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# 6

## Principal Exemption Techniques and Their Relation to Varying Objectives

Our discussion thus far has been confined largely to the type of personal allowances employed in the individual income tax of the United States. Several other types of personal allowances and various combinations of elements from different ones have been used in some other countries, and one or another of them is sometimes proposed as a substitute superior to our own. In general, the different types or techniques of personal allowances share one or more common objectives, but they differ in their distribution of emphasis and in their effects; hence some are better suited than others to achieve particular objectives. We examine and compare below the four principal exemption techniques, including the one currently used in this country. The four types are known as (1) the lump-sum or initial exemption, (2) the continuing exemption, (3) the vanishing exemption, and (4) the tax credit.<sup>1</sup>

### A. THE LUMP-SUM EXEMPTION

The lump-sum or initial exemption is defined as one that completely exempts from income tax those persons with net incomes not exceeding a stated amount, but that does not reduce the taxable income of others. It contrasts sharply with the so-called continuing exemption, such as is employed in the United States income tax, which not only excludes from tax those with incomes, after allowable deductions, equal to or less than

<sup>1</sup> See William J. Shultz and C. Lowell Harriss, *American Public Finance*, Englewood Cliffs, N.J., 1959, p. 192; Michael E. Levy, *Income Tax Exemptions*, Amsterdam, 1960.

the amount of the exemption, but deducts the same amount from the otherwise taxable income of all with larger incomes.

The objective of the lump-sum exemption is primarily to exclude the poor—defined as those with incomes only large enough or below the amount deemed necessary for a minimum tolerable standard of living, and, unlike the continuing exemption, *not* to exclude the minimum living costs of taxable persons.

The amount of the lump-sum exemption may or may not be made to vary with marital status, the number of dependents, and age or blindness. In either case, in the absence of other provisions to this end, such an exemption obviously provides no differentiation in tax treatment for individuals above the exclusion limits for variations in family responsibilities and personal needs. Further, unlike the continuing exemption, it adds nothing to the progression of effective tax rates provided by the formal rate structure for incomes above the exclusion limits.

Such an unmodified exemption technique would accord with the view that differentiation among persons for variations in dependents and other needs is not required or desirable at incomes above the exclusion limits, and that the kind and degree of rate progression desired, if any, can be best supplied by the structure of formal tax rates.

Essentially this type of personal exemption was used in the British income tax for more than a century—between 1806 and 1909. The exemption was confined to individuals with small incomes, without distinction between single persons and those with dependents. In 1910, however, allowances for a spouse and dependents were added for persons with incomes moderately above the exclusion level, but not for others. In the tax year 1918–19, for example, persons whose total income did not exceed £130 were entirely exempt; those with incomes between £130 and £1,000 received no exemption on their own account, but were allowed small tax credits for a spouse and dependents; while those with incomes exceeding £1,000 received no allowances for themselves or their dependents. A “notch” adjustment was used to prevent persons with incomes slightly in excess of the exemption limit from having their after-tax incomes reduced below the exempted amount by the tax. For example, the tax on a single person with an income of £131 was £1—the maximum amount that would prevent his after-tax in-

come from being reduced below the exemption limit of £130.<sup>2</sup> Following the report of the Royal Commission on the Income Tax in 1920, Great Britain introduced personal exemptions and dependent allowances at all income levels for the purpose of the so-called standard rate of tax, but did not provide any personal exemptions for the purpose of the surtax until 1964, when it was applicable at graduated rates on incomes above £2,000 after the personal allowances and certain other "reliefs," such as for earned income.

The Australian income tax law, as amended in 1967, continues to follow the older British tradition to some extent. Individuals with incomes not exceeding \$A 416 (the Australian dollar in 1967 generally commanded about \$1.11 U.S. in the foreign exchange markets) are entirely exempt from income tax, and no personal allowance on his own account is provided for a taxpayer with income in excess of this amount: a single person with an income in excess of \$A 416 is taxed on the entire amount of his income, not merely on the excess over this amount. But at all income levels, a taxpayer is allowed an exemption of \$A 286 for a dependent spouse and each dependent parent, and equal or smaller allowances for some other dependents.<sup>3</sup> Belgium, India, and the Netherlands also employ a lump-sum exemption for the taxpayer proper, combined with allowances at some or all higher levels of income for a spouse and dependents. Thus, the lump-sum exemption for the taxpayer proper is combined with the continuing type for a spouse and dependents, sometimes with a ceiling on the range of incomes eligible for the continuing exemptions.

The absence of personal exemptions for incomes above a lump-sum exclusion limit permits a given amount of revenue to be raised with lower nominal tax rates than under a continuing exemption. It will be recalled (see Chapter 2) that if all personal exemptions on taxable returns had been eliminated in 1965, but persons previously excluded from tax by the exemptions were excluded by some other means, the increase in taxable income would have permitted the 1965 income tax revenue to be collected with a 27 per cent reduction in the over-all effective tax rate on aggregate taxable income; and that if only the exemption for

<sup>2</sup> *Minutes of Evidence of the Royal Commission on the Income Tax*, H. M. Stationery Office, 1919, pp. 1-2, and Appendix 1, p. 6.

<sup>3</sup> The personal allowance for a dependent is reduced if the latter receives a separate income exceeding a stipulated amount.

the taxpayer proper (but not his wife's) had been eliminated, a 14 per cent cut in this rate would have been possible.

Since the legislature may adjust bracket tax rates to produce, within reasonably wide limits, approximately the amount and distribution of income tax revenues sought—subject to the aggregate of personal incomes and to various practical limitations—Australian taxpayers, for example, do not necessarily bear a heavier or differently distributed tax burden because they are denied a personal exemption on their own accounts, nor does the use of the continuing exemption in the United States necessarily lighten the income tax burden or alter its distribution among the different income classes.

It is doubtlessly advantageous to keep nominal or statutory rates as low as possible. A wide disparity between statutory and effective tax rates fosters public misunderstanding, confusion, and exaggerated notions regarding the effective level of tax rates. Further, to the extent that income taxes discourage effort and the disposition to incur risks, it is the marginal rate of tax on a person's income (that applicable to the last increment) rather than the average rate on the entire income, to which many taxpayers are the most sensitive. Hence, among other reasons, there is a strong presumption in favor of making taxable income as widely inclusive of all income as possible: by maximizing the income tax base, we minimize the levels of the statutory tax rates.

But the consequences of these differences in mere form or technique can be easily exaggerated. The effective marginal rates on additions to or subtractions from a man's total net income are of more fundamental importance than marginal statutory bracket rates when there are significant differences between them. If, to take an extreme example, the law were altered to give each taxpayer a special exemption of one-half of his otherwise taxable income, and, in order to maintain an unchanged revenue yield and an unchanged distribution of the tax burden, all bracket rates were doubled, the effective and marginal rates on all previously taxable incomes would remain unchanged despite the doubling of the marginal statutory rates.<sup>4</sup> A reduction in aggregate taxable income resulting from exemptions granted to some taxpayers but not to others, however, would require increases in both effective and statutory rates

<sup>4</sup> See Harold M. Groves, *Federal Tax Treatment of the Family*, The Brookings Institution, 1963, pp. 31 ff.

to maintain an unchanged revenue yield, if all other relevant factors remained constant.

The lump-sum exemption lends itself more readily than the continuing exemption to increases from time to time designed to take account of upward movements in consumer prices and in what are regarded as minimum tolerable living standards. The reason is that the tax effects of a rise in the lump-sum exemption are concentrated in the lower end of the income scale and entail relatively modest revenue losses, while a rise in the continuing exemption reduces the amount of taxable income in every tax bracket and is therefore relatively costly in revenue.

### *B. THE VANISHING EXEMPTION*

The fact that a number of countries couple a limited or unlimited continuing exemption for the taxpayer's spouse and dependents with a lump-sum exemption for the taxpayer proper reflects an important deficiency of the unmodified lump-sum exemption: the absence of allowance for the size of a taxpayer's family. It is recognized that, particularly for incomes slightly or moderately larger than the exclusion limit appropriate for a single person, poverty is a function of the size of the family as well as of income. The so-called vanishing exemption offers a means of allowing for this fact in logical, graduated fashion and yet avoids the extension of allowances for dependents to those with larger incomes.

In addition, the lump-sum exemption is subject to the technical disadvantage that it requires either abrupt and irrational treatment for persons with incomes only moderately larger than the exemption, or a substantial number of narrow graduated rate brackets to avoid it. This technical disadvantage is easily illustrated. If, for example, the current \$600 exemption for a single person were applicable only to individuals with this amount of income or less, after the standard or itemized deductions, the 1967 bracket rates of 14 per cent on the first \$500 of larger incomes and of 15 per cent on any part of the next \$500 would result in a tax of \$92.50 for a bachelor with \$950 of adjusted gross income who took the minimum standard deduction. That is, \$950, less \$300 minimum standard deduction, would leave \$650, of which \$500 would be taxed at 14 per cent and \$150 at 15 per cent. His after-tax income would be reduced to \$857.50, or \$42.50 less than that of a single person with a pretax income of \$900 which would be completely exempt.

If we employed the method once used in England to avoid this illogical result, we would specifically provide that the amount of tax shall in no case be greater than the amount which would reduce the aftertax income to \$900—\$50 instead of \$92.50 in the foregoing example. Technically, this would mean a rate of tax of 100 per cent on the excess of this taxpayer's income over \$900—a higher marginal rate than that imposed on the largest income; though the absolute amount of tax liability would be only \$50. Even much less drastic "notch" adjustments could produce higher marginal rates on additions to some smaller incomes than on those to larger ones, though here, again, the absolute amounts involved could be kept small.

Such discontinuities could be avoided by having numerous narrow brackets and very low tax rates, beginning perhaps at 1 per cent, at the lower end of the graduated tax scale. However, a smoothly declining vanishing exemption would serve the same purpose of avoiding rate discontinuities and also serve the broader objectives of providing appropriate graduated allowances for family size (and possibly other personal needs) in the lower part of the taxable income scale, while smoothly terminating these allowances at chosen income levels. At the same time, the vanishing exemption could provide the same or different income levels as the present continuing exemption for excluding the poor.

For example, assume that the present personal exemptions of \$600 for single persons and \$1,200 for married couples, with \$600 more for each additional exemption, were retained for adjusted gross incomes (after nonbusiness deductions) up to these amounts. Also assume that, for larger incomes, the exemptions were reduced by 25 per cent of the amount by which such incomes exceeded \$600 per exemption, up to the point at which the exemption became zero. Under these conditions, the amounts of the personal exemptions would decline smoothly as income rose, as may be seen in Table 28. They would reach zero at \$3,000 of adjusted gross income less nonbusiness deductions for single persons, at \$6,000 for married couples without dependents, at \$9,000 for three-exemption families, \$12,000 for four-exemption families, \$15,000 for five-exemption families, and \$18,000 for six-exemption families.

The vanishing technique as just described was applied in Table 28 to all personal exemptions, including those for dependents, age, and blindness. Its rationale would be that all these personal allowances are needed in declining amounts as incomes rise, and are not needed at all for larger incomes. Prior to 1934 the federal income tax operated in this

TABLE 28  
 Example of Vanishing Personal Exemption<sup>a</sup>  
 (dollars)

Adjusted Gross In- come Less Nonbusiness Deductions	Number of Exemptions					
	1	2	3	4	5	6
600	600	600	600	600	600	600
800	550	800	800	800	800	800
1,000	500	1,000	1,000	1,000	1,000	1,000
1,200	450	1,200	1,200	1,200	1,200	1,200
1,400	400	1,150	1,400	1,400	1,400	1,400
1,600	350	1,100	1,600	1,600	1,600	1,600
1,800	300	1,050	1,800	1,800	1,800	1,800
2,000	250	1,000	1,750	2,000	2,000	2,000
2,200	200	950	1,700	2,200	2,200	2,200
2,400	150	900	1,650	2,400	2,400	2,400
2,600	100	850	1,600	2,350	2,600	2,600
2,800	50	800	1,550	2,300	2,800	2,800
3,000	0	750	1,500	2,250	3,000	3,000
3,600		600	1,350	2,100	2,850	3,600
4,000		500	1,250	2,000	2,750	3,500
5,000		250	1,000	1,750	2,500	3,250
6,000		0	750	1,500	2,250	3,000
7,000			500	1,250	2,000	2,750
8,000			250	1,000	1,750	2,500
9,000			0	750	1,500	2,250
10,000				500	1,250	2,000
11,000				250	1,000	1,750
12,000				0	750	1,500
13,000					500	1,250
14,000					250	1,000
15,000					0	750
16,000						500
17,000						250
18,000						0

<sup>a</sup> Total of personal exemptions at \$600 each is reduced by 25 per cent of the amount by which it is exceeded by AGI less nonbusiness deductions.



direction to some degree by allowing the personal exemptions only for the purpose of the normal tax but not for the surtax. This deprived the upper income groups of much of the value of the personal exemptions because the normal tax rates at their steepest ranged only up to 12 per cent (during World War I), while the surtax rates, which were applicable to surtax net incomes of \$10,000 or more in 1924–31 and to \$6,000 or more in 1932–33, ranged as high as 65 per cent.

A more limited variant of the vanishing exemption would apply it only to the exemption for the taxpayer proper, retaining the continuing exemptions for dependents, age, and blindness, and treating one spouse of each joint return as a dependent. This is illustrated in Table 29.

A vanishing exemption of the kind shown in Table 28 would have to be accompanied by significant reductions in bracket tax rates unless a substantial increase in revenue was desired. We applied this vanishing exemption to the incomes and exemptions on the 1965 tax returns, and estimated that it would increase the revenue yield by about \$11.7 billion as compared with the existing exemptions, unless offsetting rate reductions were made. The more limited vanishing exemption portrayed in Table 29 would have increased tax revenues by an estimated \$6 billion, under the same conditions, unless offsetting reductions were made in the bracket tax rates.

A vanishing exemption combined with progressively graduated rates will automatically meet the usual test of a progressive rate structure: rising average or effective rates as incomes increase.<sup>5</sup> But some scholars have proposed an additional and more restrictive criterion for progressivity: that the increase in tax shall never decline as incomes rise, or, more exactly, that the actual marginal rate shall not decline with any increase in income.<sup>6</sup> To satisfy this criterion under a vanishing exemption, the increase in the bracket rate just after the point where the exemptions expire must be sufficient to offset the decline in the actual

<sup>5</sup> For a detailed mathematical analysis of the effects of the lump-sum, vanishing, and continuing types of exemptions upon the progression of marginal and average effective tax rates, see Michael E. Levy, *Income Tax Exemptions*, Amsterdam, 1960.

<sup>6</sup> See A. G. Pigou, *A Study of Public Finance*, London, 1947, Pt. II, Ch. 2; Richard A. Musgrave and Tun Thin, "Income Tax Progression, 1929–48," *Journal of Political Economy*, December 1948; Levy, *Income Tax Exemptions*, Ch. I and Mathematical Appendix to Ch. I; Richard A. Musgrave, *The Theory of Public Finance*, New York, 1959, pp. 121 ff.

TABLE 29

Example of Vanishing Exemption for Taxpayer Proper Combined with Continuing Exemptions for Spouse, Dependents, Age, and Blindness <sup>a</sup>  
(dollars)

Adjusted Gross In- come Less Nonbusiness Deductions	Number of Exemptions					
	1	2	3	4	5	6
600	600	600	600	600	600	600
800	550	800	800	800	800	800
1,000	500	1,000	1,000	1,000	1,000	1,000
1,200	450	1,200	1,200	1,200	1,200	1,200
1,400	400	1,150	1,400	1,400	1,400	1,400
1,600	350	1,100	1,600	1,600	1,600	1,600
1,800	300	1,050	1,800	1,800	1,800	1,800
2,000	250	1,000	1,750	2,000	2,000	2,000
2,200	200	950	1,700	2,200	2,200	2,200
2,400	150	900	1,650	2,400	2,400	2,400
2,600	100	850	1,600	2,350	2,600	2,600
2,800	50	800	1,550	2,300	2,800	2,800
3,000	0	750	1,500	2,250	3,000	3,000
3,200		700	1,450	2,200	2,950	3,200
3,400		650	1,400	2,150	2,900	3,400
3,600		600	1,350	2,100	2,850	3,600
3,800		600	1,300	2,050	2,800	3,550
4,000		600	1,250	2,000	2,750	3,500
4,200		600	1,200	1,950	2,700	3,450
4,400		600	1,200	1,900	2,650	3,400
4,600		600	1,200	1,850	2,600	3,350
4,800		600	1,200	1,800	2,550	3,300
5,000		600	1,200	1,800	2,500	3,250
5,200		600	1,200	1,800	2,450	3,200
5,400		600	1,200	1,800	2,400	3,150
5,600		600	1,200	1,800	2,400	3,100
5,800		600	1,200	1,800	2,400	3,050
6,000 and over		600	1,200	1,800	2,400	3,000

<sup>a</sup> Exemption for taxpayer proper is \$600 less 25 per cent of the amount by which his AGI less his other exemptions and nonbusiness deductions exceeds \$600.

marginal rate resulting from the absence of further declines in the personal exemption. The statutory marginal rates and the actual marginal rates differ in a vanishing exemption over that part of the rate schedule in which the exemption declines.

This is illustrated in Table 30 which contains a portion of Table 28

TABLE 30  
Progression of Average, Highest-Bracket, and Marginal Tax Rates for a  
Four-Exemption Family Under the Vanishing Exemption  
Portrayed in Table 28, 1967 Tax Rates

Adjusted Gross In- come Less Nonbusiness Deductions (dollars)	Amount of Ex- emption (dollars)	Tax Lia- bility (dollars)	Average Tax Rate (per cent)	Highest Bracket Rate (per cent)	Marginal Rate (per cent)
2,400	2,400	0	0	0	0
2,800	2,300	70	2.50	14.00	17.50
3,200	2,200	140	4.38	14.00	17.50
3,600	2,100	215	5.97	15.00	18.75
4,000	2,000	290	7.25	15.00	18.75
4,400	1,900	370	8.41	16.00	20.00
4,800	1,800	450	9.38	16.00	20.00
5,200	1,700	535	10.29	17.00	21.25
5,600	1,600	620	11.07	17.00	21.25
6,000	1,500	715	11.92	19.00	23.75
6,400	1,400	810	12.66	19.00	23.75
6,800	1,300	905	13.31	19.00	23.75
7,200	1,200	1,000	13.89	19.00	23.75
7,600	1,100	1,095	14.41	19.00	23.75
8,000	1,000	1,190	14.88	19.00	23.75
10,000	500	1,710	17.10	22.00	26.00
12,000	0	2,260	18.83	22.00	27.50
14,000	0	2,760	19.71	25.00	25.00
16,000	0	3,260	20.38	25.00	25.00
18,000	0	3,820	21.22	28.00	28.00
21,000	0	4,700	22.38	32.00	29.33

for a four-exemption family, together with columns showing, for various levels of income, the amount of tax liability, the average tax rate on adjusted gross income less nonbusiness deductions, the highest applicable bracket rate, and the actual marginal rate—that is, the increase in tax liability as a proportion of the increase in income after business deductions. It will be observed that the vanishing exemption in conjunction with the 1967 bracket rates provides rising average or effective tax rates as incomes increase, up to the point at which the exemption disappears, after which uninterrupted continued progression is provided by the bracket rates alone. If measured by the criterion of rising effective tax rates, the result is a progressive tax structure. The more restrictive criteria of level or rising marginal rates are also met in the example in Table 30 for all the incomes shown, except for a dip from 27.5 to 25 per cent for those incomes just over \$12,000 and up to \$16,000. Since a taxpayer's average tax rate and total tax liabilities would continue to rise within this range of incomes, the small dip in the marginal rate would doubtless be regarded as unimportant by many, though it could be avoided by offsetting changes in the progression of bracket rates or a more gradual reduction of the exemptions.

As compared with the lump-sum exemption, the vanishing type offers the advantages, then, of avoiding an abrupt distinction between the excluded poor and those with incomes moderately greater, while still confining the allowances to a limited range of income groups—assuming the latter objective to be desirable. But how does the vanishing exemption compare with the continuing type? Again, it offers the advantage of confining the personal exemptions to a limited range of incomes, and has the added, related, advantage of permitting a given amount of income tax revenue to be raised with lower formal tax rates, while permitting the same or different total exclusion limits for the poor. It is not as simple as the continuing exemption and must be formulated with greater care to achieve a smooth progression of marginal tax rates. The lesser simplicity need not pose a difficulty for taxpayers in computing their tax liabilities, however, because tables in the tax instructions and specific directions on the tax return itself can be employed to simplify the application, as is done in connection with the rate schedules.

The "vanishing" device is already employed in the income tax statute in connection with the tax credit for retirement income. It is also em-

ployed, indirectly, in connection with the minimum standard deduction, which vanishes at \$3,000 of adjusted gross income for single persons, \$4,000 for married couples, and by \$1,000 additional for each dependent up to a maximum of six. The vanishing device is also used in the Social Security Act to govern the amount of benefit payable to eligible retired persons under the age of 72 who obtain income from gainful employment.

### *C. TAX CREDITS*

Many who favor personal allowances at all income levels for marital status, dependents, age, and blindness (or some of these), nevertheless object to the character of these allowances under the continuing exemptions employed in the United States and many other income tax systems. Their objection is that with progressively graduated tax rates, an equal absolute amount of exemption gives greater absolute tax reductions to those with larger incomes than to those with smaller. It does this by substituting a zero rate of tax on the exempted amount for each taxpayer's highest bracket rate. Under 1967 tax rates in the United States, for example, the \$2,400 personal exemption of a four-exemption family with adjusted gross income of \$3,500 causes a reduction of \$364 in the income tax otherwise payable, but reduces the tax of a family of the same size with \$50,000 of adjusted gross income by \$1,200, assuming the standard deduction for nonbusiness expenses is used.

To equalize the tax-reducing value of the personal allowances at all levels of income, some countries substitute tax credits for absolute amounts of exemptions, and this is often proposed for use in the United States. Taxpayers would first make a preliminary calculation of their tax liabilities on the full amount of their adjusted gross incomes after non-business deductions, and would then deduct their tax credits from the tax otherwise payable. Wisconsin introduced tax credits in lieu of absolute amounts of exemptions in 1927 and its example was followed by a number of other states. In 1948, as previously noted, President Truman proposed that the \$500 per capita exemption then in force be supplemented by a \$40 per capita tax credit, estimating that the combination would be the tax equivalent of a per capita exemption of something more than \$700 at the bottom of the income scale, and would

concentrate 93 per cent of its benefits among individuals with incomes under \$5,000.<sup>7</sup>

More typically, the amount of tax credit contemplated is equal to the lowest bracket rate on the amount of exemption it replaces. Under such a scheme, the current \$600 exemption per capita (and for age and blindness) would be replaced by a tax credit of \$85 for each exemption—this amount being equal to the tax rate of 14 per cent on the first \$500 of taxable income plus 15 per cent on \$100. With 1967 tax rates, we estimated from the 1965 tax returns that such a substitution would have increased 1965 tax revenues by about \$10.8 billion, in the absence of offsetting rate reductions. A comparison of the amounts and effective rates of individual income tax liabilities under the present exemptions and under such a tax credit substitute, assuming the 1967 schedule of tax rates, is presented for various levels of adjusted gross income less nonbusiness deductions, in Table 31. It will be observed that, in the absence of offsetting reductions in bracket rates, the substitution of such a uniform per capita tax credit for the present personal exemptions would (1) increase the effective tax rates on all taxable incomes above \$600, (2) graduate the amount of tax liabilities more steeply, (3) increase tax revenues, and (4) increase the relative tax burden on larger as compared with smaller families in all but the lowest income brackets.

The increase of the relative tax burden on larger as compared with smaller families is marked. This effect would follow from the reduction in the tax value of the allowance for dependents in all but the lowest bracket. As may be seen in Table 31, there would be a larger increase in the effective tax rate for married couples with two children than for childless couples at all income levels above \$1,200.

The amount of the tax credit could conceivably be made large enough to cause aggregate tax liabilities to remain the same as under the present system of exemptions, other things being equal. But this would not prevent a shift to a more sharply graduated structure of effective tax rates. On the other hand, the bracket rates of tax could conceivably be adjusted downward in such a way as to avoid any significant change in the degree of graduation of effective rates and any increase in revenue. In that event, however, the principal effect of the change from personal exemptions to tax credits would be to reduce the relative tax allowance

<sup>7</sup> *Annual Report of the Secretary of the Treasury, 1948*, pp. 302, 319.

TABLE 31

Comparison of Amounts and Effective Rates of Individual Income Tax Liabilities Under Present \$600 Exemptions and Under a Substitute Tax Credit of \$85 Per Exemption

Adjusted Gross In- come Less Nonbusiness Deductions (dollars)	Amounts of Tax (dollars)			Effective Rates (per cent)		
	1967 Law <sup>a</sup>	Tax Credit Proposal	Increase	1967 Law <sup>a</sup>	Tax Credit Proposal	Increase
			Over 1967 Law			Over 1967 Law
<i>A. Single Person, No Dependents</i>						
500	0	0	—	0.0	0.0	—
1,000	56	60	4	5.6	6.0	0.4
1,500	130	140	10	8.7	9.3	0.7
2,000	209	225	16	10.4	11.2	0.8
2,500	293	320	27	11.7	12.8	1.1
3,000	386	415	29	12.9	13.8	1.0
3,500	481	510	29	13.7	14.6	0.8
4,000	576	605	29	14.4	15.1	0.7
4,500	671	715	44	14.9	15.9	1.0
5,000	778	825	47	15.6	16.5	0.9
6,000	998	1,045	47	16.6	17.4	0.8
8,000	1,480	1,545	65	18.5	19.3	0.8
10,000	2,022	2,105	83	20.2	21.0	0.8
15,000	3,706	3,855	149	24.7	25.7	1.0
20,000	5,800	5,985	185	29.0	29.9	0.9
25,000	8,230	8,445	215	32.9	33.8	0.9
50,000	22,230	22,505	275	44.5	45.0	0.6
100,000	55,076	55,405	329	55.1	55.4	0.3
500,000	335,070	335,405	335	67.0	67.1	0.1
1,000,000	685,070	685,405	335	68.5	68.5	<sup>b</sup>
5,000,000	3,485,070	3,485,405	335	69.7	69.7	<sup>b</sup>
<i>B. Married Couple, Joint Return</i>						
1,000	0	0	—	0.0	0.0	—
1,500	42	45	3	2.8	3.0	0.2
2,000	112	120	8	5.6	6.0	0.4
2,500	185	200	15	7.4	8.0	0.6
3,000	260	280	20	8.7	9.3	0.7
3,500	338	365	27	9.7	10.4	0.8
4,000	418	450	32	10.4	11.2	0.8
4,500	501	545	44	11.1	12.1	1.0
5,000	586	640	54	11.7	12.8	1.1

(continued)

## The Personal Exemptions in the Income Tax

TABLE 31 (concluded)

Adjusted Gross In- come Less Nonbusiness Deductions (dollars)	Amounts of Tax (dollars)			Effective Rates (per cent)		
	1967 Law <sup>a</sup>	Tax Credit Proposal	Increase Over 1967 Law	1967 Law <sup>a</sup>	Tax Credit Proposal	Increase Over 1967 Law
6,000	772	830	58	12.9	13.8	1.0
8,000	1,152	1,210	58	14.4	15.1	0.7
10,000	1,556	1,650	94	15.6	16.5	0.9
15,000	2,710	2,840	130	18.1	18.9	0.9
20,000	4,044	4,210	166	20.2	21.0	0.8
25,000	5,596	5,850	254	22.4	23.4	1.0
50,000	16,460	16,890	430	32.9	33.8	0.9
100,000	44,460	45,010	550	44.5	45.0	0.6
500,000	320,140	320,810	670	64.0	64.2	0.1
1,000,000	670,140	670,810	670	67.0	67.1	0.1
5,000,000	3,470,140	3,470,810	670	69.4	69.4	<sup>b</sup>
<i>C. Married Couple, Two Children, Joint Return</i>						
2,000	0	0	—	0.0	0.0	—
2,500	14	30	16	0.6	1.2	0.6
3,000	84	110	26	2.8	3.7	0.9
3,500	155	195	40	4.4	5.6	1.1
4,000	230	280	50	5.8	7.0	1.2
4,500	306	375	69	6.8	8.3	1.5
5,000	386	470	84	7.7	9.4	1.7
6,000	552	660	108	9.2	11.0	1.8
8,000	924	1,040	116	11.6	13.0	1.4
10,000	1,304	1,480	176	13.0	14.8	1.8
15,000	2,410	2,670	260	16.1	17.8	1.7
20,000	3,708	4,040	332	18.5	20.2	1.7
25,000	5,212	5,680	468	20.8	22.7	1.9
50,000	15,860	16,720	860	31.7	33.4	1.7
100,000	43,740	44,840	1,104	43.7	44.8	1.1
500,000	319,300	320,640	1,340	63.9	64.1	0.3
1,000,000	669,300	670,640	1,340	66.9	67.1	0.1
5,000,000	3,469,300	3,470,640	1,340	69.4	69.4	<sup>b</sup>

<sup>a</sup> Internal Revenue Code of 1954 as amended through 1965. Tax liabilities are based on rates effective for 1967.

<sup>b</sup> Less than .05 per cent.



(at each income level above the lowest and up to the highest tax bracket) of those taxpayers with larger families.

The relative merits of equalizing the absolute tax-reducing value of the dependent and other personal allowances at all levels of income as compared with allowing their value to vary somewhat with size of income have been previously reviewed in other connections. It is, essentially, a question of whether greater emphasis should be given in this connection to vertical equity—equity as between smaller and larger incomes—or horizontal equity—as between individuals with equal incomes but unequal family responsibilities or personal needs (because of age or blindness).

In favor of tax credits, it may be contended that the personal allowances should only protect minimum needs from income tax; that these needs are the same at all income levels (and actually do not require any special allowances at incomes more than modestly above the lowest of taxable ones); and that the effective reduction of these allowances at higher income levels would, other things equal, bring about a steeper upward graduation of tax liabilities and permit a reduction in tax rates on smaller incomes.

Against the substitution of tax credits for continuing exemptions, at least for the range of incomes that is heavily populated, it may be contended, as we have observed before, that allowances appropriate at lower levels of income to differentiate between the tax burdens of taxpayers with unequal family responsibilities are usually too small to do so adequately as between taxpayers with equal incomes but unequal family status at higher levels of income, e.g., between a childless married couple with \$10,000 of income and one with four children and the same income. Further, it may be argued that equitable tax treatment as between smaller and larger incomes—equitable according to the standards of the day—is best provided by graduating the effective tax rates on incomes of different size to produce the relative tax burdens deemed fair, but that this kind of equity is consistent with provisions to differentiate significantly at *each* income level between persons with unequal needs and responsibilities. What some members of each income group gain from such allowances is not necessarily obtained at the expense of members of lower income groups, but, by suitable choice of bracket tax rates, may be only at the expense of other members of the same income group. Finally, it may be argued, the present continuing exemptions in the

United States do not, in fact, provide more than modest allowances for dependents, at least in the middle and upper income brackets. The whole range of the tax-reducing value of each exemption is \$70 to \$420. As was brought out by Table 26, the tax liability of a married couple with four dependent children in 1967 was less than that of a childless couple by \$417 at \$5,000 of AGI, \$456 at \$10,000, \$600 at \$20,000, \$960 at \$40,000, \$1,392 at \$100,000, \$1,632 at \$200,000, and \$1,680 at \$500,000.

#### D. SOME VARIATIONS IN EXEMPTION PRACTICES

The relative influence of the various considerations reviewed in the foregoing (as well as others to be discussed in Chapter 7) has varied among different countries. In considerable measure, this may be attributed to differences in traditions and in economic circumstances. Nevertheless, despite these variations, there is a remarkable degree of similarity in the character of the personal allowances in the various income tax laws. The following comments are intended only to call attention to some of the ways in which elements of the four principal types of personal allowances are sometimes combined or modified, and sometimes supplemented by other structural elements of the income tax.<sup>8</sup>

Personal exemptions that recognize varying family responsibilities are

<sup>8</sup> These comments are based upon various published and unpublished materials, including mimeographed data obtained from the Harvard Law School International Program in Taxation (through the courtesy of Professor Oliver Oldman) and data from the United Nations; *Foreign Tax and Trade Briefs*, ed. Walter H. Diamond, New York, Fallon Law Book Company; Carl S. Shoup, John F. Due, Lyle C. Fitch, Sir Douglas MacDougall, Oliver S. Oldman, and Stanley S. Surrey, *The Fiscal System of Venezuela*, Baltimore, 1959, p. 87 ff.; John F. Due, "The Fiscal Structure of European Countries," reprinted from *Collectanea de Estudos*, No. 12, 1961, Lisboa, Portugal, Centro de Estudos de Estatística Economica; Harold M. Groves, *Federal Tax Treatment of the Family*, The Brookings Institution, 1963; and the following books in the World Tax Series of the Harvard Law School International Program in Taxation: Henry J. Gumpel and Reubens Gomes de Sousa, *Taxation in Brazil*, 1957; Henry J. Gumpel and Hugo B. Margains, *Taxation in Mexico*, 1957; Walter W. Brudno and Frank Bower, *Taxation in the United Kingdom*, 1957; Walter W. Brudno, *Taxation in Australia*, 1958; Norr, Duffy, and Sterner, *Taxation in Sweden*, 1959; and Brudno, Cobb, and Palkhivala, *Taxation in India*, 1960.

usually lacking in the so-called "schedular" income taxes. Many countries that have inherited a Latin tradition impose such taxes at flat but unequal rates on different types of income, though an exempted amount in each schedule, without regard to family status, is common. Exemptions that vary with family responsibilities are usual in graduated general income taxes, including the so-called complementary or global income taxes commonly imposed nowadays by countries that also use schedular income taxes. The following comments are confined to general and complementary income taxes.<sup>9</sup>

In most western European countries, as in the United States, the exemption or exclusion limit in the graduated income tax—the level of income on which no tax is payable—is now so low as to subject the bulk of the population to the tax. As previously noted, such countries as Australia, Belgium, India, the Netherlands, and others employ a combination of lump-sum and continuing exemptions, the personal exemption of the taxpayer proper being of the lump-sum type, and those for a spouse and dependents being of the continuing type. A number of countries have provisions that restrict the tax-reducing value of a continuing exemption to its value in the lower brackets of taxable income. The Union of South Africa accomplishes this result by providing the personal allowances in the form of tax credits; New Zealand does so by placing a ceiling on the amount of tax reduction permissible from the allowance for dependents. Austria eliminates the allowances after income reaches a certain level.

Sweden varies the amount of the personal exemption, to some extent, according to the relative cost of living in the place where the taxpayer resides. Each area is allocated to one of four "place groups" arranged on the basis of the relative cost of living, and larger exemptions are granted to taxpayers residing in place groups with higher living costs. Belgium provides larger personal allowances to persons living in large cities than to those living in smaller places.

The exemptions for dependent children are sometimes on a uniform per capita basis, as in the United States, but a number of countries vary the amount according to the number of children in the family, some of them granting a larger and some a smaller exemption for the first child. Austria raises the exemption for each succeeding child up to the fifth, and a larger allowance for any succeeding child than for a first is pro-

<sup>9</sup> Except that, in the case of Belgium, the graduated "professional" tax, though nominally a schedular tax, is treated here as a part of the general income tax.

vided by Finland, France, and Israel; but Australia and the Union of South Africa provide a larger allowance for a first than for a succeeding child, and India makes no allowance for more than two children. Like the United States, Belgium, Canada, Italy, the Netherlands, and New Zealand give an equal exemption for each dependent child.<sup>10</sup> Great Britain makes significant differentials in the amounts of the children's exemptions according to age.

The family allowance systems of many countries are more important than their personal exemptions provisions for families with dependent children. This is notably true of Sweden, which now grants no personal exemptions for children in its income tax but makes tax-exempt cash grants quarterly to the mother for each child under 16, regardless of income. Similarly, Great Britain and Canada greatly augment the value of their income tax concessions for children by their cash grants to all families with children under designated ages.

The most important means employed in some countries to reduce the tax burdens of many married couples below those of single persons with equal income consists of providing different and lower rate schedules, often achieved by income-splitting. This is clearly true in the United States for incomes of about \$12,000 and over, as is indicated by the comparative figures for single persons and childless married couples given in Tables 25 and 26. The equal division of the combined incomes of husband and wife has the effect, we observed, of making the tax brackets twice as wide for married couples filing joint returns as for single persons, with the result that more of the couple's income falls into the lower tax brackets than the equal income of a single person. Sweden limits such a dual rate system to the first bracket, after which the brackets are of equal width for single and married taxpayers. Some other countries, such as the Netherlands (and the United States after the first \$500 bracket) maintain the differential throughout the rate scale.

Income-splitting or separate rate schedules are also used in some countries to provide or add to differentiation in tax treatment for families with children. The Netherlands has a separate rate schedule for each family size; Finland has three rate schedules. Income is split for income tax purposes among children as well as husband and wife in France,

<sup>10</sup> Except that, in Canada, the allowance is reduced for a child who qualifies for a monthly cash grant under the family allowance law.

where each child counts as one-half of a person; and in Ceylon, where the wife, each child, and each dependent relative counts as one-half a unit, and the husband, as  $1\frac{1}{2}$  units, up to a maximum of four units per family, as compared with  $1\frac{1}{2}$  units for a single person.

### *E. APPRAISAL OF THE U.S. EXEMPTION STRUCTURE*

In the light of our examination of the rationale of the personal exemptions, we may now briefly discuss how well the present structure of the exemptions in the United States is designed to meet the functions of the exemptions. These functions, it will be recalled, are (1) to provide an exclusion limit, that is, to exclude from income tax altogether the individuals and families with incomes deemed too small to be properly taxable, (2) to provide an allowance for the essential living expenses of all taxpayers, (3) to provide significant allowances for taxpayers with dependents and for those who are aged or blind, and (4) to add to the progression of effective tax rates, particularly in the lower brackets of taxable income.

In serving as an exclusion limit, the existing continuing exemptions are subject to two weaknesses: (a) upward adjustments to reflect changes in consumer prices or in the minimum acceptable standard of living cannot be made without reducing the taxable part of all larger incomes, with the result that, in the absence of offsetting increases in bracket rates, the revenue costs are great and the major part of the benefits do not go to the lowest of the taxable income groups; and (b) higher bracket rates are required for any given amount of income tax revenue because the continuing exemptions reduce the amount of taxable income in every tax bracket.

The minimum standard deduction enacted in 1964 represents a largely successful though imperfect attempt to surmount the former of these weaknesses by granting additional allowances only to those with adjusted gross incomes under \$10,000 and with nonbusiness deductions less than the new minima. It is largely successful because, for most taxpayers in the lower of taxable income groups, the amount of the minimum standard deduction is greater than the actual deductible expenses for which they substitute and greater than the previous limit of 10 per cent of AGI for nonitemized nonbusiness deductions; for these taxpayers the new al-

lowance is the equivalent of an addition to their exemptions. It is imperfect and not wholly equitable because it does not distinguish among taxpayers with different amounts of nonbusiness deductions, thereby nullifying the latter for all whose actual deductible personal expenses are less than the minimum standard deduction, and it provides no benefits at all for taxpayers with incomes below \$10,000 whose nonbusiness deductions equal or exceed their minimum standard deduction, perhaps by reason of unusually large medical expenses.

The lump-sum exemption would completely avoid these weaknesses, though at the cost of some discontinuity in marginal tax rates just above the exclusion limits. It would permit complete exclusion from income tax of those with incomes below a stipulated figure, without reducing the taxable incomes of others. It could be used in lieu of the present continuing exemption for the taxpayer proper even though continuing exemptions were retained for a spouse and dependents, as is done in Australia. Tax credits would be subject to weaknesses similar to those of the continuing exemptions, though in somewhat lesser degree, because alterations in them would also affect tax liabilities in every income bracket. The vanishing exemption, which may be regarded as a smoother and more flexible version of the lump-sum exemption, would not be subject to these weaknesses except in small degree, for it would reduce taxable income by declining amounts as incomes rose and would cease to reduce them altogether after the vanishing point had been reached. Like the lump-sum exemption, it could be used for the taxpayer proper even though continuing exemptions were retained for a spouse and dependents.

The second function of the continuing exemption, that of providing an allowance for the essential living expenses of all taxpayers, is, we have seen, largely illusory. An equal exemption that is given to all is truly given to none, except those excluded thereby from tax, for the tax rates on the reduced taxable amounts of incomes must be raised to offset the exemption, if the income tax is to produce a given amount of revenue. Taxpayers would be no worse off if they were deprived of the present exemption on their own accounts and the bracket tax rates on taxable income were correspondingly reduced so as to provide the same effective tax rates as before. The existence of this exemption often leads to ill-founded and misleading comparisons and inferences, such as that the adult taxpayer (above the exclusion limit) obviously needs a larger exemption than a dependent child. The exemption for the child is real:

it differentiates at every income level between taxpayers with children and those without; the exemption on the taxpayer's own account, except as it serves as an exclusion device, is essentially nominal.

In the third function, that of providing significant allowances for taxpayers with dependents and for those who are aged or blind, the present continuing exemptions, we have seen, imply an objective to vary the tax-reducing value of such allowances with the taxpayer's marginal bracket rate in order, presumably, to take account of differences in taxpaying ability arising from these variations in personal circumstances at every income level among taxpayers with equal incomes. Those who believe that the allowances for dependents are more appropriately limited to the lower and perhaps moderate income groups would logically prefer a lump-sum or vanishing exemption. Persuasive grounds for a continuing exemption rather than a tax credit for the aged and blind with incomes above the exclusion levels are even less discernible.

The continuing exemption provides a brisk progression of effective tax rates in the lower part of the income scale, apart from any graduation of bracket rates, by placing a zero rate, in effect, on the amount of income excluded by the exemption; for the exemption constitutes a larger fraction of smaller than of larger incomes. A similar effect would be provided in even greater degree by the substitution of a uniform tax credit for each exemption. The lump-sum technique would rely wholly upon the formal tax rates to provide progression, while the vanishing exemption technique would rely for progression upon formal tax rates only for incomes above those eligible for exemptions; it would add at a diminishing rate to the progression provided by the tax rates as incomes rose above the lowest taxable level to the point at which exemptions vanished.

An understanding of the functioning of the personal exemptions in the United States must go beyond structural aspects. We must consider the appropriateness of the present levels as well as the relative amounts allowed for different purposes, in relation to the cost of living, subjects to which we now turn.