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The Future of the Income Tax[†]

By Joseph A. Pechman*

The federal income tax has been under attack by the economics profession for more than a decade. The attack comes from two directions: supply-siders who believe that progressive income taxation impairs economic incentives,1 and more traditional economists who would substitute a progressive expenditure tax for the income tax.² At one time, support for the expenditure tax was confined to a few members of our profession, including such distinguished names as John Stuart Mill, Irving Fisher, Nicholas Kaldor, and James Meade. Today, it is fair to say that many, if not most, economists favor the expenditure tax or a flat rate income tax. This group has joined the oppo-

[†]Joseph Pechman passed away on August 19, 1989. His Presidential address was delivered at the one-hundred second meeting of the American Economic Association, December 29, 1989, Atlanta, Georgia.

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¹Some of the more extreme supply siders argued that large tax cuts pay for themselves (see, for example, Laffer, 1981), but I believe it is fair to say that this view has been totally discredited. For a more reasonable supply-side view, see the *Economic Report of the President 1982*.

²See, for example, Michael J. Boskin (1978), David E. Bradford (1980), Charles L. Ballard, Don Fullerton, John Shoven and John Whalley (1985), Paul Courant and Edward Gramlich (1982), Martin Feldstein (1978), Robert Hall and Alvin Rabushka (1985), John Kay and Mervyn King (1983), Charles McLure (1987), Mieszkowski (1980), and Lawrence Summers (1981). It is interesting that the recent popularity of the expenditure tax among economists was stimulated by a tax lawyer, William D. Andrews (1974).

nents of progressive taxation in the attack on the income tax.

Despite an incessant barrage from both groups, no country in the world is planning to abandon the income tax or is even considering a personal expenditure tax. A wave of tax reform, beginning with the U.S. reform in 1986, has been sweeping the world, aimed at improving the income tax, not at eliminating it. Tax preferences formerly regarded as sacrosanct are being removed and there is a distinct movement toward comprehensive income taxation.³ However, individual income tax rates are being cut, tax progressivity has been declining almost everywhere, and reliance on the income tax has been diminishing.

It will come as no surprise to this audience that I approve of the base-broadening feature of the current tax reform movement, but I believe that the reduction in the redistributive effect of the income tax has gone too far. In this paper, I shall show that the progressivity of the U.S. tax system—never very pronounced, except during and immediately after the two world wars—has been declining for more than two decades and that the Tax Reform Act of 1986 reversed this decline, but only slightly. Consequently, we have a long way to go to improve the equity of the tax system. I believe this can be done without punitive tax rates that will hurt economic incentives.

I begin with a brief review of recent changes in the U.S. distribution of income and follow this with an analysis of the effect of taxes on the income distribution. I next examine arguments for and against the income tax, with particular emphasis on its effects on economic incentives and its merits when compared with the expenditure tax. I then evaluate the income tax as it emerged from the 1986 tax reform and conclude with

³See Pechman (1988).

an agenda for further reform in the context of the current fiscal crisis. I believe that, when the nation gets around to eliminating or substantially reducing the federal deficit, the income tax should play an important role.⁴

Distribution of Income and Tax Burdens

It is well known that, after several decades of relative stability, the U.S. pre-tax income distribution has become much more unequal in the last ten years. Official statistics understate the increasing inequality. At the same time, the tax system as a whole—and the income tax in particular—has become less equalizing, so that the trend toward inequality is even more pronounced after tax than before tax

Distribution of Income. The longest continuous and comparable income distribution series available to us comes from the annual Current Population Survey (CPS) of the Census Bureau. The figures show that the share of total income received by the highest fifth of the nation's families fell from 1948 to 1952, remained unchanged between 1952 and 1981, and then rose from 1981 to 1988. By 1988, the share of the top fifth was the highest ever recorded. The figures for the top 5 percent are similar, except that their share in 1987 had not quite recovered to the 1952 high (Table 1).

It is well known that very high incomes are virtually unrepresented in the CPS distribution and that official census statistics greatly understate income inequality in any year. What is not recognized is that the CPS data greatly understate the *increase* in inequality that has occurred during the 1980s because very high incomes have been increasing much faster than the incomes in the lower part of the distribution.⁵ This can be

Table 1—Before-Tax Income Shares, Census Data, Selected Years, 1948–1988, Percent.

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	Top 5 percent	Top 20 percent	
Year	of families	of families	
1948	17.1	42.4	
1952	17.4	41.5	
1957	15.6	40.4	
1962	15.7	41.3	
1967	15.2	40.4	
1972	15.9	41.4	
1977	15.7	41.5	
1981	15.4	41.9	
1987	16.9	43.7	
1988	17.2	44.0	

Source: Bureau of the Census. Income includes transfer payments (for example, Social Security benefits, unemployment compensation, welfare payments, etc.) but excludes capital gains. Distribution includes only families and excludes single persons living alone.

seen by examining changes in the shares of the top income recipients reported in the annual *Statistics of Income* published by the Internal Revenue Service (Table 2).⁶

Like the CPS data, the tax data show that the very rich in the United States—defined as either the top 1 percent or the top 5 percent of the income distribution—enjoyed about the same income increases as the average income recipient in the 1950s, 1960s, and 1970s, but their share of total income has been rising in the 1980s. From 1952 to 1981, the share of the top 1 percent of the tax units remained in a very narrow range—between 8 and 9 percent of the total income reported on tax returns. Since 1981, their share has skyrocketed to 14.7 percent in 1986. The same trends are shown by the top 2, 5, 10, and 15 percent of the tax units.

Much of the increase in the share of the top tax units reflects the large increase in realized capital gains that accompanied the bull market of the 1980s. But salaries and other incomes of the top units have also been increasing faster than average.⁷ In fact,

⁴See Musgrave (1989) for a statement of similar views.

⁵Using Pareto distributions based on income tax data to approximate the upper tail of the U.S. distribution, Rudy Fichtenbaum and Hushang Shahidi (1988) calculated that the CPS underestimation of the Gini coefficient rose from 1.7 percent in 1967 to 7.6 percent in 1984.

⁶For the method of calculation, see Pechman (1989), ch. 1.

⁷According to *Statistics of Income*, the shares of adjusted gross income other than capital gains increased from 6.59 percent in 1981 to 7.64 percent in 1986 for

Table 2—Before-Tax Income Shares, Tax Data	, SELECTED YEARS,
1948-1986, Percent	

Year				Top 10 percent of Tax Units	
1948	9.8	13.4	20.2	27.9	34.3
1952	8.7	12.1	18.7	26.7	33.4
1963	8.8	12.3	19.4	28.2	35.5
1967	8.8	12.3	19.6	28.3	35.5
1972	8.0	11.4	18.7	27.8	35.4
1977	7.8	11.3	18.9	28.3	36.1
1981	8.1	11.5	19.0	28.6	36.5
1986	14.7	18.2	26.6	36.8	45.1

Source: Statistics of Income. Income excludes transfer payments, but includes realized capital gains in full.

the movement toward inequality must have been even greater than the tax data show because they do not include the large amounts of income taxpayers were able to shelter before the enactment of the Tax Reform Act of 1986.

Many economists and statisticians have examined these trends, but nobody has been able to explain them fully. The declining share of incomes received by the lower income classes has been attributed to the increase in the number of single-parent families, slow growth in earnings of production workers, the disappearance of middle-income jobs, and other factors.⁸ But these explanations do not account for the recent explosion of earned and property incomes of those in the top tail of the distribution.

The trend toward greater inequality has developed despite the existence of an income tax in the United States for seventy-six years and of an estate tax for eighty years. Clearly, the tax system never reduced inequality very much and other forces in the 1980s have swamped whatever equalizing effect it may have had earlier. I turn now to an examination of the burdens imposed by the tax system and how they have affected the distribution of income after tax.

Distribution of Tax Burdens. I have been estimating federal, state, and local tax burdens by income classes for the last two decades on the basis of the Bookings MERGE files.9 These files are based on the CPS surveys, modified at the top by the incomes reported on federal individual income tax returns. As shown in Table 3, the tax burdens of the bottom 90 percent of the income distribution did not change very much from 1966 to 1985. By contrast, the tax burdens of the top ten percent of income recipients fell, especially those of the top 5 percent and 1 percent. Effective tax rates of the top 5 percent dropped by one-fifth between 1966 and 1985 (from 32.7 percent to 26.0 percent); for the top 1 percent, the reduction was more than one-third (from 39.6 percent to 25.3 percent).

Tax burdens of the highest income recipients fell because top federal individual tax rates were reduced throughout this period, from 70 percent in 1966 to 50 percent in 1985. Furthermore, the federal corporation income tax dwindled to relative obscurity, falling from 4.1 percent of GNP in 1966 to 1.6 percent in 1985. The proliferation of personal deductions (for example, state and local taxes, interest payments, and IRAs), tax-exempt bonds, and tax shelters were also major factors in the reduction of the tax burdens in the top part of the income distribution. The reduction in the corporate tax

the top one percent of tax units, from 17.31 to 18.77 percent for the top 5 percent, and from 35.11 to 36.56 percent for the top 15 percent.

⁸See, for example, Frank Levy (1988) and Sheldon Danziger, Peter Gottschalk, and Eugene Smolensky (1989).

⁹See Pechman and Benjamin Okner (1974) and Pechman (1985).

Table 3—Effective Rates of Federal, State, and Local Taxes, By Population Percentiles, Selected Years, 1966–1988^a

Percent						
Population Percentile ^b	1966	1970	1975	1980	1985	1988 ^c (est.)
1st Deciled	16.8	18.8	19.7	17.1	17.0	16.4
2nd Decile	18.9	19.5	17.6	17.1	15.9	15.8
3rd Decile	21.7	20.8	18.9	18.9	18.1	18.0
4th Decile	22.6	23.2	21.7	20.8	21.2	21.5
5th Decile	22.8	24.0	23.5	22.7	23.4	23.9
6th Decile	22.7	24.1	23.9	23.4	23.8	24.3
7th Decile	22.7	24.3	24.2	24.4	24.7	25.2
8th Decile	23.1	24.6	24.7	25.5	25.4	25.6
9th Decile	23.3	25.0	25.4	26.5	26.2	26.8
10th Decile	30.1	30.7	27.8	28.5	26.4	27.7
Top 5 Percent	32.7	33.0	28.4	28.9	26.0	27.4
Top 1 Percent	39.6	39.0	29.0	28.4	25.3	26.8
All Deciles ^e	25.2	26.1	25.0	25.3	24.5	25.4

Source: Brookings MERGE files.

^aAssumes corporate income and property taxes are borne by capital income.

Arrayed by comprehensive income which includes transfer payments, employee fringe benefits, net imputed rent, and corporate earnings allocated to shareholders.

^cProjected from 1985 on the basis of CBO estimates of changes in effective federal tax rates. Assumes no change in effective state-local tax rates between 1985 and 1988

d Includes only units in the sixth to tenth percentiles.

^eIncludes negative incomes not shown separately.

reflected primarily the investment incentives introduced in the 1960s and liberalized in the 1970s and 1980s, as well as a reduction in the profitability of the corporate sector. ¹⁰

Since 1985, the distribution of tax burdens has changed largely because of the enactment of the landmark Tax Reform Act of 1986. This act increased the progressivity of the tax system, most notably by raising the personal exemptions, standard deductions. and the earned income credit, and by shifting about \$25 billion of tax annually from individuals to corporations. However, this change in tax policy restored only a small fraction of the progressivity lost in the preceding two decades. At the very top of the income distribution, the 1986 federal tax reform restored about half the reduction in effective tax rates between 1980 and 1985. but left them far below the 1966 levels: the top 1 percent paid only 26.8 percent in taxes

in 1988 as compared with 39 percent in 1970 (Table 3).

The inescapable conclusion from these figures is that the well-to-do in our society had very large reductions in tax rates in recent years, while the tax rates at the low and middle income levels have not changed much. Since the before-tax distribution has become much more unequal in the 1980s, it follows that inequality has increased even more on an after-tax basis 11

Transfer Payments. The other major element of government policy affecting the distribution of income is the system of transfer payments, or negative taxes. This system in-

¹⁰See Alan Auerbach and James Poterba (1987).

¹¹Since the income tax affects economic behavior, the before-tax distributions reflect the responses of taxpayers, through portfolio shifts, substitution of nontaxable fringe benefits for cash compensation, and other actions, to the level and structure of the tax system. Hence, the after-tax distribution is more representative of the changes in inequality. For a discussion of these issues, see Eugene Steuerle (1985) and Harvey Galper, Robert Luce, and Eric Toder (1988).

Tax-Transfer Table

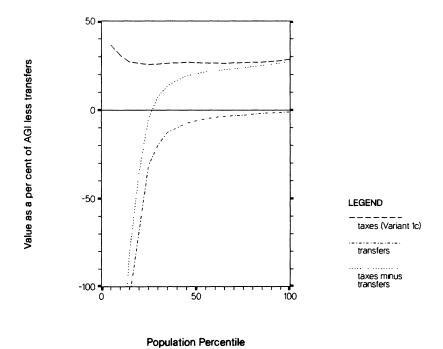


FIGURE 1. FEDERAL, STATE, AND LOCAL TRANSFERS AND TAXES AS A PERCENT OF MARKET INCOME BY INCOME PERCENTILE, 1985

cludes programs of public assistance that are designed explicitly to help the poor, but it also includes others that are not designed primarily for this purpose (for example, retirement and unemployment benefits and health insurance). To evaluate the impact of the tax-transfer system on the distribution of income, cash and in-kind transfers must be added to market incomes while taxes are deducted.

While I cannot separate the effects of transfer payments and of taxes on the recent changes in the after-tax income distribution, ¹² a snapshot for a recent year—1985—suggests what happened (Figure 1).

When family units are arrayed by their incomes from market production (wages, salaries, interest, dividends, etc.), the U.S. tax system is only mildly progressive. On the other hand, transfer payments are highly progressive. Taxes in 1985 were regressive in the lowest deciles and proportional thereafter, while transfer payments declined from over 200 percent of market incomes in the lowest decile to 1.4 percent in the highest. On balance, families in the lowest three deciles received more in transfers than they paid in taxes, while those in the top seven deciles paid more in taxes than they received in transfers.

Clearly, the tax-transfer system is progressive, mainly because of transfers, not taxes. What we are doing in the United States is financing redistributive transfers with taxes that are roughly proportional to incomes. Moreover, the tax system has been getting

¹²The income distributions used in the Brookings MERGE file for 1966 were prepared on the basis of incomes *including* transfer payments. After so many years, it is impractical to reclassify the income and tax data for 1966 by income excluding transfer payments.

less progressive in the last two decades, while the ratio of transfers to income has been increasing.¹³ In other words, the recent increases in transfer payments in the United States have been financed by the low and middle income groups, while the rich have been getting tax cuts.

What Role for the Income Tax?

Most people support tax progressivity on the ground that taxes should be levied in accordance with ability to pay, which is assumed to rise more than proportionately with income. Economists have long had trouble with the "ability to pay" concept. In recent years they have revived the old notion that consumption measures ability to pay better than income does. I believe that the person in the street is right and that we should continue to rely on the income tax to raise revenue in an equitable manner.

Ability to Pay. In the latter half of the nineteenth century, progressive income taxation was justified by "sacrifice" theories that emerged from discussions of ability to pay. Under this doctrine, ability to pay is assumed to increase as incomes rise, and the objective is to impose taxes on a basis that would involve "equal sacrifice" in some sense. If the marginal utility of income declines more rapidly than income increases and the relation between income and utility is the same for all taxpayers, equal sacrifice leads to progression.¹⁴ Whether or not one believes in sacrifice theory, the ability to pay idea has been a powerful force in history and has doubtedly contributed to the widespread

¹³Little empirical work has been done on trends in the progressivity of the transfer system itself. If it has changed, the movement in the last decade may have been toward less progressivity because welfare payments have not kept up with inflation and the coverage of the unemployment compensation system has narrowed.

rowed.

14 To be precise, equal absolute sacrifice leads to progression, equal proportionate sacrifice to still more progression, and equal marginal sacrifice to leveling of incomes from the top down until the required revenues are obtained. See Richard Musgrave (1959), pp. 99–102.

acceptance of progressive taxation.¹⁵ Young has found that the equal sacrifice model fits most U.S. tax schedules in the postwar period, with the notable exception of the schedule adopted in 1986. Similar results hold for Italy, West Germany, and Japan.¹⁶

Henry Simons vigorously attacked sacrifice theory although he argued strongly that the purpose of the progressive income tax is to reduce economic inequality.¹⁷ Simons was vague on how far progression should be pushed, but he clearly felt that it had not yet gone too far in most countries. His prescription was the pragmatic one that the tax rates should not impair economic incentives. In his policy statements, he argued in favor of a broad base and graduated rate schedule that rises to a maximum of 50 percent.¹⁸

I agree with Simons that the income tax should be used to reduce the great disparities of welfare, opportunity, and economic power arising from the unequal distribution of income. I also recognize that this view is not widely held and has probably not been the major rationale for income tax legislation in the United States or in most other countries. The income tax is widely used primarily because it raises large amounts of revenue in a moderately progressive way. Recent income tax reforms have concentrated mainly on eliminating tax preferences to improve

¹⁵See Musgrave (1959), ch. 5 and Richard Goode (1976), ch. 2. For a skeptical view of the case for the progressive income tax, see Blum and Kalven (1952).

¹⁶See H. P. Young (1990). I omit discussion of the optimal tax literature, which built on the old sacrifice theory, because it does not yet provide a basis for making judgments about the optimum degree of progression. This literature suggests that a progressive income tax is appropriate when redistribution is an objective of social policy, but the range of tax rates is very wide depending on the assumptions used. See Glen Hubbard and Kenneth Judd (1986), Nicholas Stern (1987), pp. 49–52, Henry Aaron (1989), pp. 10–12, Rosen (1988) and Slemrod (forthcoming).

¹⁷"The case for drastic progression in taxation must be rested on the case against inequality—on the ethical or aesthetic judgment that the prevailing distribution of wealth and income reveals a degree (and/or kind) of inequality which is distinctly evil or unlovely." Simons (1938), pp. 18–19.

¹⁸See Simons (1950).

horizontal equity; where income tax rates had been pushed to very high levels, they are being moderated. Curiously, the world appears to be moving toward a consensus on the Simons' view that the income tax should be levied on a broad base with graduated rates reaching a maximum of 50 percent or less, though not for his reasons.

Economic Incentives. The effects of the progressive income tax on incentives to work and to save are hard to measure. As is well known, the substitution and income effects of taxation work against each other, and the net result cannot be predicted.

Sample surveys have revealed that professional personnel do not vary their hours of work in response to high tax rates. 19 However, recent econometric studies suggest that the pre-1986 income and payroll taxes reduced the work effort of primary earners in the United States by about 8 percent, while secondary earners—who have a greater opportunity to vary their labor input—reduced their work effort by as much as 30 percent.²⁰ According to this approach, the 1986 reform may have increased labor supply of married men by only 1 percent and of married women by less than 3 percent, largely because the marginal tax rates of most workers were not reduced very much.²¹ Burtless estimates that the Reagan tax and transfer policies increased average annual taxes of men aged 25-54 by no more than 2-4 percent and of women in the same age group by no more than 3.5 percent.²²

Historical trends in U.S. labor supply are not consistent with the finding that taxes have reduced work effort. Adult males have been reducing their labor supply over the last forty years, largely through earlier retirement little of which is the effect of tax rates. The labor force participation of women has risen sharply in recent years, despite high marginal rates resulting from the requirement that married couples must file joint returns to benefit from income splitting. Studies in other countries are not reliable enough to support conclusions about the relationship between taxes and labor supply.

The effect of taxes on saving is even more ambiguous. A few studies claim that they have found a significant response to an increase in the real after-tax return on saving; others find that the response, if any, is close to zero.²³ The reduction in the personal saving rate in the United States in the 1980s confounded most economists in view of the reductions in the marginal tax rates, the incentive provided by individual retirement accounts (IRAs), and the high real interest rates, all of which should have increased the incentive to save.

The strongest conclusion one can draw from the available evidence is that the incentive effects of taxation have been relatively small. Yet the supply siders were convinced that the incentive effects were so large that rate cuts would increase revenues when tax rates are reduced.²⁴ U.S. tax rates were cut sharply in 1981 and 1986, but these cuts had little effect on labor supply and no effect on saving. Under the circumstances, so long as tax rates are not pushed to punitive levels, incentive considerations do not justify neglect of the distributional objective of tax policy.

Income vs. Expenditure Tax. The revival of interest in the expenditure tax can be traced to the difficulties of taxing income from capital under the income tax. However, economists and tax lawyers have also found

¹⁹See Break (1957) and Holland (1969).

²⁰These estimates are based on a comparison with work effort under a system of lump-sum taxes. The estimates would be reduced substantially if the basis of comparison were a proportional income tax. For summaries of recent studies and their implications for policy, see Bosworth (1984), ch. 5 and Gary Burtless and Robert Haveman (1987). The methodology of these studies is explained by Hausman (1987).

²¹See Hausman and Poterba (1987).

²²See Burtless (1989).

²³ For a review of the various studies, see Evans (1983) and Bosworth (1984), chaps. 3 and 5.

²⁴President Ronald Reagan was one of those who believed that tax rate cuts would actually increase revenues (see Reagan, 1981, p. 710). The supply-side view is defended in Raboy (1982). For an analysis of this view, see Meyer (1981).

efficiency reasons to prefer the expenditure tax and these need to be addressed.²⁵

A basic difference between the income and expenditure taxes is in the time perspective of the two taxes. The perspective of the income tax is relatively short run—a year or several years to allow for short-run income fluctuations. Consumption is more stable than income and is alleged, therefore, to be a better measure of long-term well-being. In fact, under certain simplifying assumptions. the bases of taxes on the discounted present value of income and expenditure are the same over a lifetime. Assuming perfect capital markets, constant discount rates that apply equally to all people under all circumstances, tax rates that are constant and proportional, and no gifts and bequests, the present values of lifetime expenditures of people with the same (discounted) lifetime incomes are the same regardless of when the incomes are consumed.26

Advocates of the expenditure tax regard the lifetime perspective as a major advantage because it permits them to pretend that taxing consumption is equivalent to taxing personal endowments. A tax on endowments, if they could be measured, would avoid the distortionary effects of either an income tax or an expenditure tax. If it is assumed that lifetime consumption approximates endowment, then taxing consumption at flat, and constant rates treats equally all taxpayers with the same endowment.²⁷ The totally unrealistic assumptions underlying this line of reasoning strain credulity, but it does seem to lie behind the strong support for the expenditure tax by many economists.

²⁵For analyses of the relative merits of the income and expenditure taxes, see Kaldor (1955), Musgrave (1976), Pechman (1980), Aaron and Galper (1985), and Bradford (1986).

The identity of lifetime incomes and expenditures holds when there are gifts to others and bequests, provided the gifts and bequests are counted as expenditures. Aaron and Galper (1985) defined such a tax as a "lifetime" income tax, arguing that "there is no decical reason why a particular astronomical regularity should be enshrined in the tax law" (pp. 21-22).

²⁷See Bradford (1980), pp. 106-9, Bradford (1986); p. 315, and Musgrave (1976), pp. 11-12. Bradford hölds this view while Musgrave does not.

The lifetime perspective has little merit even without the endowment rationale. In my view, it is difficult enough to measure ecónomic circumstances over relatively short periods. Taxation of lifetime consumption (or income) hardly seems appropriate in a world of changing tax rates, substantial family instability, economic and political change. and uncertainty. Except for the attractiveness of the arithmetic, lifetime economic circumstances as measured by discounted lifetime incomes or consumption cannot be regarded as satisfactory indexes of ability to pay.²⁸ Moreover, taxation of annual consumption expenditures at graduated rates would destroy the identity of lifetime taxes of taxpavers with the same (discounted) lifetime incomes.

The expenditure tax is alleged to be superior to the income tax on the additional ground that the income tax reduces the return on saving and therefore encourages current as against future consumption. Even if saving remained unchanged, the distortion generates a welfare loss for consumers. It has been pointed out by many economists that this effect must be balanced against the welfare cost of further distorting the choice between labor and leisure. There is no theoretical basis for judging whether the welfare gain from eliminating the intertemporal distortion of consumption would exceed the welfare loss from increasing the intratemporal distortion of the labor-leisure choice.²⁹

A tax that omits saving from the tax base can be shown to be the same as a tax applying only to labor income and exempting all property income.³⁰ Several expenditure tax

²⁸For an excellent discussion of the lifetime vs. the short-run perspective as a basis for taxation, see Goode (1980).

See, for example, Feldstein (1978), Atkinson and Sandmo (1980), Atkinson and Stiglitz (1980), Auerbach and Kotlikoff (1987), ch. 5, Rosen (1988), p. 469, and Gravelle (1988 and 1989).

³⁰Like the equality between a consumption and an income tax in present value terms, this assumes that tax and interest rates remain constant over a lifetime and there are no gifts and bequests. Let s = saving, w = wages, c = consumption, r = the interest rate, and assume that saving in the first period is consumed during

advocates have, in fact, proposed a tax on labor income on grounds of simplicity and administrative feasibility.³¹ Most people would be appalled by a proposal to substitute a wage tax for income tax, yet that is essentially what expenditure tax proponents are advocating.

Many economists are attracted to the expenditure tax because it would not tax income from capital and would thus eliminate all the income tax problems arising from the use of the realization principle for calculating capital gains and losses and from the accounting conventions for inventories, depreciation, and depletion used in arriving at net business profits. There would also be no need to adjust the tax base for inflation, as consumption would be measured appropriately in current dollars. These are serious problems for income taxation and I shall deal with them later, but it would be unfortunate to abandon the income tax for administrative and compliance reasons alone.

The transition from the income tax to an expenditure tax would be troublesome. The retired elderly would draw down assets, some of which had previously been taxed under the income tax, to finance current consumption that would be taxed yet again. To avoid this double tax, some method would need to be devised to identify consumption from previously taxed accumulations. Grandfathering all assets at the time an expenditure tax is initiated would leave a big loophole for people with large amounts of untaxed accrued capital gains. But I have not seen any practical method of making the

the second, then

$$s_1 = w_1 - c_1$$

$$c_2 = w_2 + (1+r)s_1$$

$$c_1(1+r) + c_2 = (1+r)(w_1 - s_1) + w_2 + (1+r)s_1$$

$$c_1(1+r) + c_2 = (1+r)w_1 + w_2.$$

necessary distinctions in order to prevent wholesale tax avoidance and to achieve equity.³²

Under an expenditure tax, taxpayers who save could accumulate large amounts of wealth over a lifetime. Many, but by no means all, expenditure tax advocates support wealth or estate and gift taxes to prevent excessive concentrations of wealth. But the history of transfer taxation in this country and abroad provides little assurance that effective death and gift taxes would be levied to supplement an expenditure tax.

Proponents of expenditure taxation often compare the merits of a comprehensive expenditure tax with the income tax as it has developed. It is hard to believe that an expenditure tax would be enacted without numerous exemptions and exclusions. In fact, most of the eroding features of the income tax (for example, preferences for housing, fringe benefits, child care, state-local borrowing, etc.) might be carried over to the expenditure tax. Thus, an expenditure tax is no less immune to erosion than the income tax and, in such circumstances, it loses much of its attractiveness.

I conclude that income is a better indicator of ability to pay than consumption and that the major upheaval of substituting an expenditure tax for an income tax cannot be justified on theoretical or practical grounds.

How Much Progression? The effective degree of progression of the income tax depends on the comprehensiveness of the tax base as well as on the tax rates. We have learned from experience that high, graduated tax rates do not assure progressivity of the income tax. For most of the period since the end of World War II, the top U.S. income tax rates were 70 percent or higher. Yet little equalization resulted because of the erosion of the base of the individual and corporate income taxes and because of increases in the payroll tax for Social Security.³³ According

³¹See Hall and Rabushka (1985), Bradford (1986), ch. 14, and McLure, Mutti, Thuroni, and Zodrow (1988), ch. 9.

³²For a discussion of these problems and possible solutions, see Aaron and Galper (1985), pp. 78–79 and 99–103, and U.S. Department of the Treasury (1977), chaps. 4 and 6.

³³The combined employer-employee payroll tax rose from 6 percent in 1960 to 12.26 percent in 1985 and

Table 4—Gini Coefficients of Inequality Before and After Federal Taxes, Selected Years, 1977–1988

Year	Gini Coefficients			
	Before Federal Taxes	After Federal Taxes		
1977	0.4502	0.4185		
1980	0.4627	0.4320		
1984	0.4884	0.4700		
1988	0.4940	0.4722		

Source: Congressional Budget Office, The Changing Distribution of Federal Taxes: A Closer Look at 1980, (July 1988), p. 98.

to estimates of the Congressional Budget Office (CBO), in 1977, when the top income tax rate was 70 percent and the general corporate tax rate was 48 percent, the Gini coefficient of inequality was 0.4502 before tax and 0.4185 after federal taxes (more than half of which were individual and corporate income taxes). In 1980, when the top tax rate was still 70 percent (though only on unearned income) and the corporate rate was 46 percent, the Gini coefficient was 0.4627 before tax and 0.4320 after the same taxes. Thus, as measured by the Gini coefficient, the equalization achieved by the federal tax system declined from a modest 0.0317 points (7.0 percent) in 1977 to an even more modest 0.0307 points (6.6 percent) in 1980 (Table 4).

Two major pieces of tax legislation were enacted during the 1980s. One increased inequality, the other reduced it. The 1981 Act, enacted after Ronald Reagan's sweeping victory in the 1980 presidential election, increased inequality by reducing income tax rates by 23 percent across the board (with a top rate on ordinary income of 50 percent), lowering the capital gains rate to a maximum of 20 percent, introducing generous

Despite the large rate cuts at the top of the income scale, the 1986 act increased income tax progression, though not to the 1980 level. By 1984, the equalization provided by the federal tax system had declined to 0.0184 points (3.8 percent) in terms of the Gini coefficient. As a result of the 1986 act, the degree of equalization increased to 0.0218 points (4.4 percent) in 1988 (Table 4). While this change is modest, it is noteworthy as the first movement toward greater income tax progressivity at least since 1964, when the Kennedy-Johnson tax cut was enacted.

I suggest that a minimal goal of federal tax policy in the next several years should be to restore the equalization achieved by the federal tax system in the mid-1970s.³⁴ While this may appear to be a modest goal, it turns out to be a rather ambitious undertaking, particularly if income tax rates are to be kept to moderate levels. Before calculating the tax rates, it is necessary first to establish the appropriate tax base for a modern income tax.

Reform of the Income Tax

The proper base for the income tax was described fifty years ago by Henry Simons, who argued that it should conform with an economic definition of income.³⁵ Admittedly, the use of a comprehensive income tax con-

deductions for individual retirement accounts, and providing very liberal depreciation allowances for business investment on top of the previously enacted investment tax credit. The Tax Reform Act of 1986 reduced inequality by increasing personal exemptions and the standard deduction, equalizing the tax rates on capital gains and ordinary income, and closing numerous loopholes. At the same time, income tax rates were reduced to a maximum of 33 percent on individuals and 34 percent on corporations.

^{14.1} percent in 1985. It is scheduled to rise further in 1990 to 15.3 percent. The maximum taxable earnings level rose from \$4,800 in 1960 to \$7,800 in 1970, \$25,900 in 1980, \$39,600 in 1985, and \$48,000 in 1989. The maximum taxable earnings levels have been adjusted for inflation since 1984. For details see Pechman (1987), p. 332.

³⁴Specifically, as the basis for revision, I use the distribution of federal tax burdens in 1977 when the CBO tax incidence series begins. I do not mean to imply that the federal tax system in the mid-1970s had exactly the correct degree of equalization.

³⁵See Simons (1938), ch. II.

tradicts the principle of optimal taxation that tax rates should vary with a number of elasticities. However, the optimal tax models are based on strong assumptions that are often implausible or virtually impossible to validate. Consequently, there is no empirical basis for determining how different commodities and sources of income should be taxed. Moreover, the compliance and enforcement costs of such a system could be large enough to more than offset the potential inefficiencies of a uniform tax. In the absence of reliable data, it is safer to rely on the comprehensive approach rather than to introduce tax differentials that will generate their own distortions.³⁶

According to Simons and others, income is the sum of an individual's consumption and change in net worth during a particular time period. For a long time, the federal income tax base was a far cry from a comprehensive definition of income. In 1986, however, Congress reversed its previous practice and enacted a wholesale tax reform that moved the income tax a long way toward the Simons' ideal. This remarkable piece of legislation can provide the basis for achieving the distributive objectives discussed earlier with moderate tax rates.

The 1986 Tax Reform.³⁷ The Tax Reform Act of 1986, a major step toward comprehensive income taxation, greatly improved the fairness and efficiency of the tax system. The major accomplishments of the act are as follows:

By doubling personal exemptions and increasing the standard deduction, the act relieved about 5 million poor people from paying any income tax. This step restored the principle (abandoned by Congress in 1978) that people who are officially designated as "poor" should not be required to pay income tax. The principle was perpetuated by the resumption in 1989 of an auto-

matic annual adjustment of the exemptions and standard deduction for inflation.

Significant increases were made in the earned income credit for wage earners with families. These increases eliminated almost the entire Social Security payroll tax (including the employer's share) for those eligible for the full credit and reduced the tax burden for many low-income workers.

For the first time since 1921, realized capital gains were made taxable as ordinary income. This is the keystone of comprehensive tax reform: it reduces the incentive to convert ordinary income into capital gains and removes one of the major elements of tax shelter arrangements. Moreover, this change made it possible to reduce tax rates without reducing the progressivity of the income tax.

A good start was made to reverse the erosion of the individual income tax base. For example, unemployment benefits, which were previously taxable only if a married taxpayer's income exceeded \$18,000 (\$12,000 if single), were made taxable regardless of the size of income. Deductions for state and local sales taxes were eliminated and those for consumer interest were phased out. For administrative reasons, deductions for unreimbursed business expenses, costs incurred in earning investment income, and other miscellaneous expenses were allowed only to the extent that they exceed a floor of two percent of income.

Some of the most egregious loopholes and special tax benefits were eliminated. Many tax shelters were rendered unprofitable by denying deductions for losses from passive activity against income from anything but passive activities.³⁸ Tax subsidies for borrowing (other than for mortgages) were eliminated by another limitation on the deduction for interest expenses to the amount of investment income reported on the individual's tax return.³⁹ Deductions for contribu-

³⁶See Stern (1987), p. 51, Aaron (1989), pp. 10-12, and Slemrod (forthcoming).

³⁷For an analysis of the structural features of the 1986 tax reform, see Pechman (1987a).

³⁸A passive activity is a trade or business in which the taxpayer (or spouse) does not materially participate. All rental activities are regarded as passive.

³⁹However, the act did not change the deductibility of interest on borrowing to finance business investments

tions to individual retirement accounts were curtailed. Deductible business expense accounts for meals, travel and entertainment were limited to 80 percent of outlays. Tax preferences benefiting defense contractors, banks, oil companies and other industries were narrowed. On top of all these changes, the minimum tax for both individuals and business was retained and strengthened.

Finally, the individual and corporate tax rates were cut drastically. Under the individual income tax, two rates—15 and 28 percent—were substituted for the earlier schedule of 14 rates, which rose to a maximum of 50 percent. However, the benefits of the lowest rates and of the personal exemptions were phased out for higher income taxpayers at a 5 percent rate. As a result, the new individual income tax rate structure has four brackets, with rates of 15, 28, 33, and 28 percent (see Table 7). The general corporate rate was cut from 46 percent to 34 percent. Despite these large rate cuts, the act was expected to be roughly revenue neutral in total over the first five years, but to shift about \$25 billion of tax annually from individuals to corporations.

The distributional effect of the 1986 act is distinctly progressive, especially if the increase in corporate tax liabilities is taken into account. I have calculated the change in average effective tax rates of the nation's families on the basis of the distribution of income estimated from the Brookings MERGE file (Table 5). Total federal tax burdens decline in the lower nine deciles and rise in the top decile. In the lower deciles, the tax reductions result from increases in the personal exemptions, standard deduction, and the earned income credit under the individual income tax. The increases at the top reflect the broadened individual income tax base, as well as the increase in corporate tax liability, which is assumed to fall on owners of capital in these calculations. However, as already noted, this increase in progressivity only partially reversed the reductions that had taken place in the 1970s and early 1980s.

The Unfinished Agenda. Despite the progress made in 1986, the federal income tax in

TABLE 5—CHANGES IN INDIVIDUAL AND CORPORATE INCOME TAX LIABILITIES UNDER THE TAX REFORM ACT OF 1986, BY POPULATION PERCENTILE, 1988

	Percent Change in		
Population Percentile ^a	Federal Individual and Corporate Income Taxes ^b	Total Federal Taxes	
1st decile	– 44	-16	
2nd decile	-32	-11	
3rd decile	-24	-10	
4th decile	-16	-7	
5th decile	-12	-6	
6th decile	-8	-4	
7th decile	-7	-4	
8th decile	-6	-3	
9th decile	-6	-4	
10th decile	+3	+2	
Top 5 Percent	+4	+3	
Top 1 Percent	+5	+5	

Source: Brookings MERGE file.

the United States falls considerably short of the comprehensive income target. 40 I assume that we shall continue to tax capital gains on a realization, rather than accrual, basis, and that gifts and bequests will be taxed under a separate transfer tax. Nevertheless, a great deal more could be done to broaden the tax base for equity, efficiency, and revenue rea-

The personal exemptions, standard deductions, and rate bracket limits are adjusted annually for inflation, but the tax base is not. Of the two types of adjustment, adjustment of the tax base would be by far the more important. Perhaps the major reason why the income tax tends to be in disrepute is the discrimination against capital income inherent in a nominal income tax. An inflation adjustment of asset prices should be

^aThe classification is by a comprehensive definition of income, including imputed rent and corporate earnings allocated to stockholders, whether distributed or not.

bAssumes the corporate tax is on capital in general.

⁴⁰For a detailed analysis of a comprehensive income tax base, see Pechman (1977). Estimates of the revenue effects of specific changes in the tax base needed to reach the comprehensive base are given in Congressional Budget Office (1989).

incorporated in the tax law as part of the computation of real capital gains and losses, real interest income expense, and real inventory and depreciation allowances. The adjustment of interest is admittedly difficult, but the widespread use of computers should ease the administrative and compliance problems.

Restoration of a tax differential between capital gains and ordinary income should be resisted at all costs. Equalization of the tax rates lowers the incentive to convert other income into capital gains, simplifies business and financial decisions, and reduces income tax complexity. Aside from the correction for inflation, the one additional reform needed in the capital gains tax is to include in the tax base unrealized capital gains transferred by gift or at death. Taxing such gains would reduce the lock-in effect of the tax on transfers of assets and eliminate a source of horizontal inequity.

A major neglected problem in most countries is the erosion of the tax base from the exclusion of employee fringe benefits. Trade unions, as well as employers, staunchly defend the continued exclusion of fringe benefit income, but in fact the largest subsidies go to the highest paid employees. Loopholes for union members and other workers are no more defensible than those for the rich. Taxation of fringe benefits would encourage their conversion into cash compensation, thus giving employees more control over the disposition of their income and the choice of the providers of their services. Australia and New Zealand have shown the way to reform in this area by taxing fringe benefits (other than contributions to pension plans) at the corporate tax rate. This method of handling a difficult, but urgent, problem is simple and effective.

Social Security benefits continue to receive favorable treatment, even though the elderly can no longer be regarded as a disadvantaged group. Under current law, the medical insurance subsidies they receive are not subject to tax, and less than half of retirement and disability benefits is taxable to married couples with income above \$32,000 (\$25,000 if single). The value of the medical insurance

subsidies should be subject to tax in full⁴¹ and retirement and disability benefits should be treated like private pensions without any income thresholds, which would mean that roughly 85 percent of the benefits would be currently taxable.

The treatment of owner-occupied housing remains unsatisfactory. I assume that the exclusion of imputed rent from the tax base and the deduction of mortgage interest by most homeowners are sacrosanct, but it is possible to limit the encouragement of borrowing without promoting rearrangements of debt for tax purposes. The solution is to broaden the limitation on deductions of investment interest to include all interest payments. That is, a deduction for all interest payments would be allowed, but limited to the amount of reported investment income. To accommodate the home-owner lobby, the limit could be raised to net investment plus an arbitrary amount, say, \$10,000—enough to take care of the vast majority of home owners. The broader interest limitation would remove the discrimination against borrowing for other purposes and the incentive to substitute home equity loans for other types of borrowing.

Deductions other than for interest are still too generous. The Simons' definition of income includes all sources of income, without any deductions for the uses of that income. For equity reasons, it is appropriate to permit deductions for such unusual expenses as medical payments and casualty losses. I would retain the deduction for state income taxes to moderate interstate tax differentials. However, the property tax is largely a benefit tax and therefore should not be deductible. Nor is it necessary to allow a deduction for the first dollar of charitable contributions on incentive grounds. Little or

⁴¹The tax would be imposed on the insurance value of hospital and Medicare subsidies rather than on the dollar benefits actually received. See Congressional Budget Office (1989).

⁴²See Pechman (1987b), pp. 267-69, for illustrations of aggregate tax rates with various combinations of federal and state tax rates.

no charitable giving would be lost⁴³ and much revenue would be gained or reductions in tax rates would be possible if the federal deduction for property taxes were disallowed and the deduction for charitable contributions were restricted to amounts in excess of two percent of income. In addition, the taxexemption for interest on newly issued state and local bonds should be removed.

Although income tax compliance is better in the United States than in most other countries, roughly 15 percent of individual income is still unreported, according to IRS estimates.⁴⁴ Extension of withholding to interest and dividends would improve compliance. Congress enacted a withholding system for these income items in 1982, but repealed it the following year under pressure from the financial institutions. Since information returns are required for annual interest and dividend payments of \$10 or more, the marginal costs of compliance with a withholding system would be small.

One of the major features of the 1986 tax law was to telescope the schedule of tax rates into two acknowledged and two concealed brackets, a bizarre four-bracket rate structure of 15, 28, 33, and 28 percent. The reduction in the number of brackets was a response to the flat tax proposals that were being promoted when the tax reform bill began its journey through Congress, while the unsightly bulge in the rate schedule was motivated by revenue considerations. It is not necessary to return to 14 brackets, but there is room for more rate graduation without the bulge.

In this connection, consideration needs to be given to improving the structure of estate and gift taxes to compensate for their low average rates. These taxes were almost gutted by increases in the exemptions and reductions in the tax rates when income tax rates were cut in 1981. Now that the top income tax rates are even lower, it is time to rely more heavily on the estate and gift taxes.

The reduction in the tax rates led to two additional changes in the 1986 act that I believe were unfortunate. Congress eliminated the deduction for two-earner couples and ended the privilege of averaging income for tax purposes. 45 Both provisions should be restored in the interest of horizontal equity.

Finally, contrary to the prevailing view among public finance experts, Congress clearly believes that a separate, unintegrated corporate tax is essential for effective income taxation. A separate tax prevents individuals from avoiding the income tax by accumulating earnings at the corporate level, although some might question whether corporations should be taxed at a higher rate than the top bracket individual rate. But in its present form, the corporate tax encourages debt financing. It is alleged to be a major cause of the recent upsurge in leveraged buyouts and mergers. The remedy is not to allow a deduction or credit for dividends received at the individual level. Rather, the deduction of interest by corporations should be denied while reducing their tax rate to the neighborhood of 15 percent to maintain the revenues now produced by the corporate tax.46 The corporate tax would become a low-rate tax on net corporate income before distributions.

Tax Rates and Progressivity. The reforms I have suggested would greatly increase the income tax base and permit a realignment of the tax rates to achieve the distributional objectives described earlier. At calendar year 1990 levels, the tax base would increase from \$2.4 trillion to \$2.8 trillion (Table 6). The increase in the base leaves enough room to cut rates in the lowest taxable income brackets and still keep the top tax rates at reasonably modest levels.

⁴³Clotfelter (1989) reports finds that equations estimated on pre-1986 data relating charitable giving to income, the price of giving, and other variables fail utterly to predict the response of charitable giving to the Tax Reform Act of 1986.

44 Kenadjian (1988).

⁴⁵For discussions of the function of a two-earner deduction and the need for income averaging, see Pechman (1987a), pp. 102-7 and 127-28.

To prevent undue hardship to highly leveraged firms, the denial of the interest deduction might be phased in over a period of years.

TABLE 6—ADJUSTED GROSS INCOME AND TAXABLE INCOME UNDER THE TAX REFORM ACT OF 1986 AND UNDER A COMPREHENSIVE INCOME TAX

-	1990 of Dollars	
Item	Adjusted Gross Income	Taxable Income
Tax Reform Act of 1986	3545	2407
Plus:		
Personal Deductions ^a	0	68
Transfer Payments ^b	226	164
Fringe Benefits ^c	187	185
Two-earner Deductiond	-82	-81
Other ^e	43	42
Equals: Comprehensive Tax ^f	3919	2785

Source: Congressional Budget Office.

^aAllows flat standard deduction of \$4,000; interest deduction limited to investment income plus \$10,000; tax deduction limited to income taxes; 10 percent floor on deductions for medical expenses and casualty losses; 2 percent floors on deductions for charitable contributions and miscellaneous expenses; and no standard deduction for the elderly and the blind.

^bIncludes 85 percent of Social Security retirement and disability benefits for all taxpayers, workers' compensation, and veterans' benefits; and 50 percent of the insurance value of hospital insurance benefits.

^cIncludes premiums paid by employers for health and life insurance and other fringe benefits; interest on life insurance policies; and IRAs of persons covered by employer pension plans.

d 20 percent of earnings of spouses with lower earnings up to a maximum of \$70,000.

*Includes unrealized capital gains transferred by gift or at death, interest on newly issued state and local securities, and all preference items now subject to the minimum tax.

^fAn increase in the earned income credit under Plan II (see Table 7) does not affect adjusted gross income or taxable income.

In redesigning the rate structure, I suggest scrapping the multiple schedule system which was developed to reduce the tax advantage of married couples relative to single people under income splitting. It is simpler to use one set of rates and to rely on the personal exemptions to take into account differences in ability to pay of families of different size. ⁴⁷ The restored deduction for two-earner couples (20 percent of the earnings of the spouse with the lower earnings up to \$70,000) would help avoid a significant marriage penalty.

The same revenue and progressivity of present law could be generated by a tax

schedule ranging from 7 percent on the first \$5,000 of taxable income to 26 percent on taxable income in excess of \$35,000, without the bulge in tax rates under current law (see Plan I, Table 7).⁴⁸ Thus, a wide margin exists for increasing progressivity at the top of the income scale, while keeping rates moderate. To restore the progressivity of the federal tax system to its 1977 level, the range of graduation would have to be expanded and the rate of graduation increased. A starting rate of 4 percent on the first \$5,000 of taxable income rising to 48 percent on tax-

⁴⁷To avoid the old community property problem, (see Pechman, 1987b, pp. 102-7) the brackets in the rate schedules for married couples filing separate returns would be one-half the size of the brackets for single people.

⁴⁸Exemptions and the standard deduction would remain the same as in 1989, that is, exemptions would be \$2,000 per capita and the standard deduction would be \$3,100 for single persons, \$4,550 for heads of households, and \$5,200 for married couples, all adjusted for inflation.

Table 7—Comparison of Tax Rates Under the Tax Reform Act of 1986 and Under Two Comprehensive Income Taxes, 1990

Tax Reform Act of 1986 ^a		Comprehensive Income Tax ^b		
Taxable	Rate	Taxable	Rate (percent) ^c	
Income	(percent)	Income	Plan I	Plan II
\$0-\$32,400	15	\$0-\$5,000	7	4
32,400-78,400	28	5,000-10,000	10	8
78,400-208,560 ^d	33	10,000-20,000	15	14
208,560 and over	28	20,000-35,000	18	14
		35,000-70,000	26	23
		70,000-100,000	26	24
		100,000-150,000	26	29
		150,000-250,000	26	33
		250,000 and over	26	48

^aFor a married couple with two dependents. Separate rate schedules apply to single persons and heads of household.

^bApplies to all taxpavers, regardless of marital and family status.

^cPlan I maintains present progressivity of the federal income tax at 1990 levels; Plan II restores progressivity of the federal tax system as a whole to levels prevailing in 1977. Plan II provides a refundable earned income credit of 14 percent (up to \$1,000) to all earners and increases the credit by 4 percentage points for each person in the tax unit above one (with a phaseout between \$10,000 and \$20,000 of adjusted gross income).

dRange within which the 13-percentage point reduction in the first bracket is phased out. Top limit of the range increases or decreases by \$11,480 for each personal exemption.

Table 8—Effective Federal Individual Income Tax Rates Under the Tax Reform Act of 1986 and Under Two Comprehensive Income Taxes, 1990^a

Percent				
Population	Tax Reform Act	Comprehensive Income Tax ^c		
Percentile ^b	of 1986	Plan I	Plan II	
1st Decile ^d	-0.9	-0.4	-1.3	
2nd Decile	0.0	0.1	-0.8	
3rd Decile	1.9	2.0	0.7	
4th Decile	4.5	4.6	3.3	
5th Decile	6.2	6.2	5.0	
6th Decile	7.4	7.4	6.1	
7th Decile	8.4	8.5	7.0	
8th Decile	9.4	9.5	7.8	
9th Decile	11.1	10.9	9.1	
10th Decile	16.5	16.5	18.9	
Top 5 Percent	18.0	18.1	22.3	
Top 1 Percent	20.7	20.8	30.5	
All Deciles ^c	11.1	11.1	11.1	

Source: Congressional Budget Office.

^aAssumes corporate income is borne by capital income.

bArrayed by comprehensive income, which includes all transfer payments, the employer share of payroll taxes, and the corporate income tax (allocated to capital income).

^cFor tax rates under the two plans, see Table 7.

^dExcludes families with zero or negative incomes.

^eIncludes families with zero or negative incomes.

able income above \$250,000 would accomplish this objective (see Plan II, Table 7).⁴⁹

Another change to increase progressivity would be to increase the earned-income credit for low-income families. Today, the credit is the same for all families, regardless of the number of children. The credit would be more effective in combatting poverty if it increased with family size. For example, the current 14-percent credit could be maintained for families with one child and four percentage points, or roughly \$250, could be added for each additional child. With this modification, the earned income credit would increase the likelihood that a family with several children could earn enough to remain outside the welfare system.

Table 8 reports the average effective federal income tax rates by population deciles under the schedule that restores overall progressivity to 1977 levels (Plan II) and under the schedule that matches 1990 distribution with a broadened base (Plan I). The average effective rates in Plan II are lower than those under present law in the bottom nine deciles and higher in the top decile. For the top 1 percent of the family units, the average effective rate rises from 21 percent to 30 percent, which cannot be regarded as punitive.

I recognize that few people would go as far as I would in broadening the tax base. But that does not mean that the objective of greater progressivity must be abandoned. Even if there were no additional base-broadening between now and 1990, the same degree of progressivity that prevailed in 1977 could be achieved with rates ranging from 7 percent at the bottom to 56 percent at the top.

Conclusion

I conclude that there is no good reason for the disenchantment of economists with the income tax. The main rival of the income tax —the consumption expenditure tax— is distinctly inferior on theoretical as well as practical grounds. The endowment or lifetime perspective of the expenditure tax is indefensible in a world of financial, political, and family instability. The transition problems in moving from an income tax to an expenditure tax are extremely difficult. There is also a danger that the substitution of an expenditure tax for the income tax would greatly increase the concentration of wealth. Moreover, the public regards income, not expenditure, as the best index of ability to pay. and it would be unwise to abandon this familiar and widely approved basis of taxation.

The 1986 reforms have greatly improved the federal income tax by broadening the base and lowering rates. But the progressivity of the federal tax system has been declining for the last two decades. As a result, the distribution of before-tax income, which has been growing more unequal in the 1980s, has become even more unequal on an after-tax basis. I have suggested that the goal of tax policy should be to restore the progressivity of the income tax at least to its level in the mid-1970s.

The 1986 tax reform went a long way toward comprehensive income taxation, but much more can be done to enlarge the tax base and to remove the preferences for capital income. Among the more urgent basebroadening reforms are the inclusion in taxable income of capital gains transferred by gift or at death, elimination of the tax exemption for newly issued state-local securities, taxation of employee fringe benefits, treatment of Social Security benefits like private pensions, reduction of the tax subsidy for home owners, pruning of the personal deductions, and withholding on interest and dividends. To correct the measurement of capital income for inflation, asset prices should be adjusted for changing prices in order to convert nominal to real incomes for tax purposes. The two-earner deduction and income averaging should be restored to reduce the marriage penalty and equalize the treatment of fluctuating and stable incomes.

⁴⁹Between 1977 and 1990 the weight of the relatively regressive payroll tax in federal revenues increased. Thus, the income tax must be more progressive in 1990 than it was in 1977 to restore overall progressivity to its 1977 level.

A comprehensive income tax along these lines would permit further rate reductions throughout the income scale if the degree of progression enacted in 1986 were to be retained. However, the progressivity of the federal tax system has declined since the mid-1970s, even after taking into account the effect of the 1986 act. To restore the degree of progressivity of the mid-1970s, the rate of graduation of the tax rates would need to be increased. I estimate that this can be accomplished with a rate schedule ranging from 4 percent at the bottom to 48 percent at the top of the taxable income scale—a moderate schedule of rates by any standard.

It is clear from this analysis that the revenue potential of the income tax has not been exhausted in this country. Even if the base is not broadened, the income tax can be used to raise considerable additional revenues in order to eliminate the recurring federal deficits. Each percentage-point increase in the individual and corporate income tax rates would bring in about \$30 billion in 1994, so that three points would come close to balancing the overall budget in that year. A top individual income tax rate of 31 percent and a corporate rate of 37 percent cannot be regarded as punitive or harmful to economic incentives.

What is inappropriate in my view would be to introduce a value-added tax, as some are suggesting. The value-added tax is regressive and imposes unnecessarily heavy burdens on the lower income classes. With tax rates as low as they are today, more revenues should come from the income tax, the tax paid by those who have the ability to pay. In view of the recent reductions in the progressivity of the federal tax system, it would be unconscionable to enact the distinctly inferior alternative of a value-added tax.

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