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CHAPTER 2

Quantitative Significance: Effect of Deductions on Tax Base and Liabilities

BEFORE dealing with each of the major personal deductions separately, an over-all quantitative view of them may be useful. To begin, we have placed the deductions within the context of other income tax magnitudes: adjusted gross income (the income concept in use since 1944), personal exemptions, and the tax base.¹ As pointed out in the preceding chapter, personal deductions and personal exemptions are the principal items that have stood, since 1913, between adjusted gross income and the tax base. Without these two allowances, adjusted gross income would in effect have constituted the tax base.

Tables 1 to 3 show the dollar amounts corresponding to the above concepts, in both absolute and relative forms. Table 1 traces for selected years, 1918 to 1955, the gap between estimated total adjusted gross income² and the tax base. Unfortunately, we possess fairly reliable estimates for only that part of the gap beginning with adjusted gross income on taxable returns (line 8). To cover the difference between total adjusted gross income and adjusted gross income on taxable returns (theoretically also explained by deductions and exemptions), we have only the information on nontaxable returns to guide us in making some crude estimates. Cast into the proverbial Scylla-and-Charybdis situation, with a set of very crude but mostly relevant data and a set of fairly accurate but less relevant data, we chose to present both.

¹ Tax base here means the amount of income to which any of the rates constituting the individual income tax schedule are applied in computing tax liability. Our tax base concept, a broad and synthetic one, corresponds approximately to the statutory concept, in the 1954 Internal Revenue code, of taxable income, which is income subject to normal and surtax plus income subject to capital gains tax. For more detail, see Appendix A.

² Total adjusted gross income is our estimate of the amount of income that would be reported on tax returns if there were no minimum filing requirements, and the public were scrupulously exact and correct in reporting income in accordance with the adjusted gross income concept. Total adjusted gross income differs from the Commerce Department's personal income concept mainly through its inclusion of net capital gains and losses, and employee contributions for social insurance, and because it excludes income in kind (such as imputed house rent, and goods produced and consumed on farms), state and local bond interest, accrued and imputed interest, a large part of military pay and family allowances, social security benefits, public assistance payments, and veterans' payments.

TABLE 1
 Gap between Total Adjusted Gross Income and Tax Base, Distribution by Personal
 Deductions and Exemptions, Selected Years, 1918-1955
 (millions of dollars)

	1918	1926	1933	1939	1946	1951	1953	1955
1. Estimated total adjusted gross income	50,301	69,481	36,445	64,674	156,065	226,603	254,450	272,723
2. Minus: adjusted gross income of nontaxable individuals and amount unexplained	35,367	50,076	28,155	47,207	37,344	42,668	43,966	43,128
3. Adjusted gross income of nontaxable individuals	32,805	46,385	26,210	43,379	18,238	21,481	20,763	21,083
4. Personal deductions	1,624	5,028	3,997	2,816	1,556	1,910	2,105	2,296
5. Personal exemptions	31,181	41,357	22,213	38,188	16,682	19,571	18,658	18,787
6. Earned income credit	—	—	—	2,375	—	—	—	—
7. Amount unexplained ^a	2,562	3,691	1,945	3,828	19,106	21,187	22,203	22,045
8. Equals: adjusted gross income on taxable returns	14,934	19,355	8,290	17,467	118,721	183,935	210,484	229,595
Minus:								
9. Personal deductions on taxable returns	1,041	1,932	917	1,663	13,245	22,504	26,961	30,524
10. Personal exemptions on taxable returns	5,772	6,244	3,094	6,564	39,653	61,428	67,896	71,182
11. Earned income credit on taxable returns	—	—	—	946	—	—	—	—
12. Equals: tax base	8,121	11,179	4,279	8,294	65,823	100,003	115,627	127,889

^a The amount of estimated total adjusted gross income (AGI) unexplained reflects possible estimating errors in the personal income figure from which total AGI was derived, in our adjustments to obtain AGI, and in the reported income tabulations in *Statistics of Income*; it also reflects underreporting due to taxpayers' errors or evasion. For years beginning with 1946, this is the residual amount of AGI after subtracting from total AGI all AGI reported on tax returns and an estimated amount not re-

ported by persons whose AGI falls below the filing requirement. For the four years 1918-1939 shown above, the unexplained amount was assumed to be 15 per cent of all reported AGI. For details, see Appendix A.

^b The tax base includes all income to which tax rates were actually applied.
 Source: See Appendix A.

*Relative Effect of Deductions and Exemptions in
Computing Tax Base, Taxable Returns*

Beginning with income reported on taxable returns, we find that the amount of personal deductions shows an almost uninterrupted rise from an estimated 7 per cent of such income in 1918, to 13.3 per cent in 1955 when it amounted to \$30.5 billion (Table 2).³ Personal exemptions have been considerably larger but have exhibited little, if any, long-run change in relation to income on taxable returns (Chart 1). They accounted, somewhat surprisingly, for roughly one-third of the income reported in each of the seven years shown in Table 2: 39 per cent in 1918, 32 in 1926, 38 in 1939, about 33 in 1946, 1951, and 1953, and 31 per cent in 1955.⁴ In view of what we know about the movement of exemptions and incomes during the period, we might have expected a steeply declining ratio of exemptions to income. This is true of the ratio of exemptions to total adjusted gross income, as we shall see below. For accuracy in stating the quantitative importance of exemptions, we must consider also nontaxable incomes, for these are excluded from the tax base primarily by virtue of the exemptions. If the ratio is computed with taxable returns only, there is no a priori reason why the ratio of exemptions to income should move in one direction rather than another as incomes and the size of exemptions change. When the amount of allowed exemptions is lowered or national income rises, or both, the exemption-income ratio for taxpayers already on the rolls tends to fall, while the ratio for new taxpayers who are only now entering the taxable group tends, on average, to be very high. The two groups therefore have an offsetting effect on the over-all ratio of exemptions to income. When the exemptions are raised or incomes fall, or both, the opposite occurs: the taxpayers with the highest exemption-income ratios drop out of the tax-paying group, but the exemption-income ratios of those who remain rise. In a period of 38

³ There is some overstatement in these figures because of the inclusion of occupational and professional expenses in the miscellaneous deductions category, as explained in Chapter 1, the end of section 2. On the assumption that since 1944 about one-half of miscellaneous deductions were really expenses incurred in the production of taxable income, the overstatement of personal deductions shown in Table 1 would amount to about one-tenth of the postwar total; or, only about nine-tenths of the amount included was truly personal. While the overstatement does not affect the trends discussed in this chapter, it must be borne in mind that the deduction figures cited (except those in Table 6) suffer from an undetermined amount of overstatement.

⁴ For other years, see Appendix Table D-3.

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TABLE 2
Deductions and Exemptions on Taxable Returns, Selected Years, 1918-1955
(dollars in millions)

	1918	1926	1933	1939	1946	1951	1953	1955
1. Adjusted gross income	14,934	19,355	8,290	17,467	118,721	183,935	210,484	229,595
2. Minus: a) Deductions	1,041	1,982	917	1,668	13,245	22,504	26,961	30,524
b) Exemptions	5,772	6,244	3,094	6,564	39,653	61,428	67,896	71,182
3. Equals: tax base	8,121	11,179	4,279	9,240 ^b	65,823	100,003	115,627	127,889
	PER CENT							
4. Adjusted gross income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
5. Minus: a) Deductions	7.0	10.0	11.1	9.5	11.2	12.2	12.8	13.3
b) Exemptions	38.6	32.3	37.3	37.6	33.4	33.4	32.3	31.0
6. Equals: tax base	54.4	57.8	51.6	52.9 ^b	55.4	54.4	54.9	55.7

^a For years beginning with 1946, the adjusted gross income figure is that given in *Statistics of Income*. For earlier years the figures are our estimates based on *Statistics of Income* data, since the concept was actually not introduced until 1944.

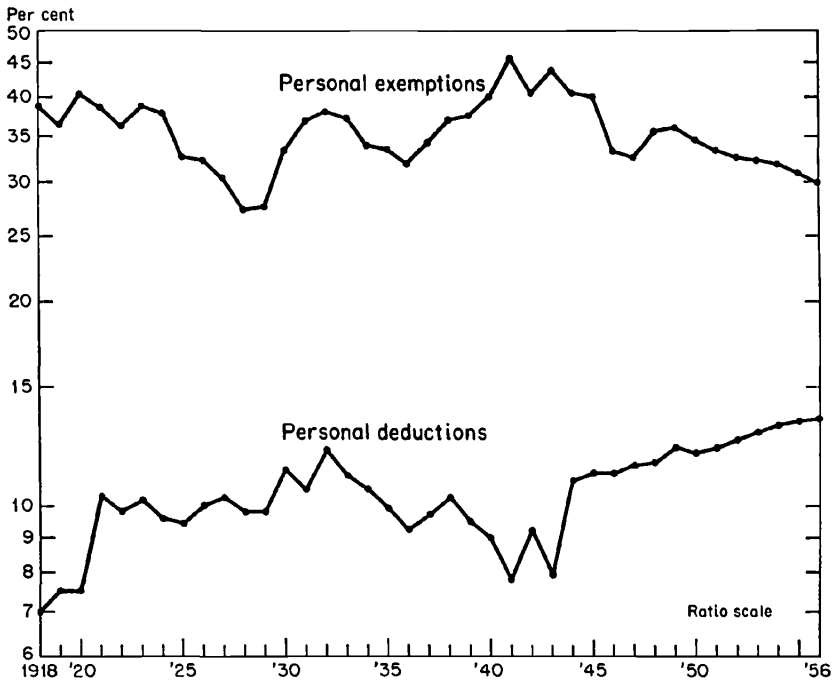
^b This figure differs from that in Tables 1 and 3 by the amount of earned income credit shown in line 11 of Table 1. It was included here to make the 1939 tax base figure more

comparable to those of other years. Actually, without the earned income credit, all the 1939 magnitudes would have been slightly larger than shown since some incomes that were not taxable would presumably have been taxable. However, the effect of adjusting for this on the percentages shown would be negligible.

Source: Table 1.

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CHART 1



Source: Table 7 and Appendix Table D-3.

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

years, 1918-1955, the exemptions-income ratio has stayed within the range of 0.32 to 0.38 almost two-thirds of the time.⁵

While the exemptions moved from about 39 per cent of adjusted gross income on taxable returns in 1918 to 31 per cent in 1955, personal deductions increased from 7 to 13 per cent over the same period. In both years the tax base was nearly the same proportion of income

⁵ The above observations are substantially similar to Vickrey's findings in his investigation of the income elasticity of various components of the tax base. Letting X = total income of the persons taxed (from the context it appears that Vickrey used statutory net income), and B = tax base, Vickrey equated the income elasticity of a simple flat-rate tax on income above a given exemption to X/B . A progressive income tax schedule may be broken down into components—as many as its bracket rates—each step-up in bracket rate constituting a flat tax on all income above the step-up level. For years before 1943, Vickrey obtained X/B values varying between 1.4 and 1.9, and he concluded that “as a first approximation the elasticity of the tax yield may be considered to fall within this range” (William Vickrey, “Some Limits to the Income Elasticity of Income Tax Yields,” *Review of Economics and Statistics*, May, 1949, pp. 141-42). X/B values may be obtained for the aggregate

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reported by taxpayers, although in absolute amount it rose from \$8 billion in 1918 to \$128 billion in 1955.

Relative Effect of Deductions and Exemptions in Arriving at Tax Base, Adjusted Gross Income

The gap between the amount of adjusted gross income reported on taxable returns and total adjusted gross income amounted to over 70 per cent of the total during most of the period 1918-1939. By 1955 it had declined to about 16 per cent. If we include the nontaxed income in our calculations, thus moving on to total adjusted gross income, our percentages for deductions and exemptions become somewhat more meaningful to the interpretation of these items, but also less reliable.

It is a truism that, except for underreporting and statistical errors in estimating, the adjusted gross income not reported on taxable returns is answered for by deductions and exemptions. Part of this income was reported on nontaxable returns; part was not reported because it was below the figure set as a filing requirement, or because some with incomes too low to be taxable ignored the filing requirement; and a third part was not reported due to error and evasion.⁶ The first two parts of the gap are accounted for by deductions and exemptions.

tax base in the same manner from Table 2 by dividing lines 1-2a by line 3 as shown below:

	1918	1926	1933	1939	1946	1951	1953	1955
X (billions)	13.9	17.4	7.4	15.8	105.5	161.4	183.5	199.1
B (billions)	8.1	11.2	4.3	9.2 ^a	65.8	100.0	115.6	127.9
X/B	1.7	1.6	1.7	1.7	1.6	1.6	1.6	1.6

^a Includes earned-income credit.

Vickrey's findings for the various components of the tax base appear to hold also for the total tax base. This is significant as a first approximation to the income elasticity of the tax, in light of what we know about the behavior of the average rate of tax with respect to the total tax base in the short run. Pechman showed that the income tax has behaved almost like a flat-rate tax with respect to the total tax base over the period 1948-1953 (Joseph A. Pechman, "Yield of the Individual Income Tax during a Recession," *National Tax Journal*, March, 1954. See also note 9 in Chapter 3). To the extent that this is so, the income elasticity of the tax base is also the income elasticity of the tax.

⁶ The approximate size of the third part—statistical error and underreporting—was estimated as a residual for the four most recent years in Table 3. To the amounts reported on all returns was added an estimated amount of adjusted gross income received by those whose incomes fell below the filing requirement in those years, and the sum was subtracted from total adjusted gross income. The relationship between "amount unexplained" and the income reported on all tax returns was assumed to hold also for the four selected pre-World War II years. For details on the method of computation, see Appendix A.

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Some rough estimates of how each subtraction helps make the two parts of the gap nontaxable are possible by use of the information supplied on nontaxable returns.

As expected, personal exemptions cover over nine-tenths of the adjusted gross income of nontaxable individuals. Inclusion of this segment of income in our computations raises the ratio of exemptions to adjusted gross income to a much higher level for the early years (1918-1939) than was the case with income reported on taxable returns only (see Table 2). In 1918 almost three-fourths of total adjusted gross income was not part of the tax base because of personal exemptions (Table 3). This figure declined to 36 per cent in 1946 and 33 per cent in 1955. The personal deductions moved in the opposite direction: from only 5 per cent of total adjusted gross income in 1918 to 12 per cent in 1955. Thus while in 1918 the amount of personal exemptions was nearly 14 times as large as that for personal expense allowances, by 1955 it was less than three times as large.

These figures reveal two important features in the development of the modern income tax. First, they show a decline in the relative amount of income eliminated by statute from the aggregate conceptually designated as the tax base (as opposed to income types that lie conceptually outside the tax base, that is, are not included in adjusted gross income). The amount eliminated is, nevertheless, still large. The amount not directly subject to tax because of deductions and exemptions has dropped from an estimated 76 per cent of total adjusted gross income in 1939 to 45 per cent in 1955. Yet after allowing for some leakage, due to underreporting and possible estimating error, the figures also show that only 47 per cent of income conceptually constituting the tax base was actually part of it. The reader is reminded that a sizable portion of income not in the actual tax base for the reasons stated is, nevertheless, part of the income of taxpayers; some (a smaller amount in recent years) is part of the income of persons not subject to tax. Thus the income not in the tax base includes not only all the adjusted gross income of nontaxpayers, but also some of the adjusted gross income of all taxpayers. Income not in the tax base, therefore, refers not to nontaxable income, but rather to the adjusted gross income not subject to the formal tax rates.⁷ Second, the figures

⁷ The size of the amount of income removed from the actual tax base does not constitute an argument against the allowances responsible for the removals. But its size may pertain to consideration of policy decisions, which take into account the cost of particular objectives of allowances granted on grounds other than that of consistency with the underlying income concept.

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TABLE 3
 Relative Importance of Personal Deductions and Exemptions in Accounting for
 Gap between Total Adjusted Gross Income and Tax Base, Selected Years, 1918-1955
 (dollars in millions)

	1918	1926	1933	1939	1946	1951	1953	1955
1. Total adjusted gross income	50,301	69,431	36,445	64,674	156,065	226,603	254,450	272,723
2. Minus: Estimated deductions ^a	2,666	6,960	4,914	4,479	14,801	24,414	29,066	32,820
Estimated exemptions ^b	36,953	47,601	25,307	44,752	56,335	80,999	86,554	89,969
Amount unexplained	2,562	3,691	1,945	3,828	19,106	21,187	23,203	22,045
3. Equals: Tax base	8,121	11,179	4,279	11,615 ^c	65,823	100,003	115,627	127,889
	PER CENT							
4. Total adjusted gross income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
5. Minus: Estimated deductions	5.3	10.0	13.5	6.9	9.5	10.8	11.4	12.0
Estimated exemptions	73.5	68.6	69.4	69.2	36.1	35.7	34.0	33.0
Amount unexplained	5.1	5.3	5.3	5.9	12.2	9.3	9.1	8.1
6. Equals: Tax base	16.1	16.1	11.7	18.0	42.2	44.1	45.4	46.9

^a Line 4 + line 9 of Table 1. tax base by an estimated \$3,321 million, which was omitted

^b Line 5 + line 10 of Table 1. here for the sake of simplicity.

^c As shown in Table 1, the earned income credit reduced the Source: Table 1.

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for exemptions and deductions indicate a change in composition of the amount of income eliminated from the tax base. The amount is less related to family size or population than previously, more to some types of personal expenses and, because of the standard deduction, to size of income.

Influence of Deductions and Exemptions on Distribution of Effective Rates among Income Groups

We may carry a step further our analysis of personal deductions within the context of other income tax magnitudes, by comparing the influence of personal deductions and exemptions on the pattern of effective rates. Aside from the difference in the total amounts of the two allowances, there is a significant difference in their distribution among income groups, which are in turn subject to varying marginal rates of tax. Table 4 shows the 1953 distribution of deductions and exemptions reported on taxable returns, by adjusted gross income

TABLE 4
Personal Deductions and Exemptions Claimed on
Taxable Returns, by Adjusted Gross Income Groups, 1953
(dollars in millions)

ADJUSTED GROSS INCOME GROUPS (<i>\$</i> 000's)	<i>Adjusted Gross Income</i>		<i>Personal Exemptions</i>		<i>Personal Deductions</i>	
	<i>Per Cent</i>		<i>Per Cent</i>		<i>Per Cent</i>	
	<i>Amount</i>	<i>of Total</i>	<i>Amount</i>	<i>of Total</i>	<i>Amount</i>	<i>of Total</i>
Under 2	9,311	4.4	4,844	7.1	1,097	4.1
2-3	17,650	8.4	7,901	11.6	2,186	8.1
3-5	63,117	30.0	26,363	38.8	8,140	30.2
5-10	81,753	38.8	24,775	36.5	10,812	40.1
10-20	19,702	9.3	3,005	4.4	2,430	9.0
20-50	12,037	5.7	857	1.3	1,337	5.0
50-100	3,994	1.9	120	0.2	486	1.8
100-500	2,392	1.1	29	a	376	1.4
500 and over	528	0.3	1	a	97	0.4
Total	210,484	100.0	67,896	100.0	26,961	100.0

^a Less than 0.05 per cent.

Source: *Statistics of Income*. The data were adjusted to exclude returns with self-employment tax only. For method, see Appendix B.

groups. Almost three-fifths of the exemptions were claimed on returns with less than \$5,000 of adjusted gross income, but only somewhat over two-fifths of the deductions fell into that income range. From the \$20,000 income level up, deductions exceeded exemptions, in absolute

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amount, even though they were only a little over one-third the size of exemptions for all returns. This is because exemptions can vary only from \$600 to a few multiples of it and therefore tend to decline in relation to adjusted gross income (except for a small range at the bottom of the income scale). Deductions varied on average from about \$70 per return at the bottom to over \$1 million at the top. Their distribution, as shown in Table 4, closely paralleled that of income.

The influence of deductions and exemptions on effective tax rates (tax liabilities divided by adjusted gross income) is shown in Table 5 and Chart 2 by means of four tax base variants constructed with figures reported on 1953 taxable returns. The first variant corresponds to the actual 1953 tax base, with both deductions and exemptions al-

TABLE 5
Effective Tax Rates Estimated from 1953 Distribution of Income
Reported on Taxable Returns, with Varying Tax Base
Assumptions, by Adjusted Gross Income Groups

(dollars in millions)

ADJUSTED GROSS INCOME GROUPS (\$000's)	1953 Tax Liability ^a Computed with:				
	<i>Adjusted Gross Income</i> (1)	<i>Deductions and Exemptions</i> (2)	<i>Exemptions Only</i> (3)	<i>Deductions Only</i> (4)	<i>No Deductions or Exemptions</i> (5)
Under 2	9,311	748	992	1,823	2,068
2-3	17,650	1,679	2,170	3,454	3,971
3-5	63,117	6,415	8,307	12,375	14,337
5-10	81,753	10,453	13,048	16,389	19,176
10-20	19,702	3,573	4,334	4,487	5,275
20-50	12,037	3,334	3,996	3,734	4,414
50-100	3,994	1,638	1,970	1,719	2,052
100-500	2,392	1,206	1,515	1,228	1,538
500 and over	528	320	409	321	410
Total	210,484	29,366	36,741	45,530	53,241
EFFECTIVE RATES OF TAX (PER CENT) ^b					
Under 2		8.0	10.7	19.6	22.2
2-3		9.5	12.3	19.6	22.5
3-5		10.2	13.2	19.6	22.7
5-10		12.8	16.0	20.0	23.5
10-20		18.1	22.0	22.8	26.8
20-50		27.7	33.2	31.0	36.7
50-100		41.0	49.3	43.0	51.4
100-500		50.4	63.3	51.3	64.3
500 and over		60.6	77.5	60.8	77.7
Total		14.0	17.5	21.6	25.3

^a 1953 rate schedule.

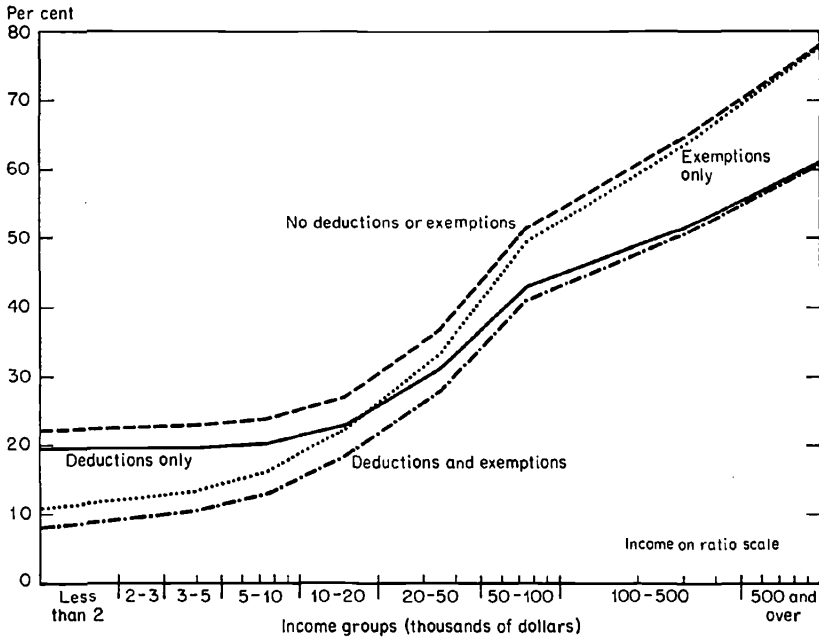
^b Tax liabilities divided by adjusted gross income.

Source: See Appendix C.

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lowed; the second allows personal exemptions only; the third allows deductions only; and the fourth allows neither exemptions nor deductions, meaning that adjusted gross income was used as the tax base. To isolate the influence of deductions and exemptions on effective rates of tax, the same rate schedule was applied to all four variants of tax

CHART 2



Source: Table 5.

Effective Tax Rates for Four Tax Base Variants, by Income Levels,
Taxable Returns, 1953

base. We chose for convenience the 1953 rate schedule, but any other rate schedule of recent times would have produced substantially the same results (and the reader can easily experiment with other rate schedules by using the detailed tax base figures shown in Appendix C). With the rate schedule held constant, and applied to one hypothetical tax base to another, the results do not imply that Congress—in the absence of provision for deductions and exemptions—would have set a rate schedule like that of recent years. The figures in Table 5, therefore, are not intended to suggest the increase in tax liabilities that would be realized if there were no allowance for personal deductions and exemptions.

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The effective rate patterns for the two variants that allow either exemptions or deductions, but not both, differ markedly (columns 3 and 4). For the variant that includes only exemptions, the rates in the lower part of the income scale are close to the current tax-base rates, and in the upper part they approach the rates that would result with the adjusted-gross-income base. If only deductions are included we obtain the opposite effective rate pattern: at the bottom it is similar to that of the adjusted-gross-income base, and at the top it resembles the current base pattern. The two effective rate curves cross slightly below the \$20,000 level. A most striking contrast emerges in the differential effect of deductions and exemptions on the progression of effective rates. When deductions alone are eliminated, the ratio of tax to income rises from 11 per cent at the lowest income level to 78 per cent at the top. When exemptions are omitted it rises only from 20 per cent to 61 per cent. Thus the personal deductions, as a whole, have tended to dampen progression in effective rates whereas the exemptions have added considerably to effective rate progression. Without personal exemptions the ratio of tax to income shows hardly any increase for the income groups with up to \$10,000 income, indicating the extent to which the exemptions have recently been responsible for effective rate progression among the great majority of taxpayers. A major reason why the exemptions explain so much progression up to the \$10,000 income level is the provision of income splitting between husbands and wives, effective since the 1948 tax law. Married couples filing joint returns have virtually been permitted to double the size of their rate brackets; for example, the first \$4,000 of their joint taxable income is subject to the same rate a single individual pays on the first \$2,000.

Effect of Deductions on Level of Liabilities and Rates

Deductions from income in computing the tax base affect either the yield of the tax or, if a given yield requirement must be satisfied, the level of tax rates. The following quantitative analysis of the short-run⁸ effects of deductions shows that the magnitudes involved are large, probably larger than commonly thought. But the quantification should not suggest a particular policy and its results. As such it would be considered unrealistic by many.⁹ Without implying suggested

⁸ It may be argued that, over longer periods of time, the flow of income itself is modified in one direction or another by some of the personal deductions, so that their net effect on tax yields, or rates, may be greater or less than shown below.

⁹ For a treatment that does propose drastic reductions in personal deductions, and

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changes in policy, we find merit in presenting some of the results of policy, as embodied in current tax law.

The significance of personal deductions in terms of total tax liability is estimated in Table 6 for 1953.¹⁰ Enlarging the tax base by the

TABLE 6
Effect of Personal Deductions on Tax Liability, 1953
(millions of dollars)

	Tax Base (1)	Tax Liability on Income		Total (4)
		Reported on Taxable Returns (2)	Not Reported on Taxable Returns (3)	
Tax base after deductions	115,627	29,366	—	29,366
Tax base before deductions	142,027	36,017	421	36,438
Increase, line (2)—(1)	26,400	6,651	421	7,072
Per cent increase in total liability, line (3) ÷ (1) × 100				24.1
Rate reduction possible (equal propor- tionate change in all rates)				19.4

Source, by column

(1) Table 1. The personal deductions were reduced by one-half of estimated miscellaneous deductions (see text note 3).

(2) Table 5. Adjusted for omission of one-half of miscellaneous deductions.

(3) Figure in line 4 of Table 1, reduced as in column 1, multiplied by lowest bracket rate for 1953.

(4) Rate reduction possible equals $(1 - \frac{29,366}{36,438}) \times 100$.

amount of personal deductions claimed in that year, we find the number of taxable returns increases somewhat and hence also the total amount of adjusted gross income reported on taxable returns.¹¹ We assume in our computations that all of the roughly \$2 billion of adjusted gross income not reported on taxable returns because of deductions (see Table 1) would have been taxable at the lowest bracket rate

presents estimates of the effect of the reductions in terms of increased tax liabilities and possible rate reductions, see Joseph A. Pechman, "Erosion of the Individual Income Tax," *op.cit.*, pp. 1ff.

¹⁰ The figures in Table 6, unlike those in the preceding tables, are presumed to exclude the part of miscellaneous deductions which consists of professional and occupational expenses incurred in the production of taxable income. The adjustment made is as indicated in note 3 above, and is therefore only approximate.

¹¹ This was not taken into account in Table 5, since our data for income not reported on taxable returns are too sketchy to be distributed by income groups. Table 5 thus shows only the redistribution of tax liability within the adjusted gross income aggregate reported on taxable returns in 1953.

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in the absence of these allowances. This is undoubtedly correct for all but a small amount. At 1953 rates, tax liabilities were reduced from an estimated \$36.4 to \$29.4 billion, that is, by \$7.1 billion. In that year the revenue cost of the deductions was somewhat less than one-fourth of the actual yield of the personal income tax.

Another way to see the significance of personal deductions is to determine how much individual income tax rates could be reduced, rather than how much more revenue could be obtained at existing rates, if the tax base were not lowered by the amount of the personal deductions.¹² This view has merit in the eyes of those who think that tax rates would not have risen to their current level without the type of tax base in existence. To hold the total tax liability approximately constant, the increase in the tax base from \$116 billion to \$142 billion, resulting from removing the deductions, might have permitted an equal proportionate reduction of all bracket rates by almost one-fifth in 1953. Alternatively, a reduction of all rates by close to 5 percentage points would have offset roughly the increase in the tax base. The overall average rate of tax (total tax liability divided by tax base) would then have been 20.7 instead of 25.4 per cent. But with an approximately constant tax liability, a lowering of rates commensurate with the widening of the base would not, of course, produce any change in the average tax burden (tax liability divided by income). Nominal rates would be lower, but the real rate of taxation would, on average, remain the same. It follows also that increments to income, though taxed at lower nominal rates, would still be generally subject to the same effective marginal rates as before. The possible merits of broadening the tax base are that (1) a higher tax yield is possible at given nominal rates, or (2) a given tax yield can result from nominal rates that are closer to actual effective rates. The lower level of rates will, of course, benefit those who had only relatively small deductions. Conversely, only the same taxpayers suffer from the higher nominal rates necessary with a smaller tax base.

The rather impressive size of the personal deductions and their

¹² This is the general approach taken by, among others, William F. Hellmuth, Jr., "Erosion of the Federal Corporation Income Tax Base," *Proceedings of the Annual Conference on Taxation, 1955*, National Tax Association, 1956, pp. 315-350; Pechman, "Erosion of the Individual Income Tax," *op.cit.*; Vickrey, *Agenda for Progressive Taxation*. In discussing the possible elimination of the mortgage interest deduction, Vickrey reasons that it "will increase the tax base and thus permit the rates to be decreased to a corresponding degree. This may be a distinct advantage in so far as it decreases the intensity of such other inequities as cannot be eliminated and reduces the effect of the tax on incentives to production" (pp. 23-24).

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effect on the income tax are offset, for some students, by the stringent allowance for personal expenses necessary to earn a livelihood. To these critics, the new allowance under the 1954 Revenue code for child-care expenses—not reflected in the above tax liability estimates—is only a faint beginning in the right direction. They point to the nondeductible quasi-business expenses of the physically handicapped, as, for example, the necessary taxicab fares to and from work; they cite the moving expenses to new places of employment, in some cases seasonal; and the educational costs incurred by those whose professional and business plans require higher education, such as accountants, physicians, and teachers. Some go further and suggest the capitalization and charging off against future income of all expenditures for higher education.¹³ Though the arguments for deduction of such quasi-business expenses are persuasive, it is difficult to determine the fine line of distinction between business and personal expenditures in each of these expense categories.¹⁴ Many of these demands for more liberal allowances imply overstatement of income not only on tax returns, but also in the current national income accounts of the Department of Commerce.

¹³ These suggestions, and many more, can be found in the records of hearings held by Congressional Committees. For a recent example, see Hearings before the Committee on Ways and Means, *General Revenue Revision*, 83rd Cong., 1st Sess., 1953, Part I. For an earlier, and more disinterested treatment, see Paul J. Strayer, *The Taxation of Small Incomes*, New York, 1939, particularly pp. 71 and 116-18. The most recent report advocating deduction from taxable income of higher education expenses is the *Second Report to the President*, President's Committee on Education Beyond the High School, Washington, D.C., July, 1957, p. 56.

¹⁴ This difficulty has been widely acknowledged throughout the literature on personal income taxation. For instance: "The problem of distinguishing sharply between business expense and personal expense is one which is the occasion of much practical difficulty and upon which wide differences of opinion exist." R. M. Haig, "The Concept of Income—Economic and Legal Aspects," *op.cit.*, p. 13.