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AVERAGING OF INCOME FOR INCOME-TAX PURPOSES

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THAS long been considered one of the principal defects of the graduated individual income tax that fluctuating incomes are, on the whole, subjected to much heavier tax burdens than incomes of comparable average magnitude which are relatively steady from year to year. That changes in the allocation of income, which often have no relation either to physical realities or to the real financial status of the taxpayer, should substantially affect his income-tax burden is obviously not in accordance with the principle of taxation according to ability to pay.

Two notable attempts have been made to remedy this situation by the introduction of an averaging process. In the state of Wisconsin from 1928 to 1932 the state income tax was assessed on the basis of the average income for the last three years, with certain adjustments at the transition years. However, legal difficulties arose in the collection of the tax from individuals who left the jurisdiction of the state and in the case of corporations dissolving; moreover, as incomes fell drastically with the onset of the depression, there was widespread objection to paying taxes during lean years based in part on the larger incomes of the more prosperous years. This experiment had therefore to be abandoned after only five years of operation.¹

The Commonwealth of Australia in 1921 enacted a provision that the rate of tax to be applied to the income of the current year was to be determined by reference to an average of the income for the last five years. New South Wales had had a similar provision applying only to income from "primary production" (pastoral, agricultural, and mining) since 1912. This type of provision seems

¹ For the details of the Wisconsin averaging method see Wisconsin Tax Commission, Rules and Regulations of the Wisconsin Tax Commission under the Income Tax Act of 1931 (Madison, 1932), pp. 215-19.

to avoid the difficulty encountered by the Wisconsin scheme of requiring heavy tax payments in years of reduced income. The application of this provision has again been restricted to income from primary production beginning with 1938 by the 1936 revision of the Commonwealth law.²

From 1812 to 1926 England also assessed portions of its income tax on the basis of averages. This, however, was not done for the purpose of avoiding excessive taxes on fluctuating incomes but appears, rather, to have originated as an attempt to estimate current income from the income of past years in cases where collection by withholding at the source proved impracticable. As this averaging applied directly only to the flat-rate normal tax, the effect in equalizing tax burdens was negligible.³

In the United States the special provisions concerning capital gains are founded in part on the theory that such gains frequently cause large fluctuations in the income of the taxpayer and so subject him to higher rates; they also, however, constitute, in part at least, a concession to those who maintain that capital gains should not be taxed as income at all. Unfortunately, the relief thus granted is capricious in its incidence, probably excessive in most cases, and opens considerable loopholes for tax avoidance.

Inequality of burden as between taxpayers of fluctuating and of steady incomes is not the only difficulty that is introduced by arbitrarily cutting up the income of the taxpayer according to time periods and assessing the tax for each period independently. In theory the determination of the accrued income between two points of time requires that valuations of all assets be made both at the beginning and at the end of the time period—an almost impossible task when the period is short, and an especially diffi-

- ² For the details of the Australian averaging method see Norman Bede Rydge and J. B. Collier, *Commonwealth Income Tax Acts*, 1922–1929 (Sydney, 1929), pp. 82–113; also J. B. Collier and Norman Bede Rydge, *New South Wales Income Tax Acts* (Sydney, 1930), pp. 30–35.
- ³ For a discussion of the British averaging provisions see H. B. Spaulding, *Income Tax in Great Britain and the United States* (London, 1927), pp. 211-28. A summary of the history of these provisions is given in: Great Britain: Royal Commission on the Income Tax (The "Colwyn Commission"), *Report* (London, 1920), Appen. 7(m). Testimony on the averaging provisions is indexed under "Assessment, average basis of."

cult one when there is no regular market for the assets in question. Supreme Court decisions and administrative exigencies have made it necessary to use so-called "realized income" as a base; one result of the use of this base has been that opportunities for manipulations designed to reduce the tax burden by shifting income from one year to another have been multiplied. Such manipulations have in turn evoked a complex system of rules and penalties designed to prevent such tax avoidance, such as the undistributed-profits tax, the regulations concerning allowances for depreciation and obsolescence, the penalty taxes on personal holding companies, and the disallowance of wash sales, sales among members of one family, and the deduction of large net capital losses from other income. These provisions, on the whole, have not only failed effectively to stop the avoidance but have also in many cases dealt excessively harshly with individuals who happened to be caught by the legal provisions without having had any intention of avoiding taxes.

Now a method of taxation which considers as a whole the income of the taxpayer over a long period in assessing the tax should, if properly designed, leave the total burden of tax unaffected by such shifts of income between the various years within the period, and should also result in a much closer approach to equality in the burdens of taxpayers with steady and fluctuating incomes than is possible under the crude averaging devices cited above. It is an obvious extension of the principle of taxation according to ability to pay that no taxpayer should bear a heavier or lighter burden merely because certain items of his income happen to be earned or realized in one year or another, regardless of whether this be by chance or by design of the taxpayer and regardless of any fluctuations in the needs of the government for revenue or the rates of tax in effect at various times. If a practicable system of taxation which satisfies this criterion can be put into effect, then many of the arbitrary, unpopular, and complicated provisions designed chiefly to prevent the manipulation by the taxpayer of his income in his own favor will no longer be necessary and may be discarded.

To be practicable, a method of assessment must meet certain

requirements. The most important of these, for present purposes, may be summarized as follows:

- 1. The discounted value of the series of tax payments made by any taxpayer should be independent of the way in which his income is allocated to the various income years.
- 2. The revenue for any given year should be capable of being raised or lowered by suitable modifications of the rates without too long notice.
- 3. If the taxpayer leaves the jurisdiction at any time, there should be no accumulations of untaxed income left behind and no tax due except possibly the regular tax for the last year. (This was one difficulty with the Wisconsin method.)
- 4. Any given tax payment should not be too large in relation to the income of the period immediately preceding.
- 5. Transition to and from other methods of assessing income tax should be simple.
- 6. The method of computing the tax should not be beyond the ordinary taxpayer's capacity.
 - 7. The administrative burden should not be excessive.

There are two steps in devising a method of assessment which will meet these criteria. The first is to determine a method of computing the final closing payment at the end of the averaging period (for example, at the death of the taxpayer) which will satisfy criterion 1; the second is to provide for the payment of suitable instalments during the averaging period which will satisfy criterions 2, 3, and 4.

Consider first two taxpayers, A and B, both of whom start with the same capital, obtain the same rate of return, and have identical earnings and expenditures during the period, the only difference being that A pays taxes on his income during the period, whereas B manages, by one method or another, to postpone the payment of the taxes until the end of the period. B's total income for the period will then exceed A's total income by the compound interest on the amounts which A paid as instalments on his income tax but which B avoided paying and so was able to invest. If, then, to A's total income is added the compound interest on the taxes which A has paid from the time they were paid to the

end of the period, an amount which will be called the "adjusted total income" is obtained which is the income A would have had if he had paid no taxes during the period. It may readily be seen that this adjusted total income will remain the same for any given taxpaver, regardless of any changes that may occur in the allocation of the realization of his income to the various years within the averaging period. If the final payment is determined in such a way that the aggregate present value of the taxes paid with respect to the income period is dependent only on this adjusted total income, then criterion I will be satisfied. A standard for the graduation of the tax that immediately suggests itself is that the taxpaver with a steady income throughout the averaging period shall be unaffected by the change in method of assessment, so that the taxes paid by a given individual A with a fluctuating income shall have the same present value as the taxes that would have been paid on an annual basis of assessment by a taxpaver C with a steady income of such magnitude that C's adjusted total income is equal to that of A. This standard satisfies criterion 2, at least with respect to the total payments of any one taxpayer.

In providing for the payment of annual instalments previous to the end of the income period, criterion 3 suggests that each year be treated as if it were the end of an averaging period, except that, instead of requiring a final and conclusive valuation of the capital assets of the taxpayer, any reasonable valuation tendered by the taxpayer may be accepted for the purpose of computing the accrued capital gain or loss. Any errors in valuation at this point will make no difference whatever in the total burden ultimately imposed upon the taxpayer but will merely alter somewhat the time of payment. This treatment will avoid any questions of unpaid and uncollectible taxes, will keep the tax payments fairly well in step with the income of the taxpayer, and will cause revenues to respond promptly to increases or decreases in the rates.

The principles involved in the computation of the tax for each year will then be as follows: First, the adjusted total income of the taxpayer for the period from the beginning of his averaging period to the present will be calculated by adding to his total income for the period the compound interest on the taxes which

he has paid with respect to this income. The size of the constant income which would have yielded the same adjusted total income over this period is then calculated. The next step is to calculate the present value of the taxes that would have been payable on such a constant income according to the present methods of assessment and the rates for the various years of the income period. The present accumulated value of the taxes already paid by the original taxpayer is then deducted from this sum, and the remainder is the tax currently due.

At first sight this method of determining the annual payments to be made by the taxpayer may seem hopelessly complex; it is possible, however, by constructing special tables and carrying figures forward from previous returns, so to arrange the computation that the actual work required of the taxpayer will be considerably less than that at present required of taxpayers having capital gains and losses. The special tables would be prepared by the Treasury, would be comparable in every respect to the surtax tables now in use, and would give the total tax payable on given amounts of adjusted total income, with marginal rates to be applied to income between the bracket limits given in the table. There would be one such table prepared for each number of years for which individual taxpayers will have been subject to this averaging method of assessment.⁴ Then from a previous return or

4 The following is a sample of such a table for taxpayers averaging over two years. The rates taken are the surtax rates of the revenue act of 1936 for both years, with interest at 5 per cent.

Adjusted Total Income (Dollars)	Total Present Value of Tax (Dollars)	Rate of Tax on Excess within Next Bracket (Per Cent)
0	0	0.0000
8,000	0	4.0059
12,004	164	5.1186
16,009	369	6.1408
20,015	615	7.1025
24,022	902	8.1836
28,030	1,230	9.2043
32,030	1,590	11.2441
36,050	2,050	13.2818
40,063	2,583	15.3176

This table is precisely similar to present surtax tables except for the facts that the figures are not rounded and that the amounts in the first two columns are a little over twice the corresponding amounts in present tables. These amounts

certified transcript the taxpayer would copy the total adjusted income and the total value of tax payments as of last year. The total value of taxes previously paid is then multiplied by the rate of interest fixed by the Treasury to obtain the interest accrued during the past year upon taxes previously paid. This interest is then added to the value of taxes paid as of last year to get the present value of taxes paid, and is added together with the adjusted total income from the previous return and the income reported for the past year to get the new adjusted total income. From the appropriate surtax table the taxpayer then obtains the total present value of tax corresponding to this adjusted total income by exactly the same procedure as is used at present in computing the surtax corresponding to a given surtax net income; from this total value of tax the taxpayer then deducts the total present value of past taxes paid, and the remainder is the payment due for the current year.5 These computations are fairly simple

would be a little more than three times as large for a table for taxpayers averaging for three years, and so on.

The figures given in the table are computed as follows: A taxpayer with a steady annual income (after exemptions) of \$12,000 pays a surtax each year, under the present law, of \$440. Interest on the first year's tax at 5 per cent is \$22. This \$22, added to the total income for the two-year period of \$24,000, gives the adjusted total income of \$24,022 given in the first column. The total present value of the tax is \$440 + \$440 + \$22 = \$902. The next higher level of income in the present tables is \$14,000, giving similarly an adjusted total income of \$28,030 and a total present value of tax of \$1,230; thus, the size of the total adjusted income bracket is \$4,008, and the tax on this bracket is \$1,230 - \$902, or \$328. The rate of tax on this bracket is therefore \$328 \div \$4,008, or 8.1836 per cent.

⁵ The required computations might be set out as follows on the income-tax return.

1. Net income this year (after exemptions)	\$18,500.00
2. Adjusted total income as of previous year (copied from item 5 of pre-	
vious year's return)	9,200.00
3. Total value of income taxes paid as of previous year (copied from	
item 6 of previous year's return)	252.00
4. Interest for past year on taxes paid (5 per cent of item 3)	12.60
(The rate of interest may be varied from year to year by the	
Treasury in accordance with current economic conditions. The rate	
of interest must, of course, be the same as that used in the computa-	
tion of the surtax tables.)	
5. Adjusted total income (sum of items 1, 2, and 4)	27,712.60
6. Present value of tax on item 5 (computed from surtax table)	1,204.02
7. Present value of past income taxes paid (sum of items 3 and 4)	264.60
8. Tax due (item 6 minus item 7)	939 - 42

The figures given are for the 1938 return of a taxpayer who is averaging over the two years 1937–38, having a net income, after exemptions, of \$9,200 in 1937 and

compared with many less equitable proposals for averaging and with the present computations required in the case of capital gains.

The chief drawback seems to be that a separate table is needed for each number of years for which taxpayers are permitted to average their income. Thus, after fifteen years of operation, fifteen separate tables would need to be drawn up; and while the individual taxpayer would need to consult only one, either the burden of selecting the proper table will have to be placed upon the taxpayer or the Treasury will have to undertake to mail each taxpayer the proper table on the basis of the records of previous returns. Whichever method is chosen, this should not prove an insuperable obstacle. Criterions 6 and 7 are thus fairly well satisfied.

Failure of the current tax liability to keep pace with the ability to pay of the taxpayer in accordance with criterion 4 has been a serious obstacle to the adoption of other forms of averaging, and actually was a contributing cause in the repeal of the Wisconsin averaging provision. It is possible to show, however, that under the foregoing method of computation the amounts of tax successively due will, under very general conditions, not bear too high a relation to the income of the preceding year. Under the Wisconsin method, a man with a sharply reduced income found that he still had to pay a tax based on the relatively high income obtained by averaging the income of the last three years. Here, on the other hand, a reduction in current income below the average of past years will cause the average, including the current year, to fall below the average on which the tax for previous years was based, and therefore will reduce the tax which should be payable

^{\$18,500} in 1938. For the first year, items 2, 3, and 4 are zero, so that item 5 for the first year is simply the income of that year, and so appears unaltered in item 2 above

Item 6 is calculated as follows: The largest amount in the first column of the surtax table not greater than item 5 is \$24,022.00, the excess being \$3,690.60. The tax on the first \$24,022.00 is given in the second column, \$902.00; the tax on the excess at the rate given in the third column, 8.1836 per cent, is \$302.02, a total of \$1,204.02. Except for the unrounded figures, this computation is precisely the same as that now required in computing surtax.

with respect to those years. The excess of tax actually paid over the tax assessable in view of the reduced average is, in effect, credited to the taxpayer and applied in reducing the tax for the current year. In fact, it can be shown mathematically that, if the rate remains unchanged and the income for the current year is less than the average income, the tax payable for the current year will be less than, or at most equal to, the tax that would have been payable for that year on a straight annual basis of assessment. Actually, the only case where the payment due in any given year can bear an unreasonable relationship to the income of the year immediately preceding is the case of a drastic rise in the scale of basic surtax rates accompanied by a sharp decrease in the income of the individual taxpayer. Thus, no provision for the relief of

⁶ If for the sake of simplicity it is assumed that income accrues and tax is assessed continuously, the equivalent constant income $\bar{\tau}$ of taxpayer C is determined by the following relation expressing the equality between the adjusted total incomes of A and C (see pp. 382-83):

$$\int_0^t \{r(\tau) + s(\tau) \left[e^{i(t-\tau)} - 1\right]\} d\tau = \int_0^t \{\bar{r}(t) + z(\bar{r},\tau) \left[e^{i(t-\tau)} - 1\right]\} d\tau ,$$

where $r(\tau)$ is the income of A at time τ , $s(\tau)$ is the tax payable, i is the rate of interest, e is the base of natural logarithms, $\tau = t$ is the time at which the current computations are being made, $\tau = \text{zero}$ is the beginning of the current averaging period, and $z(\tau, \tau)$ is the tax payable on a nonaveraging basis on an income r according to the schedule in effect at time τ ; \bar{r} may be called the "average income" of A.

The total present value of the taxes on the incomes of A and C are to be equal; therefore,

$$\int_0^t s(\tau) \ e^{i(t-\tau)} d\tau = \int_0^t z(\bar{r}, \tau) \ e^{i(t-\tau)} d\tau \ .$$

Differentiating these two expressions with respect to t and solving for s(t),

$$s(t) = z(\bar{r}, t) + [r(t) - \bar{r}(t)] \, \overline{m} \, ,$$

where \overline{m} is the "mean effective marginal tax rate" given by the equations:

$$\frac{1}{\overline{m}} = 1 + \frac{\int_0^t [1 - m(\tau)] d\tau}{\int_0^t m(\tau)e^{i(t-\tau)}d\tau}, \qquad m(\tau) = \frac{\partial z(\overline{r}, \tau)}{\partial r}.$$

m thus corresponds to the rate of tax on the top bracket of income.

[Footnote 6 continued on following page]

hard cases need be made except in the years immediately following a sharp increase in rates. Even in the years when such relief is necessary, the form of the relief may be made fairly simple without opening any very serious loopholes, since the number of tax-payers who will be eligible for relief will be relatively small. The relief might take the form of a provision that the tax payable in any one year shall not exceed an amount determined by applying a supplementary rate schedule, somewhat higher than the regular basic one, to the income of the taxpayer for the previous year. The reduced tax payment may be carried over as a basis for cal-

If the rates are progressive, it follows that

$$\frac{\partial^2 z}{\partial r^2} > 0.$$

Then, if $r < \bar{r}$ and if $m < \bar{m}$, which in particular will be the case when rate schedules are kept unchanged or lowered (and even if rates are raised slightly), then

$$s < z(\overline{r}, t) + (r - \overline{r}) m + \frac{1}{2} (r - \overline{r})^2 \frac{\partial^2 z(\rho, t)}{\partial r^2} = z(r, t)$$

where $r \le \rho \le \overline{r}$. Thus, the tax is less than it would be without averaging. If, on the other hand, $r > \overline{r}$, then, since $\overline{m} < 1$,

$$r-s = (r-\overline{r})(1-\overline{m})-z(\overline{r})+\overline{r} > \overline{r}-z(\overline{r});$$

that is, the residue after the tax is greater than the residue from an income equal to the average income.

If $z(r)/r < \overline{m}$ (which will permit the current rate to be considerably higher than past rates), then

$$s = z(\bar{r}) - \overline{m}\bar{r} + \overline{m}r < \overline{m}r.$$

that is, the overall rate of tax will be less than \overline{m} .

Finally, if $r > \overline{r}$ and $z(\overline{r})/\overline{r} > \overline{m}$ (which implies that current rates are considerably higher than past rates), then

$$\frac{s}{r} = \frac{1}{r} (r - \bar{r}) \left(\overline{m} - \frac{z(\bar{r})}{\bar{r}} \right) + \frac{z(\bar{r})}{\bar{r}} < \frac{z(\bar{r})}{r};$$

that is, the overall rate of tax will be less than that on the average income.

The only case left out of the foregoing limitations on the tax is the case where $r < \bar{r}$ and current rates are so much higher than previous rates that $z(\bar{r})/\bar{r} > \bar{m}$. This is the only case in which there is a possibility of relief provisions being required.

The conclusions arrived at on the assumption of continuous payments are a fortiori true in the case where the payments are made annually, since similar relations can be obtained from those above by integrating the continuous payments over successive yearly intervals.

culating subsequent payments, so that in most cases the government will not, in the long run, lose any revenue through the granting of this relief except in the most extreme cases.

Unlike such moving average plans as the Wisconsin plan discussed on page 379, no particular problems arise at the time of inauguration or abandonment of an averaging plan such as that outlined in the preceding four paragraphs. At the start, the basis that is already calculated for property in the hands of the taxpayer is all that is necessary to obtain an initial value for the capital assets of the taxpayer. If at any future time it is desired to abandon this method of assessment, the basis may again be taken as that last declared by the taxpayer or as corrected by whatever restrictions it is deemed necessary to reimpose. These problems of allocation of income occur in any case with even greater frequency under a straight annual basis of assessment.

It is apparent that such an averaging device can prevent the avoidance of tax by the shifting of income only with respect to shifts of income between years within the averaging period. If it is permitted to shift income between years included in an averaging period and previous or subsequent years, whether or not they are included in other averaging periods, the possibility of avoidance will re-emerge. It will therefore be necessary to reintroduce at the close and commencement of each averaging period such safeguards as may be available to prevent such shifting of income between one averaging period and another.

The simplest method of preventing such shifting of income is to require that an inventory of the assets of the taxpayer be made at the end of each averaging period and that the capital gains and accruals so revealed be included in the income of the last year of the preceding averaging period. While this procedure might involve a prohibitive amount of administrative work if valuation each year were required, as is the case when assessment on a strict accrual basis is proposed, only a small fraction of this work would be required here, since the valuations would be made only at relatively long intervals.

There are many reasons why the averaging period should be made as long as possible. Obviously, the longer the averaging pe-

riod, the smaller will be the administrative task of valuation and checking valuations. If the averaging periods are arranged so that their ends are staggered, then the effect of the valuation date upon the markets may be reduced by lengthening the averaging period. since then the amount to be valued at any one time will be smaller. The incentive for the taxpayer to attempt to shift his income from one period to another will be smaller the longer the averaging period, since it will be more difficult for him to forecast for the longer period what the size of his income will be and to what rates he will be subject; moreover, the actual variations in average income and average rates as between one period and another are likely to be smaller. However, the saving in interest to the taxpayer who transfers income from the last year of one period to the first year of the next will be substantially greater, since the interval between the average date of payment of the tax will be not one year but an entire averaging period. In general, the increase in equity afforded by the averaging method of assessment will become greater as the period is made longer.

The logical limit would seem to be to extend the averaging period from the majority of the taxpayer until his death. (Although it would be possible to start the averaging period at birth, the difficulties involved seem to outweigh any possible advantages, especially as such a procedure would tend to favor those who had taxable incomes during their minority.) If this plan is adopted, then only two valuations throughout the life of each taxpayer become necessary: one at the majority of the taxpayer and one at his death. The valuation at death is in most cases already required for estate-tax purposes, while the valuation at the time of the taxpayer's attainment of majority would usually involve only a very small amount of property and would be relatively easy to enforce, since in general it would be to the taxpayer's advantage to report as completely as possible.

This plan involves the imposition of a tax upon the capital gains accrued upon the taxpayer's property at the time of his death. That such gains should be taken into account in the return for the year in which the taxpayer dies has already been proposed as an independent reform designed to plug an important loophole.

Doubts have been expressed, however, as to the constitutionality of such an assessment. If the direct imposition of such a tax does prove unconstitutional, indirect methods of accomplishing the same end will probably not be difficult to find. There is the possible device of offering the averaging plan, coupled with the voluntary acceptance of such an assessment by the taxpayer, as an alternative to being taxed on an annual basis as at present; since in most cases the averaging method would, under identical rate schedules, result in a reduction of the tax burden, most taxpayers would probably elect the averaging plan. The rates applicable to those electing the annual basis of assessment might even be made somewhat higher, in order to offset any advantage that this election might have in affording loopholes for avoidance. Another method of inducing the taxpayer to accept such an assessment voluntarily might be to impose a special estate tax upon the transfer of assets containing such unrealized gains. The tax on the unrealized gains might even avoid the constitutional issue by being formulated as such an estate tax graduated according to the average income of the taxpaver.

Extending the averaging period from the majority of the taxpayer to his death automatically provides for a staggering of the ends of the averaging periods of different taxpavers so as to reduce to a minimum the influence on markets of the necessary valuations. The problem immediately arises, however, of how to treat taxpayers whose family status changes. One solution would be to cut the averaging period arbitrarily at the time of marriage, divorce, or death of spouse. Such a procedure, however, imposes a fairly heavy tax burden upon marriage, since the individual who marries will not be able to average his previous low incomes with his subsequent presumably higher incomes (or, in less frequent cases, vice versa) and will therefore have to pay heavier taxes than the man who remains single and is able to average over the longer period. This factor may altogether outweigh the concessions given the family man in increased exemptions; and if it does so, will run directly counter to most accepted notions of ability to pay. Another method of dealing with the problem would require separate returns to be filed and the tax computed and paid separately by each member of the family.

A more radical but probably more satisfactory method in the long run would be to go one step farther than the communityproperty states and consolidate the entire family income in one return, apportion this family income among the various members of the family according to proportions fixed by statute, and compute a tax separately for each member of the family, using for each person the appropriate previous total adjusted income. This method has the advantage that it is likely to prevent to a very large extent the avoidance of tax by various methods of redistributing income between members of the family. Moreover, it would eliminate the arbitrary and unjustified advantage now enjoyed by residents of the community-property states. On the whole, this seems a more equitable method of taxation than that at present in effect, even if not used in conjunction with any averaging basis of assessment. In order that this change should not be thought of merely as a method of increasing the relief given the wealthy on account of their families, it should be accompanied by a decrease of about 50 per cent in the income levels at which various rates of tax become effective, so that the actual change in the tax burden of the married will be relatively slight, with a substantial increase in the burdens of those individuals of large incomes who have no family with which they share this income.

Another important question is how far the averaging device should be extended to individuals with the lower incomes. A rigorously thoroughgoing application of the first criterion would result in requiring every adult to file a return no matter how small his income, and in permitting individuals to accumulate, as a deficit to be offset against any future income, any excess of exemptions and allowable deductions over gross income. This procedure is open to two very serious objections. The administrative job of auditing this vast number of returns would be staggering, especially as it would be necessary to check even those returns that were obviously not taxable, since if the taxpayer later has a large income, the amount of deficit reported in previous returns will affect his tax in such a year. The statistics might be interesting

but would probably be rather expensive! The other serious draw-back is that Congress might at some later time find that, having previously been somewhat more generous with exemptions and deductions than it would want to be at that time, the taxpayers would have accumulated such a backlog of deficits against which to offset any current income that no matter how far exemptions were then reduced, very little income from the lower brackets could then be made subject to tax. Thus, the result could conceivably be considerable financial embarrassment on the part of the government, or alternatively a breach of faith with the taxpayer through the abrogation of the right to set off these accumulated deficits against current income.

A simple method of getting around these difficulties is to permit personal exemptions to be deducted only to the extent of net income. This would restrict the carrying-forward of negative income to cases where business losses, capital losses, and other deductions exceed net income; in such cases a slight penalty would attach in that the benefit of the exemption for that year would be lost. Under such limitations there would be no incentive in the bulk of cases for the filing of nontaxable returns in the expectation of future increased income.

In connection with a flat-rate tax at a fairly low rate, such as the present normal tax, the application of the averaging method of assessment under the foregoing restrictions would make a slight but on the whole insignificant difference, provided only that full carry-over of losses is permitted. It may therefore be quite sufficent, at least at first, to apply the averaging method to the computation of surtax only, continuing to calculate the normal tax on an annual basis as heretofore. This plan would cut the initial administrative load down very sharply; and after experience has been gained with these returns, the plan might be extended to cover the normal tax of those paying surtax, or all taxpayers, as seems desirable on the basis of such experience.

In the case of corporations the opportunities for avoiding taxation by shifting income from year to year are more limited than in the case of individuals, since the corporation income-tax rates are but slightly graduated and since the rates themselves seem to have

been, at least in the past, rather more stable from year to year than the rates of the individual income tax. Nevertheless, the application of this averaging method, or some modification of it, may be of advantage even here, since the Treasury would thereby be freed from the necessity of checking inventory, depreciation, obsolescence, and the like, except at times of reorganization and to make sure of the absence of double counting. The question is not as important as with the individual income tax, however, since the need for the undistributed-profits tax and the special capital-gains provisions would not be affected, these being largely devices to patch up the unsatisfactory operation of the individual income tax.

Any averaging device will, of course, require a certain amount of record-keeping. The current records required under the present proposal consist of only four items: the year in which the tax-payer commenced to average, the adjusted total income, the total present value of past taxes, and the total value of the capital assets of the taxpayer as declared in his latest return. Further information may be filed but is not normally necessary for the checking of future assessments. It is probable that the decrease in other administrative work which is made possible by the employment of this method of assessment, such as the checking of capital-gains computations and checking deductions for depreciation and the like, will more than make up for the keeping of more complete records.

The averaging method of assessing income tax is not without its drawbacks. The keeping of records, the slightly more complicated method of computing the tax, the required final valuation at death (and perhaps at times of change of marital status), the existence of several surtax tables among which the correct one must be selected, the occasional need for the payment of refunds (in addition to refunds of overpayments resulting from error), and the more detailed treatment of family returns are the chief points at which objections may be raised. Special groups will also require particular attention: some approximate method of dealing with part-year returns must be devised, unless the number of surtax tables to be used is to be multiplied to an extent that may be con-

sidered intolerable; aliens who draw their income from foreign sources in some years may obtain unfair advantages under the normal operation of such an averaging device and may require special provisions; changes of residence status may present difficult problems in the case of states employing such an averaging device, as may the taxation of nonresidents. These difficulties and the many possible methods of dealing with them cannot, however, be discussed at length here.

Against these minor drawbacks are to be set substantial gains in equity as between taxpayers with steady and those with fluctuating incomes, taxpavers with fixed and those with readily manipulated incomes, taxpayers with capital gains and those with other forms of income, and single and family taxpayers. The fact that similarly circumstanced taxpayers are treated similarly produces, in turn, still further desirable results, such as a substantial decrease in the worry, expense, and economic waste which now result when taxpayers seek to minimize their tax burden, a reduction in the amount of litigation, and a decrease in the influence of the income tax upon business transactions and the economic life of the community. For example, the securities market should be freer from the extraneous influence of the arbitrary rules concerning capital gains and losses, while the influence of the income tax in reducing the amount of capital for risky enterprises should be diminished, as abnormal profits in one or two years will no longer subject the taxpayer to such high rates.

The undistributed-profits tax, as well as the surtaxes on personal holding companies and corporations improperly accumulating surplus, could be repealed completely without fear of reopening loopholes for tax avoidance. The special provisions for the taxation of capital gains could also be repealed, as such gains could be included in net income without imposing any special hardships upon the recipients of such gains, while the limitations on the deduction of capital losses could be removed without thereby opening any loopholes.⁷ The removal of the incentive to shift

⁷ Many of the complicated, controversial, and often arbitrary regulations for determining when gains are realized may be discarded; or, if this is not done, at least there will no longer be any incentive for contention on either side. The only

income from depression years, when rates are high, to prosperous years, when rates are low, should increase the cyclical stability of yield and in turn reduce the pressure to limit the deductibility of losses in times of depression, as was done in 1932. It is possible that this factor may also have some influence in reducing the severity of the business cycle.

The method of assessment outlined in this article has been developed on the assumption that the base to be adopted for income taxation is "accrued income" as opposed to the "paidincome" or "accrued-income-less-net-savings" base advocated by Irving Fisher. It is possible to adapt this method of assessment, with a few slight changes (changes which, on the whole, make its operation even simpler), to operate on the latter base; in the case of a "paid-income" tax, however, the advantages of the averaging method are much less striking than is the case with the accrued-income tax. The paid-income tax is said to be inherently less difficult of administration than the various forms of accrued-income tax; if so, there would be less room for improvement in that direction; in any case, the administrative difficulties, if they exist, are are not of the variety that would be reduced to any large extent

necessary requirement is that any amounts received from property be either reported as income or applied to reduce the basis of the property. Indeed, separate accounting for individual assets is no longer necessary; a simple declaration by the taxpayer of the estimated total value of his capital assets as of the end of the year is all that is necessary, and accuracy need not be insisted upon. Similarly, regulations for the allowance of depreciation and obsolescence may be discarded and the allowance made as the taxpayer sees fit. The problem becomes chiefly one of avoiding double counting and seeing to it that taxpayers do not postpone realization of income to the point where there is danger of loss of tax through insolvency, or realize prematurely in the hope of being able to gain through the application of relief when in later years the taxpayers report lower incomes. This latter danger is already taken care of through the provisions in existing law for jeopardy assessments; further protection could be added by stiffening the qualifications for the application of the relief provisions. It may be desirable to provide a slight incentive to taxpayers to report income and pay taxes as early as possible by setting the interest rate used in the computation of the tax slightly above the market rate.

⁸ The expenditure tax advocated by Irving Fisher is expounded in greatest detail in "Income in Theory and Income Taxation in Practice," *Econometrica*, Vol. V, No. 1 (January, 1937); also less technically in "A Practical Schedule for an Income Tax," *Tax Magazine*, July, 1937.

by an averaging method. On the other hand, the paid-income tax assessed on a straight annual basis may have a much more severe effect in accentuating the business cycle through encouraging spending in times of prosperity, when taxes are low, and discouraging it in times of depression and fiscal need, when taxes are high, than is the case with the accrued-income tax. Also, a rather severe transitory effect upon sales may be expected at times of sharp increase or decrease in rates. The application of an averaging device would substantially eliminate both of these untoward effects. The possibility of the simplification of administration in the one case, of the elimination of transitory and cyclical effects in the other case, and of the equalization of burden in both cases by means of such an average basis of assessment should make it easier to discuss the relative merit of these two bases for taxation on the basis of their long-run economic and social effects without having the issue confused by considerations of cyclical effects, relative ease of administration, and degree of discrimination against fluctuating incomes.