# CBO MEMORANDUM 

OPTIONS TO CUT TAXES

June 2000

## NOTES

Unless otherwise indicated, all years referred to in this report are fiscal years.
Numbers in the text and tables may not add up to totals because of rounding.

This memorandum, which first appeared as Chapter 2 in the Congressional Budget Office's (CBO's) March 2000 Budget Options volume, examines a range of major proposals that have been prominent in the public debate over cutting federal taxes. After an overview of the current federal tax system and discussion of three criteria for assessing tax changes, the memorandum considers specific proposals to reduce revenues under each of four basic approaches: broad-based tax cuts that affect most taxpayers, tax cuts aimed at reducing particular disincentives in the current tax system, tax cuts designed to simplify the tax system or improve compliance, and tax cuts that provide new incentives for particular types of behavior.

Roberton Williams, G. Thomas Woodward, and Richard Kasten of CBO's Tax Analysis Division wrote the memorandum. Barry B. Anderson, Arlene Holen, and Steve Lieberman, all of CBO, provided helpful comments.

Sherry Snyder edited the memorandum, and Christine Bogusz proofread it. Kathryn Quattrone prepared it for publication, and Laurie Brown prepared the electronic versions for CBO's World Wide Web site (www.cbo.gov).

## Contents

THE FEDERAL TAX SYSTEMThe Individual Income Tax 1
Social Insurance Taxes 3
Other Federal Taxes 4
CRITERIA FOR ASSESSING TAX CHANGES
Efficiency 6
Fairness 6
Complexity and Costs 7
WAYS TO REDUCE REVENUES 7
Making Broad-Based Tax Cuts 8
Reducing Particular Disincentives of the Tax System 9
Simplifying the Tax System 12
Expanding or Adding to Current Incentives 13

## TABLES

1. CBO Projections of Revenues 2
2. 

Effective Tax Rates and Shares of Tax Liability, by Income Quintile and Source of Revenue, 1995

## FIGURES

1. Total Revenues as a Share of GDP 1
2. Revenues, by Source, as a Share of GDP

4

## Options to Cut Taxes

Federal tax revenues will claim a postwar record 20.3 percent of gross domestic product (GDP) in fiscal year 2000 (see Figure 1). The Congressional Budget Office (CBO) projects that revenues measured as a share of GDP will decline over the next few years to 19.8 percent, a level that is still higher than in any year before 1998 other than the last two years of World War II. In light of that situation, the Congress may want to use some of the projected surplus to cut taxes. If so, it will face two issues: how much to reduce revenues and how to accomplish that reduction. Choosing among alternative approaches requires understanding the current structure of the federal tax system as well as the criteria that may prove useful in evaluating any tax change.

Figure 1.
Total Revenues as a Share of GDP (By fiscal year)


SOURCE: Congressional Budget Office.

## The Federal Tax System

The federal tax system will raise nearly $\$ 2$ trillion in fiscal year 2000 (see Table 1). Over 90 percent of that revenue will come from income and social insurance taxes. Individual income taxes are the largest source, accounting for nearly half of the total. Social insurance taxes, levied primarily to support Social Security and Medicare, make up another third. The remainder splits roughly evenly between the corporate income tax and a variety of smaller revenue sources including excise taxes, the estate and gift tax, customs duties, and miscellaneous levies.

## The Individual Income Tax

Americans are most familiar with the individual income tax and its recurring April 15 deadline. Although it has many complexities, the basic structure of the tax is straightforward: add up income from various sources; subtract exclusions, standard or itemized deductions, and personal exemptions to determine taxable income; apply graduated tax rates to assess basic tax liability; and subtract various credits to calculate final liability. The tax falls most heavily on people at the top of the income distribution: those in the highest quintile-the fifth of families with the highest in-come-pay over three-fourths of the total revenue from the individual income tax (see Table 2). By contrast, families in the bottom three-fifths of the income distribution pay just 7 percent of the tax, and because of the earned income tax credit (EITC), the lowest quintile as a group actually receives a net payment.

That distribution reflects two developments in the 1990s. First, tax acts in 1990 and 1993 added three new tax brackets to the 15 percent and 28 percent brackets set in the Tax Reform Act of 1986 (TRA86). The new brackets-with rates of 31 percent, 36 percent, and 39.6 percent-sharply increased the taxes paid by high-income families. At the same time, the income of families facing the higher rates rose much more rapidly over the decade than did overall income, making a markedly larger share of total income subject to the higher rates. Finally, the earned income tax credit was greatly expanded in the early 1990s. Those changes combined to boost the share of individual income tax liability in the top quintile from 72 percent in

1991 to 77 percent just four years later. The changes were also an important cause of revenues from the tax growing from 7.7 percent of GDP in 1992 to 9.9 percent in 2000 (see Figure 2).

The rate structure of the individual income tax makes it the most progressive of the major sources of revenue; that is, the tax measured as a share of in-come-the effective tax rate-rises most sharply as income increases. In 1995, families in the lowest income quintile faced a negative effective tax rate, -5.6 percent, compared with 6.1 percent for the middle quintile and 16.2 percent for the highest quintile.

Table 1.
CBO Projections of Revenues (By fiscal year)

| Source of Revenue | $\begin{gathered} \text { Actual } \\ 1999 \end{gathered}$ | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In Billions of Dollars |  |  |  |  |  |  |  |  |  |  |  |  |
| Individual Income | 879 | 945 | 986 | 1,026 | 1,068 | 1,112 | 1,162 | 1,217 | 1,275 | 1,339 | 1,407 | 1,480 |
| Corporate Income | 185 | 189 | 189 | 187 | 190 | 194 | 200 | 208 | 216 | 225 | 233 | 242 |
| Social Insurance | 612 | 653 | 684 | 714 | 742 | 770 | 808 | 842 | 878 | 913 | 954 | 998 |
| Excise | 70 | 68 | 71 | 73 | 75 | 77 | 79 | 81 | 84 | 86 | 89 | 91 |
| Estate and Gift | 28 | 30 | 32 | 33 | 35 | 36 | 37 | 38 | 40 | 42 | 45 | 48 |
| Customs Duties | 18 | 19 | 20 | 22 | 23 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Miscellaneous | 35 | 40 | 36 | 41 | 44 | 49 | 50 | 52 | 51 | 53 | 55 | 57 |
| Total | 1,827 | 1,945 | 2,016 | 2,096 | 2,177 | 2,263 | 2,361 | 2,465 | 2,572 | 2,686 | 2,813 | 2,946 |
| On-budget | 1,383 | 1,465 | 1,515 | 1,571 | 1,630 | 1,693 | 1,764 | 1,843 | 1,923 | 2,010 | 2,106 | 2,208 |
| Off-budget ${ }^{\text {a }}$ | 444 | 480 | 502 | 525 | 547 | 570 | 597 | 623 | 649 | 676 | 707 | 738 |
| As a Percentage of GDP |  |  |  |  |  |  |  |  |  |  |  |  |
| Individual Income | 9.6 | 9.9 | 9.8 | 9.8 | 9.7 | 9.7 | 9.7 | 9.8 | 9.8 | 9.9 | 9.9 | 10.0 |
| Corporate Income | 2.0 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 |
| Social Insurance | 6.7 | 6.8 | 6.8 | 6.8 | 6.8 | 6.7 | 6.8 | 6.8 | 6.8 | 6.7 | 6.7 | 6.7 |
| Excise | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 |
| Estate and Gift | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Customs Duties | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Miscellaneous | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Total | 20.0 | 20.3 | 20.1 | 20.0 | 19.9 | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 | 19.8 |
| On-budget | 15.2 | 15.3 | 15.1 | 15.0 | 14.9 | 14.8 | 14.8 | 14.8 | 14.8 | 14.8 | 14.8 | 14.9 |
| Off-budget ${ }^{\text {a }}$ | 4.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |

SOURCE: Congressional Budget Office.
a. Social Security.

## Social Insurance Taxes

Social insurance taxes claim just under 7 percent of GDP each year, primarily in support of Social Security and Medicare. The taxes, which are often referred to as payroll taxes, principally comprise several separate levies. The tax that finances Social Security equals 6.2 percent of wage, salary, and self-employment income up to a taxable maximum ( $\$ 76,200$ in 2000) paid by both employer and employee. Thus, the
total Social Security tax is 12.4 percent of earnings up to the maximum. The Medicare tax has no cap and equals 1.45 percent of earnings, again paid by both employer and employee to yield a total tax of 2.9 percent. Economists generally agree that the entire payroll tax is actually paid by workers because their wages are lower by the employer's share of the tax. Smaller taxes finance unemployment benefits and retirement benefits for railroad and government workers.

Table 2.
Effective Tax Rates and Shares of Tax Liability, by Income Quintile and Source of Revenue, 1995

| Source of Revenue | Pretax Family Income Quintile |  |  |  |  | All Families |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lowest | Second | Middle | Fourth | Highest |  |
| Effective Tax Rate (As a percentage of pretax income) |  |  |  |  |  |  |
| Individual Income | -5.6 | 1.8 | 6.1 | 8.7 | 16.2 | 11.3 |
| Corporate Income | 0.5 | 1.0 | 1.3 | 1.5 | 4.9 | 3.2 |
| Social Insurance | 7.8 | 9.9 | 10.7 | 11.2 | 7.9 | 9.2 |
| Excise | 3.3 | 2.0 | 1.5 | 1.2 | 0.7 | 1.1 |
| Total | 6.0 | 14.6 | 19.7 | 22.5 | 29.6 | 24.7 |
| Share of Tax Liability (In percent) |  |  |  |  |  |  |
| Individual Income | -2 | 1 | 8 | 16 | 77 | 100 |
| Corporate Income | 1 | 3 | 6 | 10 | 81 | 100 |
| Social Insurance | 3 | 10 | 16 | 26 | 46 | 100 |
| Excise | 10 | 15 | 19 | 22 | 32 | 100 |
| Total | 1 | 5 | 11 | 19 | 64 | 100 |
| Pretax Family Income |  |  |  |  |  |  |
| Average (Dollars) | 8,100 | 20,100 | 33,300 | 49,600 | 120,000 | 45,700 |
| Share (Percent) | 3 | 9 | 14 | 21 | 53 | 100 |

SOURCE: Congressional Budget Office.
NOTES: Families are groups of individuals living together. Individuals not living with relatives are included as one-person families.
Individual income taxes are distributed directly to families paying those taxes. Corporate income taxes are distributed to families according to their share of capital income. Social insurance (payroll) taxes are distributed to families paying those taxes directly, or indirectly through their employers. Federal excise taxes are distributed to families according to their consumption of the taxed good or service.

Pretax family income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, and all cash transfer payments. Income also includes the corporate income tax and the employer's share of Social Security and federal unemployment insurance payroll taxes. For purposes of ranking by adjusted family income, income for each family is divided by the poverty threshold for a family of that size. Quintiles contain equal numbers of people. Families with zero or negative income are excluded from the lowest income category but are included in the total.

From 1960 to 1988, payroll taxes climbed sharply as a share of GDP, rising from 3 percent to nearly 7 percent. The share of payroll taxes is roughly 7 percent today and will remain at about that level under current law. For most families, the payroll tax now exceeds their income tax. Nearly three-fourths of families who pay either tax face a combined employer/ employee payroll tax that is greater than their income tax liability.

The cap on earnings subject to the Social Security tax and the fact that income other than earnings is not taxed combine to impose somewhat higher payroll taxes, measured as a percentage of income, on middleincome families than on those at the top or bottom of the income distribution. In 1995, families in the lowest income quintile incurred payroll taxes equal, on average, to 7.8 percent of their income, compared with 10.7 percent for families in the middle quintile and 7.9 percent for those in the top quintile.

## Other Federal Taxes

One-sixth of federal tax revenues come from various sources, none of which yield as much as one-tenth of the total.

The Corporate Income Tax. After falling from 3.6 percent of GDP in 1962 to just over 1 percent in the early 1980s, the corporate income tax has rebounded somewhat to claim roughly 2 percent of GDP this year. The recent rise resulted primarily from TRA-86 and from generally higher corporate profits in the 1990s. CBO projects that that percentage will decline slightly over the next decade. The tax currently provides just under one-tenth of total federal revenues, but that share is expected to fall over time. Although the tax has four rates, the first two ( 15 percent and 25 percent) apply only to corporate income below $\$ 75,000$; the higher two ( 34 percent and 35 percent) differ only slightly. At least 80 percent of corporate income is taxed at the highest rate.

Regardless of how they are levied, taxes are paid by individuals, not by corporations. Various theories have been advanced to explain how the burden of the corporate income tax might be borne by workers, owners of corporate capital, or owners of capital generally. Most economists now agree that all or nearly all of the tax falls on the owners of capital, both corporate and noncorporate. Since the nation's capital stock is owned primarily by people at the upper end of the income distribution, the tax falls most heavily on

Figure 2.
Revenues, by Source, as a Share of GDP (By fiscal year)


SOURCE: Congressional Budget Office.
the wealthy and is therefore progressive. In 1995, families in the top income quintile effectively paid corporate income taxes equal to about 4.9 percent of their income, compared with 1.3 percent for families in the middle quintile and 0.5 percent for those in the lowest quintile.

Excise Taxes. Excise taxes, which are levied on such goods and services as gasoline, alcohol, tobacco, and telephone use, represent a small and declining share of total federal revenues. Most of those taxes are levied on the quantity rather than the value of goods, and rates have generally not kept pace with inflation. In the early 1960s, excise taxes were just over 2 percent of GDP; this year, they will be only about one-third as large, or 0.7 percent.

Because consumption claims a smaller share of income as income rises, effective excise tax rates are higher for families at the lower end of the income distribution than for those at the top. Families in the lowest income quintile faced an average effective rate of 3.3 percent in 1995, compared with 0.7 percent for families in the top quintile.

Estate and Gift Taxes. The estate and gift tax combines the taxation of assets given away during a person's life and bequests made at death. The tax applies only to large estates and gifts. Under current law, estates valued at less than $\$ 675,000$ are exempt from taxation, but those valued at more than $\$ 675,000$ are taxed at rates ranging from 37 percent to 55 percent. ${ }^{1}$ Annual gifts in excess of $\$ 10,000$ per recipient are subject to similar levies. The $\$ 675,000$ exclusion, which applies to the lifetime sum of taxable gifts and bequests, is scheduled to increase incrementally to $\$ 1$ million by 2006 and remain at that level. By contrast, the $\$ 10,000$ annual limit on gifts will increase to keep pace with inflation since 1997 , but only in $\$ 1,000$ increments.

[^0]Revenues from the estate and gift tax have grown rapidly in recent years, nearly tripling from $\$ 11$ billion in 1991 to a projected $\$ 32$ billion in 2001. Even so, the tax is relatively small. CBO projects that revenues from that tax will claim only 0.3 percent of GDP over the next decade. Furthermore, the tax affects few taxpayers: less than 2 percent of estates (just over 100,000 in 1998) incur any tax liability. Gift tax returns, which may be filed annually and may or may not involve tax liability, are more numerous (about 260,000 in 1998), but they represent less than 0.5 percent of all taxpayers. ${ }^{2}$

Assessing the distributional impact of the estate and gift tax is difficult. Measured with respect to the well-being of decedents and gift-givers, the tax is clearly highly progressive; only the largest estates and gifts pay any tax. Some economists argue, however, that it is more appropriate to assign the burden of the tax to beneficiaries. Unfortunately, research yields incomplete and conflicting findings about the distributional impact of the tax from that perspective.

Customs Duties and Miscellaneous Receipts. The final pieces of federal collections are customs duties and miscellaneous receipts. Customs duties grow over time in tandem with imports and claim about 0.2 percent of GDP. Tariff reductions enacted in 1994 will continue to phase in over the next few years and constrain any growth in revenues from that source.

The largest component of miscellaneous receipts is the profits of the Federal Reserve System, which are turned over to the Treasury and counted as revenues. The other major source of receipts is the Universal Service Fund, collected from the telecommunications industry to finance Internet service for libraries and schools and to subsidize basic telephone service for high-cost areas and low-income households. Those two and other, smaller components of receipts equal about 0.4 percent of GDP, a level that is projected to remain fairly constant over the next decade.

[^1]
## Criteria for Assessing Tax Changes

Any examination of potential tax changes requires a set of criteria by which to evaluate the effects on individuals and the economy as a whole. Economists focus their evaluation of taxes on three characteristics:
o Efficiency-the impact of the tax on economic activity and growth,
o The fairness of the tax with respect to who bears its burden, and
o The costs of complying with and collecting the tax.

Those three criteria are often in conflict, however, and the Congress faces inevitable trade-offs in its decisions on tax policy.

## Efficiency

Taxes change behavior. Consumers buy less of taxed goods and more of untaxed goods. People decide whether and how much to work on the basis of their after-tax wages and thus may choose to work less when income taxes are higher. Firms pick production methods on the basis of input costs after taxes-using less machinery, for example-in the face of higher taxes on capital. And individuals make decisions about saving on the basis of after-tax returns. All of those responses distort the economy from the way it would be in the absence of taxes and may lead to slower economic growth and thus a lower level of national well-being. Typical estimates of the economic cost of a dollar of tax revenue range from 20 cents to 60 cents over and above the revenue raised. ${ }^{3}$

Those negative effects do not mean, however, that taxes have only negative effects. Some taxes may induce behavior consistent with other policy goals;

[^2]cigarette taxes lead to a reduction in smoking and its associated costs, and emission taxes cause firms to shift to production methods that pollute less. Furthermore, the government needs revenues to carry out its various functions. Nevertheless, economists agree that taxes should distort behavior as little as possible, consistent with other objectives. In general, that means not levying taxes that affect some activities more than others. Economists generally refer to minimizing distortions as maximizing efficiency.

## Fairness

Unfortunately, maximizing efficiency can mean imposing taxes that many people feel are unfair. The most efficient tax from an economist's viewpoint is a head tax-a specific levy on every individual, regardless of his or her well-being. Because liability under such a tax does not depend at all on behavior, the only distortion comes from the revenue collection itself. However, few people would argue that the U.S. government should pay its bills by charging every citizen $\$ 7,000$ (the total of gross government expenditures divided by the total number of citizens). Most would view such a head tax as inherently unfair. Rather than focusing only on maximizing efficiency, the country faces trade-offs between doing what is best for the economy and what is fair.

Economists have developed various ways of assessing fairness. Horizontal equity occurs when people in equivalent economic positions have the same tax liability; that is, equals are treated equally. The major difficulty in interpreting that metric comes in defining "equals." Much of the complexity of the individual income tax derives from the various adjustments to income, such as personal exemptions and itemized deductions, that are intended to yield a measure of taxable income defining "equals." Any such measure, however, is open to interpretation and debate.

Vertical equity occurs when tax liabilities rise with ability to pay, often interpreted as having more income. Progressivity measures that characteristic. A tax is progressive when it claims a greater percentage of income as income increases-higher-income families pay a larger share of their income in taxes than do those with lower income. The reverse situation is la-
beled regressive; the tax is a larger share of income for those at the bottom of the income distribution than for those at the top. A tax that claims the same percentage of income from all taxpayers is termed proportional.

Vertical equity can be assessed in terms of either effective tax rates (tax liability as a percentage of pretax income) or the effect of the tax on the distribution of after-tax income. The two approaches are quite different but yield comparable assessments of a given tax. A progressive tax, for example, has effective tax rates that rise with income; it also generates a more equal after-tax distribution of income. But that consistency fails to hold when evaluating a change in taxes. For example, a tax reduction that cuts all rates of a progressive tax by the same percentage has no effect on relative effective rates; relative shares of the total tax bill are unchanged. However, the change raises after-tax income much more for families at the top of the income distribution than for those at the bottom, thus increasing inequality. The choice of metric matters.

## Complexity and Costs

The costs of collecting taxes are net losses to the economy. Taxes that cost less to collect raise more net revenue relative to resources taken from the economy than do more expensive alternatives. The collection costs include both the costs the government incurs in administering and enforcing the code and the costs the public incurs in complying with it. Administrative costs are frequently associated with the ease of evasion. Compliance costs are usually associated with complexity.

Complexity in the tax system largely results from features of the tax code that are designed to affect behavior by taxing some endeavors more or less than others. Those features include activities that are exempt from tax, from various deductions for preferred items, and from credits for undertaking certain actions. As a consequence, many of the same aspects of the system that reduce economic efficiency also increase complexity.

In a number of instances, complexity also arises from efforts to achieve vertical equity. For example, the phaseouts of various tax credits and deductions throughout the code are designed to give benefits only to people with the greatest need, but they make taxes more difficult to calculate. Similarly, the earned income tax credit provides wage subsidies to low-income families but requires them to fill out an additional form. And the alternative minimum tax (AMT) is intended to limit the use of incentives by higher-income taxpayers but requires taxpayers to recalculate their tax liability in an entirely different way and then pay the larger of the regular and alternative taxes.

In some cases, complexity results from trying to make the code efficient. That occurs most frequently in the case of business taxation, in which considerable complexity stems from the need to define income consistently so that it may be taxed with a minimum of distortion.

Minimizing complexity, therefore, in some instances involves a trade-off with vertical equity and efficiency. In other instances, probably most, it is consistent with horizontal equity and greater efficiency. All else being equal, taxes that are simpler and easy to enforce are preferred in order to minimize the costs of collection.

## Ways to Reduce Revenues

Given the near-record levels of federal revenues as a share of GDP, the Congress may want to use some of the projected surplus to cut taxes. In doing so, it faces two issues: how much to reduce revenues and which approach to use in making that reduction. Cuts need not be restricted to a single approach; different approaches can be combined into a package that accomplishes the desired reduction in revenues. The Congress can choose from a range of approaches, including:
o Broad-based tax cuts that affect most taxpayers;
o Tax cuts aimed at reducing particular disincentives in the current tax system;
o Tax cuts designed to simplify the tax system or improve compliance; and
o Tax cuts that provide new incentives for particular types of behavior.

Options based on each approach may have different effects on the complexity of the tax code, incentives or disincentives for particular behavior, and the distribution of after-tax income among families and individuals.

Estimates of the amount of revenue that would be lost under each of the options discussed in this memorandum should be viewed as approximate. The estimates for options in this memorandum come from CBO.

## Making Broad-Based Tax Cuts

Two federal taxes-individual income taxes and the payroll taxes funding Social Security and Medicareaffect most families. Consequently, cutting either or both of those taxes is the easiest way to provide substantial across-the-board tax relief.

Individual Income Taxes. Rapidly rising incomes over the past decade have caused individual income tax revenues to climb more sharply than GDP, reaching 9.6 percent of GDP in 1999, the highest level ever. Although much of the increase in revenues has come from the concentration of income gains in the top income brackets that face the highest tax rates, many observers argue that the increase calls for some form of across-the-board cut in individual income taxes. Such a cut would lower top tax rates toward levels experienced in the early 1990s and could have positive effects on both incentives to work and the national saving rate.

Most evidence suggests that income taxes modestly reduce incentives to work because they reduce after-tax wages. The negative effects are particularly strong for workers who are not their family's principal earner. Lowering income tax rates would decrease those disincentives and result in an expansion of the national labor supply. Evidence with respect to the effect of income taxes on saving is weaker, but many
analysts have concluded that they also reduce the incentive to save. Hence, reducing tax rates would also reduce the disincentives to save that may exist and could lead to an increase in the national saving rate.

More important, because it taxes some incomeproducing activities and not others, the income tax code distorts choices about production, consumption, and portfolio allocation. Those distortions result in economic inefficiency-too much activity in areas subject to lower or no taxes and too little activity in areas subject to higher taxes. Lowering tax rates reduces those differentials and consequently improves efficiency. Since some of those distortions were deliberately enacted to encourage particular activities such as home ownership and charitable giving, however, lowering tax rates can lead to less of what has been legislatively deemed to be desirable behavior.

Across-the-board rate cuts may be implemented in various ways that have differing consequences for the distribution of income. The two most commonly suggested methods are cutting all rates by a given percentage or by a given number of percentage points. Either form of rate cut could accomplish any level of desired revenue reduction, determined by how much rates are lowered. CBO expects nearly $\$ 1$ trillion in individual income tax revenue in 2001, so a 10 percent tax cut would reduce tax liabilities in that year by about $\$ 100$ billion. Cutting all individual rates by 2.2 percentage points would yield about the same revenue loss. Regardless of how rates were reduced, however, taxpayers would not realize the full benefits unless the alternative minimum tax was also adjusted to preclude the lower tax rates from making more returns subject to the AMT.

A proportional cut-say, 10 percent in all tax rates, including capital gains and the AMT-would not affect the progressivity of income tax rates. However, because the individual income tax is the most progressive part of the federal tax system, reducing income taxes while leaving other taxes unchanged makes overall federal taxes less progressive. Furthermore, because the effective tax rate facing highincome taxpayers would be reduced more in terms of percentage points, such a cut would make the distribution of after-tax income more unequal and would thus reduce progressivity under that measure.

A rate cut that reduced all tax brackets by the same number of percentage points would actually increase the progressivity of tax rates by making proportionately larger cuts in the lower rates. However, since low- and middle-income families face relatively low effective tax rates, their total taxes would be cut by a smaller percentage than would the taxes of other families.

Payroll Taxes. Most families pay more in payroll taxes-deductions from paychecks to fund Social Security and Medicare-than in income taxes. Cutting taxes that finance Social Security (the Old-Age, Survivors, and Disability Insurance program, or OASDI) and Medicare's Hospital Insurance program could thus have a greater impact on most families than would cutting income taxes by the same total amount. Cuts in payroll taxes would have the same kind of effects on work incentives as cuts in the individual income tax. However, the incentives of workers with earnings above the taxable maximum would not be affected by a reduction in OASDI tax rates. Furthermore, because payroll taxes do not apply to investment income, cutting them would have less of an effect on incentives to save than cutting income taxes would. Finally, because payroll taxes are a larger share of total taxes for low- and middle-income families than for those with higher income, cutting payroll tax rates would increase the overall progressivity of the tax system.

An immediate 10 percent reduction in the Social Security and Medicare tax rates would reduce revenue by about $\$ 60$ billion in fiscal year 2001. The reduction could be scaled to produce a greater or smaller level of tax reduction. For a fixed amount of revenue reduction, cutting the Social Security tax rate would focus more tax relief on low- and middle-income families than would a change in the Medicare tax rate because of the limit on earnings subject to the Social Security levy.

One concern about cutting payroll taxes is the effect on the Social Security and Medicare trust funds. Although the trust funds currently have positive balances, the retirement of the baby-boom generation will deplete them rapidly. Trust fund balances, however, can be misleading. Transfers to the trust funds, for example, will not by themselves provide the resources for future benefits. Ultimately, it is not the size of the
balances in the trust funds that will limit the ability to meet long-term obligations but the amount of the benefits and the size of the economy.

## Reducing Particular Disincentives of the Tax System

Rather than provide broad-based tax relief, the Congress might choose to focus tax cuts on particular groups of taxpayers. Marriage penalties and estate taxes are two aspects of the current tax system that observers have frequently identified as in need of change. The double taxation of corporate income has also drawn the criticism of many tax experts.

Marriage Penalty. Many married couples who file a joint return have higher tax liabilities than they would if they were allowed to file as individuals or heads of household (single taxpayers with dependents). At the same time, many other married couples pay lower taxes than they would if they filed as individuals. Whether a couple incurs a marriage "penalty" or receives a marriage "bonus" depends on the spouses' relative incomes: penalties generally occur when spouses have similar incomes, and bonuses occur when only one spouse works or when spouses have substantially different earnings. Penalties tend to be larger for couples who have dependents that would qualify them to file as heads of household if they were not married.

Just over 40 percent of married couples incurred marriage penalties averaging $\$ 1,480$ in 1999, and about 50 percent received bonuses averaging $\$ 1,600$. Overall, however, bonuses totaled $\$ 43$ billion, about $\$ 10$ billion more than total penalties. High-income couples were more likely to incur penalties and less likely to receive bonuses than those with lower income. About 70 percent of both penalties and bonuses affected couples with income above $\$ 50,000$.

Any tax system that treats married couples as single taxpaying units subject to progressive tax rates will have marriage penalties, bonuses, or both. One way to reduce the penalties would be to allow couples to choose to file either jointly or individually. That option would erase all penalties other than those associated with the head-of-household filing status and
would not affect couples with bonuses. However, couples with the same amounts of income would no longer face the same tax liabilities.

Beyond allowing married taxpayers to choose their filing status, penalties can be reduced by lowering the taxes of penalized couples, increasing the taxes of other taxpayers, or both. Some options would increase tax revenues. For example, requiring all married couples to file individual tax returns would eliminate all marriage penalties but only at the cost of increasing the tax liabilities of couples now receiving bonuses. Alternatively, tax brackets and standard deductions could be made less generous for individuals and heads of household, thus raising their taxes. That change would reduce penalties for some married couples and increase bonuses for others.

Other options would reduce both tax revenues and marriage penalties. The options differ in how much of the tax relief goes to couples incurring penalties and where in the income distribution the tax relief occurs. For example, setting the standard deduction for married couples equal to twice that for single filers would reduce penalties by about 6 percent at an annual cost of roughly $\$ 5$ billion. That approach would favor low- and middle-income couples: penalized couples with annual income below $\$ 50,000$, who incur just over one-third of total penalties, would get twothirds of the tax savings. But half of the tax reduction would go to couples not now incurring penalties. Alternatively, setting both the standard deduction and tax bracket widths for joint filers to twice those for individual filers would offset roughly 40 percent of total penalties at an annual cost of about $\$ 40$ billion. But it would focus that reduction on higher-income couples: more than 90 percent of the cut in penalties would go to those with income above $\$ 50,000$.

Another option would restore the two-earner deduction that existed between 1982 and 1986. That provision allowed two-earner couples to deduct from taxable income 10 percent of the earnings of the lower-earning spouse, up to a maximum of $\$ 3,000$. That approach would reduce current marriage penalties by more than one-fourth at an annual cost of about $\$ 12$ billion. Roughly 80 percent of the revenue loss would go to reducing current penalties. Most of the benefits would go to higher-income families: couples with income over \$50,000-those most likely to
have two earners-would get more than four-fifths of the tax reduction. Like other ways of reducing marriage penalties, that option would also widen the disparity of treatment between married and unmarried couples.

A related issue involves marriage penalties associated with the earned income tax credit. Since many low-income families pay no income tax, most of their marriage penalty results from the loss of the EITC because the percentages and income levels determining the credit do not differ by marital status. As a result, two single parents could lose as much as $\$ 5,310$ of the EITC if they married. Setting the credit parameters for couples to twice those for individuals would eliminate that penalty, but it would also give the EITC to couples who would not qualify at all if they had to file as individuals. The penalty could be reduced somewhat at significantly lower cost by phasing the credit out more slowly for couples than for individuals, but that approach would leave many couples facing substantial penalties. Regardless of the approach taken, any option to reduce marriage penalties that does not address the EITC would leave in place much of the penalty for low-income families.

The Estate and Gift Tax. The only federal tax on wealth is the estate and gift tax, which imposes levies on large estates and gifts. Proponents of the tax assert that it provides limited redistribution of wealth and gives people an incentive to donate to charities. It also serves as a backstop to other taxes, taxing income that would otherwise go untaxed. Critics complain that the tax leads to the breakup of family farms and businesses, discourages saving, and induces costly efforts to avoid paying the tax.

The tax may create problems for family-owned farms and businesses, primarily because estates dominated by family enterprises may lack the liquid assets needed to pay the tax. However, many small businesses are able to undertake tax planning, such as purchasing life insurance to cover any estate tax liability, to mitigate the effects of the tax. Even so, the levy could force the sale of part or all of the enterprise and thus might jeopardize its viability. Provisions in the tax reduce that effect by allowing estates to spread payments over time. Despite anecdotal evidence about the adverse effects of the estate tax on family businesses, however, no research has revealed whether the
tax actually contributes to the breakup of such enterprises. In 1995, about 2,000 small businesses and farms, roughly defined, incurred any estate tax liability; those enterprises paid less than 4 percent of all estate tax revenues.

Some critics have argued that because the estate tax reduces the size of bequests that can be passed on to heirs, it reduces the incentive to save. The likelihood of such an effect depends on the reasons people have for leaving bequests. On the one hand, if people base decisions on the trade-off between their own consumption and their heirs' consumption, the tax shifts the balance toward their own consumption and they would tend to save less. On the other hand, if people want to leave particular levels of inheritance, the tax forces them to save more to reach their goal. Empirical studies have reached no consensus on the net effect.

Although the estate and gift tax accounts for less than 2 percent of federal revenues, its effect on the distribution of federal taxes among income groups is substantial. Measured in terms of the giver, the estate tax falls primarily on high-income families because it effectively exempts all but the largest estates. As a consequence, eliminating the tax would substantially reduce the progressivity of the federal tax system. The distributional consequences of the tax are less clear if the burden of the tax is assumed to fall on beneficiaries.

The estate and gift tax may influence more than personal saving. Because the tax does not apply to charitable contributions, it may encourage donations to charitable activities. Significantly lowering the tax could reduce such gifts. The estate tax also interacts with the taxation of capital gains. Under current law, gains incur tax liability only when realized; accrued gains held until death escape the income tax because heirs receive assets with their basis set to the current value (that is, "stepped up" from the decedent's basis to the value at his or her death). Because of that stepup in basis, accrued gains would avoid taxation entirely if the estate tax was removed. Many proposals for modifying the estate tax would therefore either tax any accrued gains at death or require that beneficiaries assume the decedent's basis.

A major criticism of the estate tax is that it leads the owners of significant assets to pursue complicated strategies in their attempt to mitigate or avoid the tax liability. Such activity not only involves potentially great expense but may also result in inefficient use of assets and inequitable treatment of taxpayers, only some of whom undertake actions to lower their taxes. Furthermore, the tax's complexity imposes large compliance costs; conservative estimates place the cost at between 5 percent and 10 percent of revenue collected. Eliminating the tax, or even substantially increasing its exemption level, would mitigate both effects.

Although estate and gift tax receipts are projected to total about $\$ 32$ billion in 2001, eliminating the tax could have a larger or smaller effect on federal revenues, depending on changes made to other parts of the tax code. For example, if the step-up in basis for capital assets was also removed, the lost revenue from the estate tax could be offset by increased income taxes on capital gains if taxpayers deferred fewer of their gains until death. Similarly, because the estate tax can significantly lower the after-tax cost of spending during one's lifetime, removing the tax could lead to lower levels of deductible expenditures like charitable contributions and consequent increases in income tax revenues.

Other options would reduce the impact of the tax. Under current law, the exempt value of an estate will rise incrementally to $\$ 1$ million in 2006 and remain at that level in future years. Indexing that exemption would keep inflation from raising the percentage of families subject to the tax, and increasing the exempt amount further could lower that percentage. Alternatively, lowering estate tax rates would reduce incentives for taxpayers to avoid the tax through complicated actions. Any of those changes would affect only the 2 percent of decedents who owe estate taxes, and a rate change would give more of the benefit of the cut to the wealthiest families within that group.

Double Taxation of Corporate Income. Many economists are concerned that the corporate tax creates distortions that cause economic inefficiency. Firms pay taxes on their profits, and investors pay additional taxes when they receive dividends or realize capital gains. The tax thus raises the cost of capital and discourages investment. More significantly, it creates various distortions: between noncorporate and corpo-
rate business; between payment of dividends and internal reinvestment of earnings; and between financing with debt (interest on which is deductible) and with stock issuance (dividends from which are not deductible). All such distortions change how corporations operate-in terms of production methods and investment decisions, for example-and thus create economic inefficiency.

The corporate tax will raise nearly $\$ 190$ billion in 2001, but eliminating it would reduce revenues by less than that amount because both dividends and capital gains realizations would be greater in its absence. Furthermore, removing distortions caused by differential taxation of business activities would improve economic efficiency, leading to a larger economy and consequent higher revenues. Eliminating the corporate tax, however, might not be optimal in terms of efficient tax collection. The tax applies to the retained earnings of firms; those earnings would either escape taxation under the individual income tax or face lower taxes because any tax on them is deferred until corporate shareholders receive them as future dividends or realized capital gains.

Two approaches that would lose less revenue than would eliminating the tax involve integrating the corporate and individual income taxes to reduce or eliminate the efficiency costs that come from double taxation. The more complicated approach would replace the current tax with a comprehensive tax on business income and eliminate taxes on capital income at the individual level. The second, more straightforward approach would eliminate either the individual or corporate taxation of business income within the current structure. That approach could be implemented in stages by reducing the share of income subject to both taxes incrementally over a number of years.

A final issue involves the distributional effects of reducing corporate taxes. Most economists agree that the burden of the current corporate tax falls almost entirely on the owners of all capital, both corporate and noncorporate. Because capital ownership is concentrated toward the upper end of the income distribution, the corporate tax is progressive. Any reduction in the tax would give the bulk of gains to higherincome taxpayers and would almost certainly reduce the progressivity of the federal tax system.

## Simplifying the Tax System

Particular features of the tax system might also be targeted because they complicate tax filing. Two features increasingly encountered by taxpayers are the alternative minimum tax and the phaseout of personal exemptions and deductions.

Alternative Minimum Tax. The Congress implemented the alternative minimum tax in 1969 to prevent taxpayers from using tax preferences so intensively that they pay little or no tax. The AMT requires that taxpayers add some preference items to income and then recompute their taxes under rules that disallow most exemptions, deductions, and credits. That recomputation allows a single exemption- $\$ 45,000$ for joint filers and $\$ 33,750$ for single filers-that is phased out completely for high-income taxpayers. The remaining income is then subject to two tax rates: 26 percent on the first $\$ 175,000$ and 28 percent on any excess. Those taxpayers then pay the higher of the normal tax or the AMT.

The adjustments to the AMT include not just preferences used by high-income taxpayers to avoid taxes but also commonly used deductions, credits, and personal exemptions. As a consequence, many middle-income families would fall under the AMT but for the Congress's repeated exemption of personal credits from the AMT. That exemption is not permanent, however; in 1999, the Congress exempted all personal tax credits from the AMT only through 2001. More important, unlike many other dollar values used to calculate tax liabilities (such as tax brackets, personal exemptions, and the standard deduction), the values for the AMT exemption and tax brackets are not indexed for inflation. As a result, more taxpayers become subject to the AMT each year. In any case, even if the AMT does not result in greater tax liability, an increasing number of taxpayers still have to compute it to determine their liability.

CBO estimates that the number of taxpayers subject to the AMT will grow from 1 million in 2000 to 15 million in 2010 if the tax code is not changed. That growth will raise the revenue attributed to the AMT from $\$ 5$ billion to $\$ 35$ billion over the decade. Much of the increased impact of the AMT derives from the fact that personal exemptions, the standard
deduction, and tax brackets in the regular tax are indexed for inflation but the AMT exemptions and tax brackets are not. Increasing those two parts of the AMT over time to keep pace with inflation would eliminate most of the growth in the AMT's reach. If such indexation began in 2000, the number of taxpayers subject to the AMT in 2010 would fall to about 1 million, and the revenue attributable to the AMT in that year would drop by about three-fourths, to about $\$ 9$ billion. Eliminating the AMT would further cut revenues by that amount.

## Phaseout of Exemptions and Limitation on Deduc-

 tions. Because of the progressive rate structure of the individual income tax, reductions in taxable income, such as personal exemptions and itemized deductions, are more valuable to taxpayers in high tax brackets than to those in low brackets. The tax code reduces that disparity by phasing out personal exemptions and limiting itemized deductions for taxpayers with income above specified levels. In 1999, personal exemptions were phased out for joint filers with adjusted gross income (AGI) above $\$ 189,950$ and for individual filers with AGI above $\$ 126,600$; itemized deductions were reduced by 3 percent of AGI above $\$ 126,600$. The two limitations differ, however, in that personal exemptions are phased out completely for taxpayers with the highest income but most taxpayers keep a substantial portion of their deductions.The tax code thus effectively imposes higher tax rates on income in the range over which the exemptions and deductions are reduced. The phaseouts also add complexity to the tax code. Eliminating them would simplify the computation of taxes for affected taxpayers at an annual revenue cost of about $\$ 12$ billion. In addition, it would slightly improve work incentives for taxpayers who face the higher effective tax rates on any additional income. The gains, however, would accrue entirely to taxpayers with income in or above the phaseout range-about 5 million taxpayers with the highest income. Taxpayers with income above the exemption's phaseout range would receive tax cuts with smaller changes in their marginal incentives.

## Expanding or Adding to Current Incentives

The Congress might choose to focus tax reductions on people engaging in particular activities it wishes to encourage. Any of the current incentives built into the tax code could be expanded, and the cost would depend on how much the current credits or deductions were raised. For example, the current child credit could be raised, or the deduction for charitable contributions could be extended to families that do not itemize their deductions. A long list of new incentives could be added. In recent years, the President has proposed expanding the EITC to assist low-income working families and creating new retirement savings accounts to encourage private saving. Either change would probably involve refundable tax credits that exceed basic tax liabilities in order to reach families with little or no tax liability. The excess of those credits over basic tax liabilities represents not a change in revenues but rather an increase in federal outlays.

Earned Income Tax Credit. In 2000, the earned income tax credit will provide low-income working families with up to $\$ 3,888$ in income tax reduction or, for taxpayers with low or no tax liability, payments in the form of tax refunds. Of the $\$ 30$ billion cost of the credit in 1999, about 85 percent represented payments to taxpayers in excess of their tax liability. That portion of the credit shows up on the spending side of the federal budget rather than the revenue side.

The EITC has a complicated structure. The credit equals a fixed percentage of earnings up to a maximum that depends on the number of children in the family. The credit stays at that maximum as income rises further, up to a level beyond which the credit is reduced by as much as 21 cents for each additional dollar of income. That reduction continues until the credit falls to zero at a point termed the break-even income. The phase-in and phaseout rates and the levels of income to which they apply depend on whether the tax unit has no children, one child, or two or more children, with maximum credits rising across the three groups. The credit is refundable; that is, if the credit exceeds a family's tax liability, the family receives the balance as a payment.

Roughly 13 percent of mandatory federal spending on low-income families is provided through the EITC. Its structure, however, creates both incentives and disincentives to work. Furthermore, because the credit is the same for families with two children as for those with more children, it provides less assistance relative to need for larger families. Increasing the credits would concentrate the benefits of the tax cuts among lower-income families. Depending on how the credit was structured, it could improve the incentives to work.

The EITC provides a work incentive for families with earnings in the range over which the credit is rising. Taxpayers with earnings in that range and two children, for example, can claim a tax credit equal to 40 percent of their wages. Such families receive an effective wage that is 40 percent greater than that paid by their employers, thus encouraging them to work more than they would if the wage was unsubsidized. That subsidy is reversed, however, for families with income in the phaseout range. Those families face an effective wage that is less than that paid by their employers; the difference between effective and actual wages is the percentage rate of phaseout, roughly 21 percent for families with two children. Because their net wage (reflecting the loss of the EITC) is lower than their gross wage, families in the phaseout range face a work disincentive and may choose to work fewer hours (although the credit still provides an incentive for such families to continue to hold jobs).

Phasing out the credit more slowly would reduce the work disincentive for families with income in the phaseout range but would give the credit to families earning more than the current break-even income and would reduce their incentive to work. For example, halving the phaseout rate for taxpayers with two children from 21.06 percent to 10.53 percent would raise the break-even income from the current $\$ 30,580$ to $\$ 48,700$-roughly the 60th percentile of all families with children. That change would extend the credit to about 4 million families that are not now eligible at an annual cost of roughly $\$ 8$ billion. The change would have no effect on families with earnings below the phaseout range.

Changes to the credit could take many forms. The phase-in percentage could be increased to give
larger subsidies to working families with the lowest income. That change would also raise the break-even income unless the phaseout rate was also increased. The phase-in range could be extended to increase the income range over which wages are subsidized, thus encouraging more families to work. That modification would also lift the break-even income and make more families subject to the work disincentives of the phaseout. Or the amount of the credit could be raised for families with more than two children, as the President has proposed. That approach would affect relatively few families and would focus added credits on families with arguably the greatest need. For any of the options, the bulk of the budgetary effect would be to increase outlays for the refundable portion of the credit rather than to reduce revenue collections.

Any expansion of the EITC could increase the complexity of the tax code. Claiming the EITC requires completing an additional form, and any change that raised the break-even income would impose that requirement on more taxpayers. Another issue involves compliance: taxpayers not in traditional (married couple with children) families appear to be unclear about the living arrangements of children that qualify them for the credit. As a result, many taxpayers erroneously claim the credit, either inadvertently or intentionally. In many cases, the Internal Revenue Service lacks the information needed to identify such returns and may consequently allow the credit for ineligible taxpayers. Expanding the EITC would worsen those problems.

New Retirement Savings Accounts. The tax code encourages saving in many ways, most commonly by deferring the taxation of income from savings or exempting such income from taxation entirely. Capital gains are taxed only when realized, traditional individual retirement accounts (IRAs) are taxed when funds are withdrawn, and the earnings of Roth IRAs are never taxed. (Unlike the case of traditional IRAs, however, contributions to Roth IRAs come from aftertax income.) Because those incentives to save are greater for people in higher tax brackets, they disproportionately favor high-income taxpayers, who are already the most likely to save. Taxpayers with AGI above specified levels may not contribute to either kind of IRA, however, and thus cannot benefit from those incentives to save.

Saving incentives that would give greater encouragement to lower-income taxpayers could involve refundable tax credits, which have equal value to all families regardless of their tax liability. One proposal to create new retirement savings accounts would make annual deposits to private retirement savings accounts for all low-income families and individuals and match account holders' contributions up to a fixed annual limit.

The fixed annual contribution would in itself create no incentives. It might, in fact, reduce private saving to the extent that it would substitute for existing saving, although that effect could not be large, given the near-zero saving rate of low-income taxpayers. Even if some substitution did occur, however, the program would still increase national saving relative to an approach that would give equal sums to families but not require that the money be saved.

Unlike the fixed contribution, the matching credits would encourage people to save more by increasing the return to private saving, although the positive effect would be offset somewhat by the increased wealth that the new savings accounts would represent. The net effect of the program on national saving is uncertain. Economic analyses have reached differing conclusions about the impact of subsidizing saving.

The new savings accounts would concentrate benefits on low- and middle-income families and individuals, particularly when compared with existing saving incentives. They might also introduce a large number of families without bank accounts to financial institutions and to the benefits of saving. The proposal would, however, add significant complexity to the tax code.


[^0]:    1. Rates actually range from 18 percent to 60 percent. However, rates below 37 percent apply only to that part of an estate below the $\$ 675,000$ exemption and are therefore irrelevant. The 60 percent rate applies to that part of an estate valued between $\$ 10$ million and about $\$ 17$ million in order to phase out the benefits of the graduated estate tax brackets.
[^1]:    2. The Taxpayer Relief Act of 1997 gave taxpayers an incentive to file gift tax returns, even if gifts were below the $\$ 10,000$ limit. Under the act, the Internal Revenue Service (IRS) may not question the information on those returns after three years. If no return is filed, the IRS may audit gifts when an estate tax return is filed upon the taxpayer's death.
[^2]:    3. Charles L. Ballard and Don Fullerton, "Distortionary Taxes and the Provision of Public Goods," Journal of Economic Perspectives, vol. 6, no. 3 (Summer 1992), pp. 117-131.
