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CHAPTER 3

Quantitative Significance: Changes in Composition, Cyclical Sensitivity, and Distribution, 1918-1956

IN THE preceding chapter, the quantitative significance of personal deductions was analyzed, by comparing them over time with income and exemptions, and by examining their effects upon the tax base and upon the yield of the individual income tax. This broad, rather sweeping view of deductions in the context of the income tax structure will now be supplemented by a detailed view of three of their quantitative aspects: changes over time in composition of deductions; their effects on the built-in flexibility of the income tax; and the distribution of deductions among income classes.

As we have seen, there has been a slow, but steady, upward trend in personal expense deductions in relation to income reported on taxable returns.[1] Table 7 shows that in the four years 1918-1921 deductions absorbed, on average, about 8 per cent of adjusted gross income. During the latest years of our period, 1952-1956, the ratio rose to 13 per cent. In the 1920's deductions averaged close to 10 per cent of adjusted gross income; in the first half of the 1930's slightly over 11 per cent; and in the 1940's, after an initial sharp dip, they moved steadily toward their 1956 level of 13.4 per cent of income. It is also apparent from Table 7 that in the interwar years they were somewhat less sensitive than taxpayers' incomes to cyclical fluctuations in economic activity. They rose abruptly to 10 per cent of adjusted gross income in 1921; to a three-decade peak of 12 per cent in 1932; and—after a decline to 9.2 per cent in 1936—to 10.3 per cent in 1938. The relative stability of the deductions, with consequent changes in the ratio to income, made the tax base slightly more sensitive to business cycles than it would have been had the ratio of deductions to income remained the same during business cycles.

Changes Over Time in Composition

The upward trend of total personal deductions in relation to income,

[1] Unless otherwise noted, our data in this and the following chapters are for taxable returns. The tabulated information for nontaxable returns is less complete and detailed than that for taxable returns, and filing nontaxable returns appears to have been highly subject to the vagaries of administrative practice and change in tax laws.

TABLE 7

Total Personal Deductions Reported on Taxable Returns as Per Cent of Adjusted Gross Income Reported, 1918-1956

YEAR	*AGI* (billions of dollars) (1)	*Deductions* (billions of dollars) (2)	*Deductions as Per Cent of AGI* (3)
1918	14.9	1.0	7.0
1919	19.1	1.4	7.5
1920	21.9	1.7	7.5
1921	15.0	1.5	10.3
1922	16.7	1.6	9.8
1923	19.4	2.0	10.2
1924	21.5	2.1	9.6
1925	19.3	1.8	9.4
1926	19.4	1.9	10.0
1927	20.2	2.1	10.3
1928	23.3	2.3	9.8
1929	22.7	2.2	9.8
1930	15.4	1.7	11.3
1931	10.4	1.1	10.6
1932	9.0	1.1	12.1
1933	8.3	0.9	11.1
1934	9.3	1.0	10.6
1935	11.1	1.1	9.9
1936	15.7	1.4	9.2
1937	16.9	1.6	9.7
1938	14.1	1.5	10.3
1939	17.5	1.7	9.5
1940	25.9	2.3	9.0
1941	49.3	3.8	7.8
1942	72.7	6.7	9.2
1943	104.6	8.2	7.9
1944	115.2	12.5	10.9
1945	118.1	13.2	11.2
1946	118.7	13.2	11.2
1947	135.9	15.7	11.5
1948	142.7	16.6	11.6
1949	139.1	16.9	12.1
1950	159.3	19.2	12.0
1951	183.9	22.5	12.2
1952	197.3	24.7	12.5
1953	210.5	27.0	12.8
1954	209.7	27.5	13.1
1955	229.6	30.5	13.3
1956	249.6	33.5	13.4

Source: Appendix Table D.

shown in Table 7, does not characterize all components. The number of deductions included in the total, as well as the relation of each to income, has changed over time (Tables 8 and 9). Before the 1930's, 40 per cent of the total was interest paid on nonbusiness loans, about 25 per cent nonbusiness taxes, and close to 20 per cent philanthropic contributions. In the course of the 1930's, with the decline of interest rates and private indebtedness on the one hand, and the rise of most deductible taxes on the other, the quantitative relationships changed significantly. By 1940—the last year before the introduction of the optional standard deduction device—nonbusiness taxes amounted to almost 40 per cent of total deductions, contributions to almost 25 per cent, and personal interest payments to only 20 per cent.

In 1941 an optional standard deduction and in 1942 an allowance for medical expenses were added to the list of deductible items. The medical expense deduction has not played as important a quantitative role as is suggested by the size of personal medical expenditures in the United States—$12.1 billion in 1956, for instance. In that year the medical expense deduction on all tax returns was less than $3.5 billion, and on taxable returns it was less than $3 billion. During 1942-1956, the medical allowance accounted each year for substantially less than one-tenth of personal deductions. One reason for this is that the medical expense allowance is the only one designed to benefit principally taxpayers with large expenses relative to income. In effect, the lower income groups thereby tend to be the main beneficiaries (see Chapter 7). The other reason is the standard deduction, in force a year before the medical deduction. The same groups who tend to benefit from the medical deduction are also the major users of the standard deduction.

The standard deduction was first introduced on a moderate scale and only for those at the bottom of the income distribution. It gave taxpayers the opportunity of filing a short, simplified return, including in the rate structure an automatic allowance for personal deductions, without regard to the individual taxpayer's actual deductions.[2] From 1941 to 1943 the standard deduction accounted for one-tenth to one-fifth of total deductions. Beginning with 1944, when the new adjusted gross income concept was introduced, the standard deduction was made more generous and applicable to all taxpayers: 10 per cent

[2] For a detailed description and discussion of the development of the standard deduction, see Chapter 8.

TABLE 8

Major Personal Expense Deductions, Taxable Returns, Selected Years, 1920-1956

(millions of dollars)

YEAR	*Contributions*	*Taxes Paid*	*Interest Paid*	*Losses (fire, theft, storm, etc.)*	*Medical Expenses*	*Child-Care*	*Miscellaneous*[a]	*Optional Standard Deduction*	*Total Deductions*	*Adjusted Gross Income*
1920	349[b]	372[b]	700[b]	17[b]	—	—	214	—	1,651	21,880
1927	423	537	827[b]	11[b]	—	—	268	—	2,067	20,157
1929	441	560	922	19[b]	—	—	289	—	2,232	22,725
1932	231	353[b]	352[b]	10[b]	—	—	141	—	1,086	9,006
1936	312	532	397	17[b]	—	—	187	—	1,445	15,664
1940	570	901	467	22	—	—	356	—	2,317	25,875
1942	1,320	1,893	1,010	91	534	—	762	1,112	6,721	72,670
1944	1,235	1,152	696	149	722	—	695	7,883	12,532	115,173
1945	1,424	1,225	683	128	836	—	1,027	7,873	13,195	118,104
1946	1,559	1,269	694	137	906	—	1,225	7,455	13,245	118,721
1947	1,875	1,547	855	193	1,156	—	1,517	8,541	15,682	135,891
1948	1,756	1,500	903	179	1,040	—	1,648	9,545	16,571	142,667
1949	1,897	1,812	1,106	171	1,170	—	1,656	9,082	16,895	139,108
1950	2,129	2,068	1,372	248	1,260	—	1,940	10,135	19,152	159,256
1951	n.a.	n.a.	n.a.	n.a.	n.a.	—	n.a.	11,566	22,504	183,935
1952	2,968	3,034	2,095	293	1,843	—	2,440	12,069	24,742	197,331
1953[c]	3,383	3,453	2,585	326	2,043	—	2,638	12,533	26,961	210,484
1954[c]	3,671	3,826	2,985	359	2,482	73	2,479	11,600	27,476	209,669
1955[c]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	12,027	30,524	229,595
1956[c]	4,650	5,543	4,544	295	2,993	95	2,916	12,471	33,508	249,551

In this and all other tables, n.a. = not available.

[a] Until 1944 the miscellaneous deductions were computed as a residual by "estimating out" certain other items for which independent estimates were possible.

[b] Estimated.

[c] Excludes fiduciary returns.

TABLE 9

Major Personal Expense Deductions as Per Cent of Adjusted Gross Income and as Per Cent of Total Deductions, Taxable Returns, Selected Years, 1920-1956

YEAR	*Contributions*	*Taxes Paid*	*Interest Paid*	*Losses (fire, theft, storm, etc.)*	*Medical Expenses*	*Child-Care*	*Miscellaneous*	*Optional Standard Deduction*	*Total*
				PER CENT OF ADJUSTED GROSS INCOME					
1920	1.6	1.7	3.2	0.1	—	—	1.0	—	7.5
1927	2.1	2.7	4.1	0.1	—	—	1.3	—	10.3
1929	1.9	2.5	4.1	0.1	—	—	1.3	—	9.8
1932	2.6	3.9	3.9	0.1	—	—	1.2	—	12.1
1936	2.0	3.4	2.5	0.1	—	—	1.2	—	9.2
1940	2.2	3.5	1.8	0.1	—	—	1.4	—	9.0
1942	1.8	2.6	1.4	0.1	0.7	—	1.0	1.5	9.2
1944	1.1	1.0	0.6	0.1	0.6	—	0.6	6.8	10.9
1945	1.2	1.0	0.6	0.1	0.7	—	0.9	6.7	11.2
1946	1.3	1.1	0.6	0.1	0.8	—	1.0	6.3	11.2
1947	1.4	1.1	0.6	0.1	0.9	—	1.1	6.3	11.5
1948	1.2	1.1	0.6	0.1	0.7	—	1.2	6.7	11.6
1949	1.4	1.3	0.8	0.1	0.8	—	1.2	6.5	12.2
1950	1.3	1.3	0.9	0.2	0.8	—	1.2	6.4	12.0
1951	n.a.	n.a.	n.a.	n.a.	n.a.	—	n.a.	6.3	12.2
1952	1.5	1.5	1.1	0.1	0.9	—	1.2	6.1	12.5
1953	1.6	1.6	1.2	0.2	1.0	—	1.3	6.0	12.9
1954	1.8	1.8	1.4	0.2	1.2	[a]	1.2	5.5	13.1
1955	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5.2	13.3
1956	1.9	2.2	1.8	0.1	1.2	[a]	1.2	5.0	13.4
				PER CENT OF TOTAL DEDUCTIONS					
1920	21.1	22.5	42.4	1.0	—	—	12.9	—	100.0
1927	20.4	26.0	40.0	0.5	—	—	13.0	—	100.0
1929	19.8	25.1	41.3	0.9	—	—	13.0	—	100.0
1932	21.3	32.5	32.4	0.9	—	—	13.0	—	100.0
1936	21.6	36.8	27.5	1.2	—	—	12.9	—	100.0
1940	24.6	38.9	20.2	0.9	—	—	15.4	—	100.0
1942	19.6	28.2	15.0	1.4	7.9	—	11.3	16.5	100.0
1944	9.9	9.2	5.6	1.2	5.8	—	5.5	62.9	100.0
1945	10.8	9.3	5.2	1.0	6.3	—	7.8	59.7	100.0
1946	11.8	9.6	5.2	1.0	6.8	—	9.2	56.3	100.0
1947	12.0	9.9	5.5	1.2	7.4	—	9.7	54.5	100.0
1948	10.6	9.1	5.4	1.1	6.3	—	9.9	57.6	100.0
1949	11.2	10.7	6.5	1.0	6.9	—	9.8	53.8	100.0
1950	11.1	10.8	7.2	1.3	6.6	—	10.1	52.9	100.0
1951	n.a.	n.a.	n.a.	n.a.	n.a.	—	n.a.	51.4	100.0
1952	12.0	12.3	8.5	1.2	7.4	—	9.9	48.8	100.0
1953	12.5	12.8	9.6	1.2	7.6	—	9.8	46.5	100.0
1954	13.4	13.9	10.9	1.3	9.0	0.3	9.0	42.2	100.0
1955	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	39.4	100.0
1956	13.9	16.5	13.6	0.9	8.9	0.3	8.7	37.2	100.0

Source: Table 8.

[a] Less than 0.05 per cent.

of income up to $500 per taxpayer. In that year almost two-thirds of the amount of the deductions was taken in the package form, and the number of taxpayers using it exceeded 80 per cent of the total. The amount of standard deduction thus rose from $1.8 billion in 1943 to $7.9 billion in 1944, or by over $6 billion. Probably about $2.5 billion, or 40 per cent, of the rise was caused by the inclusion in the enlarged standard deductions of a portion of income that would have been in the tax base in the absence of the 10 per cent standard deduction. Most of the rest of the increase was caused by the shift of taxpayers from itemized to standard deductions.[3] However, the shift did not continue after 1944. Despite some further liberalization in 1948 of the standard deduction, it accounted for less than 40 per cent of the total in 1956, in contrast to 63 per cent in 1944.

From the available evidence, it appears that the relative decline in use of the standard deduction is attributable to rises in both incomes and deductible expenditures since 1944. Despite the dramatic increase in incomes over the decade, most taxpayers have stayed within the income range to which the standard deduction of 10 per cent of income applies, particularly since its ceiling was raised to $1,000 in 1948. But within this income range the preference for the standard deduction declines with rising income, and incomes have shifted upwards considerably within the $0-10,000 income group during 1944-1956. In addition the relative rise in deductible expenditures has brought about a fall of the proportion of standard deduction returns at any given income level in the years since 1944.[4] Reported philanthropic contributions seem to have continued their mild upward trend in relation to income. Nonbusiness interest payments have reversed their previously noted relative decline throughout the 1930's and the war years, with the postwar firming of interest rates and growth of consumer and mortgage debt. State and local tax payments have risen steeply in relation to income in the postwar period, a rise reinforced for deductible purposes by the increase of homeownership since World War II. The medical expense deductions, rather stable until 1950, have also risen sharply since then, largely because of the removal of the exclu-

[3] This estimate is based on the assumption that without the more generous standard allowance, the 1944 relationship between deductions and income would not have differed appreciably from that of 1942-1943. This resulted in a hypothetical deductions estimate of $10.0 billion for 1944 compared to the actual of $12.5 billion. (The 1943 figures are shown in Appendix D, Table D-1.)

[4] These observations will be dealt with in more detail in Chapter 8. See particularly Table 52.

sion of 5 per cent of income from the medical expenses of taxpayers 65 and older, and because of the reduction of the exclusion for all taxpayers in 1954.

Thus of $33.5 billion deductions on taxable returns in 1956, we find $12.5 billion in the optional standard form and $21 billion in the itemized form. Of the latter, $5.5 billion are for state and local taxes, another $4.6 billion for philanthropic contributions, $4.5 billion for personal interest payments, and $3 billion for medical expenses. As we shall see later, the relative size of these deductions is not indicative of the relative size of the underlying aggregate expenditures. Personal interest payments are probably larger than philanthropic donations, and medical expenditures exceed both of them, even though on tax returns medical deductions are smaller than either of the other two. The large proportion of the total coming from the standard deduction may have some effect on the cyclical sensitivity of the personal deduction aggregate, referred to earlier. Conversion of a large amount of the deductions into a flat 10 per cent of income has made the cyclical variability of the deductions more akin to that of income, and hence seems to make the tax base somewhat less cycle-sensitive than formerly.[5] We shall explore the effect on built-in flexibility in the next section.

The amount of deductions classified as miscellaneous has fluctuated, on average, between one-tenth and one-fifth of the total. Serving as a catch-all for items we could not estimate separately, its composition has been neither constant over time, nor made up solely of personal expense items. In recent years it has included, among other items, deductions for alimony payments, gambling losses, the taxpayers' share of interest and taxes on cooperative apartment houses, and such business-type expenses as amortizable bond premiums, and outlays in connection with employment (for example, union dues, tools and supplies, and employment agency fees).

Effect on Built-in Flexibility of the Income Tax

In what direction have personal deductions affected the built-in

[5] The evidence on this is as yet rather inconclusive. In the 1948-1949 and 1953-1954 recessions, the total of deductions did not decline as the total of reported income did. The standard deductions declined sharply, but the itemized deductions more than offset the drop. For 1954 the revisions in the tax code may account for it in part. A possible generalization on these two experiences would be that the effect of the standard deduction on built-in flexibility was not as great as suggested above, although in the same direction.

flexibility of the income tax? If we define built-in flexibility[6] as the change in tax accompanying a given change in income, or $\frac{\Delta T}{\Delta Y}$, where $T =$ tax liability and $Y =$ income, it is likely that with a given rate structure changes in tax liability, in response to changes in income, will be larger without than with personal deductions. This would be true as long as personal deductions varied in the same direction as income—not always the case as we shall see below. It was probably with a constant rate structure assumption in mind that Brown concluded: "Greater output stabilization can be achieved . . . through elimination of deductions that vary with output or income such as those for charitable contributions and for other taxes."[7]

The effect of personal deductions on built-in flexibility is not so obvious if we start with the supposition that tax rates would be different (that is, lower) in the absence of deductions. Suppose Congress wants to raise a given amount of revenue from the income tax, in some initial year, regardless of whether any deductions are allowed. For simplicity's sake, let us assume a flat rate of tax on all taxable income. Will the tax with deductions show cyclical responses similar to those of the tax without deductions? If the ratio of deductions to tax base moves inversely to the business cycle—falling as the tax base rises, and rising when the tax base declines—then the tax with deductions has the greater built-in flexibility than that without. If the ratio of deductions to tax base rises as the tax base rises, and falls as the tax base falls, then deductions lessen built-in flexibility. If deductions change by the same relative amounts as the tax base, built-in flexibility is unaffected by personal deductions.

Table 10 compares personal deductions to the tax base for the pre-

[6] Built-in flexibility, as used here, is not synonymous with, but merely ancillary to, automatic stabilization. The latter concept is concerned with the effect of induced changes in tax liabilities (or some other stabilizer) on output and income. The definition adopted here is that presented by Pechman, "Yield of the Individual Income Tax During a Recession," *op.cit.*

[7] E. Cary Brown, "The Statistic Theory of Automatic Fiscal Stabilization," *Journal of Political Economy*, October, 1955, p. 433. In a similar but more general vein, Norman Ture stated: ". . . We should be concerned with the impact of narrowing the tax base on the potential of the federal revenue system in automatically counteracting changes in the level of economic activity. . . . It appears evident to me that adopting a tax provision which narrows the tax base in relation to income increases the possibility that changes in income will not involve effective compensating changes in tax liabilities." See round table on "Federal Tax Problems," *Proceedings of the Annual Conference on Taxation, 1955*, National Tax Association, 1956, p. 362.

war period 1932-1939, and the ten postwar years 1946-1955. The two periods were chosen because both permitted year-to-year comparisons undisturbed by legal changes in exemptions, which would of course exert a strong influence on the size of the tax base.[8] Deductions on tax

TABLE 10

Relation of Personal Deductions to Tax Base, 1932-1939 and 1946-1955

(*dollars in millions*)

YEAR	*Personal Deductions*		*Tax Base*	*Tax Base before Deductions*		*Deductions as Per Cent of Tax Base before Deductions*	
	on Taxable Returns	*Estimated Total Effective Deductions*		(1)+ (3)	(2)+ (3)	(1)÷ (4)	(2)÷ (5)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1932	1,086	5,649	4,489	5,575	10,138	19.5	55.7
1933	917	4,914	4,279	5,196	9,193	17.6	53.5
1934	987	4,565	4,740	5,727	9,305	17.2	49.1
1935	1,106	4,447	5,773	6,879	10,220	16.1	43.5
1936	1,445	4,427	8,544	9,999	12,971	14.5	34.1
1937	1,633	4,599	8,669	10,302	13,268	15.9	34.7
1938	1,453	4,370	6,702	8,155	11,072	17.8	39.5
1939	1,663	4,479	8,294	9,957	12,773	16.7	35.1
1946[a]	12,571	14,801	56,656	69,227	71,457	18.2	20.7
1947[a]	15,089	17,273	65,688	80,777	82,961	18.7	20.8
1948	16,571	18,716	75,208	91,779	93,924	18.1	19.9
1949	16,895	19,095	71,980	88,875	91,075	19.0	21.0
1950	19,152	21,232	84,861	104,013	106,093	18.4	20.0
1951	22,504	24,414	100,003	122,507	124,417	18.4	19.6
1952	24,742	26,818	108,054	132,796	134,872	18.6	19.9
1953	26,961	29,066	115,627	142,588	144,693	18.9	20.1
1954	27,476	29,852	115,227	142,703	145,079	19.3	20.6
1955	30,524	32,820	127,889	158,413	160,709	19.3	20.4

[a] Figures for 1946 and 1947 in columns 1 and 3 were adjusted for comparability with later year figures by assuming a $600 per capita exemption instead of the actual $500 exemption in force in those years. The 1946 and 1947 figures are therefore somewhat smaller than corresponding figures in other tables.

Source: Column 1: Appendix Table D-1; columns 2 and 3: estimated as described in notes to Table 1 (Appendix A).

returns and total "effective" deductions indicate the same characteristic relative to the tax base: they rose relatively less than the tax base when the latter rose, and they declined by a relatively smaller amount

[8] Since the exemptions were changed in 1948 from $500 per capita to $600, we adjusted the 1946 and 1947 tax base figures to a $600 exemption basis, which was possible with a fair degree of accuracy. However, the estimates of effective deductions for 1946-1947 do not take this into account and are therefore very slightly on the high side.

when it fell—a relationship more marked in the 1930's[9] than in the postwar years. But for both periods the figures indicate that deductions slightly increased the built-in flexibility of the tax, if the tax rate is set to obtain a given yield. The figures for deductions on taxable returns are far more reliable than those for total effective deductions since, with some estimated adjustments, they are based on reported figures. The total effective deductions (a very crude series of estimates as noted in Chapter 2) are conceptually the most relevant, since not only the deductions reported on taxable returns, but also some not so reported would have become taxable in the absence of the corresponding allowances.

In the postwar years the relation between deductions and the tax base was apparently much more stable than in the '30's. Nevertheless, in the 1948-1949 and 1953-1954 recessions, the decline in the tax base was evidently reinforced by the presence of the deductions; indeed, in these instances the latter rose while the tax base dropped off. On the supposition that Congress raised the same amount of tax revenues in 1946 with or without deductions, we applied a constant flat rate of tax to each of the tax bases in columns 3 and 5 of Table 10, computed to give a tax liability of $16.3 billion for 1946 for each type of base.[10] The figures are shown in Table 11. For 1948-1949, the liabilities obtained with the base allowing deductions drop from $21.6 billion to $20.7 billion; those derived from the base allowing no deductions decline from $21.4 to $20.8 billion. The deductions thus make for slightly greater built-in flexibility than in their absence, given the assumption that the same yields would be sought regardless of whether or not deductions are allowed. Similar computations for the '30's give the

[9] See also Adolph J. Goldenthal, *Concentration and Composition of Individual Incomes, 1918-1937*, Temporary National Economic Committee, Monograph No. 4, Washington, D.C., 1940, pp. 99-100. Goldenthal observes, in a somewhat different context, that "deductions from economic income are a larger proportion of economic income in years of diminished incomes than in years of increased incomes," during the period 1918 to 1937.

[10] The figure of $16.3 billion corresponds to that actually reported in *Statistics of Income* for 1946. The application of a constant flat tax rate to the tax bases of the postwar years is not unreasonable in the light of Pechman's (*op.cit.*, p. 9) and our own findings. When we use a given rate schedule, the rates under the 1954 code, for instance, we find that the tax has behaved almost like a flat-rate tax with respect to the total tax base over the period 1946-1955:

1946	24.1	1951	23.9
1947	23.8	1952	23.3
1948	24.2	1953	22.9
1949	23.8	1954	23.3
1950	24.5	1955	23.4

same results for 1937-1938, a period when deductions did not continue to rise as they did in 1948-1949 (Table 10). Built-in flexibility is nevertheless greater with than without the deductions in this instance, too.

If we hold rates constant while studying the effect of deductions on

TABLE 11

Tax Liabilities Obtained with Assumed Flat Rate on Tax Base before and after Personal Deductions, 1933-1939 and 1946-1955

(millions of dollars)

YEAR	*With Current Tax Base* (1)	*With Tax Base Before Deductions* (2)
	(rate: 0.074)	*(rate: 0.033)*
1932	330	330
1933	317	303
1934	351	307
1935	427	337
1936	632	428
1937	642	438
1938	496	365
1939	614	422
	(rate: 0.287)	*(rate: 0.228)*
1946	16,281	16,281
1947	18,852	18,915
1948	21,585	21,415
1949	20,658	20,765
1950	24,355	24,189
1951	28,701	28,367
1952	31,011	30,751
1953	33,185	32,990
1954	33,070	33,078
1955	36,704	36,642

$330 million for 1932 and $16,281 million for 1946 are the reported tax liabilities for these two years in *Statistics of Income*. Rates for each column were obtained by dividing these two liabilities by the respective tax base figures for those years, as given in Table 10.

Source: Column 1: rate times column 3, Table 10; column 2: rate times column 5, Table 10.

built-in flexibility, then built-in flexibility is likely to be lessened by the operation of deductions, as illustrated by the 1937-1938 experience. The absolute decline in tax base is smaller with deductions allowed. By the same token the 1948-1949 and 1953-1954 experiences do not confirm this: deductions rose in that period and the absolute decline in the tax base is therefore in this instance greatest when deductions are allowed.

In any case, it should be evident from the foregoing that the effect on built-in flexibility attributed to deductions depends heavily on what the relation between level of tax rates and deductions is assumed to be. In the short run, any change in tax law or practice regarding deductions is more likely to affect revenue than tax rates. When the rate structure remains thus unchanged, any change in deductions may well cause an opposite change in built-in flexibility, as Brown has pointed out. Over the long run, budgetary requirements may exert the dominant influence in determining the amount of revenue raised by the income tax. Within broad limits, statutory changes in the size of the tax base may affect the level of statutory rates rather than revenue. In the same way, the allowance of deductions may in the long run affect the level of statutory rates rather than the level of revenue and, as has been shown above; their existence may thus tend to increase built-in flexibility by some small amount.

Distribution by Size of Income on Tax Returns

The change over time in the composition of the personal deductions, described in the first section of this chapter, has been accompanied by changes in their distribution by income groups.[11] Until 1941 deductions exhibited a tendency to rise in relation to taxpayers' income; since then the curve describing this relationship has been U-shaped. This is shown by the percentages in Table 12.

The percentages are given both inclusive and exclusive of the miscellaneous deductions, because that category has always contained some negative income (that is, expense and loss) items. This was particularly true of the earlier years and has tapered off in time.[12] For instance, the 1918 and 1928 miscellaneous deductions include the net losses of sole proprietors and partners of unincorporated businesses, and before 1937 they also include amounts that were distributed to beneficiaries and hence deducted from income on fiduciary tax returns. But the

[11] All figures are deductions as per cent of adjusted gross income. But in distributing the returns by income size groups, statutory net income is used for years up to 1943 and adjusted gross income thereafter. This change in classification moves some taxpayers into a higher group than the one they were in before 1944. Therefore, the change results in a slightly lower ratio of deductions to income for a given income group when the ratio is a rising function of income. The opposite results when the deduction-income ratio is a declining function of income. When the curve describing the ratios is U-shaped, the change in classification raises the declining portion and lowers the rising portion of the curve slightly.

[12] For an enumeration of the various items included under miscellaneous in the different years, see the notes to this Table in Appendix E.

TABLE 12

Personal Deductions as Per Cent of Adjusted Gross Income on Taxable Returns, by Size of Income, Selected Years, 1918-1956

INCOME GROUPS[a] ($000's)	1918	1928	1933	1937	1943	1945	1947	1949	1952	1954	1956
INCLUDING MISCELLANEOUS DEDUCTIONS[b]											
Under 2	4.5	8.9	8.2	8.2	9.0	11.3	11.4	11.4	11.6	11.6	11.8
2-3	6.3		10.7	9.7	8.3	11.6	11.4	11.7	12.1	12.4	12.7
3-5	7.5		13.0	11.0	7.7	11.9	12.5	12.5	12.7	13.3	13.6
5-10	15.3	12.0	15.0	11.9	7.9	11.0	11.6	13.0	13.0	13.6	14.0
10-25	14.1	12.9	15.7	12.0	7.4	8.5	9.2	11.3	12.0[c]	12.5[c]	12.6
25-50	13.6	12.4	17.8	12.0	7.3	8.2	8.9	9.9	10.5[c]	11.2[c]	11.3
50-100	14.8	12.1	21.3	12.7	7.6	9.3	10.0	10.4	11.3	12.0	12.3
100-500	15.1	11.1	24.0	14.7	8.7	11.8	12.0	12.8	14.4	15.9	17.1
500 and over	20.9	9.4	19.4	16.7	9.0	12.3	12.6	13.4	15.3	18.8	19.3
Average[d]	10.6	11.3	14.2	11.3	8.2	11.1	11.5	12.1	12.5	13.1	13.4
EXCLUDING MISCELLANEOUS DEDUCTIONS[b]											
Under 2		4.3	5.8	5.8	8.2	11.0	11.1	11.0	11.3	11.3	11.5
2-3		4.4	7.6	6.7	7.5	11.1	10.9	11.3	11.7	12.0	12.2
3-5		7.4	9.4	7.9	6.8	11.0	11.6	11.6	12.0	12.6	12.8
5-10		8.8	11.0	8.8	6.7	9.7	10.0	11.6	11.8	12.5	12.9
10-25		9.7	11.2	9.0	6.1	7.1	7.5	9.5	10.3[c]	11.0[c]	11.2
25-50		9.6	12.8	9.2	6.0	6.8	7.1	8.0	8.6[c]	9.4[c]	9.7
50-100		9.5	15.3	10.2	6.2	7.6	7.8	8.3	9.0	9.8	10.4
100-500		8.8	16.8	12.1	7.1	9.6	9.4	9.9	11.4	13.1	14.5
500 and over		8.3	12.5	13.8	7.6	10.5	10.0	11.0	12.6	16.6	17.3
Average		8.5	10.2	8.4	7.3	10.4	10.5	11.1	11.4	12.1	12.4

[a] Statutory net income classes until 1943; adjusted gross income classes thereafter.

[b] In the tabulation that includes the miscellaneous deductions, the latter were also part of adjusted gross income. When the miscellaneous category was excluded, it was omitted from adjusted gross income as well as from the deductions total.

[c] For 1952 and 1954 the percentages given are for the income group $10-20 thousand and 20-50 thousand.

[d] The ratio of total deductions to income in this table does not correspond to that shown in Table 11. In the latter table an attempt was made to present both deductions and adjusted gross income free of most business deductions. It was not possible to do the same for each income group.

miscellaneous category also includes such personal expense items as losses due to fire, storm, and theft until 1937, and gambling losses in excess of gains until 1933. The figures excluding miscellaneous deductions are probably closer to the total of truly personal deductions.

It is evident from both tabulations in the table that before World War II the personal deductions as a whole removed a larger proportion of income from the tax-base of high-income taxpayers than of low-income ones. For 1928 the ratio of personal deductions (excluding miscellaneous) to income rises from 4 per cent for taxpayers with $3,000

and under, to almost 10 per cent for those in the $10 to $50 thousand range, and then declines to 8 per cent for incomes of $500 thousand and over. For 1933 the rise is from 6 per cent at the bottom to 17 per cent for incomes in the $100 to $500 thousand range, and 12.5 per cent in the highest income group. On 1937 tax returns, the percentage rises smoothly from 6 to 14 without any hump in the middle. The picture is not altered when we include the miscellaneous deductions in the distribution. The percentages are at a higher level, but the pattern remains the same.

Beginning with 1942, the ratio of personal deductions to income no longer rises throughout the income scale. It was lifted sharply at the bottom to a level about as high as that near the very top, mainly because of the introduction of the standard allowance optional for those with gross incomes of $3,000 or less, and the medical expense allowance with a fixed percentage exclusion. The percentages from that time on started at a high level at the lower income ranges, sagged at the middle income ranges, and rose to their initial level at high-income ranges. With surprising regularity, the ratio reached its low point at the $25 to $50 thousand income range in every year during the 1942-1953 period. It was not until 1952 that, for the first time since 1940, it went above 10 per cent at that income range. This was also the first time that personal deductions (including the miscellaneous category) exceeded one-tenth of the reported income of taxpayers in all income groups.

From 1944 on, when the 10 per cent standard deduction was inaugurated, there is a mild rise in the percentages at the lower end of the income distribution extending to the point where the upper limit of the standard deduction is reached.[13] The rise occurs because, as we move up in the income scale, relatively more taxpayers choose to itemize. Yet on returns with itemized deductions, the latter decline as a percentage of income until the $25 to $50 thousand income range is reached. The reasons for the behavior of the percentages will become clearer after we analyze in succeeding chapters the major items in the totals of deductions for each income group. Philanthropic contributions is the subject of that analysis in the next chapter.

[13] Until 1947 the upper limit of the 10 per cent deduction was $500 per return and it was reached at $5,000 of adjusted gross income. From 1948 on the limit became $1,000 for virtually all taxpayers and was reached at $10,000 income.