and 1929 are presented by Creamer to provide overlapping data for years in which he started using a new series.

Although a comparison of the before-tax distributions is somewhat inconclusive, since they relate to a particular category—taxable returns—whose composition changed from year to year not only as a result of "economic" forces but also because of changes in exemptions and tax law, the degree of equalization effected by the tax system can be compared. That this fell off in 1952 compared with 1941 or 1947 can be explained largely by the softer "bite" of the tax system that followed the introduction of general income-splitting in 1948.

TABLE 35

Dividend Distribution Equalization Effect of the Personal Income Tax, 1934, 1937, 1941, 1947, and 1952

Year (1)	Before-Tax Distribution of Dividends (2)	After-Tax Distributions of Dividends (3)	Degree of Equalization (4)
1934	0.7255	0.6926	4.5%
1937	0.6710	0.6248	6.9
1941	0.6030	0.5162	14.4
1947	0.6374	0.5456	14.4
1952	0.5950	0.5250	11.8

Note: Column 4 (derived by subtracting col. 3 from col. 2 and dividing the result by col. 2) is a measure of the "push toward equality" exercised by the tax system on the distribution of dividends. Column 2 shows how much equalization was possible; the difference between it and column 3 shows how much the distribution was equalized in absolute terms; column 4 shows what proportion of the total possible equalization was effected by the tax system.

Distribution of Dividend Tax Liability and of Dividends

Because of the progressive nature of the personal income tax, the distribution of the dividend tax liability has always been more concentrated than the income class distribution of dividends. Another factor making for this result, through 1935, was the exemption of dividend receipts from normal tax. The data are summarized by broad income ranges in Table 36 and plotted on Chart 5.

Through 1935 taxpayers with net incomes of under \$5,000 who received, depending on the year, anywhere from 2 to 10 per cent of the dividends reported by all taxpayers (see Table 2), accounted for none of the dividend tax liability. Because of the exemption of dividends from normal tax and the relatively high level of income at which surtax started, dividends received by this income group were not subject to personal income tax. After 1935, coincident with the rise in this group's share of dividends, their share of the dividend tax liability increased. But only from 1941 on was the latter over 2 per cent, and in all these years it was less than half their share of taxable dividends.

For taxpayers in the income class \$5,000 to \$50,000 the story is quite different. Over the period covered by this study the proportion of taxable dividends flowing to this segment of the taxpaying population was notably stable-fluctuating between about 40 and 50 per cent, and being about the same at the end of the period as at the beginning. No such stability was shown by this income group's share of the dividend tax liability, however. This percentage had a wide range-from under 11 (in 1928) to over 47 (in 1945). It remained fairly low through 1933 (except for 1920 and 1921), jumped suddenly in 1934 to 20 per cent, and then grew slowly up to 1940 where it reached 31. In 1941 another sudden jump occurred up to 40 per cent, then a regular rise to a maximum of 47 per cent in 1945 followed by a falling tendency over the remaining years. Over the latter half of the period 1918-1957, there was a substantial increase in the proportion of the total dividend tax liability that came from taxpayers in this income class; at the same time, however, their share of taxable dividends remained about the

Just the reverse pattern appears in the class \$50,000 and over. Through 1933, this group's share of the dividend tax liability was very high and fairly stable—characteristically between 85 and 90 per cent. Starting with 1934 a noticeable and continuous decline in this per-

TABLE 36

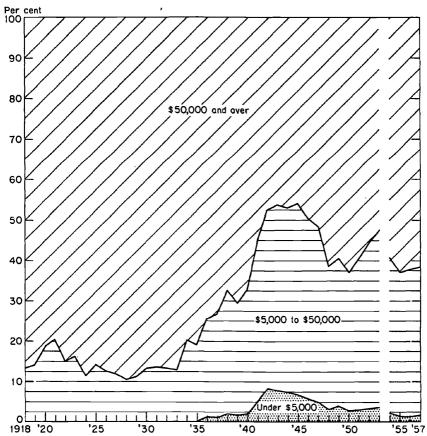
Share of Dividend Tax Liability by Income Classes, 1918–1957

(per cent)

Year	Under \$5,000	\$5,000 to \$50,000	\$50,000 and over	
 	ф 5,000		and over	
1918	0.0	13.3	86.8	
1919	0.0	13.9	86.2	
1920	0 0	18.6	81.4	
1921	0.0	20.4	79.6	
1922	0.0	14.8	85.2	
1923	0.0	16.1	83.9	
1924	0.0	11.4	88.7	
1925	0.0	14.0	86.0	
1926	0.0	12.5	87.6	
1927	0.0	11.8	88.2	
1928	0.0	10.5	89.5	
1929	0.0	11.2	88.8	
1930	0.0	13.1	86.8	
1931	0.0	13.5	86.5	
1932	0.0	13.3	86.7	
1933	0.0	12.8	87.2	
1934	0.0	20.2	79.8	
1935	0.0	18.9	81.1	
1936	1.1	24.2	74.9	
1937	1.2	25.3	73.6	
1938	2.0	30.5	67.5	
1939	1.8	27.4	70.9	
1940	1.9	30.8	67.3	
1941	5.1	39.9	55.0	
1942	8.3	44.1	47.6	
1943	7.7	45.9	46.4	
1944	7.4	45.6	47.0	
1945	6.7	47.2	46.3	
1946	5.7	44.6	49.7	
1947	5.0	43.3	51.7	
1948	3.2	35.2	61.7	
1949	4.1	36.4	59.4	
1950	2.9	34.0	63.2	
1951	3.1	37.2	59.6	
1952	3.4	40.9	55.8	
1953	3.7	43.5	52.7	
		NG FIDUCIARIE		
1954	2.1	38.5	59.4	
1955	1.6	35.5	62.9	
1956	1.5	36.1	62.4	
1957	1.6	36.6	61.8	

CHART 5

Percentage Breakdown of Dividend Tax Liability by Income Classes,
1918–1957



Note: From 1954 on, tax liability is for individuals only; in prior years it is for individuals and fiduciaries.

centage set in. It reached a low of 46 per cent in 1945, but has tended to rise since.

In analyzing the proportion of total taxable dividends reported in the various income classes earlier in this study, we concluded that there had been long swings in the distribution—the share of the uppermost classes rose up to 1929, fell up through 1943, and then rose thereafter; the share of the middle groups remained substantially the

same, and the proportion going to the lowest income classes moved opposite to the uppermost class share. In the case of the dividend tax liability, too, we find a pattern of long swings. And, as one would expect in going from income to tax liability, the swings in the income class shares of total dividend tax liability were more pronounced. Again we remind the reader of our earlier warning that the evidence for money income classes over periods of sharply varying price and income levels is ambiguous.

Share of Dividend Tax Liability in Total Tax Liability

The importance of the dividend tax liability in relation to total tax liability is different for each income class. The results depend on the relative importance of dividends in adjusted gross income qualified by: (1) the fact that up to 1936 dividend receipts were exempt from normal tax and (2) the exclusion and credit introduced in 1954. The data assembled under a few broad income groupings are presented in Table 37 and are plotted on Chart 6.

The point of most obvious interest in connection with taxpayers in the under-\$5,000 group is that, through 1935, their dividend receipts were responsible for none of the personal income tax liability levied on them. From 1936 through 1940 dividend tax comprised a more substantial percentage of total tax liability for this group, but afterward fell to an insignificant level. Through 1935, because dividends were excluded from normal tax income, in the other two broad income classes the ratio of dividend tax liability to total tax liability was lower than the proportionate share of dividends in adjusted gross income. Since 1936, however, for all income classes, the dividend tax liability has been a higher percentage of total personal income tax liability than dividends have been of adjusted gross income. This represents the result of a conceptual decision on our part. In our method the presumed tax saving due to certain income types, e.g., partnership losses, is offset against the tax liability due to the positive income from this source—the tax liability is taken as a net amount for these income types, which means that for those income shares that have no negative counterpart, such as dividends, for instance, the effective tax rate is computed as higher than that on the total adjusted gross income in this class.

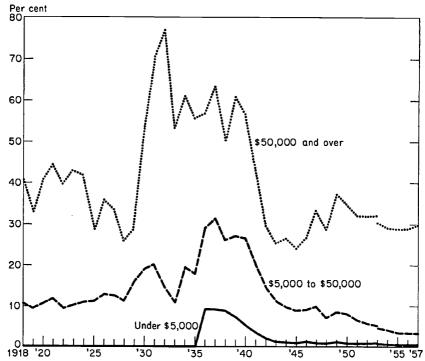
TABLE 37

Dividend Tax Liability as a Percentage of Total Personal Income Tax Liability, 1918–1957

		Income Class		
Year	Under \$5,000	\$5,000 to \$50,000	\$50,000 and over	
1918	0.0	10.5	40.8	
1919	0.0	9.3	32.9	
1920	0.0	10.5	40.3	
1921	0.0	11.7	44.3	
1922	0.0	9.5	39.4	
1923	0.0	10.1	43.0	
1924	0.0	10.9	41.6	
1925	0.0	11.2	28.9	
1926	0.0	12.7	35.8	
1927	0.0	12.6	33.3	
1928	0.0	11.3	25.7	
1929	0.0	16.0	28.6	
1930	0.0	19.0	53.9	
1931	0.0	20.1	70.4	
1932	0.0	14.5	77.2	
1933	0.0	10.7	53.5	
1934	0.0	19.3	61.0	
1935	0.0	17.9	55.6	
1936	9.2	29.0	56.7	
1937	9.2	31.3	63.3	
1938	8.9	26.2	50.4	
1939	7.5	27.1	60.8	
1940	5.4	26.6	56.5	
1941	3.6	20.3	44.2	
1942	2.0	14.3	29.6	
1943	1.1	11.3	25.4	
1944	1.0	9.7	26.4	
1945	0.9	8.9	23.9	
1946	1.1	9.0	26.5	
1947	0.9	9.7	33.3	
1948	0.7	7.0	28.7	
1949	1.1	8.4	37.1	
1950	0.9	8.1	34.9	
1951	0.8	6.4	32.0	
1952	0.8	5.6	31.9	
1953	0.9	5.0	32.0	
		NG FIDUCIARIE		
1953		4.6		
	0.8		30.3	
1954	0.5	4.1	29.1	
1955	0.4	3.4	28.8	
1956	0.4	3.3	28.8	
1957	0.4	3.2	29.6	

CHART 6

Tax Liability Attributable to Dividends as a Percentage of Total Personal Income Tax Liability, by Income Classes, 1918–1957



Note: From 1954 on, tax liability is for individuals only; in prior years it is for individuals and fiduciaries.

Effective Tax Rates on Dividends Compared with Other Sources of Property Income

Starting in 1936 and continuing through 1953, dividends were subject to the same tax provisions and rates as the other sources of property income (except for tax-exempt interest and capital gains). Earlier, however, the exemption of dividends from normal tax meant a substantially lower rate on this income source as compared with, say, fully taxable interest. How great a difference it was can be seen from Table 38, which also shows in the 1956 panel the effect of the exclusion and

⁹ This statement neglects, of course, any consideration of the corporate tax load on earnings made for dividend payments.

credit introduced in 1954. For dividends per se, the relief provided in these periods of special tax treatment was relatively more powerful the lower the taxpayer's income class. For the more recent set of special tax provisions for dividends, the degree of relief does not vary among income classes as much as it did in the pre-1936 tax treatment. On the other hand, the absolute amount (number of percentage points of effective rate) of relief increased with taxpayer's income in the earlier period, but appears to be fairly constant from class to class for the Internal Revenue Code of 1954 provisions. Reverting to the relative lightening of the tax liability on dividends, it is interesting to note that in the three highest income classes, the relative difference between dividends and regular income, here summarized by fully taxable interest, is about the same for 1935 and 1956.

Comparisons of the type embodied in Table 38 are inexact at best, for the income classes, particularly the higher ones, are so broad that some of the difference in dividend taxation will be obscured by the effective rate variations between dividends and interest attributable to the different distribution within a given income class of the two types of income. But a more serious criticism is that these data do not focus on the real issue. What would have happened to stockholders' income and taxes had there not been a corporation income tax, i.e., had there been only one tax on corporate earnings? Comparisons of this sort barely scratch the surface of that thorny problem-the "double taxation of dividends" and related matters. It is to this subject that the next chapter is devoted. Before turning to this, however, it is convenient to take up here the corporate income tax liability which, together with the personal income tax liability attributable to dividends, makes up the total tax liability on corporate earnings. But these data as presented directly below are not the most germane to the problem of "double taxation."

Tax Liability on Corporate Earnings

For the federal tax structure, the theme pursued in this chapter can be extended: on the income side we can go from dividends to total corporate earnings (before any taxes); and on the tax side we can obtain the total income tax liability on corporate earnings by adding annually the corporation income tax to the personal income tax liability attributable to dividend receipts. In a general sense, then, we

TABLE 38 COMPARISON OF EFFECTIVE RATES ON FULLY TAXABLE INTEREST AND DIVIDENDS, 1924, 1929, 1935, AND 1956

(per cent)

Dividend

1929

Dividend

75

82

89

94

95

1924

Income Class (thousand dollars)	Fully Taxable Interest	Divi- dends	Rate as a Percent of Rate on Fully Taxable Interest	Fully Taxable Interest	Divi- dends	Rate as a Percent of Rate on Fully Taxable Interest
Under 2	0.4	0.0		0.1	0.0	
2 to 3	0.5	0.0		0.1	0.0	
3 to 5	0.4	0.0		0.1	0.0	
5 to 10	1.0	0.0		0.3	0.0	
10 to 25	2.9	0.6	21	1.7	0.6	35
25 to 50	6.9	3.5	51	5.3	3.2	60
50 to 100	12.5	8.9	71	9.1	6.7	74
100 to 500	23.1	19.5	84	14.6	11.8	81
500 and over	30.9	27.9	90	18.7	15.6	83
	· ·	1935			1956	
Income Class (thousand dollars)	Fully Taxable Interest	Divi- dends	Dividend Rate as a Percent- age of Rate on Fully Taxable Interest	Fully Taxable Interest	Divi- dends	Dividend Rate as a Percent- age of Rate on Fully Taxable Interest
Under 2	0.9	0.0		7.3	5.0	68
2 to 3	1.2	0.0	• • •	7.5	4.8	64
3 to 5	1.0	a		7.7	4.5	58
5 to 10	2.1	0.5	24	10.7	6.9	64
5 10 10	2.1	0.5	~ .	10.7	0.7	V 1

5.4

11.1

19.0

33.9

46.2

3.2

8.6

16.4

32.3

44.1

10 to 25 b

25 to 50 °

50 to 100

100 to 500

500 and over

59

77

86

95

95

15.8

25.1

35.9

44.9

55.4

11.9

20.7

32.1

42.1

52.9

a Less than 0.5 per cent.

^b 10 to 20.

^{° 20} to 50.

would be talking about corporate earnings and the tax liability attributable to them. This latter, of course, can also be considered the taxes "paid out of" corporate earnings. On the assumption that the incidence of corporate taxes is on profits, and the incidence of personal income tax on the taxpayer, this section will compare the amount of income generated for stockholders with the amount of income accruing to stockholders after taxes on this income source. And by considering the corporate tax and the relevant portion of the personal income tax as a combined income tax on corporate earnings, we can also address ourselves to this question: What proportion of total federal income tax revenue has come from corporate earnings, and how does this compare with the proportion that corporate earnings represent of income generated in the course of production? (We neglect, however, the capital gains tax liability on capital gains due to retained earnings.)

The intent here is merely to assess the importance of this income component as a revenue source, not to suggest that corporate earnings are inequitably or unequally taxed. Before a judgment could be reached on this latter matter, a standard of equity or "appropriate" taxation would have to be established. Corporate earnings would have to be related to the taxpaying capacity ("ability to pay") of the beneficial owners or corporate enterprise, and the actual tax load at selected stockholder income levels under the combined corporate-personal income tax could then be compared with what the tax liability would then have been had corporate earnings fully and promptly been subject to the personal income tax alone.¹⁰

But here our procedure simply is to sum up corporate tax liability and that portion of the personal income tax liability attributable to dividend receipts and relate this to the total income tax liability—corporate plus personal.¹¹ (In other words, the latter total differs from

¹⁰ In Chapter 4 such comparisons are made for the distributed component of corporate earnings, and there is a relatively brief consideration of all corporate earnings, both distributed and retained. The whole question is discussed at length and relevant measurements are provided in the author's study, *The Income-Tax Burden on Stockholders*.

¹¹ The reader will appreciate that this is a rough and ready method, the results of which are only indicative. There is no need to list its shortcomings in detail. Briefly, however, no adjustment is made in the annual figures because of dividends from earnings of prior years (although such a correction would probably not change the figures much); nor is any account taken in the tax liability on corporate earnings figure for the capital gains tax that would be due in later years should a stockholder realize gains on corporate shares that have risen in value because of the reinvestment of earnings of earlier years. As another qualification, we talk about

the former by inclusion of all personal income tax liability rather than merely that incurred on dividends.) Viewed in this framework, it appears that over the whole of our period, corporate earnings have constituted a very important source of income tax revenue (Table 39). Anywhere from 81 per cent of total income tax revenue in 1931 to 40 per cent in 1946 came from corporate earnings. The broad swing has been downward. Taking the whole of our period, it can be described this way: The fraction that corporate earnings tax liability represented of total tax liability ran at between one-half and two-thirds in the twenties, at between two-thirds and three-quarters in the thirties, and from two-fifths to one-half in the forties and fifties. The results since 1940, of course, follow from the great expansion that has occurred in the personal income tax. But although they have constituted a small fraction of national income, corporate earnings are still the major revenue producer among the sources of income. In recent years, with corporate earnings running at from 10 to 15 per cent of national income, personal and corporate income taxes on corporate earnings were responsible, as noted, for between one-half and twofifths of total income tax liabilities.

Thus we can say that currently corporate earnings contribute between three and four times as much to tax liability as to income, and that in earlier years the ratio was considerably higher (Table 39, column 3).

We end on the note on which we began. This is presented simply as a statistic, nothing more. For given the progressive personal income tax as the benchmark and the very concentrated distribution of corporate earnings, there is nothing outlandish or necessarily inequitable in these disparate proportions of tax liability and income. That is to say, if we define equity or "appropriate" taxation of income in terms of the scale of progressive rates Congress establishes, then the tax liabilities of Table 39 are not necessarily inequitable. Aggregates, at best, cast little light on this question. The next chapter of this book will venture a little into this area. The reader who desires to go still further might look at the book cited in footnote 10 above.

tax liabilities incurred on the income of a given year, not the taxes actually collected in that year. Finally, the results given in Table 39 mirror not only corporate and personal tax rates (and hence, of course, the concentration of the dividend distribution), but also the fact that, even though in the aggregate corporate earnings are negative in some years, income corporations paid a tax.

TABLE 39

Comparison of Contributions of Corporate Earnings to Tax Liability and to National Income, 1918–1957

	Combined Personal-		
	Corporate Tax on		
	Corporate Earnings		
	as a Per Cent of	Corporate Earnings	Ratio of
	Total Income Tax	as a Per Cent of	Col. 1 to
Year	Liability	National Income	Col. 2
	(1)	(2)	(3)
1918	53.0		
1919	50.8	a	
1920	51.2	a	
1921	50.0	8	
1922	60.0		_
1923	68.9	•	_
1924	68.6		_
1925	70.4	B	
1926	73.3	_ B	
1926	69.3	- B	
1928	61.5	8	_
1929	66.3	11.0	6.0
1930	77.0	4.6	16.7
1931	81.3	-1.4	b
1932	69.2	-7.3	b
1933	68.1	0.4	170.2
1934	72.1	3.5	20.6
1935	70.4	5.5	12.8
1936	71.8	8.9	8.1
1937	75.2	8.5	8.8
1938	70.1	5.0	14.0
1939	7 4. 8	8.7	8.6
1940	76.8	11.4	6.7
1940	70.8 72.4	15.8	4.6
1941	62.6	15.0	4.2
1942	55.9	14.4	3.9
1944	51.4	12.7	4.0
1945	42.6	10.4	4.0 4.1
1945	40.2	12.2	3.3
1947	42.6	14.5	3.0
1947	48.8	14.6	3.3
1946	46.8	12.2	3.8
1950	53.8	16.4	3.3
1951	53.8 52.0	15.0	3.5 3.5
1951	45.0	12.6	3.5 3.6
1952	44.1	12.5	3.6 3.5
1954	44.1 42.6	12.5	3.5 3.6
1955	42.0 45.8	14.0	3.8
1956	43.0 43.0	14.0 12.9	3.8 3.3
1957	40.3	11.7	3.4
1957		11.7	

Source: Tax liability: Statistics of Income, Parts 1 and 2, and National Bureau of Economic Research Personal Income Tax Study. Corporate earnings and national income: U.S. Income and Output, p. 127, Table I-8. Corporate earnings line 19, national income line 1 minus line 24 (i.e., national income is adjusted by adding back the inventory valuation adjustment); for 1956 and 1957, Survey of Current Business, July 1960.

^a Not available.

^b Minus figure.