Searching for a Just Tax System

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Despite the intensity of the debate over President Bush's tax policies, all political factions seem to agree that tax and spending programs should, on average, distribute economic resources from the rich to the poor. The arguments involve the amount of redistribution; only fringe groups ask whether it should occur at all.

Liberals argue that a tax policy change is fair if it reduces discrepancies in the distribution of after-tax income. Moderate conservatives focus on the share of the cost of government borne by different income groups and argue that all is well as long as a tax change raises the share of the total tax burden borne by the more affluent. Many pure conservatives favor a flat tax, and some believe that the base of the tax should be consumption rather than income. Nevertheless, they believe in protecting lower income groups with large exemptions. They just don't care much about the distribution of economic resources among the middle class, the moderately rich, and the filthy rich.

Pure conservatives' ultimate policy goals are clearer than those of liberals and moderate conservatives. If liberal arguments were taken to an extreme, they would imply an egalitarian society—at least as measured by the distribution of after-tax income. The moderate conservatives' argument would imply that the very highest income earners would eventually bear 100 percent of the total tax burden. Presumably, neither side would go that far, but where would they stop?

The Philosophers

That being a philosophical question, it is appropriate to turn to philosophers for guidance. John Rawls (1971) argued that if we were designing a just society before we arrived on earth, and if none of us knew what family connections or skills we would possess once we arrived, we would opt for an egalitarian society—with one important qualification: Inequality would be tolerated if it made the least well-off person better off.

That argument implies that marginal tax rates imposed on the more affluent must be limited. Presumably, rates cannot be raised to a level at which work and savings decline or tax evasion increases so much that total tax revenues decline. The government would then have fewer resources. Although fewer resources do not necessarily mean that programs for the poor would be cut back, they certainly make that possibility more likely.

Rawls' approach may restrain permissible tax rates well below this point. Any increase in marginal tax rates causes a decrease in economic efficiency that reduces the size of the gross domestic product. This loss is often referred to as the "excess burden" imposed by taxation—a burden exceeding that involved in handing money over to the government. Rawlsians advocating more progressive taxation must be sure that none of this excess burden lands on the backs of the poor.

It is impossible to design the perfect Rawlsian tax system without detailed knowledge of the links between tax rates, tax evasion, and the supply of work and savings. However, economists differ significantly in their estimates of these links, and as a result, the Rawlsian philosophical framework does not provide precise guidance on how to proceed.

Robert Nozick (1974) begins with a very different philosophical perspective. He argues that individuals are entitled to whatever wealth and income they happen to possess, so long as they obtain it in a morally permissible manner. The only role for a coercive state is to prevent people from taking resources from one another in a morally impermissible manner. In this framework, the state's role is minimized. Income redistribution is permitted, but only if it is agreed to voluntarily. Nozick can imagine a contract in which some affluent people agree to make payments to the less affluent if others agree to do the same. Those agreeing to the contract would have to decide whether the agreement must be unanimous or whether they can tolerate some people opting out.

Although Nozick is usually regarded as a conservative, his approach is vaguely similar to that of Knut Wicksell, a 19th-century socialist economist. Wicksell (1896) argued that all changes in public policy should require unanimous support. That is to say, all winners from a policy change should be willing to compensate the losers if necessary to gain their vote. Such a system is obviously not practical, but if it were, it is unclear what distribution of economic resources would emerge. It would depend to a considerable degree on the sequence in which different policy changes were considered.

Nozick provides little information on how his minimalist state would be financed. He does not wish to presume how people might negotiate such arrangements as they struggle to design the perfect society.

Although the philosophical debate is interesting, it leaves unanswered practical questions such as, "Have recent tax policy changes been fair or unfair?"

The Academic Economists

Academic economists do a little better than philosophers in discussing criteria for a just system, but they still fall considerably short of providing a precise design. Economists begin with the proposition that it hurts less for a rich person to pay a given tax than for a poor person to pay the same absolute tax. If the goal is to impose the same absolute sacrifice on all, and if the distaste for paying taxes increases in the same way for everyone as their economic resources diminish, there is a legitimate argument for having the more affluent face a greater absolute tax burden than the poor. But nothing in that statement implies that the absolute tax burden should go up faster than a person's economic resources.

A variant on the theme would, however, lead to the ultimate in progressivity. Instead of levying the same absolute sacrifice on everyone, the tax system might equalize the sacrifice imposed by the last dollar of taxes paid. If everyone were assumed to have the same tastes, the amount of their after-tax economic resources would be equalized; that is, policy would aim for an egalitarian society. Economists do not generally like to compare one person's welfare to another's or to add up units of "welfare," but if it is assumed that the units of welfare derived from different levels of economic well-being are the same for everyone, it can be shown that the equalization of the sacrifice imposed by the last dollar of taxes paid minimizes the total sacrifice inflicted on the whole population—all else being equal.[1]

But, of course, all else is not equal. As already noted in discussing Rawls and as recognized by economists for many generations, a highly progressive tax system saps incentives and leaves the total national product lower. Thus, when formulating tax policy, economists often talk of a trade-off between equity and efficiency.

Although our uncertainty regarding the exact nature of this trade-off makes it difficult to know how unequally unequals should be treated by the tax system, economists widely agree that equals should be treated equally. They do not agree, however, on how equality should be measured. The problem has at least three important dimensions. First, what is the unit being taxed—the individual, family, or household? Second, what is the best measure of their affluence—income, consumption, or wealth? Third, over what period should well-being be measured—one year, several years, or a lifetime? Regardless of how these issues are resolved, there is a difficult question regarding how to measure the pain imposed on the "equals." Should the pain be assessed depending on who hands the money over to the government, or should it be assessed after all the economic effects of changes in incentives have worked their way through the economy? Yet another question: Should the quest for the equal treatment of equals consider the joint effects of both the spending and revenue sides of the budget, or is it is permissible to consider the two sides separately?

The argument is further confused because most economists permit a role for benefit taxation and for tax policies aiming to achieve particular economic or social goals. Thus, gasoline taxes are seen as a payment for the benefit of using highways. Social Security taxes can be seen as a compulsory purchase of a pension benefit. Ideally, questions relating to income distribution might be decided prior to having taxpayers vote on how many of such benefits to purchase, but tax policy does not proceed that neatly.

Taxes aiming at some social or economic goal also muddy distributional issues. The excise tax on beer, which may be our most regressive tax, attempts to shape consumption patterns in a socially responsible direction. Excise taxes on pollutants are seen as an efficient approach to improving the environment. The main point about excise taxes, regardless of their

[1] See Musgrave (1959) for a discussion of equal sacrifice criteria. Equal proportional sacrifice is not discussed here, but like equal absolute sacrifice, it does not necessarily imply a progressive tax system.

purpose, is that the ultimate burden may not be closely related to the economic resources of the taxpayer.

The Legislators

Unlike philosophers and academic economists, legislators must make concrete tax policy decisions with important consequences. From their actions, one might be able to discern their own concept of tax justice, as tempered by their quest for economic efficiency and other, perhaps less worthy, political goals. One would not expect their revealed preferences to be constant or even coherent, as the political and ideological balance of legislatures shifts from election to election, and individual tax bills may have to appeal to different majority or supermajority coalitions to get the necessary votes. In fact, the most cursory reading of tax policy changes at the federal level indicates that the importance of different criteria for judging tax justice tends to rise and fall significantly from Congress to Congress, bill to bill, and tax to tax.

Equal treatment of equals—When I moved from academic life to Washington policymaking thirty years ago, I was shocked to learn that the basic rule of tax justice beloved by so many economists—that equals should be treated equally—does not resonate with politicians. Politicians like to do favors for individuals and identifiable groups. These favors have to be big enough to be noticed. That means that policymakers usually cannot afford to do the same favors for all the equals of those especially favored by politicians.

That lack of parity does not much bother typical legislators. They often speak as though they were performing what an economist would call a Pareto optimal move—a move that benefits someone without hurting anyone else. If that were true of the favors granted, the policies would not be objectionable. But the favors given to some must be paid for by others. Usually the pain is so diffused that it isn't noticed. That makes it look like a Pareto move when it really isn't.

I do not mean to imply that legislators ignore the concept of treating equals equally. But they do not put much weight on ensuring that all policies, or even a high proportion of policies, are of this type.

The tax-paying unit—The treatment of different possible tax-paying units provides a prime example of how criteria for judging equity can change from Congress to Congress and tax to tax. The most important federal tax, the personal income tax, focuses on the family unit or unmarried individuals. The second most important tax, the payroll tax, focuses on the amount of wages paid to the individual, whether married or not. At the same time, the payroll tax buys a benefit that can, under certain circumstances, provide support for dependents. Taxes on households consisting of unrelated individuals are less important, but they do exist. Property taxes can burden a household,[2] as can sales or excise taxes on jointly shared products. The old federal excise tax on telephone services was of this type.

The fact that the personal income tax is levied on families and single people has created two long-running controversies. Legislators must decide how to treat married couples relative to single people, and they must decide how to adjust for differences in family size.

Our system allows married couples to report their income jointly. Because of the progressive rate structure, married couples with relatively unequal incomes tend to benefit from splitting their total income, and they usually receive a marriage bonus. However, tax brackets and the standard deduction for couples have not historically been double those for individuals, and as a result, couples with more equal incomes have often been faced with a marriage penalty. That is to say, they have ended up with a higher tax bill than two singles with the same total income. Since joint filing was first permitted,[3] the pendulum has swung back and forth between treating couples relatively generously and being more sympathetic to singles.

Because the last thing a Republican Congress wants to do is penalize marriage, recent tax changes have essentially eliminated the possibility of a penalty for couples in the lower middle class and reduced the ratio of penalties to bonuses for lower and higher income groups. Is this just? Rest assured, singles will not think so. They will soon be complaining about the unfair burden imposed by the new regime. It is probably safe to predict that the pendulum will continue to swing as it has in the past and that we shall someday find the tax system again treating singles more generously.

Congress must also decide how to treat large families vis-à-vis small families. Again, the pendulum has swung back and forth. After my colleague, Eugene Steuerle (1983), reported that the relative advantage of large families had eroded in the postwar period, the religious right suddenly became interested in tax policy and began to press for more generous treatment of larger families. Their efforts bore fruit in 1997 when a Republican Congress added a child credit to the existing exemption for dependent children. Recent legislation has increased that credit substantially. As a result, large families are treated relatively better than they have been through much of the previous 50 years.

In some cases, the tax unit is a business rather than a person or set of people. But we know that businesses cannot pay taxes—only people can. There is not a strong consensus among economists on how much of a particular business tax falls on the owners, the employees,

[2] One view of property taxation is that it is really a tax on a certain type of capital, similar to the corporate tax. Economists generally believe that the burden of taxes of this type largely fall on all capitalists, although the view is far from unanimous. The above discussion proceeds as though the burden falls on the household paying the tax.

[3] In practice, many husbands and wives aggregated their income from the beginning of the income tax. But there was much confusion and the issue was not completely clarified until the Revenue Act of 1918.

the customers, or the suppliers of a business. It is often assumed that the most important business tax—the corporate tax—falls largely on capitalists, but that assumption depends on the corporate tax not affecting the supply of capital, by either reducing the saving rate or driving capital abroad. Not all economists accept this basic assumption—a point that will be discussed in more detail later. Unfortunately, political rhetoric often proceeds as though businesses are entities that can feel the pain of taxation without involving any real people.

The choice of a tax base—There is some tax in our system on every possible measure of economic well-being—income, consumption, and wealth. Sales taxes at the state and local levels and excise taxes at all levels of government burden a large portion of total consumption. Property taxes tax real estate wealth and are sometimes levied on other forms of personal property as well. Estate taxes are levied on wealth held at death.

As a result of 2001 legislation, the estate tax is now being phased out and will be abolished by 2010.[4] This policy change represents an interesting case of shifting values in the Congress. A broad bipartisan majority supported a substantial reduction in the estate tax burden. The majority behind outright abolition was not quite as broad, but it is nevertheless interesting how a tax that was recently paid by less than 2 percent of estates could become so unpopular.

Of course, many more individuals (spouses, heirs, and dependents of heirs) than estates are affected by the tax, and many who do not pay must nevertheless worry about it. Avoiding it requires considerable estate planning, for both the many who do and those who may aspire to own enough to pay it, even if they don't quite make it in the end. And, of course, heirs are vitally affected by the tax. Certain farmers and small businessmen also gained sympathy by claiming that the tax often prohibits them from leaving their businesses to their children, even though they have won considerable concessions in the past and are rarely forced to liquidate a business because of the tax.

The main justifications for the tax—preventing dynastic concentrations of wealth and taxing previously untaxed income such as unrealized capital gains—clearly lost their luster. But the tax admittedly did not achieve either goal very effectively. A progressive inheritance tax—that is, a tax on the amount received by an heir rather than on the total amount left by the decedent to one or more heirs—would be more effective at preventing concentrations of wealth. And the estate tax taxed previously taxed and untaxed wealth equally—sometimes at very high rates (a top rate of 55 percent). The high rates encourage avoidance, and much avoidance can be purchased with a sufficient expenditure on lawyers. Nevertheless, estate tax reform focused on abolishing the tax rather than fixing it. This political decision will be easier to understand when public attitudes toward the estate tax and other taxes are explored in the next section.

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[4] The law reconstitutes the tax at 2001 levels in 2011, but few expect that to actually happen. If it is reconstituted, it will be at levels considerably less burdensome than in 2001.

Changing values regarding the individual income tax are equally interesting. What we call an income tax is not really a pure income tax. A pure income tax would tax the income from investment and savings too heavily for most politicians' taste. As a result, the system has historically contained a plethora of provisions that reduce the burden on saving and investing. This gives our most important tax some characteristics of a progressive consumption tax. Aaron, Galper, and Pechman (1988) have described the outcome as an "uneasy compromise" between income and consumption taxation, but politicians would never describe it that way. They prefer to discuss providing incentives for saving and investing. They do not like to talk about taxing consumption more heavily.

Nevertheless, there are both pragmatic and philosophical arguments for taxing consumption rather than income. Consumption is less volatile than income and can be said to reflect the individual's self-assessment of well-being. Pragmatically, it is difficult to measure capital income so that it can be taxed fairly. Particular problems involve adjusting for inflation, estimating real depreciation, and dealing with unrealized capital gains. There is also the philosophical argument that goes back four hundred years to Thomas Hobbes; it may be fairer to tax what people extract from the economy rather than what they contribute.

The degree to which income or consumption is the tax base has varied significantly over time. In recent decades, concessions on capital income began to grow as capital gains taxes were eased in the late 1970s. Legislation in 1981 went much further by greatly easing depreciation deductions, re-establishing an investment tax credit, and significantly increasing preferences for retirement savings (Steuerle 1992). The pendulum swung back abruptly toward income taxation with the 1986 reform. That reform cut back depreciation allowances, eliminated the investment tax credit, taxed capital gains at regular rates, and imposed income-related restrictions on tax-favored retirement accounts.

The resulting broadening of the tax base allowed a significant cut in marginal tax rates, and the top rate was lowered to 28 percent.[5] With such a low top rate the burden on saving and investment did not seem serious. But as frustration grew over large budget deficits, the top rate was again raised in two steps until it reached almost 40 percent after 1993. That again implied more of a burden on capital than politicians would tolerate. Capital gains tax preferences reappeared, and more recently, Congress has added concessions for dividends, capital gains, retirement savings, medical saving accounts, and various educational savings accounts. Depreciation allowances have also been increased temporarily as a stimulus measure (Steuerle forthcoming).

Since the prevalence of tax concessions on capital income seems to vary with the level of the top marginal income tax rates, and since most capital income is earned by people in the top brackets, cynics may argue that periodic moves toward consumption taxation do not reflect

[5] A phase-out of exemptions created a higher rate of 33 percent over a narrow range of incomes before a taxpayer hit the 28 percent rate.

a concern that savings and investment are being taxed too heavily. Rather, they reflect a concern that the rich are taxed too heavily. In other words, high marginal rates on the rich are used as camouflage to conceal other provisions that reduce the burden at the top.

This possibility cannot be ruled out, but it will be shown later that the public doesn't really support strong efforts to redistribute income. That would seem to imply that such camouflage is unnecessary and that there is a more genuine, though implicit, political belief that consumption should play a heavier role in the tax base than a pure income tax would imply.

While the pendulum has shifted between consumption and income taxation, there have always been significant deductions and exclusions from whatever tax base is popular. Some attempt to promote "good" things (charities and homeownership), while others adjust for welfare-reducing emergencies (medical and catastrophic expenses). Clearly the deductions and exclusions that survived the purge of the 1986 tax reform have considerable political staying power and are likely to be with us for a very long time.

The choice of a time period—In a progressive tax system, people whose tax base varies tend to pay more total taxes over time than people with the same average economic resources whose tax base is less volatile. The income tax tends to favor some occupational groups over others in this regard. Small businesspeople in erratic businesses can move from the top of the income distribution to the poverty population and back from year to year. Doctors and certain other professionals spend a long portion of their lives in training earning low incomes and then suddenly move into very high tax brackets for a relatively short career.

In the past, Congress provided some protection through income averaging for people whose income took a significant upward jump from one year to the next, but they did not show the same sympathy for people whose income went down. The tax reform of 1986 eliminated income averaging, perhaps because the problems posed by varying incomes seemed less severe after marginal rates were cut substantially. But there was little talk of restoring averaging as the top rate rose to almost 40 percent in the 1990s. Now that the top rate has been lowered to 35 percent the problem has again diminished slightly. For whatever reason, the problem of variable incomes has been ignored for many years.

The spending side of the budget—Generally, the political debate proceeds as though distributional decisions on the spending and revenue sides of the budget are quite separate. Steuerle (1995) has pointed out that the two sides are even judged by different criteria. Tax changes are often debated relative to income whereas a welfare program may be judged by the absolute benefit provided. With a program like Supplemental Security Income, the absolute benefit is reduced abruptly as income rises.

Although the tax and spending sides of the equation are often judged separately, there are exceptions to this rule. Occasionally, the payroll tax and Social Security benefits are examined jointly, and we ask what rate of return different income groups and differently structured families get on their payroll tax payments. During the debate on the 1983 Social

Security reforms, there was much discussion of whether the decision to put a portion of Social Security benefits in taxable income represented a tax increase or a benefit reduction. The distinction was politically important because Republicans wanted to emphasize that the reform involved some benefit reductions, while Democrats wanted to emphasize its tax increases.

The two sides of the budget are most confused by the Earned Income Tax Credit (EITC) and the refundable child credit. Budget accounting rules define the refundable portion of tax credits as an outlay rather than a tax reduction. The EITC is now our biggest welfare program. It has been popular politically, having been enhanced in both Republican and Democratic administrations.

The popularity of the EITC has waned a bit in recent years because of a conservative Republican argument against converting the tax system into a welfare system. This argument has been directed somewhat more at the refundable child credit than at the EITC. The EITC has also been afflicted by high error rates and outright cheating, dampening its political popularity. It provides a rare instance in which people can cheat on the income tax by claiming more income than they actually have. More important, recipients have claimed children erroneously and lied about their marital status.

In many programs, Congress aids the poor by appearing to subsidize the consumption of particular goods and services. This approach is not much discussed in public finance textbooks, but it seems that society is less upset with poverty per se than with the manifestations of poverty as revealed by the consumption patterns of the poor. Thus, we subsidize medical care (through Medicaid, for example), food (food stamps), housing (a plethora of subsidies), and college education (Pell grants) for the poor.

In some instances, the subsidies do not provide any extra incentive to consume the subsidized good or service. For example, food stamps and many housing subsidies can have the same effect on consumption as grants of cash, because recipients receive a subsidy related to their income and not to the amount of the favored good purchased.[6] The subsidy rarely exceeds the amount of food or housing purchased.

It is difficult to ascertain how much politicians know about these programs. Do they support the programs because they believe—wrongly—that consumption of all the favored goods is increased, or do they support them because their constituents believe it? Whatever the truth, it is apparent that taxpayers are more willing to give their money to the poor if the assistance is linked to meritorious purchases. They do not want the money to go to drugs or liquor. They ignore the notion that money is fungible.

[6] Although housing subsidies often do not provide a marginal economic incentive to spend more on housing, they may force higher housing expenditures by forcing housing units to satisfy certain expensive housing codes in order to be eligible for a subsidy.

The Public

Politicians must play to the public. The resulting debate is not edifying. The Democrats have recently been decrying "tax cuts for the rich" while the Republicans have responded with accusations of "class warfare." Undoubtedly, these phrases have been tested by polls and vetted in focus groups. The shallowness of the debate reflects the unfortunate fact that the public is not sufficiently interested in federal tax policy to learn much about it. A 2003 Kaiser/NPR/Harvard poll indicated that only 21 percent of respondents had heard the term "progressive taxes" and knew what it meant.[7] Another 23 percent had heard the phrase, but did not know what it meant. The majority—59 percent—had not heard the phrase. Respondents are similarly uninformed about the distribution of different tax burdens. The same poll found that only 26 percent believed that high-income people paid the highest proportion of their income to federal income taxes; 51 percent thought that middle-income groups faced the highest average burden; and 11 percent thought it was lower-income people.

It is not surprising that people think that the tax system is so unfair. Although the tax distribution tables that will be discussed later imply that the individual income tax system is highly progressive *on average,* the income tax burden faced by different individuals within any income group varies widely. We are a very long way from treating equals equally if income is used as a classifier. In 1999, the average income tax burden in the middle quintile was $1,780, but 43.8 percent of those in the quintile had burdens greater than $2,230 while 32.3 percent paid less than $1,340. As a result of such variation, 4.6 million in the third quintile paid more than $3,000 in taxes while 5.6 million in the fourth quintile paid less than that amount. Over 3 million in the fourth quintile paid more than $7,500 while 4 million in the fifth quintile paid less (Joint Economic Committee 2003). Most people probably know someone who makes more money than they do, but pays less in taxes.

Although the public generally does not feel that the rich pay their fair share of taxes, its responses suggest that its view of a fair burden would be quite low compared to what is actually paid. When a 1995 Roper Center/Reader's Digest survey asked about the highest combined federal, state, and local tax burden that would be fair to impose on a family of four with $200,000 of income, the mean response was 27 percent of income, while the median was 25 percent.[8]

The fact that the public greatly underestimates the tax burden actually facing the rich on average and does not believe that the rich pay their fair share suggests that Democrats' complaints about tax cuts for the rich may have some traction in the current debate. But

[7] This polling result is one of a collection assembled by Karlyn Bowman at http://www.aei.org/docLib/20030604_Taxes2.pdf

[8] Slemrod and Bakija (2001) cites polls that imply that people think that personal income taxes on the affluent should be higher than they actually are.

evidently the Republican counter of "class warfare" also has considerable appeal. Although Americans broadly endorse the notion that the tax system should be progressive, they have no apparent desire to severely punish the rich. It is sometimes suggested that given the American dream, this is because so many hope to be rich themselves. This suggestion is not borne out by a 1997 ABC/Washington Post poll, which found that only 36 percent of respondents thought it "very likely" or "somewhat likely" that they would ever be rich.[9]

More generally, Americans are ambivalent toward the rich. In a 1979 Roper Starch Worldwide poll that has not been repeated, fewer than 10 percent characterized themselves as being "antirich" while 35 percent were antihippy, 28 percent were antismoking, and 27 percent were antiwelfare. Gallup in 1990 found that 62 percent of respondents thought that America benefited from having a class of rich people, but in 1996, Roper Starch found that more than 85 percent of respondents thought that professional athletes, celebrities and entertainers, and lawyers were overpaid. Significantly, 68 percent thought the same of U.S. senators and representatives.

Numerous polls suggest that vigorous attempts to redistribute income have little support. For several years, the National Opinion Research Center has asked what people think of the statement "It is the responsibility of government to reduce the differences in income between people with high incomes and those with low incomes." In 2000, only 33 percent strongly or somewhat agreed with the statement; 25 percent neither agreed nor disagreed; and 40 percent disagreed or disagreed strongly. The results have changed very little since the poll was first taken in 1985.

The tepid support for redistribution shows up strongly in public attitudes toward the estate tax. A Gallup/CNN/USA Today poll in 2000 showed 60 percent in favor of eliminating the federal estate tax, even though only 17 percent thought that they would benefit personally.[10] By November 2002, the same pollsters showed only 50 percent in favor of elimination. But the drop in support did not indicate a trend. In January 2003, Fox News/Opinion Dynamics showed 67 percent favoring total elimination, indicating that liberal and conservative pollsters often come up with somewhat different results on similar questions. The wording of the question is also influential. In February–March 2003, Kaiser/NPR/Harvard found 54 percent favoring elimination of the "estate tax," but support for elimination grew to 60 percent in a parallel sample asked about "the estate tax that some people call the death tax." Among those supporting elimination, 92 percent chose the reason that the "money was already taxed once and should not be taxed again."

Whatever the public feeling regarding income distribution within the United States, this concern clearly stops at our national boundaries. Although our poverty-level income would be

[9] This poll and those referred to in the following paragraph are discussed in Ladd and Bowman (1998).

[10] The pollsters called it an "inheritance tax," but presumably that slip made little difference.

considered the height of affluence in most countries of the world, and even though a large portion of the world's inhabitants live under deplorable conditions, there is no sympathy within the American public for providing more foreign assistance. Concerns about income distribution, to the extent that they exist at all, tend to be highly tribalistic.

The Results

Because different standards for judging fairness rise and fall in importance with different Congresses and are applied to different taxes and tax-paying units in different ways, the final result is a hodgepodge that each person will judge differently depending on what standards he or she thinks are important.

Liberals and moderate conservatives often refer to distribution tables that indicate the amount of some or all taxes paid by individual income groups, where the income measure used to categorize people may be broadly defined or based on the legal definition of the some tax base, such as adjusted gross income. One rarely sees tax burdens displayed by consumption groups, even though politicians seem to have consciously chosen to tax income devoted to saving less than income devoted to consumption and to tax capital income less than wage income.

Regardless of such arguments, we are pretty much stuck with dealing with distribution tables based on income, since they are the only ones readily available. More disturbing, the typical table is based on only one year's income. This means that these tables have to be interpreted very carefully, especially when comparisons are made over time. One can talk of the rich, say the top 1 percent, being taxed more or less leniently over time, but the composition of the top 1 percent changes significantly from year to year.

There is considerable movement up and down the tax structure. If we look at the rate structure established for the income tax by 2001 legislation, slightly less than half the people who would have faced the top rate of 35 percent in 1987 would still face it in 1996 (Council of Economic Advisers 2003). About 19 percent would have moved down just one bracket to 33 percent, but 5 percent would have moved all the way down to the zero bracket. Similarly, only one-third of those in the zero bracket in 1987 would have remained there in 1996. About 60 percent would have moved up one or two brackets, and only 0.3 percent would have moved all the way to the top bracket. It seems downward mobility is more extreme than upward mobility.

Another way of looking at the issue is to examine movement across income percentiles. Roughly half of all taxpayers in the top 1 percent at any time in the 1979–88 period stayed there only one year. However, almost no one in this group fell as far as the bottom 10 percent (Congressional Budget Office [CBO] 2001).

Analysts compiling comprehensive distribution tables must make assumptions about where the final burden of a tax rests. Almost all distribution tables assume that the entire burden of individual income taxes rests with the person handing over the money to the government, as though the tax has no effect on behavior. CBO does assume that behavioral responses leave the entire burden of the corporate tax on domestic capitalists regardless of whether they own corporate or noncorporate capital. The Joint Committee on Taxation refuses to distribute the corporate tax burden on the grounds that its distributional effects are too uncertain. All government analysts assume that the entire burden of payroll taxes rests on employees regardless of whether the employer or employee hands over the money to the government. Curiously, analysts investigating the distributional implications of having a value-added tax (VAT) in the United States generally pass the entire burden through to consumers, even though a large component of a VAT is identical to a wage tax. Economists' conventions are not necessarily logically consistent.

Yet another failing of distributional tables has already been noted. They obscure very large differences in the tax treatment of individuals within any income group. Under current law, a rentier receiving most of his or her $30 million annual income from capital gains, dividends, and tax-free municipal bonds could face an average income tax rate considerably less than 15 percent whereas a rock star earning $30 million per year from concerts and royalties could have an average rate approaching 35 percent. Generally, tax burdens are extremely sensitive to how income is received and used.[11]

Having demeaned the usefulness of distribution tables, I shall now examine what they show. The most comprehensive recent analysis of effective tax rates imposed by the entire federal system at different income levels comes from CBO for the period 1979 through 2000. The analysis is not designed to isolate the effects of policy changes, because effective tax rates are affected by many factors other than legislation. Increases in the average level of real income push people into higher income tax brackets and so increase effective tax rates. Changes in the distribution of income affect tax rates at different points in the distribution. For example, if the top 1 percent gains relative to the median, its effective tax rate will rise relatively under constant law. The composition of income is also important, because different types of income are taxed differently and demographic changes that alter the size and composition of households also affect tax rates. Nothing in the historical record suggests that Congress attempts to use tax policy to offset such "accidental" changes in the distribution of income or the tax burden.

CBO's analysis is shown in tables 1 through 4. The tax unit in these tables is the household, and income is adjusted for household size. The definition of income is more comprehensive than taxable income or adjusted gross income used on individual income tax forms. For example, all Social Security benefits are included, even though only a small portion shows up in taxable income. Corporate income is allocated to individuals in proportion to other capital income. However, the income measure falls short of what economists ideally would like

[11] The foregoing critique of distributional tables owes much to Bradford (1995) and Graetz (1995).

to use. The flow of services from owner-occupied houses and other consumer durables is not counted. Interest and dividend income is not adjusted for inflation, nor are capital gains. Also, capital gains are recorded when realized, not when they accrue.

Table 1 shows that the effective tax rate for the bottom quintile rose from 8.0 to 10.2 percent from 1979 to 1984, fell to 5.6 percent in 1996, and then rose to 6.4 percent in 2000. The rate for the top quintile fell from 27.5 percent in 1979 to 23.8 percent in 1986 and then rose to 28.0 percent in 2000. The top 1 percent paid a rate of 37.0 percent in 1979, 25.5 percent in 1986, 36.1 percent in 1995, and 33.2 percent in 2000.

What do these numbers tell us? Obviously, they show that the federal tax system is quite progressive, but the tables are less clear on whether the system has become more or less progressive over time. The effective tax rate has fallen, both for the bottom quintile and the top 1 percent, with the former falling proportionately more than the latter. Nevertheless, the distribution of after-tax income has become considerably more unequal (table 2). The share of the top 1 percent grew from 7.5 percent in 1979 to 15.5 percent in 2000 law. Measured in 2000 dollars, income at the top of the lowest quintile grew 9.7 percent between 1979 and 2000, whereas the threshold income necessary to get into the top 1 percent grew 86 percent (table 3). The growing inequality in the distribution of after-tax income largely reflects changes in the distribution of pre-tax income. It is not the purposeful result of changes in tax law.

The growing discrepancy in incomes combined with changes in law significantly lowered the share of the total tax burden borne by the lowest quintile from 2.1 percent in 1979 to 1.1 percent in 2000 while the share of the burden borne by the top 1 percent rose from15.4 percent to 25.6 percent (table 4). Even though the share of after-tax income received by the rich rose, it is clear that the relative gain of the rich would have been much greater in the absence of a progressive system and the tax rate increases of the 1990s.

The combatants in the current tax policy debate see the CBO analysis as ancient history. The focus is now on the fairness of the income tax cuts of the 2001–03 period. The cuts are the largest, relatively, since the Reagan cuts of 1981. Moreover, they reduce the importance of income as a tax base and move the system more toward a progressive consumption tax, having provided tax relief for dividends, capital gains, and depreciation. Like any partial tax reform, their effects are complex and may be surprising in the long run. They are like a consumption tax in that relief is provided for income from capital. They are unlike a consumption tax in that the incentive to borrow using loans whose interest is deductible from the tax base is not reduced. That will make the tax burden on investments negative in some cases, in the sense that the after-tax rate of return will exceed the before-tax rate of return. As people respond to the incentive for borrowing, the system will become extremely inefficient.

Unfortunately, no one has analyzed the impact of 2001–03 tax changes using comprehensive definitions of income and tax burdens similar to those used by CBO. The Urban-Brookings Tax Policy Center has examined tax changes using adjusted gross income to define income classes (table 5),[12] and it provides estimates of the distribution of both individual income and payroll tax burdens (table 6). The distribution of the corporate tax—a matter of some significance at the top of the income distribution—is not estimated. In the CBO analysis, about one-fifth of the effective tax rate for the top 1 percent in 2000 was the result of the corporate tax.

Analyzing the distributional effects of the law as it exists at the end of 2003 poses a special problem because of the many phase-ins, phaseouts and sunsets introduced by the combination of 2001 and 2003 legislation. I shall arbitrarily resolve the problem by examining the distributional effects of 2001–03 legislation in 2013 under the assumption that none of the sunsets take effect. This should be regarded a measure of the distributional values reflected in 2001–03 legislation and not as a prediction of what the distribution of the tax burden will actually be in 2013. Although it is reasonable to assume that many, if not all, sunsets will be eliminated, it is also likely that we shall see numerous important new tax laws passed before 2013. Remember there will be five congressional elections and three presidential elections between the date that this is written and 2013. The new laws will build on or react against what was enacted in 2001–03 depending to some extent on the outcome of those elections. Consequently, the actual distribution of the tax burden in 2013 is likely to differ significantly from what table 5 shows, which I shall refer to in my discussion. Results for other years can be found on the Tax Policy Center web site, http://www.taxpolicycenter.org.

For the bottom 40 percent of the distribution, the individual income tax has become negative on average; that is, refundable tax credits exceed the liability stemming from positive tax rates. The effects of 2001–03 legislation were minor for this group as a whole. For the next 59 percent of the distribution, it is difficult to discern a pattern. Increases in after-tax income resulting from the cuts are similar in various percentiles, ranging from 2.3 to 3.6 percent for the classifications shown in the table. The proportionate cut in tax rates is, however, considerably larger at the bottom than at the top of this 59 percent.

The top 1 percent appears to reap a bonanza. Their after-tax income rises 6.0 percent and the fall in the income tax rate is larger than for any other group in the top quintile. The large tax cut at the top is a result of two factors. The first is ironic. The alternative minimum tax (AMT), originally designed to limit how much the rich could lower their tax bill with various deductions and exclusions, has become largely irrelevant for the ultra-rich because the top income tax rate exceeds the AMT rate. Consequently, those at the very top of the income distribution enjoy the full benefit of the 2001–03 tax cut, whereas most of those somewhat farther down the distribution have a portion of their benefits taken away by the AMT.

The second factor involves how much the 2003 legislation changes the nature of the tax base by reducing the burden on capital income. The tax on dividends and capital gains is

[12] The Tax Policy Center is currently working to broaden the definition of income used for their distribution tables.

lowered to a maximum of 15 percent. The administration's original intent was to reduce the very heavy tax burden on income flowing through corporations because of the cascading effect of the corporate and individual income tax. Such a reduction could be justified on grounds of both equity and economic efficiency. The law reduces the tax on dividends whether corporate taxes were levied on the relevant income stream or not, and it reduces the capital gains tax on both the corporate and noncorporate sectors. The final outcome lacks the purity of the administration's original proposal, but is much simpler.

Whether the distribution table is right to concentrate the benefits of the dividend-capital gains tax cut so heavily in the top 1 percent of the distribution in 2013 depends on the economic reaction to the cut. As much as the cut in the dividend tax increased the value of shares and the cut in the capital gains tax increased the prices of capital more generally—and that may have largely happened in anticipation of the change in law—those holding shares at the right time will have benefited handsomely. But those acquiring assets later will not gain nearly as much by the tax cut.[13] In addition, as much as the cut in the tax on capital increases its supply, either by attracting more capital from abroad or by raising savings, wage earners will become more productive because they have more capital to work with, and the benefits of the cut will trickle down the income distribution. If the tax cut draws more capital to the United States from abroad, foreign rates of return will rise and foreign capitalists will also reap some benefits of the U.S. tax cut.

Estimates of the quantitative importance of such effects are controversial, but table 5 assumes that they are not important at all. Fuchs, Krueger, and Poterba (1997) surveying economists at the top 40 universities found that on average, economists believed that only 40 percent of the corporate tax was borne by domestic capitalists. Gravelle and Smetters (1998) have questioned this result, arguing that it underestimates how much changes in capital flows into and out of the United States affect world rates of return and the relative prices of imported and domestically produced goods. The sets of assumptions that they favor leave the bulk of the corporate tax burden on domestic capitalists, but they also report results in which almost 20 percent of the tax falls on domestic labor and describe different models that imply that over 70 percent of the burden falls on foreign capital owners.

It is also important to repeat that different people within each income percentile will be affected very differently by the 2003 legislation. Their tax cut will depend very much on the importance of capital gains and dividends in their total income.

Table 5 does not take account of the distributional effects of eliminating the estate tax or easing pension and individual retirement account tax rules. The former are not easy to discern. The estate tax is sometimes distributed according to the income of the decedent, but that

[13] Using the effect of the exemption of municipal bond interest, Graetz (1995) discusses the issues involved in measuring distributional effects when a tax change changes the prices of capital assets.

assumes that dead people bear the pain of the tax. It would seem more reasonable to distribute it according to the economic resources of the heirs, but sufficient data are not available.

Conclusions

Given the public's tepid support for income redistribution, it is remarkable how much occurs. Clearly, however, the public as a whole is quite uninterested in the formulation of tax policy, whether redistributive or not. That gives what I would call the tax policy establishment—the legislature, interest groups, editorial boards, think tanks, and academics—a disproportionate influence over outcomes. The establishment seems to favor redistribution more than the general public.

Recent tax changes reflect two important political forces. First, conservatives have obviously gained more influence over tax policy given that the Congress and the presidency have been Republican-controlled since the 2000 election. But the second force is powerful as well. It is inertia. Radical changes in tax policy occur rarely, absent major wars and economic crises, and even when they are relatively important, as in 1986, they tend not to profoundly affect the distribution of income. Powerful economic forces emanating from the private sector tend to change the income distribution much more than changes in tax or welfare policy.

The changes of 2001 and 2003 have had an unusually large impact on the burden at the very top of the income distribution. But recent policy has continued to increase negative taxes at the bottom, despite some conservative objections, and has not done much redistribution at all in the rest of the distribution. Perhaps the social values expressed by recent tax changes are as significant as the distributional values. Since 1997, the system has become more strongly pro-marriage and pro-family.

If history repeats, the distributional and social values expressed by tax policy will continue to jump around, but on a fairly small playing field. Nothing approaching a flat tax or an egalitarian society would seem to be in our future. But intense debates will occur over a narrower range of options. It's too bad that the public isn't paying more attention.

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Table 1. Effective Federal Tax Rates for All Households, by Household Income Category, 1979-2000 (percent)

Income category[a]	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total Effective Federal Tax Rate																						
Lowest quintile	8.0	7.7	8.3	8.2	9.1	10.2	9.8	9.6	8.7	8.5	7.9	8.9	8.4	8.2	8.0	6.6	6.3	5.6	5.8	5.8	6.1	6.4
Second quintile	14.3	14.1	14.7	13.8	13.7	14.6	14.8	14.8	14.0	14.3	13.9	14.6	14.2	13.7	13.5	13.1	13.4	13.2	13.6	13.0	13.3	13.0
Middle quintile	18.6	18.7	19.2	17.9	17.5	18.0	18.1	18.0	17.6	17.9	17.9	17.9	17.6	17.4	17.3	17.3	17.3	17.3	17.4	16.8	16.9	16.7
Fourth quintile	21.2	21.5	22.1	20.6	20.1	20.4	20.4	20.5	20.2	20.6	20.5	20.6	20.5	20.2	20.2	20.4	20.5	20.3	20.5	20.4	20.5	20.5
Highest quintile	27.5	27.3	26.9	24.4	23.9	24.3	24.0	23.8	25.8	25.6	25.2	25.1	25.3	25.6	26.8	27.4	27.8	28.0	28.0	27.6	28.0	28.0
All quintiles	**22.2**	**22.2**	**22.4**	**20.7**	**20.4**	**21.0**	**20.9**	**20.9**	**21.6**	**21.8**	**21.5**	**21.5**	**21.5**	**21.5**	**22.0**	**22.3**	**22.6**	**22.7**	**22.9**	**22.6**	**22.9**	**23.1**
Top 10 percent	29.6	29.0	28.2	25.3	24.8	25.2	24.7	24.3	27.2	26.7	26.3	26.1	26.6	26.9	28.6	29.4	29.8	30.1	29.9	29.3	29.7	29.7
Top 5 percent	31.8	30.8	29.4	26.0	25.6	26.1	25.4	24.6	28.5	27.8	27.2	27.0	27.6	28.1	30.5	31.3	31.8	32.0	31.6	30.8	31.2	31.1
Top 1 percent	37.0	34.6	31.8	27.7	27.7	28.2	27.0	25.5	31.2	29.7	28.9	28.8	29.9	30.6	34.5	35.8	36.1	36.0	34.9	33.4	33.5	33.2

Source: Congressional Budget Office, Effective Federal Tax Rates, 1997-2000, Appendix B (August 2003).

Notes: Effective tax rates are calculated by dividing taxes by comprehensive household income. A household consists of the people who share a housing unit, regardless of their relationships.

The income measure is comprehensive household income, which comprises pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes; the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employees' contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Social insurance, or payroll, taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Corporate income taxes are distributed to households according to their share of capital income. Federal excise taxes are distributed to them according to their consumption of the taxed good or service.

a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size--that is, divided by the square root of the household's size. Quintiles, or fifths, contain equal numbers of people.

Table 2. Shares of Pretax and After-Tax Income for All Households, by Household Income Category, 1979-2000 (percent)

Income category[a]	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Share of Pretax Income																						
Lowest quintile	5.8	5.7	5.5	5.2	4.9	5.0	4.8	4.5	4.4	4.3	4.3	4.6	4.7	4.4	4.5	4.4	4.6	4.3	4.3	4.3	4.2	4.0
Second quintile	11.1	11.0	10.9	10.6	10.3	10.3	10.1	9.6	10.0	9.7	9.8	10.0	10.0	9.7	9.8	9.8	9.7	9.4	9.1	9.0	8.9	8.6
Middle quintile	15.8	15.7	15.9	15.7	15.5	15.4	15.2	14.7	15.3	14.9	15.1	15.1	15.4	15.1	15.0	15.2	14.9	14.5	14.2	14.1	13.8	13.5
Fourth quintile	22.0	22.1	22.2	22.2	22.2	22.0	21.9	21.2	22.1	21.6	21.6	21.6	21.8	21.5	21.6	21.6	21.3	21.0	20.4	20.2	19.9	19.6
Highest quintile	45.5	45.8	46.0	46.7	47.7	48.0	48.6	50.6	48.9	50.3	49.9	49.5	49.0	50.0	49.8	49.8	50.2	51.5	52.6	53.0	53.8	54.8
All quintiles	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Top 10 percent	30.5	30.6	30.7	31.1	32.2	32.6	33.4	35.8	33.5	35.3	34.8	34.4	33.7	34.9	34.6	34.6	35.2	36.5	37.8	38.4	39.4	40.6
Top 5 percent	20.7	20.7	20.7	21.1	22.2	22.6	23.4	26.0	23.4	25.4	24.8	24.3	23.6	24.7	24.4	24.5	25.1	26.5	27.8	28.5	29.6	30.7
Top 1 percent	9.3	9.1	9.1	9.6	10.3	10.9	11.5	14.0	11.2	13.3	12.5	12.1	11.2	12.3	11.9	12.1	12.5	13.8	14.9	15.7	16.7	17.8
Share of After-Tax Income																						
Lowest quintile	6.8	6.8	6.5	6.0	5.5	5.7	5.5	5.2	5.1	5.0	5.1	5.3	5.5	5.2	5.3	5.3	5.5	5.3	5.2	5.3	5.2	4.9
Second quintile	12.3	12.1	12.0	11.5	11.2	11.1	10.9	10.3	10.9	10.7	10.8	10.8	10.9	10.7	10.9	11.0	10.9	10.6	10.2	10.1	10.0	9.7
Middle quintile	16.5	16.5	16.5	16.3	16.1	16.0	15.8	15.3	16.1	15.6	15.7	15.8	16.2	15.9	16.0	16.1	15.9	15.6	15.3	15.1	14.9	14.6
Fourth quintile	22.3	22.3	22.3	22.3	22.3	22.2	22.0	21.3	22.5	21.9	21.9	21.9	22.1	21.9	22.1	22.2	21.9	21.6	21.1	20.8	20.5	20.2
Highest quintile	42.4	42.8	43.3	44.6	45.7	46.0	46.7	48.7	46.3	47.9	47.6	47.3	46.5	47.4	46.8	46.5	46.8	48.0	49.1	49.6	50.2	51.3
All quintiles	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Top 10 percent	27.6	27.9	28.4	29.4	30.5	30.9	31.7	34.3	31.1	33.1	32.7	32.3	31.5	32.5	31.7	31.4	31.9	33.1	34.4	35.1	36.0	37.1
Top 5 percent	18.1	18.4	18.9	19.7	20.7	21.2	22.0	24.8	21.3	23.5	23.0	22.6	21.7	22.7	21.8	21.6	22.1	23.3	24.6	25.4	26.5	27.5
Top 1 percent	7.5	7.7	8.0	8.7	9.4	9.9	10.6	13.2	9.9	12.0	11.3	11.0	10.0	10.9	10.0	10.0	10.3	11.4	12.6	13.5	14.4	15.5

Source: Congressional Budget Office, Effective Federal Tax Rates, 1997-2000, Appendix B (August 2003).

Notes: A household consists of the people who share a housing unit, regardless of their relationships.

The income measure is comprehensive household income, which comprises pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes; the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes); and employees' contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Social insurance, or payroll, taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Corporate income taxes are distributed to households according to their share of capital income. Federal excise taxes are distributed to them according to their consumption of the taxed good or service.

a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size--that is, divided by the square root of the household's size. Quintiles, or fifths, contain equal numbers of people. The minimum adjusted income is the lower income boundary for each quintile.

Table 3. Income Category Minimums for All Households, by Household Income Category, 1979-2000 (2000 dollars)

Income category[a]	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Minimum Adjusted Income																						
Lowest quintile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Second quintile	14,400	13,800	13,600	13,200	12,700	13,500	13,500	13,700	13,200	13,600	13,900	14,200	14,200	13,800	14,000	14,200	14,900	14,600	15,000	15,700	16,100	15,800
Middle quintile	22,800	22,000	21,900	21,400	21,200	22,100	22,500	23,100	23,000	23,500	23,900	23,900	23,500	23,600	23,700	24,000	24,800	25,100	25,400	26,400	26,900	26,800
Fourth quintile	31,300	30,400	30,600	30,200	30,200	31,600	32,100	33,200	33,400	34,100	34,400	34,200	33,900	34,200	34,100	34,900	35,500	36,000	36,600	37,900	38,700	38,900
Highest quintile	43,600	42,600	43,000	43,000	43,300	45,200	45,900	47,900	48,500	49,400	50,100	49,400	48,700	49,300	49,700	50,500	51,800	52,800	54,000	56,100	57,800	58,400
Top 10 percent	55,700	55,100	55,100	55,500	56,200	59,200	60,300	63,000	63,900	65,500	66,500	65,300	64,300	65,500	65,900	66,800	69,200	71,100	73,200	76,400	78,600	80,100
Top 5 percent	70,700	69,200	69,900	69,500	71,100	75,100	77,000	81,800	81,700	84,000	86,100	84,700	83,200	85,900	85,600	87,500	91,000	93,700	98,300	102,500	105,700	108,400
Top 1 percent	138,300	134,200	132,400	133,000	138,900	148,500	154,400	179,300	168,200	181,000	183,600	175,100	171,700	181,600	178,700	184,100	195,800	206,700	219,400	234,000	249,700	257,100

Source: Congressional Budget Office, Effective Federal Tax Rates, 1997-2000, Appendix B (August 2003).

Notes: A household consists of the people who share a housing unit, regardless of their relationships.

The income measure is comprehensive household income, which comprises pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes; the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes); and employees' contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Social insurance, or payroll, taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Corporate income taxes are distributed to households according to their share of capital income. Federal excise taxes are distributed to them according to their consumption of the taxed good or service.

a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size--that is, divided by the square root of the household's size. Quintiles, or fifths, contain equal numbers of people. The minimum adjusted income is the lower income boundary for each quintile.

Table 4. Share of Federal Tax Liabilities for All Households, by Household Income Category, 1979-2000 (percent)

Income category[a]	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Share of Total Federal Tax Liabilities																						
Lowest quintile	2.1	2.0	2.0	2.1	2.2	2.4	2.3	2.1	1.8	1.7	1.6	1.9	1.9	1.7	1.6	1.3	1.3	1.1	1.1	1.1	1.1	1.1
Second quintile	7.2	7.0	7.1	7.1	6.9	7.2	7.2	6.8	6.5	6.4	6.4	6.8	6.6	6.2	6.0	5.8	5.8	5.5	5.4	5.2	5.2	4.8
Middle quintile	13.2	13.3	13.6	13.6	13.3	13.2	13.2	12.7	12.4	12.2	12.6	12.6	12.6	12.2	11.8	11.8	11.4	11.1	10.8	10.5	10.2	9.8
Fourth quintile	21.0	21.3	21.9	22.1	21.8	21.4	21.3	20.8	20.7	20.4	20.6	20.7	20.9	20.2	19.8	19.8	19.3	18.8	18.3	18.2	17.8	17.4
Highest quintile	56.4	56.3	55.2	55.0	55.7	55.6	55.8	57.5	58.4	59.1	58.7	57.9	57.9	59.5	60.5	61.1	61.9	63.4	64.2	64.9	65.6	66.7
All quintiles	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Top 10 percent	40.7	40.0	38.6	38.0	39.0	39.3	39.5	41.6	42.2	43.2	42.5	41.7	41.7	43.6	44.9	45.6	46.6	48.3	49.3	49.9	51.0	52.2
Top 5 percent	29.6	28.7	27.2	26.5	27.7	28.2	28.4	30.7	30.8	32.3	31.3	30.6	30.3	32.3	33.8	34.4	35.4	37.3	38.3	38.9	40.2	41.4
Top 1 percent	15.4	14.2	12.9	12.8	14.0	14.7	14.8	17.1	16.2	18.1	16.7	16.2	15.7	17.5	18.7	19.4	20.1	21.8	22.7	23.3	24.3	25.6

Source: Congressional Budget Office, Effective Federal Tax Rates, 1997-2000, Appendix B (August 2003).

Notes: Effective tax rates are calculated by dividing taxes by comprehensive household income. A household consists of the people who share a housing unit, regardless of their relationships.

The income measure is comprehensive household income, which comprises pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes; the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes); and employees' contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Social insurance, or payroll, taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Corporate income taxes are distributed to households according to their share of capital income. Federal excise taxes are distributed to them according to their consumption of the taxed good or service.

a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size--that is, divided by the square root of the household's size. Quintiles, or fifths, contain equal numbers of people.

Table 5. Distribution of Income Tax Changes Due to 2001-2003 Tax Cuts, Assuming Sunsets are Eliminated, by Percentiles, 2013

AGI class[a]	Percent of tax units with tax cut	Percent change in after-tax income[b]	Percent of total income tax change	Average tax change ($)	Average income tax rate[c]	
					Current law	Proposal
Lowest quintile	0.3	0.1	*	-3	-11.8	-12.0
Second quintile	75.5	1.9	3.8	-353	-3.9	-5.9
Middle quintile	99.0	2.6	9.2	-868	7.2	4.8
Fourth quintile	99.7	2.8	18.1	-1,705	12.0	9.6
Next 10 percent	99.9	3.6	19.1	-3,593	15.1	12.1
Next 5 percent	99.9	2.9	10.8	-4,061	17.7	15.3
Next 4 percent	99.7	2.3	10.4	-4,906	22.2	20.5
Top 1 percent	99.0	6.0	28.5	-53,561	29.1	24.9
All	74.9	3.3	100.0	-1,881	16.7	14.0

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0503-1).

* Less than 0.05 percent.

Notes: Calendar year 2013. Baseline is current law. Includes removing sunsets for the following individual income tax provisions in EGTRRA, the Job Creation and Worker Assistance Act of 2002, and the conference agreement: marginal tax rate reductions; the 10-percent bracket; the child tax credit; the child and dependent care credit; the AMT exemption; the allowance of personal nonrefundable credits regardless of AMT liability; the personal exemption phaseout (PEP); the limitation on itemized deductions (Pease); the standard deduction, 15-percent bracket, and EITC expansion for married couples; tax rates on long-term capital gains and dividends (15 percent; 0 percent for those in the 10- and 15-percent tax brackets). Excludes pension and IRA provisions, and phaseout of the estate tax.

a. Tax units with negative AGI are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units. Tax units that are dependents of other taxpayers are excluded from the analysis.

b. After-tax income is AGI less individual income tax net of refundable credits.

c. Average income tax, net of refundable credits, as a percentage of average AGI.

Table 6. Current-Law Distribution of Income and Payroll Tax, by Percentile, 2003

AGI class[a]	Total ($ millions)				Percent of total				Average effective tax rate		
	AGI	Income tax[b]	Payroll tax[c]	Income and payroll	AGI	Income tax	Payroll tax	Income and payroll	Income tax	Payroll tax	Income and payroll
Lowest quintile	46,201	-4,679	6,516	1,837	0.7	-0.5	1.0	0.1	-10.1	14.1	4.0
Second quintile	380,583	-18,700	47,781	29,081	5.9	-2.2	7.0	1.9	-4.9	12.6	7.6
Middle quintile	762,602	33,838	98,376	132,214	11.8	3.9	14.4	8.6	4.4	12.9	17.3
Fourth quintile	1,380,221	123,064	176,253	299,318	21.4	14.3	25.9	19.4	8.9	12.8	21.7
Next 10 percent	1,095,700	124,708	137,045	261,753	17.0	14.5	20.1	17.0	11.4	12.5	23.9
Next 5 percent	763,476	108,744	91,684	200,428	11.8	12.6	13.5	13.0	14.2	12.0	26.3
Next 4 percent	988,812	184,333	88,144	272,477	15.3	21.4	12.9	17.7	18.6	8.9	27.6
Top 1 percent	1,117,072	310,376	34,135	344,511	17.3	36.0	5.0	22.3	27.8	3.1	30.8
All	6,459,061	861,611	681,477	1,543,088	100.0	100.0	100.0	100.0	13.3	10.6	23.9

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0503-1).

Note: Calendar year 2013.

a. Tax units with negative AGI are excluded from the lowest income class but are included in the totals. Includes both filing and nonfiling units. Tax units that are dependents of other taxpayers are excluded from the analysis.

b. Net of refundable credits (earned income tax credit and refundable child tax credit).

c. Includes both the employee and employer portion of Social Security and Medicare tax.

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