

Revenues

Revenues are the other side of the federal budget equation. In 1996, federal revenues were \$1.45 trillion compared with outlays of \$1.56 trillion. With no change in current policies governing taxes, the Congressional Budget Office (CBO) expects that revenues will grow to \$1.51 trillion in 1997 and to \$1.86 trillion by 2002 (see Table 6-1).

Over 90 percent of federal revenues come from income and payroll taxes. In 1996, the individual income tax alone raised 45 percent of federal revenue. Social insurance payroll taxes raised 35 percent, and the corporate income tax raised 12 percent. Excise taxes raised an additional 4 percent of federal revenue, and the rest came from estate and gift taxes, customs duties, and fees and other miscellaneous receipts.

Federal revenues claimed 19.4 percent of gross domestic product (GDP) in 1996, well above the average revenue share of 18.1 percent recorded since 1960. The Congressional Budget Office expects the federal revenue share of GDP to decline gradually over the next five years under current law, reaching 18.8 percent of GDP in 2002, which is still above its historical average. Most of that decline stems from an expected decrease in the GDP share of corporate income taxes and excise taxes.

This chapter presents a broad range of options for increasing federal revenue. The options would raise revenue from all of the major revenue sources. They differ in the way they would affect how economic resources are allocated among various uses and how tax burdens are allocated among taxpayers. In using combinations of options, however, some cautions should be

observed. Because a number of options are variations of the same theme, certain combinations would not be appropriate. Moreover, some combinations of options would compound any adverse economic incentives arising from changes in tax rules.

The estimates assume that taxpayers would change their behavior in a variety of ways in response to tax increases. For example, higher taxes on alcohol or tobacco would lead to reduced consumption of those goods, whereas higher income tax rates would lead to a shift in income from taxable to nontaxable forms, deferral of income, and greater use of deductions. The estimates do not attempt to assign a numerical value to any feedback to the overall economy from, for example, changes in investment or work behavior. Although such feedback might occur, most options involve small changes, and their impacts would probably not affect economic activity enough to be noticed in the \$8 trillion U.S. economy. Broad-reaching options--such as introducing a federal value-added tax--would have effects on the entire economy over time, but the size and timing of those effects are highly uncertain.

Options for raising revenues would appear to be headed against both the Administration and Congressional tide of revenue-reducing proposals introduced over the past two years. However, for a variety of reasons, the Congress may wish to consider certain revenue-raising options. First, relying on spending cuts alone may prove to be difficult in assembling a balanced budget proposal. Second, many options would raise revenue by eliminating or curtailing certain preferences in the tax code. Those steps would not only achieve deficit reduction, but also reduce the com-

plexity of the tax code and provide more even-handed treatment of taxpayers. Third, revenues from removing tax preferences could be used to pay for tax reductions that would be more neutral in their effects. Alternatively, such revenues could substitute for cutbacks in spending programs supporting the same or related activities.

Trends and International Comparisons

The federal revenue share of GDP has dropped as low as 17 percent and risen almost as high as 20 percent

since 1960 (see Figure 6-1). The revenue share reached its peak in 1969, when the Congress enacted an income tax surcharge during the Vietnam War, and again in 1981 after several years of rapid inflation pushed taxpayers' incomes into higher tax brackets ("bracket creep"). Large personal and corporate tax reductions enacted in the Economic Recovery Tax Act of 1981, combined with back-to-back recessions in 1980 and 1981 to 1982, brought the revenue share down to well under 18 percent in 1983 and 1984.

In subsequent years, the revenue share rose above 18 percent before falling below that level as a result of the 1990-1991 recession and the slow recovery that followed. That drop more than offset the tax increases enacted in the Omnibus Budget Reconciliation Act of

Table 6-1.
CBO Projections for Revenues Under Current-Policy Economic Assumptions (By fiscal year)

	Actual 1996	1997	1998	1999	2000	2001	2002
In Billions of Dollars							
Individual Income Taxes	656	676	708	740	777	817	857
Corporate Income Taxes	172	179	184	187	189	193	198
Social Insurance Taxes	509	534	553	578	604	630	659
Excise Taxes	54	54	52	53	53	54	54
Estate and Gift Taxes	17	19	21	22	23	25	26
Customs Duties	19	17	19	19	20	21	22
Miscellaneous	<u>25</u>	<u>28</u>	<u>31</u>	<u>35</u>	<u>39</u>	<u>42</u>	<u>44</u>
Total	1,453	1,507	1,567	1,634	1,705	1,781	1,860
On-budget	1,085	1,119	1,164	1,212	1,263	1,320	1,378
Off-budget ^a	367	388	403	422	442	461	482
As a Percentage of GDP							
Individual Income Taxes	8.8	8.6	8.6	8.6	8.6	8.7	8.7
Corporate Income Taxes	2.3	2.3	2.2	2.2	2.1	2.0	2.0
Social Insurance Taxes	6.8	6.8	6.8	6.7	6.7	6.7	6.7
Excise Taxes	0.7	0.7	0.6	0.6	0.6	0.6	0.6
Estate and Gift Taxes	0.2	0.2	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
Miscellaneous	<u>0.3</u>	<u>0.4</u>	<u>0.4</u>	<u>0.4</u>	<u>0.4</u>	<u>0.5</u>	<u>0.4</u>
Total	19.4	19.3	19.2	19.0	19.0	18.9	18.8
On-budget	14.5	14.3	14.2	14.1	14.1	14.0	14.0
Off-budget ^a	4.9	5.0	4.9	4.9	4.9	4.9	4.9

SOURCE: Congressional Budget Office.

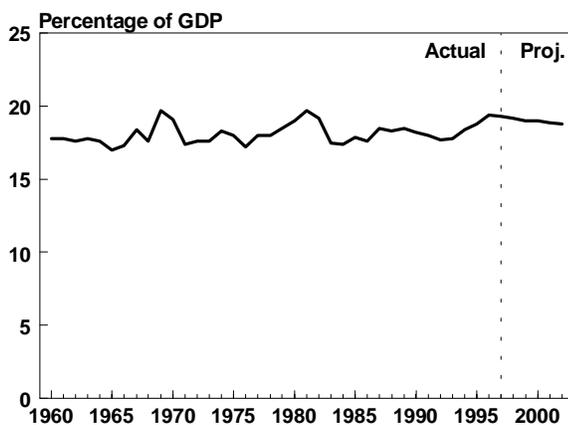
a. Social Security.

1990 (OBRA-90). The revenue share rebounded in 1994 as the economy improved and the tax increases enacted in the Omnibus Budget Reconciliation Act of 1993 (OBRA-93) took effect.

At 19.4 percent of GDP, the revenue share in 1996 was just below its highest level recorded since 1960. A number of factors contributed to the higher than usual revenue share in 1996. In addition to the OBRA-93 tax increases, the economy was generally strong. Corporate profits, in particular, reached levels relative to the size of the economy that had not been recorded in over 25 years.

In addition to the fluctuations of revenues as a share of GDP, important shifts have occurred over the last 35 years in the composition of revenues (see Figure 6-2). Individual income taxes--the largest component of total revenues--have fluctuated between about 7 percent and 9.5 percent of GDP since 1960. At 8.8 percent of GDP in 1996, the share of individual income taxes is currently in the high end of that range. Individual income taxes as a share of GDP rose sharply in the 1979-1982 period, when rapid inflation led to bracket creep that pushed up revenues, which peaked at 9.4 percent of GDP in 1981. Since the early 1980s, individual income taxes as a share of GDP have stayed below 9 percent. Barring any new legislation affecting revenues, CBO expects that individual income tax revenues

Figure 6-1.
Total Revenue as a Share of GDP



SOURCE: Congressional Budget Office.

will claim almost 8.7 percent of GDP a year through 2002.

The share of GDP claimed by corporate income taxes fell between 1960 and the mid-1980s both because of a drop in corporate profits as a share of GDP and legislated reductions in tax liability. The share averaged just below 4 percent in the 1960s, 3 percent in the 1970s, and 2 percent in the 1980s. Corporate taxes as a share of GDP have grown slightly since the Congress raised corporate taxes in the Tax Reform Act of 1986. With corporate profits as a share of GDP at its highest level since 1969, its tax share of GDP was up even more in 1996. CBO expects that the revenue share of corporate taxes will decline gradually from 2.3 percent of GDP in 1996 to 2 percent in 2002.

The share of GDP claimed by social insurance taxes (mostly the Social Security payroll tax) increased steadily between 1960 and the late 1980s, as tax rates, coverage, and the share of wages subject to taxation all grew. The share swelled from just under 3 percent of GDP in 1960 to nearly 7 percent by 1988--about where it is today. Social insurance tax revenues were equal to about 25 percent of combined individual and corporate income tax revenues in 1960, about 50 percent of combined income tax revenues in 1980, and over 60 percent today.

Excise taxes--levied on such goods and services as gasoline, alcohol, tobacco, and telephone use--represent a small share of total federal revenues. Excises have claimed a decreasing share of GDP over time largely because most are levied on the quantity--not the value--of goods, and rates have not generally kept pace with inflation.

Taxes at all levels of government--federal, state, and local--amounted to nearly 30 percent of GDP in 1994. By way of comparison, the tax share of GDP for member countries of the Organization for Economic Cooperation and Development (OECD)--comprising most of the major industrialized, market-economy countries in the world--averaged nearly 40 percent in 1994 (see Figure 6-3).

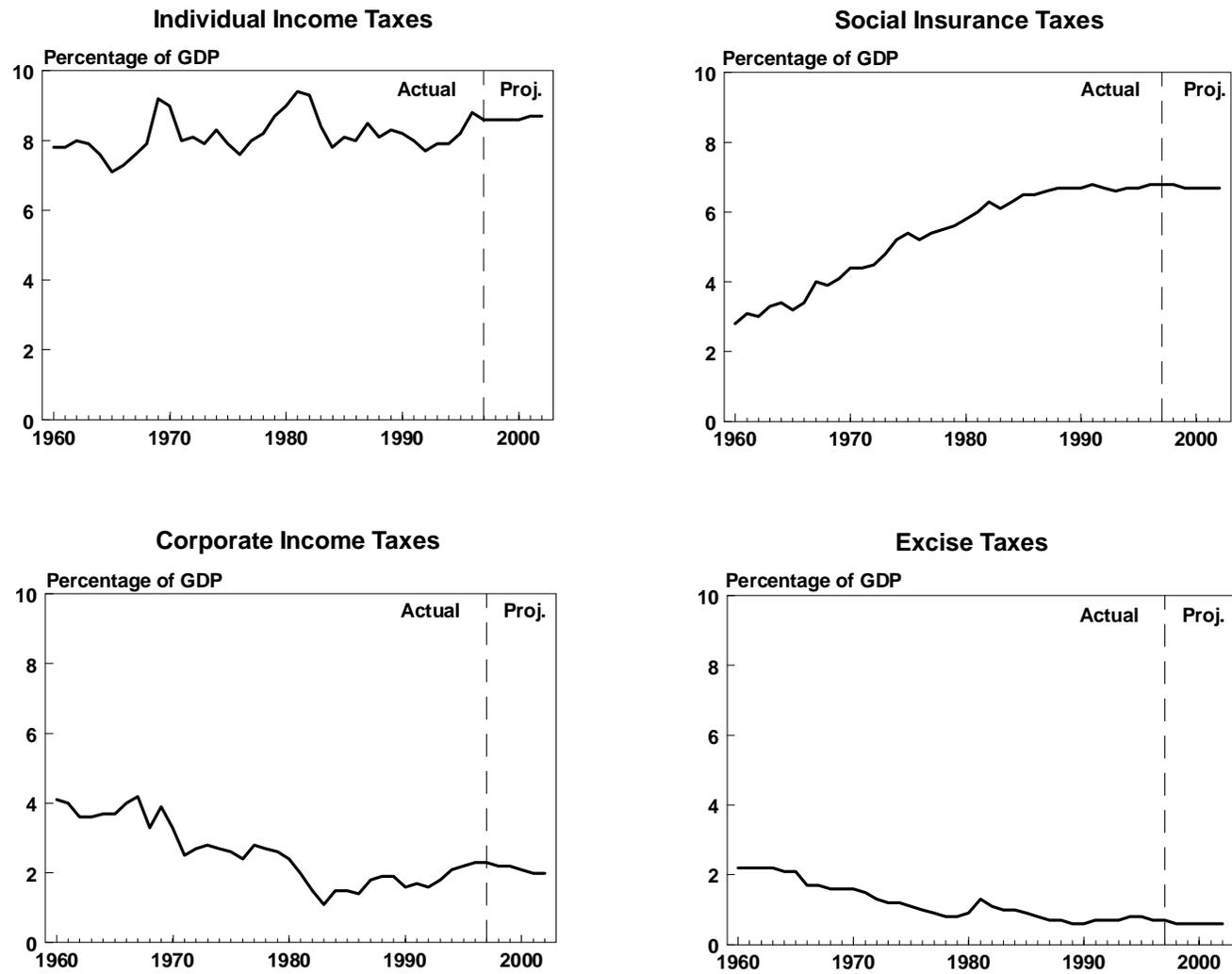
Indeed, the composition of tax revenues in the United States is quite different from that in most OECD member countries. The most significant difference is the greater reliance on taxes on goods and ser-

vinces in most other countries, particularly general consumption taxes such as the value-added tax (VAT). Australia and the United States are the only OECD countries without a VAT, although Australia does levy a general consumption tax in the form of a sales tax at the wholesale level. The United States has no general consumption tax at the federal level, but 45 states and the District of Columbia have a general sales tax.

General consumption taxes at all levels of government accounted for less than 8 percent of total tax revenues in the United States in 1994, compared with 17.5

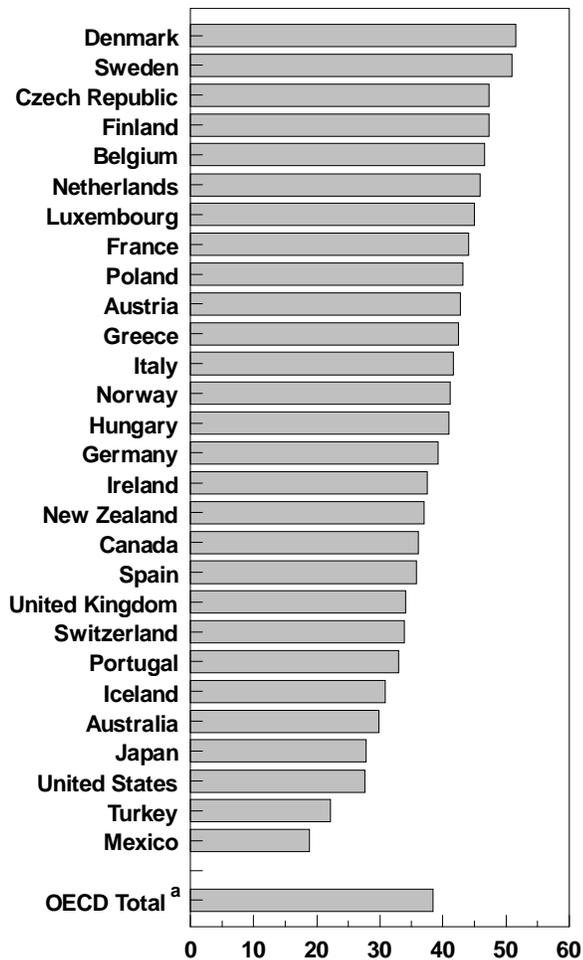
percent of total tax revenue in OECD member countries (see Figure 6-4). Of all the member countries, only Japan had a lower percentage of revenues raised by general consumption taxes than the United States. All taxes on goods and services, which include specific excise taxes as well as general consumption taxes, made up about 18 percent of total tax revenues in the United States compared with an average of 32 percent in OECD member countries. Despite a heavier reliance on consumption taxes than in the United States, revenue from income taxes, including taxes on corporate profits, are still a significant share of total revenues in OECD

Figure 6-2.
Revenues by Source as a Share of GDP



SOURCE: Congressional Budget Office.

Figure 6-3.
Total Tax Revenues as a Percentage of GDP, 1994



SOURCE: Organization for Economic Cooperation and Development (OECD).

a. Unweighted average.

member countries, averaging about one-third of revenues among European members, and one-half of revenues among Pacific Ocean members.

Revenue-Raising Options

The revenue options in this chapter are grouped according to a number of broad categories. The first set of options, REV-01 through REV-03, would raise reve-

enues by simply raising income tax rates. Options REV-04 through REV-08 would remove certain preferences and broaden the individual income tax by restricting itemized deductions and credits. Options REV-09 through REV-17 would also remove tax preferences and broaden the individual income tax base but would do so by extending taxes to currently nontaxable employer-paid fringe benefits, and restricting the tax-favored treatment of certain types of household income.

With the release of the final report of the 1994-1996 Advisory Council on Social Security in January of this year, the Congress may address the issue of the future solvency of the Social Security and Medicare trust funds in this session. The Advisory Council report included tax options that would make major changes in the financing of Social Security. Although such options are beyond the scope of this chapter, certain more limited options presented here, such as REV-18 through REV-20, would contribute to the long-term solvency of those funds.

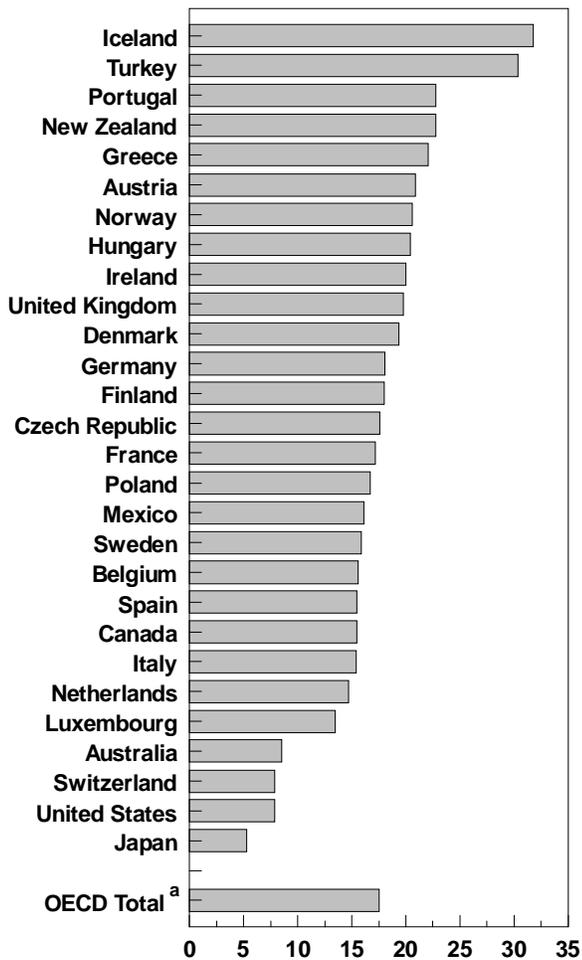
In 1996, the Congress eliminated several income tax preferences for businesses, most notably those for investment in U.S. possessions and corporate-owned life insurance. The preferences were eliminated to finance the enactment of certain tax incentives for investment by small businesses and for purchase of additional types of health insurance. Options REV-26 through REV-33 would curtail other income tax preferences for businesses.

Some Members of Congress seek more dramatic changes in the way the federal government raises revenues that go beyond changing features of the current tax structure or removing certain preferences in the current code. Those changes include a full or partial replacement of income taxes with a general consumption tax in the interests of increasing national saving and reducing the complexity of the tax system. Clearly, such changes would constitute a sweeping overhaul of the nation's tax laws. It would affect many areas of the economy as well as revenue collection, not only at the federal level but also at the state and local levels.

This volume does not address comprehensive tax reform. Such a complex change would call for extensive analysis, and most proposals for comprehensive tax reform seek to maintain revenue neutrality rather than an increase in revenues. Certain options presented

here, however, would increase the share of revenues collected from consumption-based taxes. For example, REV-34 would impose a value-added tax, whereas REV-35 would add a broad-based tax on energy. Both options assume that the current income tax system would remain in place.

Figure 6-4.
Taxes on General Consumption as a Percentage of Total Taxation, 1994



SOURCE: Organization for Economic Cooperation and Development (OECD).

a. Unweighted average.

The volume's revenue options differ in their implications for the cost of administration by the Internal Revenue Service and the cost of compliance by taxpayers. Some of the options would raise revenue from existing tax sources by increasing tax rates, broadening tax bases, or expanding tax coverage to include additional taxpayers. The government could put many of those options into place quickly and easily because the taxes are already in operation. Other options that would raise revenue from new tax sources, such as the federal value-added tax or broad-based energy tax, could impose substantial added compliance costs on taxpayers and administrative costs on the federal government because they would require additional tax computation methods and more Internal Revenue Service employees.

Certain options--such as REV-09, the first part of REV-18, and REV-19--would impose new mandates on state and local governments in their role as employers. Almost all of the options would impose mandates on the private sector. The Unfunded Mandates Reform Act of 1995 requires that CBO provide estimates of intergovernmental and private-sector mandates for new legislation. (The act exempts Social Security taxes.) The act imposes procedural hurdles on Congressional consideration of any legislative proposal that contains unfunded intergovernmental mandates in excess of \$50 million for any of the first five years.

One revenue-raising option--to make all entitlement payments subject to the individual income tax--appears not in this chapter but in Chapter 4, which discusses entitlement payments and other mandatory spending. That option is part of ENT-45, which would apply a means test to federal entitlement payments.

Although most of the spending options presented in this volume would take effect on October 1, 1997, all but one of the revenue options would take effect on January 1, 1998. The VAT option has a later effective date because putting the tax in place would take more time. The revenue estimates for the options, most of which the Joint Committee on Taxation prepared, may differ from estimates for similar provisions in actual tax legislation as a result of differences in effective dates, transition rules, and technical details.

REV-01 RAISE MARGINAL TAX RATES FOR INDIVIDUALS AND CORPORATIONS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Individuals						
Raise Marginal Tax Rates to 16 Percent, 30 Percent, 33 Percent, 38 Percent, and 42 Percent, and the Top AMT Rate to 30 Percent	28.9	41.2	46.5	48.2	50.3	215.1
Raise the Top Marginal Tax Rates to 38 Percent and 42 Percent	6.9	2.9	6.5	6.7	6.8	29.8
Corporations						
Raise the Top Marginal Tax Rate to 36 Percent	2.0	4.0	4.1	4.2	4.2	18.5
Raise the AMT Rate to 25 Percent	2.3	4.1	3.4	2.8	2.3	14.9

SOURCE: Joint Committee on Taxation.

NOTE: AMT = alternative minimum tax.

Rate increases have some administrative advantages over other types of tax increases because they require relatively minor changes in the current tax collection system. But rate increases have drawbacks as well. Higher tax rates can reduce incentives to work and save. They also encourage taxpayers to shift income from taxable to nontaxable forms (such as substituting tax-exempt bonds for other investments or tax-free fringe benefits for cash compensation) and to increase spending on tax-deductible items such as home mortgage interest and charitable contributions. In those ways, higher tax rates may cause a less efficient use of economic resources.

Individuals. Under current law, five explicit marginal tax rates apply to taxable income: 15 percent, 28 percent, 31 percent, 36 percent, and 39.6 percent. (The marginal tax rate is the percentage of an extra dollar of

income that a taxpayer must pay in taxes.) The maximum marginal tax rate on capital gains income is 28 percent. Some taxpayers face effective marginal rates higher than the top rate of 39.6 percent because of provisions that phase out their itemized deductions and personal exemptions. (See Table 6-2 for the levels of taxable income at which the marginal rates apply for 1997.)

Increasing all marginal tax rates on ordinary income to 16 percent, 30 percent, 33 percent, 38 percent, and 42 percent (approximately a 7 percent increase) would raise about \$215 billion in 1998 through 2002. This option would also increase the top marginal tax rate under the alternative minimum tax (AMT) to 30 percent in order to keep the rate aligned with regular tax rates and avoid a major shift of payments between the AMT and regular tax. The alternative minimum tax is

now imposed on individuals at rates of 26 percent and 28 percent on an income base broader than the regular tax. Individuals pay the larger of the AMT or the regular tax. Under this option, families with tax credits would face a somewhat larger percentage increase in their tax liabilities than other taxpayers, and families whose earned income tax credit gives them a tax refund might have to pay tax. (This option and the next one assume that the maximum rate on capital gains would remain at 28 percent.)

Another option is to increase only the top two marginal tax rates. Increasing the current 36 percent rate to 38 percent and the 39.6 percent rate to 42 percent would raise revenues by about \$30 billion in 1998 through 2002. For 1998, this option would increase taxes for married couples with a taxable income of more than \$156,200 and single filers with a taxable income of more than \$128,300. The change would affect just over 1 percent of tax filers.

The estimates assume that taxpayers will change their behavior in a variety of ways if marginal tax rates are raised, chiefly by shifting income from taxable to nontaxable or tax-deferred forms. However, those estimates do not incorporate changes in work effort. Because higher tax rates reduce the payoff from working, individuals are likely to shift more of their time from work in the market place to untaxed activities such as child care, other work in the home, or leisure time. People may also leave occupations or jobs in which higher pay reflects riskier, more demanding, or unpleasant work or involves more costly investments in school-

ing and training. The extent to which those changes in work behavior occur is likely to vary among individuals. For example, it would depend on the size of the effective tax increases people would face as well as on their potential rewards from unpaid nonmarket work. Another factor would be whether the individuals could receive other income such as pension or transfer payments, which often increase when earnings decline. Those effects are difficult to measure, and the available statistical evidence on their magnitude and timing is inconclusive.

Corporations. The tax rate for corporations is 15 percent on taxable income up to \$50,000, 25 percent on income from \$50,000 to \$75,000, 34 percent on income from \$75,000 to \$10 million, and 35 percent on income above \$10 million. The tax benefit from the 15 percent, 25 percent, and 34 percent rates is recaptured for corporations by an additional 5 percent tax that is levied on taxable income between \$100,000 and \$335,000 and a 3 percent additional tax on income between \$15 million and \$18.3 million (see REV-03).

Corporations also face the alternative minimum tax, which limits their use of tax preferences. When computing taxable income for the alternative minimum tax, taxpayers may not make certain adjustments that are otherwise allowed in computing regular taxable income. Those adjustments are of two types: deferral preferences, such as accelerated depreciation, excess intangible drilling costs, and profit or loss from long-term contracts; and exclusion preferences, such as some tax-exempt interest and percentage depletion. As with individuals, corporations must pay the larger of the regular tax or the AMT and can use one year's AMT as a credit against regular tax liability in future years. (Individuals can only use as credits the portion of the AMT that arises from deferral preferences.) Thus, a portion of the revenue gain from a higher AMT rate would result from a shift of some future tax liabilities to earlier years.

Increasing the top marginal rate for corporations to 36 percent would raise \$18.5 billion in 1998 through 2002. Out of approximately 1 million corporations that have positive corporate tax liabilities each year, only about 3,500 pay income taxes at the top rate and would be affected by this option. Nonetheless, those firms earn approximately 80 percent of all corporate taxable income. The change would not, however, affect corpo-

Table 6-2.
Individual Income Tax Brackets, 1997 (In dollars)

Taxable Income for Single Filers	Marginal Tax Rate (Percent)	Taxable Income for Married Couples
0 to 24,650	15.0	0 to 41,200
24,651 to 59,750	28.0	41,201 to 99,600
59,751 to 124,650	31.0	99,601 to 151,750
124,651 to 271,050	36.0	151,751 to 271,050
271,051 and Over	39.6	271,051 and Over

SOURCE: Internal Revenue Service.

NOTE: Separate schedules apply for single taxpayers who file a head-of-household return or married taxpayers who file separate returns.

rations that always pay the AMT. Moreover, those corporations paying the regular tax--but with unused credits--could offset some of the tax increase.

Boosting the corporate AMT rate to 25 percent would raise about \$4 billion in 1999. But it would yield decreasing amounts thereafter because the revenue raised represents a shift of future liabilities to earlier years, as described earlier. Proponents of the corporate AMT argue that it improves the perceived fairness of the tax system because it largely ensures that corporations reporting profits to shareholders pay the corporate tax. Critics maintain, however, that the corporate AMT places a greater tax burden on rapidly growing and heavily leveraged corporations and increases incentives to engage in tax-motivated transactions. For example, a firm that expects to pay the AMT may be able to reduce its tax by leasing its equipment rather than owning it and using the accelerated depreciation tax preference. In addition, critics point to evidence that suggests the costs to businesses of complying with the AMT are

large relative to the revenue raised. Responding to such criticisms, the Congress adopted AMT relief in the vetoed Balanced Budget Act of 1995 by no longer treating accelerated depreciation for future investment as a taxable preference and by providing greater use of AMT credits.

Relationship Between Top Rates Affects Business Form. Changes in the difference between the top corporate and individual tax rates affect the form of organization a business chooses. Owners of corporate businesses pay the corporate income tax on their business income and the individual income tax if they distribute that income as dividends. Owners of noncorporate businesses pay tax only at the individual level but on total business income. The top individual tax rate is now above the corporate tax rate, making it relatively more advantageous for businesses that retain their earnings to choose the corporate form. Subsequent changes in that relationship would alter the incentives that businesses face when they choose their organizational form.

REV-02 AMEND OR REPEAL THE INDEXING OF INCOME TAX SCHEDULES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Suspend Indexing for 1998 (Except for the earned income tax credit)	5.7	10.3	11.4	10.3	11.6	49.3
Repeal Indexing (Except for the earned income tax credit)	5.7	16.4	28.6	40.5	54.2	145.4

SOURCE: Joint Committee on Taxation.

To offset the effects of inflation, current law each year indexes the standard deduction, the personal exemption, the minimum and maximum dollar amounts for each tax rate bracket, the thresholds for the phaseout of personal exemptions, the limit on itemized deductions, and the earned income tax credit (EITC). A repeal of indexing (except for the EITC), beginning in 1998, would raise revenues by about \$145 billion from 1998 through 2002, if the annual rate of inflation averages 3 percent over the period, as the Congressional Budget Office projects. Revenues from the repeal would grow rapidly as the effect of repeal cumulated over time. Suspending indexing only for 1998 would raise about \$50 billion over the five-year period.

An alternative to suspending or repealing indexing is to index by something less than the full annual increase in the consumer price index (CPI) that applies under current law. If the CPI tends to overstate the increase in the cost of living, as many analysts believe, then indexing by less than the full CPI increase would be appropriate. The magnitude of the overstatement, however, is subject to much debate. For example, the Advisory Commission to Study the Consumer Price Index (known as the Boskin Commission) recently estimated the overstatement at about 1 percentage point a year. Indexing by 0.5 percentage points less than the

estimated increase in the CPI would raise revenues and reduce EITC outlays by about \$29 billion over the 1998-2002 period.

Repealing or suspending indexing would not burden all taxpayers equally. Among families with the same income, the tax increase would be smaller for taxpayers who itemize than for those who use the standard deduction, and for families without children than for families with children (and more personal exemptions). As long as the EITC continued to be indexed, low-income families would have a smaller percentage drop in after-tax income than other families because they have little or no taxable income. The percentage drop in after-tax income would also be small for families with the highest incomes because they receive no benefit from the personal exemption, and most of them do not take the standard deduction. A general rate increase would allocate additional taxes more equally among families with the same income than repealing or suspending indexing would (see REV-01).

Another reason for retaining indexing is that it prevents unlegislated tax increases. Without indexing, inflation would cause the average income tax rate to increase without any legislative action.

REV-03 TAX ALL CORPORATE INCOME AT A 35 PERCENT RATE

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current- Law Revenues	1.8	3.6	3.6	3.7	3.7	16.4

SOURCE: Joint Committee on Taxation.

Under current law, corporations pay a 35 percent statutory tax rate on their taxable income in excess of \$10 million. Income below that amount is subject to tax at reduced rates of 15 percent, 25 percent, and 34 percent. Eliminating the reduced corporate rates and taxing all corporate income at the single 35 percent rate would raise an estimated \$16.4 billion from 1998 through 2002.

Firms with taxable income below \$75,000 have tax rates of 15 percent or 25 percent. Firms with taxable income between \$75,000 and \$10 million have a tax rate of 34 percent, and those with income above \$10 million have a 35 percent rate. Compared with a single 35 percent statutory rate, corporations with taxable income between \$10 million and \$15 million pay \$100,000 less in taxes--the maximum benefit from the lower rates.

The tax benefit from the reduced rates is phased out for corporations with income above certain amounts by an additional 5 percent tax that is levied on corporate taxable income between \$100,000 and \$335,000 and a 3 percent additional tax on income between \$15 million and \$18.3 million. As a result, corporations with income of more than \$18.3 million pay an average rate of 35 percent and receive no benefit from the reduced rates.

The Congress enacted the reduced rates to provide tax relief to small and moderate-sized businesses. Of the approximately 1 million corporations that have positive corporate tax liabilities each year, only about 3,500 do not qualify for reduced rates, although they earn about 80 percent of total corporate profits. Reduced rates not only provide a competitive advantage to some small and moderate-sized businesses, but other taxpayers benefit as well. For example, high-income

individuals can benefit because the provision allows them to shelter income as retained earnings in a small corporation. Tax law does not allow owners of personal service corporations--such as physicians, attorneys, and consultants--to incorporate themselves in order to gain the tax benefit. Other high-income individuals still use those opportunities for tax shelters, however. Additional unintended recipients of the tax benefit from reduced rates are large businesses with low profits. Furthermore, some of those large corporations may be able to control the timing of certain income and expenses in order to generate low taxable income--and the tax benefit--in certain years.

The reduced corporate rates do lessen the "double taxation" of corporate income. Owners of corporate businesses pay corporate tax on all of the earnings of the business and also pay individual tax on the part of their earnings that they receive as dividends. Owners of noncorporate businesses, however, pay tax at only the individual level on all earnings.

Lower corporate rates are not the only means of reducing the double tax on the income of those businesses. As an alternative to incorporation, many businesses--especially small ones--could operate as sole proprietorships or partnerships and pay tax only under the individual income tax. In addition, many small businesses could enjoy the advantages of incorporation by operating either as S corporations, which must have 75 or fewer owners and satisfy other requirements, or as limited liability companies (LLCs), which generally possess fewer restrictions, especially for businesses choosing an organizational form for the first time. Owners of S corporations and LLCs also pay under the individual income tax only.

REV-04 ELIMINATE OR LIMIT DEDUCTIONS FOR MORTGAGE INTEREST

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Eliminate Mortgage Interest Deductions	32.7	44.8	46.5	48.4	50.3	222.7
Reduce Maximum Mortgage Principal Eligible for Interest Deductions to \$300,000	2.1	2.3	2.5	2.8	3.0	12.7
Limit Deductions to \$12,000 per Return (Single) or \$20,000 (Joint)	2.6	3.7	3.9	4.2	4.6	19.0
Limit Deductions for Second Homes	0.5	0.7	0.7	0.8	0.8	3.5

SOURCE: Joint Committee on Taxation.

A home is both the largest consumer purchase and the main investment for most Americans. The tax code has historically treated homes more favorably than other investments. For example, current law allows homeowners to deduct mortgage interest expenses, even though homes do not produce taxable income. It also exempts most capital gains from home sales (see REV-23).

Preferential treatment for home ownership encourages people to become homeowners and to purchase larger homes. Increasing home ownership may contribute to social and political stability by strengthening people's stake in their communities and governments. In addition, such preferential treatment may stabilize neighborhoods by encouraging longer-term residence and home improvement. The amount of preference, however, is probably larger than needed to maintain a high rate of home ownership. For example, Canada achieves about the same rate of home ownership as the United States without allowing the deduction of mortgage interest. Instead of the deduction, some provinces provide a limited tax credit for low- and middle-income people who save for a down payment, but the long-run value of the credits is much less than the value of the deductibility of mortgage interest.

A disadvantage of providing preferential tax treatment for investment in home ownership is that it reduces the amount of savings available for investment in taxable business enterprises. That shift may contribute to a relatively low rate of investment in business assets in the United States compared with other developed countries that do not allow such large mortgage interest deductions. In recent years, one-third to one-half of net private investment has gone into owner-occupied housing. Consequently, even a modest reduction in investment in owner-occupied housing could raise investment significantly in other sectors.

Limiting mortgage interest deductions would reduce the preferential treatment of home ownership for those owners who must borrow to purchase their homes. Under current law, taxpayers may deduct interest on up to \$1 million of debt that they have incurred to acquire and improve first and second homes. They may also deduct interest on up to \$100,000 of other loans they have secured with a home (home-equity loans), regardless of purpose. No other type of consumer interest is deductible. Current law also limits the extent to which interest deductions for carrying assets other than first and second homes can exceed income from such assets.

The limits under current law on mortgage interest deductions result in a generous subsidy even for relatively expensive homes. Moreover, taxpayers with substantial home equity can circumvent the limits on consumer and investment interest deductions by using, for example, home-equity loans with deductible interest to finance automobiles and other consumer purchases or investment in assets other than homes. In contrast, renters and people with less home equity cannot use that method to deduct interest on the loans they use to finance auto and other purchases.

Eliminate Interest Deductions. Eliminating the deductibility of mortgage interest would increase tax revenues by about \$225 billion over the 1998-2002 period. Taxes would increase for about 30 million homeowners by an average of about \$1,500 in 1997. Limiting the mortgage interest deduction would raise the cost of home ownership, causing the demand for homes to fall as some people chose to delay purchases, buy smaller homes, or rent rather than own. Homeowners currently claiming the mortgage interest deduction would see a sharp increase in net mortgage payments, forcing some to sell other assets, while others without such resources could potentially no longer afford their homes.

The decreased demand for homes would reduce housing prices somewhat and cut back new housing construction, although the demand for rental housing would increase. Other investments would replace investment in housing to some extent. As a result, losses to the home-building industry would be offset by gains in other sectors.

Reduce the Principal Eligible for Deduction. Lowering the limit on the amount of principal eligible for the mortgage interest deduction from \$1 million to \$300,000 would reduce deductions for about half a million taxpayers with large mortgages and increase revenues by \$12.7 billion over the 1998-2002 period. That change would reduce the deduction only for owners of relatively expensive homes. It would not affect the vast majority of homeowners. The fraction affected would be greatest in high-cost areas such as Honolulu and San Francisco. Because the proposal would not index the limits for inflation, the real value would gradually decline. Phasing down the limit gradually would cushion the effects on most current homeowners and the home-building industry.

Cap Interest Deductions. Capping the mortgage interest deduction would have effects similar to limiting the principal eligible for deduction. One difference is that fluctuating interest rates would affect deductions subject to the interest cap but would not affect deductions subject to the limit on mortgage principal. Owners with adjustable-rate mortgages and people buying when interest rates are high would be affected by that difference.

Capping the mortgage interest deduction at \$12,000 per single return, \$20,000 per joint return, and \$10,000 per return for married couples who file separately would raise about \$19 billion in revenues in 1998 through 2002. Those limits are much higher than the deductions most taxpayers claim. Of the 29 million taxpayers who claimed the mortgage interest deduction in 1994, about 1.1 million (4 percent) had deductions that exceeded those limits; the average deduction for home mortgage interest was about \$6,600. At an 8 percent interest rate, the proposed \$20,000 cap would allow full interest deductions on new fixed-rate mortgages as large as about \$250,000. Only 6 percent of new mortgages originated in 1996 exceeded that amount.

Limit Interest Deductions for Second Homes. A final option is to limit deductibility only to interest on debt that taxpayers incur to acquire and improve a primary residence, plus \$100,000 of other debt secured by that home. That approach would require interest deductions for second homes to qualify under the \$100,000 limit on home-equity loans. The proposal would increase revenue by \$3.5 billion in 1998 through 2002.

Permitting taxpayers to deduct the interest from mortgages on second homes--many of which are vacation homes--may seem inequitable when taxpayers cannot deduct interest from consumer loans used to finance education, medical expenses, and other consumer purchases. However, limiting the deduction of mortgage interest to a single home would retain the present deduction for taxpayers with high mortgage interest on a costly primary home while partially denying it for other taxpayers with equal combined mortgage interest on two less costly homes.

REV-05 ELIMINATE OR LIMIT DEDUCTIONS OF STATE AND LOCAL TAXES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Eliminate Deduction of State and Local Taxes	19.8	48.9	51.0	52.9	55.2	227.8
Limit Deductions to the Excess over 1 Percent of Adjusted Gross Income	2.2	7.4	7.7	8.0	8.2	33.5
Prohibit Deductibility of Taxes Above a Ceiling of 8 Percent of Adjusted Gross Income	2.6	8.1	8.3	8.5	8.8	36.3

SOURCE: Joint Committee on Taxation.

In determining their taxable income, taxpayers may claim a standard deduction or itemize and deduct from their adjusted gross income (AGI) certain specific expenses, including state and local income, real estate, and personal property taxes. For taxpayers who itemize, those deductions provide a federal subsidy of state and local tax payments. That subsidy may cause itemizers to support higher levels of state and local services than they would otherwise. Consequently, the deductions indirectly finance increased state and local government spending at the expense of other uses of federal revenues.

The Tax Reform Act of 1986 reduced the subsidy to state and local governments directly by repealing the deduction for state and local sales taxes, and indirectly by increasing the standard deduction and lowering marginal rates. The latter changes reduced both the number of itemizers and the value of the deductions. The Omnibus Budget Reconciliation Act of 1993 raised marginal tax rates for higher-income households and thus indirectly increased the value of the deductions.

As a way to assist state and local governments, deductibility of state and local taxes has several disadvantages. First, the deductions reduce federal tax liability only for itemizers. Second, because the value of an additional dollar of deductions increases with the

marginal tax rate, the deductions are worth more to higher-bracket taxpayers. Third, deductibility favors wealthier communities. Communities with higher average income levels have more residents who itemize and are therefore more likely to spend more because of deductibility than lower-income communities. Fourth, deductibility may discourage states and localities from financing services with nondeductible user fees, thereby discouraging efficient pricing of some services.

An argument against restricting deductibility is that a taxpayer with a large state and local tax liability has less ability to pay federal taxes than one with equal total income and a smaller state and local tax bill. In some areas, a taxpayer who pays higher state and local taxes may receive more benefits from publicly provided services, such as recreational facilities. In that case, the taxes are more like payments for other goods and services (for example, private recreation) that are not deductible. Alternatively, higher public expenditures resulting from deductibility benefit all members of a community, including lower-income nonitemizers who do not receive a direct tax saving.

Eliminating or limiting the value of the state and local deduction could raise significant revenues. Eliminating deductibility would raise over \$225 billion in 1998 through 2002. An alternative option would allow

deductions only for state and local tax payments above a fixed percentage of AGI. A floor of 1 percent of AGI on deductions would increase revenues in 1998 through 2002 by about \$34 billion. Another alternative would be to prohibit deductions above a fixed ceiling, which also might be a percentage of AGI. A ceiling set at 8

percent of AGI would increase revenues by about the same amount--\$36 billion in 1998 through 2002. A floor and a ceiling, however, would have very different effects on incentives for state and local spending. A floor would retain the incentive for increased spending, but a ceiling would reduce it.

REV-06 ELIMINATE OR LIMIT DEDUCTIONS FOR CHARITABLE GIVING

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Eliminate Deductions for Charitable Giving	3.2	21.6	22.6	23.7	24.8	95.9
Limit Deductions for Appreciated Property to Its Tax Basis	0.3	1.9	2.0	2.1	2.1	8.4
Limit Deductions to the Excess over 2 Percent of Adjusted Gross Income	1.5	9.8	10.3	10.8	11.3	43.7

SOURCE: Joint Committee on Taxation.

Under current law, taxpayers who itemize deductions can deduct the value of contributions they make to qualifying charitable organizations. The amount of deductions cannot exceed 50 percent of adjusted gross income in any year. In 1994, 30 million taxpayers claimed just over \$70 billion of deductions for charitable contributions, reducing federal revenues by about \$18 billion. In addition to cash donations, taxpayers can deduct the fair market value of a contribution of appreciated property that they have held for more than 12 months, regardless of how much they paid for the property.

Eliminating the deductibility of charitable contributions would increase tax revenues by about \$3 billion in 1998 and by \$96 billion over the 1998-2002 period. In 1998, it would increase tax liabilities of roughly 30 million taxpayers by an average of about \$675 per return, most of which would be paid in fiscal year 1999.

The deduction provides significant government support for charitable activities. But one criticism of the deduction is that the electorate as a whole, and not individual donors, should make decisions about which activities deserve taxpayer support. Another criticism is that the deduction provides unequal federal matching rates for contributions by different taxpayers. The government subsidy rates can approach 40 percent of contributions for the highest-income taxpayers, but are

only 15 percent for taxpayers in the lowest tax bracket and zero for people who do not itemize deductions.

Nonetheless, the decisions of individuals about donations may be the best measure of which activities should receive government support and yield substantial contributions. Without deductibility, contributions would drop. However, the magnitude of the decline is uncertain.

Alternatively, limiting the deduction of appreciated property to a taxpayer's cost of an asset under the regular income tax would increase revenues by about \$0.3 billion in 1998 and by more than \$8 billion over five years. The existing provision allows taxpayers to deduct the entire value of assets they contributed even though they paid no tax on the gain from appreciation. That outcome provides preferential treatment to one kind of donation relative to other kinds and expands the preferential treatment of capital gains (see REV-24). Indisputably, however, the present provision encourages people to donate appreciated assets to eligible activities rather than passing them on to their heirs at death, when any gains also escape income tax.

Yet another way to limit the charitable deduction, while retaining an incentive for giving, is to allow taxpayers to deduct only those contributions in excess of 2 percent of adjusted gross income. That alternative would retain an incentive for increased giving by people

who donate a large share of their income but would remove the incentive for smaller contributors. It would completely disqualify the charitable deductions of about 17 million taxpayers in 1998 and reduce allowed deductions for roughly another 15 million, increasing revenues by about \$1.5 billion in 1998 and by about \$44 billion over the 1998-2002 period. Such a change

would eliminate the tax incentive for just over 50 percent of the taxpayers who currently make and deduct charitable contributions. In addition, it would encourage taxpayers who planned to make contributions over several years to lump them together in one tax year to qualify for a deduction with the 2 percent floor.

REV-07 LIMIT THE TAX BENEFIT OF ITEMIZED DEDUCTIONS TO 15 PERCENT

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	25.9	57.1	59.4	61.6	64.3	268.3

SOURCE: Joint Committee on Taxation.

Current law allows taxpayers to reduce taxable income by the amount of itemized deductions. Taxpayers who itemize may deduct state and local income and property taxes, home mortgage interest payments, contributions to charity, employee business expenses, moving expenses, casualty and theft losses, and medical and dental expenses. Taxpayers benefit from itemizing if their deductions exceed the standard deduction. Current law limits some itemized deductions to the amount in excess of a percentage of adjusted gross income, and it reduces all itemized deductions for high-income taxpayers.

The tax benefit of itemized deductions, like all deductions, increases with a taxpayer's marginal tax bracket. For example, \$10,000 in itemized deductions would reduce taxes by \$1,500 for a taxpayer in the 15 percent tax bracket, \$2,800 for a taxpayer in the 28 percent bracket, and \$3,960 for a taxpayer in the 39.6 percent bracket. Most taxpayers do not itemize deductions. Among the 30 percent of taxpayers who do itemize, however, about half are in tax brackets above 15 percent. This option would limit the tax benefit of itemized deductions to 15 percent for those higher-bracket taxpayers. The limit would increase revenues by about \$268 billion over five years.

Limiting the tax benefit of itemized deductions would make the income tax more progressive by rais-

ing average tax rates for most middle- and upper-income taxpayers. The limit might also improve economic efficiency because it would reduce tax subsidies that lower the after-tax prices of selected goods, such as mortgage-financed, owner-occupied housing.

The itemized deductions for health expenses, casualty losses, and employee business expenses, however, are not subsidies of voluntary activities, but are instead allowances for costs that reduce the ability to pay income tax. Under this option, some taxpayers would pay tax on receipts they use to defray such costs because they would pay tax on their gross income at rates above 15 percent, but could deduct only 15 percent of the cost of earning income. Thus, an individual with unusually high medical bills, for example, would pay more tax than another individual with the same ability to pay but who had low medical bills.

Like other limits on itemized deductions, this option would create incentives for taxpayers to avoid the limit by converting itemized deductions into reductions in income. For example, taxpayers might draw down assets to repay mortgages, reducing both income and mortgage payments, or donate time or services rather than cash to charities. The option would also make calculating taxes more complex for itemizers.

REV-08 PHASE OUT THE DEPENDENT-CARE CREDIT

Addition to Current- Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Set the Phaseout Starting at:						
\$30,000	0.8	1.6	1.6	1.7	1.7	7.4
\$50,000	0.5	1.0	1.0	1.1	1.1	4.7
\$65,000	0.3	0.6	0.7	0.7	0.8	3.1

SOURCE: Joint Committee on Taxation.

Taxpayers who incur employment-related expenses for the care of children and certain other dependents may claim an income tax credit. The credit per dollar of qualifying expenses declines from 30 percent for taxpayers whose adjusted gross income (AGI) is \$10,000 or less to 20 percent for taxpayers whose AGI is above \$28,000. Tax law limits creditable expenses to \$2,400 for one child and \$4,800 for two or more. Creditable expenses cannot exceed the earnings of the taxpayer or, in the case of a couple, the earnings of the spouse with lower earnings. In 1994, taxpayers claimed about \$2.5 billion in credits on 6 million tax returns.

About two-fifths of the credit benefits taxpayers with AGIs of \$50,000 or more. Retaining the credit only for lower-income families would reduce its revenue cost. One way to do that would be to reduce the percentage of credit as income rises. For example, reducing the credit percentage by 1 percentage point for each \$1,500 of AGI over \$30,000 would raise \$7.4 billion from 1998 through 2002. That option would reduce the credit for about 37 percent of currently eligible families and eliminate it for another 37 percent (families with AGI over \$58,500). Alternatively, phasing out the credit between \$50,000 and \$78,500 would

raise about \$4.7 billion in the same period. That option would reduce the credit for about 27 percent of eligible families and eliminate it for another 20 percent. Finally, phasing out the credit between \$65,000 and \$93,500 would raise \$3.1 billion in the same period, reducing the credit for about 20 percent of eligible families and eliminating it for roughly another 10 percent.

The credit provides a work subsidy for families with children. Phasing out the credit for higher-income families targets that subsidy toward families with greater economic need, but it may discourage parents in families with a reduced credit from working outside the home.

If the credit was phased out, higher-income employees could seek other tax benefits for dependent care by asking their employers to provide subsidized day care. Current law allows workers to exclude from taxable income up to \$5,000 of annual earnings used to pay for dependent care through employer-based programs. If more employer-subsidized dependent care was provided, budgetary savings would be reduced. To preclude taxpayers from using that alternative, the Congress could limit the use of the fringe benefit.

REV-09 IMPOSE AN EXCISE TAX ON NONRETIREMENT FRINGE BENEFITS

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	3.8	5.8	6.1	6.4	6.8	28.9

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Unlike employee compensation paid in cash, many fringe benefits are exempt from income and payroll taxes. The exemption of employer-paid health and life insurance premiums from tax will cost about \$49 billion in income taxes and \$33 billion in payroll taxes in 1998. In addition, the law explicitly excludes from gross income employer-paid dependent care and miscellaneous benefits such as employee discounts, parking valued below a specified limit, and athletic facilities. Imposing an excise tax on fringe benefits would diminish the effects of those exclusions.

Excluding fringe benefits from gross income effectively subsidizes their cost, thereby causing people to consume more of such benefits than they would if they had to pay the full price. As a result, resources may be allocated inefficiently. For example, excluding employer-provided parking facilities from taxation has encouraged people to drive to work rather than commute by other means and encouraged employers to build parking facilities on land that might have more productive uses. (The parking subsidy has been partly offset in recent years by another fringe benefit: the exclusion for car pool subsidies and transit passes.) Similarly, excluding employer-provided health insurance has contributed to the large and growing demand for health care services. (See REV-10.)

Such exclusions are inequitable because individuals who earn compensation in cash pay more tax than others with the same total income, part of which is paid in the form of fringe benefits. That inequity is exacerbated to the extent that the higher demand for the fringe benefit by employees drives up the price for people who have to purchase it with after-tax dollars. Moreover, because the tax exclusion is worth more to

taxpayers in higher tax brackets and because higher-income taxpayers also receive more fringe benefits than lower-income people, the tax savings from the exclusion are unevenly distributed among income groups.

Making all fringe benefits taxable, however, would present problems in valuing benefits and in assigning their value to individual employees. Appraisal is simpler when employers purchase goods or services and provide them to employees, but it is more difficult to determine the value of a facility, such as a gym, that employers provide. Further difficulties arise if employers must allocate to individual employees the total value of the fringe benefits they provide. For example, in cases in which an employer provides a service--such as employee discounts--it might be unfair to assign the same taxable value to all employees regardless of their level of use. Conversely, it would be administratively complex to assign values that depended on each worker's use. Further, the costs of collecting taxes on small fringe benefits (such as employee discounts) might exceed the revenue collected.

An alternative to including employer-provided benefits in income to recipients would be to impose on employers an excise tax on the value of the benefits that they provide. Those benefits would include the employer's share of health insurance (see REV-10); premiums to fund the first \$50,000 of life insurance, the part that is excluded from income (see REV-11); dependent care; athletic facilities; employee discounts; and parking with a value up to the amount above which it is currently taxed. (Under current law, employees must include in taxable income in 1997 the market value in excess of \$170 per month of any parking provided free of charge by an employer. The amount is indexed for

inflation each year.) A 3 percent excise tax, for example, would raise about \$29 billion from 1998 through 2002. The large bulk of those revenues would come from taxing employer-paid health insurance.

Under this option, employers would need to know only their total fringe benefit costs; they would not have to place a value on the benefits paid to each employee. Because the 3 percent excise tax rate would be much lower than the tax rate on wages, this option would maintain most of the incentive for employers to provide fringe benefits instead of taxable wages.

A flat-rate excise tax on employers would be relatively more favorable to employees in higher-wage firms than including fringe benefits in employees' taxable income. Under an excise tax, the rate would not rise with the income of employees, as it would if the benefits were subject to the income tax. Within a firm, however, an excise tax can be more or less progressive depending on how the employer allocates the tax among workers.

REV-10 TAX EMPLOYER-PAID HEALTH INSURANCE

Addition to Current- Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Tax Some Employer-Paid Health Insurance						
Income Tax	6.2	9.6	10.8	12.1	13.6	52.3
Payroll Tax	<u>4.0</u>	<u>6.1</u>	<u>6.8</u>	<u>7.6</u>	<u>8.5</u>	<u>33.0</u>
Total	10.2	15.7	17.6	19.7	22.1	85.3
Tax All Employer-Paid Health Insurance, but Allow Individuals a Credit for Premiums That They or Their Employers Pay up to a Limit						
Income Tax	25.6	4.0	5.9	8.1	10.5	54.1
Payroll Tax	<u>22.2</u>	<u>33.0</u>	<u>34.7</u>	<u>36.6</u>	<u>38.6</u>	<u>165.1</u>
Total	47.8	37.0	40.6	44.7	49.1	219.2

SOURCE: Joint Committee on Taxation.

Employees do not pay taxes on income they receive in the form of employer-paid health insurance. In addition, health insurance premiums and health care costs paid through cafeteria plans are generally excludable from income and payroll taxes. Those exclusions will reduce income tax revenues and payroll tax revenues by a total of about \$79 billion in 1998.

Tax Some Employer-Paid Health Insurance. One way to limit the exclusion would be to treat as taxable income for employees any employer contributions for health insurance plus health care costs paid through cafeteria plans that exceed \$350 a month for family coverage and \$170 a month for individual coverage. Those amounts are estimated average contributions for 1998 and would be indexed to reflect future increases in the general level of prices. The option would increase income tax revenues by about \$52 billion and payroll tax revenues by about \$33 billion over the 1998-2002 period. Including employer-paid health care coverage in the Social Security wage base, however, would lead to increased outlays on Social Security benefits in the future that could offset most of the added payroll tax revenues from this option over the long run.

This approach would eliminate the tax incentive to purchase additional coverage beyond the ceiling. Employees would have stronger incentives to economize in the medical marketplace, which could reduce both upward pressure on medical care prices and the provision of unnecessary or marginal services. Because the option indexes the ceiling amounts to the overall inflation rate, whereas health care costs have been rising faster than the overall rate of inflation, it could constrain health care costs even more over time. The Congress has already limited the exclusion for employer-paid group term life insurance in a similar way.

One disadvantage of limiting the tax exemption of employer-paid medical insurance premiums is the difficulty of determining when extensive coverage becomes excessive. Also, the level of coverage purchased by a given premium depends on such factors as geographic location and the characteristics of a firm's workforce. As a result, a uniform ceiling would have uneven effects. Finally, if health insurance costs continued to rise faster than the general level of prices, indexing to reflect the general level of prices would gradually reduce subsidies for employer-paid health insurance.

Taken together, those factors could increase the number of workers without health insurance.

Tax All Employer-Paid Health Insurance, but Allow Individuals a Credit for Premiums That They or Their Employers Pay up to a Limit. Another option would treat all employer-paid health insurance premiums as taxable income and disallow payments for health care costs through cafeteria plans, but offer a refundable individual income tax credit of 20 percent for health insurance premiums up to the amounts described above for family and individual coverage. The credits would be available to taxpayers whether or not their employers paid for or sponsored the coverage. The option would increase income tax revenues by about \$54 billion over the 1998-2002 period. That amount would be the net result of about \$245 billion in revenues if there was no credit, less about \$191 billion in new income tax credits. The income tax gain occurs disproportionately in the first year because many taxpayers would not adjust their withholding to take account of the credit. Payroll tax revenues would rise

substantially--by about \$165 billion over the same period. But as under the first option, increases in Social Security outlays could offset most of the added payroll tax revenues in the long run.

In addition to eliminating the tax incentive for excessive health insurance, as under the first option, this option would offer the subsidy to all taxpayers who purchased health insurance, regardless of their employment status. Moreover, the subsidy per dollar of eligible health insurance premiums would no longer be relatively higher for taxpayers with higher marginal tax rates (and higher incomes). Limiting the amount of insurance eligible for credits to a fixed level, however, creates all of the same problems as in the first option. Moreover, by extending the subsidy to individual purchases of insurance, the option might induce relatively healthy employees to buy insurance outside the workplace. Consequently, insurance would become more expensive for the remaining employees, especially in small firms, and that rise in cost could cause more firms to terminate coverage.

REV-11 TAX EMPLOYER-PAID LIFE INSURANCE

Addition to Current- Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Income Tax	1.2	1.8	1.9	1.9	2.0	8.8
Payroll Tax	<u>0.8</u>	<u>1.2</u>	<u>1.3</u>	<u>1.3</u>	<u>1.3</u>	<u>5.9</u>
Total	2.0	3.0	3.2	3.2	3.3	14.7

SOURCE: Joint Committee on Taxation.

Tax law excludes from taxable income the premiums that employers pay for group term life insurance but limits the exclusion to the cost of the first \$50,000 of insurance. The exclusion is not available to the self-employed. Employer-paid life insurance is the third most expensive tax-advantaged fringe benefit (after health insurance, discussed in REV-10, and pensions, discussed in REV-12 and REV-13). Including employer-paid premiums in taxable income would add \$8.8 billion to income tax revenues and \$5.9 billion to payroll tax revenues from 1998 through 2002.

Like the tax exclusion for other employment-based fringe benefits, the tax exclusion for life insurance creates a subsidy for the fringe benefit, which causes people to purchase more life insurance than they would if they had to pay the full cost for insurance. Furthermore, the tax exclusion allows workers whose employers purchase life insurance for them to pay less tax than workers who have the same total compensation but

must purchase insurance on their own (see REV-09). In addition, the value of employer-paid life insurance, unlike some other fringe benefits, could be accurately measured and allocated. Employers could report the premiums they paid for each employee on the employee's W-2 form and compute withholding in the same way as for wages. Indeed, employers already withhold taxes on life insurance premiums that fund death benefits above the \$50,000 limit.

A tax subsidy to provide life insurance might be called for, however, if people buy too little life insurance because they systematically underestimate the financial hardship to their families resulting from their death. But whether people purchase too little insurance for that reason is unclear. Moreover, even if it was clear, a more efficient way of allocating resources might be to provide a direct tax subsidy to all purchasers of life insurance and not just limit the subsidy to insurance provided by employers.

REV-12 DECREASE LIMITS ON CONTRIBUTIONS TO QUALIFIED PENSION
AND PROFIT-SHARING PLANS

Addition to Current- Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Decrease Limits for Defined Benefit Plans to the Social Security Wage Base (With equivalent reductions for defined contribution plans)	0.5	1.4	1.4	1.5	1.5	6.3
Decrease the Limit for Deferrals in Salary Reduction Plans to \$4,000	0.2	0.5	0.6	0.6	0.6	2.5

SOURCE: Joint Committee on Taxation.

Saving for retirement through employer-provided qualified pension and profit-sharing plans provides two tax advantages: it exempts from taxes the investment income earned by the assets in qualified plans, and it defers tax on contributions to qualified plans until retirement, when an employee's marginal tax rate is often lower.

Decrease Limits on Employer Contributions. Section 415 of the tax code establishes limits on the benefits that an employer can fund in qualified plans for any employee. The limits depend on the type of plan the employer offers.

Defined contribution plans specify how much the employer will contribute for each employee's retirement--for example, 5 percent of pay. The employee's pension depends on how much the employee's retirement fund accumulates by the time he or she retires. Current law limits annual contributions to such plans to 25 percent of compensation or \$30,000, whichever is less.

Defined benefit plans specify the pension amount employees will receive in retirement, which is usually a percentage of preretirement earnings. Employers adjust their annual contributions so that enough will accumu-

late by the time the employee retires to pay the promised pension. Current law limits contributions to defined benefit plans so that annual benefits for pensions that begin at age 65 are no more than 100 percent of preretirement wages or a fixed amount (\$125,000 in 1997), whichever is less. The tax law reduces that limit on an actuarial basis for pensions that begin at an earlier age. When an employer sponsors both types of plans, a higher limit applies--the lesser of 140 percent of wages or \$160,000 for 1997.

The limits on employer contributions are intended to limit the size of the tax benefits received by highly paid people. Those people are better able to provide adequately for retirement without the full tax benefits and may use pensions to shelter nonretirement savings from taxation.

The main argument for lowering the current limits on contributions is that they allow the funding of pensions far higher than the preretirement earnings of most workers. Three percent of people who worked full time throughout 1995 earned as much as \$100,000. Yet current limits allow the funding of pensions up to \$125,000. Workers who accrue pensions that large are unlikely to need the full tax advantage to provide adequately for their retirement. Limiting funding for de-

financed benefit plans to amounts necessary to pay benefits equal to the Social Security wage base (\$65,400 in 1997), and making proportionate reductions in limits for defined contribution plans, would raise about \$6 billion from 1998 through 2002. Revenues would increase because more employment income would be subject to taxes. Those limits would still be higher than the earnings of all but about 10 percent of full-time, year-round workers.

One argument against reducing the limits is that it would make participation less attractive to high-income business owners and top managers and thus might discourage them from sponsoring such plans for both themselves and their employees. Although higher-paid managers and owners might not need tax-advantaged pension plans to save adequately for retirement, their employees might. A further argument against reducing the limits is a concern that national saving is too low. Limiting incentives for pension saving could reduce total saving.

Limit 401(k) Deferrals to \$4,000. Section 401(k) of the tax code allows employees to choose to receive lower current (taxable) compensation and defer the remainder of compensation as a contribution to an employer retirement plan. Similar arrangements are possible for some workers in the nonprofit sector (403(b) tax-sheltered annuities), federal workers, and workers enrolled in some simplified employer plans (SEPs). Starting in 1997, small employers are able to establish a simplified retirement plan called the savings incentive match plan for employees (SIMPLE) under section 408(p), and a wider range of nonprofit organizations will be allowed to use salary deferral plans.

Section 402(g) specifies indexed limits for employee deferrals. In 1997, the limit for deferrals to 401(k) plans, 403(b) annuities, SEPs, and the federal plan is \$9,500. Section 401(p) limits contributions to the new SIMPLE plan to \$6,000 in 1997. Limiting deferrals in all plans with cash or deferred arrangements to \$4,000 in 1998, and indexing that limit thereafter, would raise \$2.5 billion in 1998 through 2002.

Lowering the limit would affect higher-income workers who are likely to provide adequately for their own retirement without the tax incentive. In addition, many employers have added 401(k) plans on top of other pension plans that, coupled with Social Security, already meet the basic retirement needs of employees. Those 401(k) plans provide supplementary saving for employees who prefer higher retirement income. Thus, limiting contributions to 401(k) plans would not threaten the basic retirement security of those workers.

Alternatively, higher limits provide a greater incentive for employers to initiate the plans, which benefit employees at all income levels. In particular, 401(k) plans appeal to small employers who have traditionally not established pension plans. Lower limits may discourage small employers from offering what could be the only retirement benefit available to their employees. Lowering limits on those plans and not on other plans encourages traditional pensions, which are primarily defined benefit plans. Unlike defined benefit plans, 401(k) plans and other defined contribution plans do not discriminate against workers who change employers or drop out of the workforce temporarily. In addition, the voluntary nature of plans with cash or deferred arrangements allows workers who have spouses without coverage to save more for retirement than other workers.

Other Funding Limit. In addition to the section 415 and section 402(g) limits described above, section 401(a)(17) limits the amount of compensation that can be considered in calculating an employee's pension benefits. The Omnibus Budget Reconciliation Act of 1993 reduced that compensation limit from \$235,840 in 1993 to \$150,000 in 1994 and provided for indexing the limit in subsequent years. The limits in section 415 and section 402(g) primarily restrict pension benefits for high-income employees with generous pension plans. The compensation limit primarily restricts pension benefits for all high-income employees.

 REV-13 IMPOSE A 5 PERCENT TAX ON INVESTMENT INCOME OF PENSION PLANS AND INDIVIDUAL RETIREMENT ACCOUNTS

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	7.7	12.9	13.6	14.3	14.7	63.2

SOURCE: Joint Committee on Taxation.

Under normal income tax rules, the interest earnings of savings accounts are fully taxable each year. The absence of that annual tax is one of the tax advantages for employer pensions and individual retirement accounts (IRAs). Instituting a tax at a low rate on the earnings of pension funds and IRAs would reduce the size of that advantage. A 5 percent tax rate would raise about \$63 billion between 1998 and 2002. (The other tax advantage of pensions and IRAs is the deferral of tax on contributions until retirement, when an employee's marginal tax rate is often lower.)

The tax advantages for pensions and IRAs encourage firms and workers to provide for retirement. Most studies of pensions find that they increase saving; the studies of IRAs are less conclusive. Although the tax advantages promote a public objective, many people receive little or no benefit from them. In 1993, for example, 47 percent of workers neither participated in a pension plan nor contributed to an IRA. The largest pension benefits go to higher-paid workers or to workers with long-term employment at large firms.

Imposing a tax at a low rate on pension and IRA earnings would reduce the tax advantage of saving for retirement through those vehicles. Such a tax would reduce the use of pensions and IRAs and probably result in less retirement saving. The smaller tax advantage for pensions and IRAs would, however, make the tax burden of employees with pensions and IRAs and those without them slightly more equal. It would also increase taxes relatively more for higher-paid workers.

Taxing pension and IRA earnings would affect more taxpayers than would setting lower limits on employer contributions to pension plans (see REV-12). Lowering the contribution limits would increase taxes on a small number of the highest-paid workers and raise taxes substantially for some of them. Taxing pension and IRA earnings would affect workers with a wider range of earnings. Moreover, because it would affect so many more workers, it could raise more revenue with a smaller impact for each employee who pays more tax.

Taxing the annual earnings of pension funds and IRAs would encourage fund managers to shift their investments from assets that yield income toward assets that appreciate in value, such as growth stocks and real estate, because they can defer tax on capital gains until realization (see REV-24). To obtain that tax deferral, however, pension funds would have to invest in riskier assets. Although that portfolio shift would reduce the security of workers' retirement funds, it would make it easier for risky enterprises to obtain funding.

Legislative proposals introduced in recent years would have expanded access to IRAs and broadened their use beyond retirement saving. Taxing the investment income of IRAs runs counter to the objective of expanding IRA use, but it would also mitigate the revenue loss from such an expansion.

 REV-14 TAX THE INCOME-REPLACEMENT PORTION OF WORKERS' COMPENSATION AND BLACK LUNG BENEFITS

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	1.4	3.9	4.0	4.1	4.2	17.6

SOURCE: Joint Committee on Taxation.

Current law exempts workers' compensation and Black Lung benefits from income taxation. Taxing the portion of those benefits that replaces the income employees lose from work-related injuries or black lung disease would increase revenues by \$17.6 billion from 1998 through 2002. The remaining portion of benefits, which reimburses employees for their medical costs (about 40 percent), would continue to be exempt from taxation.

Taxing the income-replacement portion of workers' compensation and Black Lung benefits would make the tax treatment of those entitlement benefits comparable to the treatment of unemployment benefits and the wage-replacement benefits that employers provide through sick pay and disability pensions. It would also improve work incentives for disabled workers who are

able to return to work. (Under current law, the after-tax value of the wages they are able to earn may be less than the tax-free benefits they receive while disabled.)

An argument against taxing such benefits is that legal or insurance settlements for non-work-related injuries are not taxable, even if a portion of them reimburses lost income. Hence, taxing workers' compensation benefits would treat those two types of compensation inconsistently.

Furthermore, if the current levels of wage-replacement benefits were established under the assumption that they would be untaxed, this option would reduce benefits below desired levels. Enacting the option, therefore, might lead to efforts to increase benefits, thereby reducing the intended deficit reduction.

REV-15 INCREASE TAXATION OF SOCIAL SECURITY AND RAILROAD RETIREMENT BENEFITS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Tax 85 Percent of Benefits for All Recipients	9.8	25.0	26.1	27.1	28.2	116.2
Tax 85 Percent of Benefits for Recipients with Income Above \$44,000 (Couples) and \$34,000 (Individuals), and Tax 50 Percent of Benefits for All Other Recipients	4.9	12.4	12.9	13.4	14.0	57.6
Tax 85 Percent of Benefits for Recipients with Income Above \$32,000 (Couples) and \$25,000 (Individuals)	0.5	1.0	1.0	1.1	1.1	4.7

SOURCE: Joint Committee on Taxation.

Social Security and Railroad Retirement (Tier I) together constitute the federal government's largest entitlement program. Most benefits are not subject to tax. Under current law, a taxpayer first calculates his or her combined income, which is the sum of adjusted gross income (AGI), nontaxable interest income, and one-half of Social Security and Tier I benefits. If a taxpayer's combined income exceeds a fixed threshold, he or she includes a fraction of benefits in AGI. The thresholds at which up to 50 percent of benefits are subject to tax are \$25,000 for single returns and \$32,000 for joint returns. Above a second set of thresholds, \$34,000 (single) and \$44,000 (joint), up to 85 percent of benefits become subject to tax. The additional revenues from the higher thresholds go to the Medicare trust fund, whereas all other revenues from taxing Social Security benefits go to the Social Security retirement and disability trust funds.

About one-fourth of households receiving Social Security pay income tax on some portion of their benefits, and about three-fifths of those households pay tax on 85 percent of their benefits. Because the thresholds remain fixed over time, as nominal incomes increase, the percentage of households that pay tax on benefits will grow to 32 percent in 2002. Bills to remove the 85 percent rate were proposed in 1996 but not enacted.

The first option would eliminate the income thresholds entirely and would require all beneficiaries to include 85 percent of their benefits in their adjusted gross income. It would raise \$116 billion from 1998 through 2002. Eliminating the income thresholds would cause many more, but not all, Social Security recipients to pay income tax on their benefits. In addition to the thresholds, the tax code through personal exemptions, the regular standard deduction, and an additional standard deduction for the elderly protects the income of lower-income elderly households from being taxed. Eliminating the thresholds on taxing benefits would nearly triple the share of couples and individuals paying tax on their benefits from the current 25 percent to 70 percent.

Eliminating the thresholds would reduce tax disparities among middle-income households. Social Security beneficiaries receive a tax preference not available to other taxpayers because they can exclude a portion of their income--Social Security benefits below the thresholds--from AGI. As a result, the average income tax rate that middle-income elderly families pay is less than the tax rate that nonelderly families with comparable income pay under current law.

The second option would not change the treatment of couples with combined income above \$44,000 and

individuals with combined income above \$34,000--they would still be taxed on up to 85 percent of their benefits--but it would require all other recipients to include 50 percent of benefits in their adjusted gross income. That option would raise \$58 billion from 1998 through 2002. Couples with combined income below \$32,000 and individuals with combined income below \$25,000 would be added to the beneficiaries whose benefits are subject to tax. Almost all beneficiaries currently taxed on up to 50 percent of their benefits--couples with combined income between \$32,000 and \$44,000 and individuals with combined income between \$25,000 and \$34,000--would be unaffected. (Because the taxation of benefits is phased in under current law, some couples with combined income just above \$32,000 and singles with income just above \$25,000 are now taxed on less than a full 50 percent of their benefits.)

The final option would keep the current-law income threshold of \$32,000 for couples and \$25,000 for individuals, while including up to 85 percent of benefits for all taxpayers above that threshold. The option would raise \$4.7 billion from 1998 through 2002. It would, moreover, almost exclusively affect couples with modified income between \$32,000 and \$44,000, and individuals with income between \$25,000 and \$34,000.

Increasing the percentage of benefits that are taxable from 50 percent to 85 percent would make the treatment of Social Security roughly similar to that of contributory pension plans. Workers receiving benefits from contributory plans pay income tax on the excess of benefits over their own contributions. Social Security actuaries estimate that among workers now

entering the labor force, employee-paid payroll taxes will represent 15 percent of expected benefits for high-earning, unmarried workers and a lower percentage for all other workers. Thus, 85 percent is the minimum fraction of benefits in excess of past contributions. However, a lower rate might be appropriate for two reasons. First, benefits will have to be cut or taxes raised at some point in the future to restore the long-run balance of Social Security. Either change would raise taxes as a share of benefits above 15 percent for some workers. Second, keeping the inclusion rate at 50 percent would make the treatment of Social Security equivalent in terms of present value to that of noncontributory pensions.

Increasing the tax on benefits would reduce the net benefits of retirees compared with what some people consider to be the implicit promises of the Social Security and Railroad Retirement programs at the time recipients were working. The government has, however, made numerous changes in the Social Security and Railroad Retirement programs over time, including changing the benefit formula, introducing partial taxation of benefits, and raising payroll tax rates to finance the programs.

Increased taxation of Social Security benefits is one way to apply a means test to those benefits. As an alternative to expanding taxation, the government can reduce benefits from those programs by changing the benefit formula (see ENT-31 through ENT-34), reducing cost-of-living adjustments (see ENT-44), or including benefits in a broadly based means test of multiple entitlement programs (see ENT-45).

REV-16 TAX INVESTMENT INCOME FROM LIFE INSURANCE AND ALL ANNUITIES

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current- Law Revenues	7.8	19.1	21.5	23.7	25.9	98.0

SOURCE: Joint Committee on Taxation.

Life insurance policies often combine features of both insurance and tax-favored savings accounts. In the early years of whole life insurance and similar policies, annual premiums exceed the annual cost of insurance. As the excess premiums accumulate, they earn investment income, which is then available to pay the cost of future insurance, provide part of a death benefit, or provide a disbursement to the policyholder if the policy is voluntarily canceled.

The investment income, sometimes called "inside buildup," receives special tax treatment under current law compared with the interest income from other investments. It is exempt from taxation when used to pay the cost of future life insurance. It is also tax-exempt to the beneficiary or, with some tax planning, to the estate of the insured person when it is paid as part of a death benefit. The accumulated investment income is taxable to the policyholder when he or she voluntarily cancels a policy and receives a disbursement. Even when the investment income is ultimately taxable, however, the tax deferral can be favorable to the policyholder. The interest income from other investments, such as taxable bonds, is subject to tax as it accrues, even when interest is not paid to the investor until the bond matures.

Life insurance companies also sell annuities, which have features of both insurance and tax-favored savings accounts. Life annuities promise periodic payments to the annuitant as long as he or she lives. Those payments provide insurance against the possibility that the annuitant will outlive his or her assets. By nature, however, annuities are also saving vehicles because annuity premiums are paid in return for annuity benefits received at a later date. Because premiums are often

paid long before benefits are received, the benefits must include a return on investment in order for an annuity to be financially attractive.

For tax purposes, annuity benefits are divided into two parts--a return of principal and investment income. Only the investment income is subject to tax. Although investment income accrues over the life of a contract, it is not included in taxable income until benefits are paid. As with whole life insurance and other similar policies, such tax deferral can increase the after-tax return to the investor significantly compared with alternative investments such as taxable bonds and certificates of deposit from which interest income is taxable as it accrues.

Tax Investment Income Annually. Under this option, policyholders would include the investment income from life insurance policies and annuities in taxable income as it accrued. Insurance companies would report the accrued investment income to a policyholder or annuitant annually. Life insurance disbursements and annuity benefits would no longer be taxable as they were paid. Making the investment income taxable in that way would raise almost \$100 billion in 1998 through 2002. Investment income from annuities purchased as part of a qualified pension plan or qualified individual retirement account would still be tax-deferred until benefits were paid.

Taxing the investment income from life insurance and annuities would equalize their tax treatment with the tax treatment of similar investments. The investment income from life insurance and annuities is tax-deferred, but the income from an ordinary savings account or taxable bond is taxed as it accrues. Alterna-

tively, the tax deferral for life insurance and annuities is consistent with the tax deferral currently allowed for capital gains income.

A tax incentive to purchase life insurance is desirable if people systematically underestimate the financial hardship on spouses and families caused by their own death. Such shortsightedness could cause them to buy too little life insurance. Similarly, it might cause people to buy too little annuity insurance to protect them against outliving their assets. But it is not currently known whether people would buy too little insurance without the tax incentive, or the extent to which the tax incentive increases the amount of life insurance or annuity coverage. If the incentive is justified to correct for people's shortsightedness rather than subsidize the inside buildup, a better policy might be to subsidize life insurance directly by allowing a tax credit or partial deduction for insurance premiums. Annuities receive other tax incentives through the special tax treatment of pensions and retirement savings.

A tax preference for inside buildup in life insurance policies and annuities has an uncertain effect on saving. It may encourage saving because it increases people's income when they are older for each dollar they save when they are younger. The tax preference might, however, reduce saving because it also enables people to save less when they are younger without reducing their expected income when they are older.

Use a More Limited Option. Some annuity contracts sold by life insurers provide little or no insurance against outliving assets. For example, a contract may guarantee to pay a minimum total benefit regardless of how long the annuitant lives. Other annuities simply make predetermined benefit payments over a fixed term. Such "term-certain" annuities are simply investments and are essentially identical to bonds, bank certificates of deposit, or money market mutual funds.

Under a more limited option, an individual's taxable income would include the annual accrual of investment income only from annuity benefits that are guaranteed to exceed a certain amount or to be paid over a fixed period, regardless of how long the annuitant lives. The insurance companies would annually report to individuals the amounts to be included as taxable income. To lessen the burden of compliance, however, no reporting or accrual taxation would be required when the term-certain portion of the value of an annuity is less than one-third of its value. Annuities purchased as part of a qualified pension plan or qualified individual retirement account would also be exempted. This option is similar to a proposal made by the Bush Administration in its 1993 budget. An estimate of the option's budgetary effect is not available.

REV-17 TAX A PORTION OF THE INSURANCE VALUE OF MEDICARE BENEFITS

Addition to Current- Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
With Income Thresholds						
Tax Hospital Insurance Only	2.7	7.3	8.4	9.4	10.7	38.5
Tax Supplementary Medical Insurance Only	1.4	3.7	4.3	4.8	5.5	19.7
Tax Both	4.3	11.3	13.0	14.7	16.7	60.0
Without Income Thresholds						
Tax Hospital Insurance Only	3.9	13.4	14.8	16.3	17.8	66.2
Tax Supplementary Medical Insurance Only	1.8	6.3	7.2	8.1	9.0	32.4
Tax Both	6.1	21.2	23.8	26.4	29.0	106.5

SOURCE: Joint Committee on Taxation.

Like Social Security, Hospital Insurance (HI) benefits under Medicare are financed by payroll taxes that are earmarked for a trust fund. Social Security benefits, however, are partially taxable for higher-income people, whereas the value of HI benefits is not subject to tax. In addition, the Supplementary Medical Insurance (SMI) component of Medicare is heavily subsidized: premiums cover only about one-fourth of the benefits paid, and that share is projected to decline to less than one-sixth over the next decade. This option would tax HI the same way Social Security is taxed under current law or under the tax option in REV-15 and would partially tax SMI.

The first option would treat the insurance value of Medicare much like Social Security benefits, although the tax would be imposed on the average insurance value of in-kind Medicare benefits, not on the dollar value of benefits actually received. In this option, 85 percent of the value of HI and 75 percent of the value of SMI would be included in adjusted gross income (AGI) for taxpayers with combined income (AGI plus nontaxable interest income plus one-half of Social Security, Railroad Retirement, and Medicare benefits) of more than \$34,000 for single returns and \$44,000 for joint returns. For taxpayers with combined income below

those thresholds, but above \$25,000 (single) and \$32,000 (joint), 50 percent of the insurance value of both HI and SMI would be included in AGI. Taxpayers with lower income would have no additional tax liability. Because the thresholds are fixed, inflation would cause a larger fraction of Medicare insurance benefits to become taxable over time.

With those income thresholds, the HI tax alone would increase federal revenues by \$38.5 billion from 1998 through 2002. The SMI tax alone would yield \$19.7 billion over the five-year period. If both taxes were imposed simultaneously, revenues would be about \$60 billion higher over five years. The combined tax would generate more revenues than the sum of the HI and SMI taxes because some taxpayers would be subject to higher tax rates as a result of the increase in AGI. Also, more enrollees would have income above the threshold when both components are included.

The second option would include 85 percent of the insurance value of HI benefits and the subsidy component of SMI (about 75 percent) in AGI for all taxpayers. Without an income threshold, the HI tax alone would increase federal revenues by \$66.2 billion over the 1998-2002 period. Revenues from the SMI tax

alone would be \$32.4 billion over the five-year period. If both taxes were imposed simultaneously, revenues would be \$106.5 billion higher over the five-year period.

Earmarking revenues from taxing HI benefits for the HI trust fund would delay the projected deficit of the trust fund in 2001. A tax on SMI benefits would shift some SMI costs from taxpayers to enrollees. Using income thresholds would leave lower-income enrollees unaffected. In fact, because many beneficiaries do not have to pay income taxes, this proposal would affect only about half of enrollees in 1998 even if no income thresholds were used. Furthermore, since this option would use the mechanism already in place for taxing Social Security benefits, it would be straightforward to administer.

Unlike the tax on Social Security benefits, this tax would be imposed on the insurance value of in-kind benefits rather than on the dollar benefits actually re-

ceived. Some people might object that the additional income does not generate cash with which to pay the tax liability. (Basing the tax on actual benefits received, however, has little to recommend it because the tax would then be directly related to the health care costs of enrollees. Such a tax would reduce the insurance protection Medicare is intended to provide.) In addition, the actual value of insurance provided under Medicare varies among households based on age, health status, and whether they have other health insurance.

Thus, including a fixed imputed premium in income might be viewed as unfair. The approximately 15 percent of enrollees in or above the 28 percent tax bracket would face a tax increase averaging about \$1,350 in 1998 for individuals and about \$2,750 for couples with two enrollees, assuming the combined tax was imposed with no income thresholds. In addition, more households would have to pay tax on Social Security benefits if the definition of combined income was expanded to include Medicare benefits.

REV-18 EXPAND MEDICARE AND SOCIAL SECURITY COVERAGE

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Expand Medicare Coverage to Include State and Local Government Employees Not Now Covered	1.1	1.5	1.5	1.4	1.4	6.9
Expand Social Security Coverage to Include All New State and Local Government Employees	0.3	1.2	2.2	3.3	4.3	11.3

SOURCE: Congressional Budget Office.

NOTE: Estimates do not include the effect of any increases in benefit payments that would result from the option. They would be small over this five-year period. Estimates are net of reduced income tax revenues.

Certain groups of federal, state, and local government employees are not covered under the Medicare and Social Security programs, despite recently expanded coverage. The Tax Equity and Fiscal Responsibility Act of 1982 required all federal employees to pay Medicare payroll taxes beginning in 1983, and the Social Security Amendments of 1983 required federal employees who began work after December 31, 1983, to pay Social Security payroll taxes. The Consolidated Omnibus Budget Reconciliation Act of 1985 mandated that state and local employees who began work after March 31, 1986, pay Medicare payroll taxes. The Omnibus Budget Reconciliation Act of 1990 expanded Social Security and Medicare coverage to include state and local government employees not covered by any retirement plan.

Under current law, many state and local employees will qualify for Social Security and Medicare benefits based on other employment in covered jobs or their spouse's employment. Those employees will thus receive benefits in return for a smaller amount of lifetime payroll taxes than are paid by people who work continuously in covered employment. That inequity is especially apparent for Medicare benefits: one out of six state and local employees is not covered through his or her employment, but 85 percent of those not covered receive Medicare benefits through their spouse or be-

cause of prior work in covered employment. Inequitable treatment is less of a problem in the case of Social Security benefits because benefits are based on a formula that only includes wages earned in employment covered by Social Security and because the benefit formula is adjusted for retired government employees who have worked a substantial portion of their career in employment not covered by Social Security.

Requiring all state and local employees to pay Medicare payroll taxes, and all new state and local employees to pay Social Security payroll taxes, would make coverage of state and local employees resemble that of federal employees. That broader coverage would reduce the inequity from the high benefits those employees receive in relation to payroll taxes paid. Expanding Medicare and Social Security payroll taxes to include more state and local employees would increase the government's liability for future program benefits. The additional revenues, however, would most likely more than offset increased benefits permanently.

Expand Medicare Coverage to Include State and Local Government Workers Not Now Covered. Expanding Medicare coverage to include state and local government employees who began work before April 1, 1986, would raise about \$7 billion from 1998 through 2002. The annual revenue gain would decline gradually

because the number of employees who were hired before April 1986 and remain on the payrolls of state and local governments declines over time.

Expand Social Security Coverage to Include All New State and Local Government Workers. Retirement coverage for state and local government employees may be provided by a public-employee program, the Social Security program, or a plan that integrates both programs. Expanding Social Security coverage to include all new state and local government employees would raise about \$11 billion from 1998 through 2002, although in the long run higher Social Security benefit payments would offset a portion of the extra revenue. The annual revenue gain would grow rapidly--to \$4.3 billion by 2002--because the pool of new employees would grow rapidly.

How states and localities revised their pension plans in response to mandatory coverage would determine which employees gained and lost from that change, but requiring coverage of new state and local government employees would probably benefit many

employees who spent only part of their career in the government sector. First, because of the portability of coverage, newly hired employees might find it easier to qualify for disability and survivors' benefits under Social Security than under many public-employee benefit programs. Second, unlike many public-employee plans, state and local employees would not lose Social Security eligibility if they change jobs before they are vested. Third, because Social Security benefits are calculated on the basis of inflation-adjusted wages, many employees who worked only when they were young might receive more generous retirement benefits from Social Security than from public pension plans.

State and local governments would have to pay the employer's share of Social Security taxes on new employees if coverage was made mandatory. Because state and local government participation in Social Security is now voluntary, those states with a low percentage of covered employees would bear more of the cost of expanded mandatory coverage, including the cost of setting up the payment system.

**REV-19 INCREASE THE PAYROLL TAX RATE FOR MEDICARE HOSPITAL INSURANCE
BY ONE PERCENTAGE POINT**

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current- Law Revenues	26.4	36.9	38.6	40.5	42.4	184.8

SOURCE: Congressional Budget Office.

NOTE: Estimates are net of reduced income tax revenues.

Medicare Part A, which is also known as the Hospital Insurance (HI) program, pays for hospital care and related medical expenses for the elderly. The program is financed by a 1.45 percent payroll tax on employees and employers, which results in a combined payroll tax rate of 2.9 percent. Increasing the combined HI tax rate by 1 percentage point to 3.9 percent would generate about \$185 billion in revenues from 1998 through 2002.

The Congress has taken a number of steps in recent years to increase revenue to the trust fund. The Omnibus Budget Reconciliation Act of 1990 more than doubled the maximum amount of earnings subject to the HI tax, from \$51,300 in 1990 to \$125,000 in 1991. The Omnibus Budget Reconciliation Act of 1993 eliminated the taxable maximum earnings starting in 1994 and allocated to the Hospital Insurance Trust Fund revenue resulting from an increase in the tax on Social Security benefits.

However, despite those recent increases in earmarked revenue, the Congressional Budget Office projects that the assets of the Hospital Insurance Trust Fund will be completely depleted during 2001. In its final report issued in 1995, the Bipartisan Commission on Entitlement and Tax Reform discussed a variety of HI payroll tax increases that would improve the trust fund's actuarial balance. Increasing the combined HI tax rate by 1 percentage point to 3.9 percent would lengthen the solvency of the trust fund beyond 2007.

The Congress has recently considered a variety of options to restructure Medicare and improve its long-term solvency. Increasing the HI tax rate is only one possibility. For a discussion of the types of options available, see Chapter 5 of this report.

REV-20 INCREASE THE MAXIMUM TAXABLE EARNINGS FOR THE SOCIAL SECURITY PAYROLL TAX

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current-Law Revenues	13.1	19.6	20.6	21.5	22.6	97.4

SOURCE: Congressional Budget Office.

NOTE: Estimates are net of reduced income tax revenues.

Social Security--composed of the Old-Age, Survivors, and Disability Insurance (OASDI) programs--is financed by a payroll tax on employees, employers, and self-employed individuals on earnings up to a specified maximum. The maximum amount of taxable earnings is increased automatically each year in proportion to the increase in average annual earnings. For 1997, the maximum taxable earnings are \$65,400 and are projected to increase to \$68,400 in 1998. Approximately 87 percent of earnings in employment covered by the programs fall below the maximum. Increasing the maximum taxable earnings to \$100,000 in 1998, and continuing to index them for average growth in earnings thereafter, would place about 90 percent of total covered earnings below the maximum and would generate about \$97 billion from 1998 through 2002.

When Social Security began in 1937, about 92 percent of earnings in employment covered by the program were below the maximum. That percentage gradually declined over time as the earnings of workers grew, but the maximum increased only occasionally when the Congress enacted specific increases to it. By 1978, about 84 percent of total covered earnings were below the maximum. In the 1977 Social Security Amendments, the Congress provided for increases in the earnings base in 1979, 1980, and 1981 with the intent of raising the taxable percentage of covered earnings to 90 percent. Since achieving that percentage in 1982, the taxable maximum has automatically increased each year by the increase in average wages.

Despite indexing the maximum amount of taxable earnings, the taxable fraction of covered earnings has slipped below 90 percent over the past decade as a result of faster-than-average growth in the earnings of the

highest earners. By 1995, the taxable portion was about 87 percent. Increasing the maximum taxable earnings could restore the percentage to its 1982 level. In its final report issued in 1995, the Bipartisan Commission on Entitlement and Tax Reform discussed this option as a means of improving the actuarial balance of the OASDI trust funds.

Increasing revenues that are earmarked for Social Security would improve the solvency of the trust funds. Under the intermediate assumptions of the funds' Board of Trustees, total income is expected to exceed expenditures only through 2019, and the combined trust fund will be completely exhausted by 2029. Increasing the maximum taxable earnings would improve the long-range solvency of the system by pushing back both of those dates, thereby helping the system move closer to actuarial balance.

Because individuals with income above the maximum amount of taxable earnings do not pay the tax on all of their earnings, they pay a lower share of their total earnings in payroll taxes than do individuals with total earnings below the maximum. Increasing the maximum taxable earnings would raise payroll taxes for high-income earners and make the payroll tax more progressive. Although that change would also entitle individuals with earnings above the old maximum to higher retirement benefits, those additional benefits would be low relative to the additional taxes they would have to pay.

Increasing the maximum taxable earnings would reduce the additional return from working for individuals whose earnings are above the old maximum, but below the new maximum, because those earnings would

become subject to the payroll tax. Those workers would have an incentive to work less or to take more compensation in the form of fringe benefits that are not subject to the payroll taxes. Increasing the maximum taxable earnings would not reduce the return from work

for employees with earnings in excess of the new maximum. Those employees would not have an incentive to reduce their earnings. Instead, they would have some incentive to work more to maintain the same level of after-tax income.

REV-21 CURTAIL TAX SUBSIDIES FOR EXPORTS

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current- Law Revenues	2.3	4.8	5.2	5.7	6.1	24.1

SOURCE: Joint Committee on Taxation.

The tax code subsidizes U.S. exports in two important ways. First, the allocation of income between domestic and foreign business activities under the "title passage" rule routinely allows U.S. multinational companies to use excess foreign tax credits to offset about half of the U.S. tax on their export income by characterizing it as foreign-source income. Second, the tax rules for foreign sales corporations (FSCs) offer U.S. companies an opportunity to exempt about 15 percent of their export income from U.S. tax by characterizing it as income of a foreign subsidiary that is not effectively connected with U.S. trade or business.

Sourcing Rules for Sales of Inventory. U.S. companies generally pay U.S. tax on their worldwide income, but they may claim a foreign tax credit. The foreign tax credit reduces the tax that U.S. companies owe on foreign-source income by the amount of income tax they pay abroad. To prevent the foreign tax credit from offsetting domestic-source income, the tax code limits the credit to the amount of tax owed on foreign-source income. When foreign tax payments exceed the U.S. tax on foreign-source income, U.S. companies accrue excess foreign tax credits that they cannot currently use. U.S. companies retain those excess credits to offset taxes owed on future income from foreign sources, but only for five years.

In allocating worldwide income between domestic and foreign sources, rules for sourcing determine how fully U.S. companies can use their foreign tax credits to reduce their U.S. tax liability. For example, when a corporation has excess foreign tax credits, treating a dollar of income as foreign-source income instead of domestic-source income allows the corporation to use excess credits that might otherwise expire to reduce the U.S. tax on its worldwide income by about 35 cents.

Sales income is classified for tax purposes as domestic or foreign source according to a complex set of sourcing rules that take account of the residence of the seller, the place of sale, the location of the seller's business activities, and the presence of any foreign tax on the sales income. Under a particular rule known as the "title passage" rule, the income of a U.S. company from the sale of inventory is sourced according to the place of sale. So when inventory is sold abroad, the income from the sale is deemed foreign-source income, regardless of where the inventory was purchased and regardless of whether the income was subject to foreign tax. When a U.S. company produces the inventory in the United States and markets it abroad, half of the income is typically classified as foreign source on the basis of the title passage rule and half is classified based on the location of the production activity. Assuming the company has excess foreign tax credits to offset the tax on its foreign-source income, the 50-50 allocation effectively exempts half of the export income from U.S. tax.

If the title passage rule allows a company with excess foreign tax credits to classify more of its export income as foreign source than it could justify solely on the basis of the location of its business activities, then the company receives an implicit export subsidy.

Foreign Sales Corporations. According to a decision by the governing council of the General Agreement on Tariffs and Trade (GATT), export income can be exempt from U.S. tax only if the economic activity that produces the income takes place outside the United States. In response to the GATT decision, the tax code was amended by the Congress to allow U.S. companies to charter FSCs in low-tax countries and either supply goods to the FSCs for resale abroad or pay commissions to them on export sales. Although the FSCs are

largely paper corporations with very few employees, the Congress believes that they have enough foreign presence and economic substance to meet GATT's requirements to exempt export income.

Under the tax code, when a U.S. company sells exports through an FSC, about 23 percent of the total income from production and marketing is attributed to the FSC and about 65 percent of the FSC's export income is exempt from U.S. tax. The exempt income, which is approximately 15 percent of the income from the sale, remains free from U.S. tax when the U.S. company receives it as a dividend from the FSC.

Economic Effects of Export Subsidies. Export subsidies increase investment and employment in export industries, but do not increase the overall levels of domestic investment and domestic employment. Stimulating exports increases the demand for U.S. dollars by foreigners, which raises the value of the dollar and lowers the cost of imports, causing imports to increase. In the long run, export subsidies increase imports as much as exports. As a result, investment and employment in import-competing industries in the United States would decline about as much as they increased in the export industries.

Export subsidies reduce domestic welfare by distorting the allocation of economic resources at home and abroad. The subsidized production of export goods in the United States partially displaces the more effi-

cient production of those goods abroad. Moreover, the subsidies increase the worldwide supply of goods that the United States exports and decrease the worldwide supply of goods that the United States imports. The shifts in supply lower the world price of U.S. exports and raise the price of U.S. imports. As a result, domestic welfare suffers because the United States receives fewer import goods in exchange for its export goods.

Curtailing the export subsidies provided by the title passage rule and the favorable tax treatment of FSCs would raise about \$24 billion from 1998 through 2002. The option would curtail the export subsidy from the title passage rule by eliminating it and treating the income of U.S. companies from the sale of goods abroad as domestic-source income. An exception would be allowed, however, if a U.S. company had a place of business that was located outside the United States and was substantially involved in the export sale. Under the exception, income would be allocated between domestic and foreign sources based on the location of the business activities that produced the income.

The option would curtail the subsidy from FSCs by treating them like other foreign subsidiaries. In general, all of the income repatriated from FSCs would be subject to U.S. tax, but some of it might be foreign-source income under the revised sourcing rule mentioned above. The tax on any income from an FSC that was deemed foreign-source income could be offset by unused foreign tax credits.

REV-22 IMPOSE A MINIMUM TAX ON FOREIGN-OWNED BUSINESSES

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current- Law Revenues	0.1	0.3	0.4	0.5	0.5	1.8

SOURCE: Joint Committee on Taxation.

Foreign-owned companies must pay tax on the income they earn from business activities within the United States. Treaties with other countries generally stipulate that the United States will not tax the income of foreign-owned businesses more heavily than the income of U.S.-owned businesses.

When foreign multinational corporations operating in the United States import materials and services from affiliated companies abroad, the "transfer price" of imports affects the amount of income that is subject to U.S. tax. (The transfer price is the price charged for goods sold between affiliated companies.) By raising the transfer price of imports, foreign-owned companies can shift income out of the United States to their foreign affiliates and reduce their U.S. tax liability. U.S. tax law requires companies to base the transfer prices of many goods and most services on comparable transactions between unaffiliated companies. But such prices are often difficult for companies to determine and even more difficult for the Internal Revenue Service to enforce, especially when comparable goods and services are not routinely traded among unaffiliated companies.

Foreign-owned multinational corporations may be manipulating transfer prices to shift income overseas and avoid U.S. tax. Circumstantial evidence has indicated that this kind of tax avoidance has occurred. For example, studies have found that the reported profit rates (as a percentage of assets and as a percentage of sales) of foreign-owned multinational corporations operating in the United States are generally lower than the profit rates of U.S.-owned corporations in the same industry.

However, other plausible explanations exist for the low profit rates. For example, foreign-owned companies may have newer plants and equipment than U.S.-owned companies in the same industry. Because accelerated depreciation methods allow companies to claim larger annual deductions on newer equipment than on older equipment, foreign-owned companies would have higher reported depreciation costs and lower reported profit rates as a percentage of sales. Moreover, the lack of an inflation adjustment for the book value of plant and equipment undervalues older assets relative to newer assets. As a result, U.S.-owned companies with older assets would tend to have higher profit rates as a percentage of reported book value than foreign-owned companies with newer assets. When foreign-owned companies are the result of recent acquisitions, they would tend to have lower than average rates of profit. Newly acquired companies tend to have more debt, larger depreciation deductions, and higher book value from assets that are revalued on acquisition.

To discourage foreign companies from manipulating transfer prices to avoid U.S. tax, a minimum tax could be levied on foreign-owned businesses that have a sizable amount of trade with affiliated companies overseas. One legislative provision, introduced in 1992, would have imposed a minimum tax on all companies that are at least 25 percent foreign owned and have transactions with foreign affiliates in excess of either 10 percent of their gross income or \$2 million annually. Under the proposal, the foreign-owned company would compute its taxable income under the current income tax rules, but its taxable income would be subject to a floor. The floor would equal 75 percent of its gross business receipts multiplied by the average

profit margin on gross receipts for U.S. companies in the same industry. If the foreign-owned company's operations spanned several industries, the floor would be based on the profit margins in each industry weighted by the share of the company's gross receipts in that industry. The Internal Revenue Service could waive the minimum tax after examining a company's method of computing transfer prices and finding it acceptable.

The formula approach under the minimum tax provides a simple way to ensure that foreign-owned companies conducting business in the United States pay an acceptable amount of U.S. tax. The simplicity of the approach may offer some advantage over the cumbersome rules for arm's-length pricing, which are extremely difficult to enforce. The formula approach, however, provides a very crude estimate of taxable profit.

The minimum tax would discriminate against foreign-owned companies, possibly in violation of U.S. treaties, by taxing their income more heavily than the income of their domestic competitors. The minimum tax would be especially onerous on foreign-owned companies starting new businesses in the United States because new businesses are seldom profitable initially. Under the minimum tax, such businesses would still owe a sizable amount of income tax based on their gross receipts.

Other countries would be likely to treat the minimum tax as a protectionist measure and retaliate with similar taxes on U.S.-owned companies conducting business within their borders. If so, the minimum tax would stifle international trade and reduce economic welfare throughout the world. Imposing the minimum tax on foreign-owned companies, which is one of many possible formulary approaches, would raise \$1.8 billion from 1998 through 2002.

REV-23 TAX CAPITAL GAINS FROM HOME SALES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Tax 30 Percent of Gain	1.9	5.5	5.7	5.9	6.0	25.0
Tax Lifetime Gains in Excess of \$125,000	0.2	0.8	0.9	0.9	0.9	3.7

SOURCE: Joint Committee on Taxation.

When homeowners sell their home, they realize a capital gain or loss equal to the difference between the selling price and their basis. Their basis is the initial cost of the home plus the cost of home improvements.

Although capital gains on most assets are taxable when the assets are sold, capital gains on home sales generally escape taxation. A taxpayer can defer the capital gain from the sale of a principal residence by purchasing another home of at least equal value within two years. When a homeowner dies, the accrued gain on the current home plus any gain on previous homes escapes tax permanently. Further, the tax law allows taxpayers age 55 and older to exclude up to \$125,000 of gain from one home sale even if they do not purchase another home of equal or greater value within two years. Replacing the deferral and one-time exclusion with a rule that includes 30 percent of capital gains from home sales in taxable income would raise \$25 billion in 1998 through 2002. Alternatively, including all lifetime gains in excess of \$125,000 in taxable income when realized would raise \$3.7 billion over the same period.

Current law effectively shields most gains on home sales from taxation. In 1993, about \$300 million in taxes were paid on home sales in contrast to the roughly \$20 billion that would have been paid without the deferral and one-time exclusion. Despite raising relatively little revenue, current law can discourage homeowners from selling their homes and either purchasing homes of lesser value or renting rather than owning.

The President in his budget for fiscal year 1998 has proposed to reduce the taxing of capital gains on home sales. The proposal would allow taxpayers to exclude

up to \$500,000 of gains on the sale of their principal residence. A taxpayer could use this exclusion repeatedly, provided the sales occurred at least two years apart. The proposal would enable nearly all homeowners to move to less expensive homes or to rent without concern about triggering a capital gains tax liability.

The preferential treatment of capital gains from home sales is only one of the ways in which the tax code strongly favors owner-occupied homes over other investments (for a discussion of other ways, see REV-04). All of those tax preferences divert savings from business investment to housing. One way to make the tax treatment of housing more like that of other assets would be to replace the capital gains deferral and exclusion provisions with a low tax rate on gains from home sales. Including 30 percent of the gain from home sales in taxable income would make the tax rate on such gains range from 4.5 percent for taxpayers facing a 15 percent marginal tax rate to 11.9 percent for those in the 39.6 percent tax bracket.

An increase in the tax on gains from home sales would further discourage home sales. It might discourage workers from relocating to take advantage of better job opportunities. The tax might also deter some homeowners from changing homes as family requirements change. The low tax rate, however, would limit the extent to which moves were discouraged. Furthermore, such a tax on home sales would treat people who moved to less expensive homes or to rental units the same as people who buy more expensive homes.

Another option would allow all taxpayers to exempt the first \$125,000 of gains on all home sales from tax, but would fully tax the excess over that amount at

the time of sale. That option would protect the mobility of most homeowners. Taxpayers who realize a gain of less than \$125,000 on their first home could apply the unused portion to future home sales. That exclusion would increase the mobility of homeowners under age 55 relative to current law because they could move to homes of lesser value without incurring a tax as long as the gain on the home they sold was less than \$125,000. Although this proposal would increase mobility for most homeowners, it would reduce it for those under age 55 whose gains from home sales exceed \$125,000. Those taxpayers could no longer defer additional gain by purchasing a more expensive home.

Taxing gains on home sales without the rollover and exclusion that current law allows would increase the need for taxpayers to keep records of home improvements. They would need to maintain such records to establish the tax basis of a home upon sale. Currently, many taxpayers do not keep such records because the probability of any future tax on gains from a home sale is low and the expected present value of such a tax is small. Allowing a lifetime exemption of \$125,000 would complicate recordkeeping, especially when people buy and sell successive homes with different spouses.

Much of the capital gain on home sales results from inflation. Ideally, inflationary gains would not be subject to income taxation. Taxing inflationary gains may, however, be an appropriate way to offset the tax benefit

homeowners enjoy from inflation by being able to deduct fully their mortgage interest payments, which include an inflation premium.

Including capital gains from the sale of a home in taxable income could argue for a change in the treatment of capital losses from home sales. Taxpayers generally may not deduct losses on home sales against gains from sales of future homes, gains from sales of other assets, or against other income. In contrast, taxpayers may deduct their capital losses from other assets against capital gains on other assets or, if they do not have gains in excess of losses, against up to \$3,000 of other income. The options described here would continue to disallow the deduction of losses from home sales.

Any reduction in the tax benefit from home ownership would lower the value of existing housing relative to other assets such as corporate equity. Middle-income taxpayers particularly would feel the loss in value because homes are their principal asset.

Another way to reduce the tax benefit for home ownership is to limit the mortgage interest deduction (see REV-04). Limiting the mortgage interest deduction has the advantages of not hindering mobility or complicating recordkeeping. Taxing gains on sale, however, has the advantage of preserving the greatest tax benefit for first-time homebuyers.

REV-24 TAX CAPITAL GAINS HELD UNTIL DEATH

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Include Gains in the Last Income Tax Return of the Deceased ^a	b	15.0	15.9	13.9	11.4	56.2
Enact a Supplemental 10 Percent Estate Tax	b	1.8	2.0	1.7	1.3	6.8
Enact a Carryover Basis	b	1.2	2.3	3.5	4.9	11.9

SOURCE: Joint Committee on Taxation.

a. Estimates are net of reduced estate tax revenues.

b. Less than \$50 million.

A capital gain or loss is the difference between the current value of an asset and the owner's basis. The owner's basis is the initial cost of the asset plus the cost of any subsequent improvements and minus any deductions for depreciation. When an asset is sold, tax law normally requires that the owner include any realized gain in taxable income. The owner can deduct any realized losses against realized gains, and when the owner does not have gains in excess of losses, he or she can deduct up to \$3,000 of the loss against other income.

An exception occurs when an owner holds an asset until death. In that case, tax law allows the inheritor to "step up" the basis to the asset's value as of the date of the decedent's death. On subsequent sale of the asset, the inheritor pays tax on the gain that accrued after the decedent's death. The gain that accrued before the decedent's death is permanently excluded from taxable income. The estate of the decedent may pay taxes under the separate estate tax, but that tax applies equally to assets on which the decedent previously paid income tax and to assets with accrued capital gains that had escaped income taxation.

There are three ways to tax gains held at death: the law could require that gains held at death be included as income on the final income tax return of the decedent, the estate of the decedent could be subject to a supplemental tax rate on accrued gains, or the law could re-

quire that inheritors assume the decedent's basis in the asset they inherit. Under the last method of carryover basis, inheritors would include the decedent's unrealized gain in their taxable income when they sold the asset.

Tax Gains on Final Return of the Decedent. Taxing accrued but unrealized gains on the final income tax return of the decedent would raise about \$56 billion from 1998 through 2002. This option would exclude gains on assets that a spouse inherits. Instead, the spouse would assume the basis of the decedent and pay tax on the full gain only when the asset was sold. Any gains on assets that the decedent left to charity would also be exempt. The option would include gains on other assets in taxable income. It would also allow three additional modifications. First, to ease the problem of documenting the basis, the option would allow the estate to use an alternative basis equal to one-half of the asset's current value in computing the gain to be included on the final tax return. Second, the estate could claim the existing \$125,000 exclusion on the gain from the sale of a principal residence if the decedent had not already claimed it. Third, the estate could exclude an additional \$75,000 of any remaining gains. With all of those provisions, about 10 percent of decedents would owe taxes on accrued gains on their final income tax return. Finally, taxes paid on gains realized at death would be deductible under the estate tax.

Tax Gains Under the Estate Tax. An additional estate tax on accrued gains of 10 percent would raise about \$7 billion from 1998 through 2002. This option would apply a flat 10 percent rate to the same tax base as in the previous option. In addition, however, taxpayers could offset the additional tax with any unused credits under the estate tax. Because of those credits, few people would owe additional tax under this option. Only about 1 percent of estates currently pay the estate tax, and the fraction paying the additional tax on gains would be about the same.

Tax Gains Upon Realization by Heirs (Carryover Basis). A third option would carry over the decedent's basis in assets left to the heirs and tax the gains of the decedent when the heirs sold their assets. This option would raise roughly \$12 billion from 1998 through 2002. The option would also allow heirs to set the basis of inherited assets at one-half of their current value. In addition, if the estate of the decedent paid any estate tax, shares of that tax would be added to the basis of all the estate's assets in proportion to their shares of the estate's value. Carryover basis would make most gains held at death taxable, but the timing of the tax payments would depend on when the heirs sold the inherited assets.

Gains held until death have always been exempt from income tax. The Congress enacted a carryover basis in the Tax Reform Act of 1976 but postponed it in 1978 and repealed it in 1980. Hence, it never took effect.

Taxing accrued gains at death, on either the last income tax return or the estate tax, would reduce the incentive for investors to hold assets until death in order to avoid tax. Current law encourages taxpayers to hold on to assets longer than they otherwise would. That "lock-in" effect distorts their investment portfolios and may hinder the flow of capital to activities with higher rates of return. Reducing the lock-in effect is one of the advantages of reducing the income tax on realized capital gains. Taxing gains at death would also reduce the lock-in effect, but, unlike a lower capital gains tax rate, it would reduce the preferential treatment of capital gains over ordinary income.

Using a carryover basis would not achieve the same unambiguous reduction of the lock-in effect that the other two options would achieve. Using a carryover

basis lessens the incentive for the original owner to hold on to an asset until death. But an heir receiving an asset with a carryover basis has a stronger incentive to hold on to the asset than under current law.

A disadvantage of taxing gains at death is that the tax might force the family of the decedent to sell assets to pay the tax, although two of the three options minimize that problem. Forced sales of illiquid assets at an inopportune time can reduce their value substantially. Forcing heirs to sell a family farm or business would impose a particular hardship on families wanting to continue the enterprise. Forced sales would not occur if a carryover basis was used because heirs could defer the tax on unrealized gains until they sold the assets. In addition, taxing gains held at death through the estate tax would also reduce forced sales. The estate tax permits heirs who continue to operate a family farm or business to value the farm or business on its current use instead of its market value, and then to defer payment for five years and spread it over the next 10 years. Estates would receive no deferral, however, if gains were taxed on the final income tax return of the deceased. That option could be structured to allow the same protections as are currently allowed under the estate tax, although at some cost in revenue.

Taxpayers and the Internal Revenue Service often have difficulty determining the basis of assets of closely held businesses, personal property, and assets for which the taxpayer did not keep adequate records. The difficulty in determining the amount of the basis was one of the main arguments that influenced the Congress to delay implementing carryover basis in 1978 and then to repeal it in 1980. Because people currently planning to hold assets until death might not have kept adequate records, documenting the basis would be particularly difficult immediately after passage of a law to tax gains held until death. But once a tax on gains held at death had taken effect, people would have a reason to keep better records. In the interim, allowing estates and heirs to set the basis at one-half of the market value at the time of death would ease compliance. Finally, if gains held at death were taxable under the estate tax instead of the income tax, most estates would be exempt because of the high estate tax credit (see REV-25).

In 1995, the Congress passed and the President vetoed legislation to raise the value of assets excludable from the estate tax. That legislation also provided a

larger exclusion for family-held businesses. If the legislation became law, revenues raised by taxing gains through the estate tax would be lower than shown

above, and the burden on family businesses would be lessened.

REV-25 INCREASE ESTATE AND GIFT TAXES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Reduce the Unified Credit	0	5.4	6.1	6.8	7.6	25.9
Convert the Credit for State Death Taxes into a Deduction	0	2.0	2.3	2.6	2.9	9.8
Include Life Insurance Proceeds in the Base	0	0.4	0.6	0.6	0.7	2.3

SOURCE: Joint Committee on Taxation.

Current law imposes a gift tax on transfers of wealth during a taxpayer's lifetime and an estate tax on transfers at death. The estate and gift taxes together constitute a unified tax: one progressive tax is imposed on cumulative transfers during life and at death. Generous credits built into the system, however, exempt most estates from taxation. About 32,000 estates paid tax in 1994.

Although the estate and gift tax applies to all transfers of wealth, a unified credit of \$192,800 effectively exempts the first \$600,000 from taxation. As a result of the credit, taxable estates face tax rates ranging from 37 percent on the first \$150,000 of transfers in excess of \$600,000 to 55 percent on transfers in excess of \$3 million. An additional 5 percent surcharge applies to estates between \$10 million and \$21.04 million. The 5 percent surcharge phases out the benefit of graduated rates for those larger estates. In addition, current law phases out the unified credit for estates above \$10 million. Another credit allows taxpayers to subtract a portion of state death taxes from federal estate tax liability.

The Congress last raised estate and gift taxes in the Omnibus Budget Reconciliation Act of 1993, when it made permanent the top two estate tax rates that had been scheduled to decline to 50 percent after 1992. Those are the 53 percent rate that applies to estates of between \$2.5 million and \$3 million and the 55 percent rate that applies to estates of more than \$3 million. The

Congress could raise the estate and gift tax, without raising rates, by reducing allowable credits or by including proceeds of life insurance policies in the tax base.

Reduce the Unified Credit. Lowering the unified credit from \$192,800 to \$87,800 would raise about \$26 billion from 1998 through 2002. That lower credit is equivalent to an exemption of the first \$300,000 of transfers, instead of the current \$600,000.

The estate and gift tax is a way to tax income that has not been taxed during a person's lifetime. It provides the only tax on the unrealized capital gains held until death by people with the highest-valued estates. The estate and gift tax, however, taxes those unrealized gains at the same rate as other accumulated wealth that has already been taxed as income when earned (see REV-24).

Reducing the unified credit would extend the tax to more estates with small businesses, family farms, and large homes. The necessity of paying the tax would put pressure on heirs to sell those assets when they might prefer to retain them in the family or when the value of the assets was temporarily depressed. However, the estate tax has provisions for spreading payment over 15 years for small businesses and family farms, but even that burden could be prohibitive for retaining some family assets.

Reducing forced liquidation of assets was one concern of the Congress when it voted in 1981 to raise the credit in steps from \$47,000 to \$192,800 by 1987. Since then, the credit has been fixed, and hence its value therefore has been eroded by inflation. The credit is now worth only about \$138,000 in 1987 dollars, representing a nearly 30 percent decline in its value over the last 10 years, but it remains more than double its inflation-adjusted level in 1981.

A provision in the Balanced Budget Act of 1995, vetoed by the President, would have raised the unified credit to \$248,300 by 2001 and indexed it to inflation thereafter. Such a change would be equivalent to an exemption of the first \$750,000 of transfers, instead of the current \$600,000, but still leave the credit below its real level reached in 1987. That act, as well as the President's budget for fiscal year 1998, include further relief from estate and gift taxes for family businesses.

Convert the Credit for State Death Taxes into a Deduction. Currently, state death taxes reduce federal tax liability by a credit that ranges from 0.8 percent on transfers of \$40,000 to 16 percent on transfers of more than \$10 million. When enacted in 1926, the credit sometimes virtually eliminated federal tax liability because the top marginal rate on estate and gifts taxes was 20 percent. The credit acts as a state revenue-

sharing system for estates taxed up to the 16 percent exclusion level. Consequently, a majority of states have adopted death tax systems that simply redistribute estate tax revenues from the federal to state governments. That shift is accomplished by imposing state taxes that exactly match the amount of the federal credit. Changing the state death tax credit to a deduction would raise about \$10 billion from 1998 through 2002 and would correspond to the itemized deduction that taxpayers receive for state and local income and property taxes.

An alternative change that yields about the same revenue is to reduce the amount of state tax credited by half so that the maximum credit is 50 percent of the amount paid to states. The two alternatives are not equivalent for estates of different sizes: the value of the deduction increases as the marginal tax rate rises, whereas the value of the credit is not affected by the marginal tax rate.

Include Life Insurance Proceeds in the Base of the Estate and Gift Tax. Life insurance is an alternative way of transferring wealth to descendants, but is currently exempt from the estate tax if the policyholder is someone other than the person who died. Making life insurance proceeds subject to estate and gift tax would raise \$2.3 billion from 1998 through 2002.

REV-26 AMORTIZE A PORTION OF ADVERTISING COSTS

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current- Law Revenues	5.1	9.0	6.8	4.5	2.6	28.0

SOURCE: Joint Committee on Taxation.

The income tax law allows taxpayers to deduct the ordinary costs of doing business. When a taxpayer purchases a durable asset for use in business, however, the expense may not normally be deducted immediately. Taxpayers must spread out (amortize) deductions over a number of years as the asset depreciates in value. That requirement is intended to match the timing of the deductions for depreciation with the timing of income earned from using the asset in business.

The rate at which such deductions are allowed, the "depreciation schedule," is normally faster than the rate at which an asset actually depreciates. For example, when a machine is expected to last 10 years, the depreciation schedule might allow the original cost to be deducted over five years. The sooner the deductions, the lower the effective rate at which income earned from using the asset is taxed. In the extreme, if the initial cost of a durable asset was deducted immediately, the net income from the asset would effectively not be taxed at all.

Currently, businesses may deduct advertising expenses in the year they are incurred. The benefits of advertising, however, may extend beyond the current year because advertising can create brand recognition or otherwise increase the demand for a business's products or services in later years. If advertising creates a durable asset, the immediate deduction allowed by current law favors such investments over investments in other durable assets.

Under this option, businesses could deduct 80 percent of all advertising expenses immediately but would have to amortize the remaining 20 percent equally (using a "straight line" method) over four years. The option might improve the match between the deductions

and the income created from advertising. This option would raise \$28 billion from 1998 through 2002. After peaking at \$9 billion in 1999, the estimated revenue gain would diminish to under \$3 billion by 2002 because the deductions that are deferred are taken by taxpayers in later years. In other words, the total deductions for advertising expenses do not change; they are simply spread out over five years.

Because advertising can be difficult to define, this option would require complex rules to distinguish advertising costs from other ordinary business costs. Some marketing costs, such as those of notifying customers about price changes, redesigning a product package, or changing store displays, might or might not fit within the definition of advertising. If advertising was defined too narrowly, the requirement for depreciation would be easy to avoid and difficult to administer. If advertising was defined too broadly, however, it would place an unintended burden on some forms of marketing.

The option would increase the after-tax cost of advertising and discourage its use. However, advertising also fulfills important economic functions by supplying information about products to prospective buyers. Advertising often provides information about prices, making it easier for buyers to find the lowest price, which can make markets more competitive. Advertising can also provide valuable information about the quality and other characteristics of products, making it easier for buyers to make good purchasing decisions.

Available research provides conflicting evidence about the durability of advertising. The actual rate at which advertising depreciates is unknown and differs for different types of advertising. The depreciation

schedule chosen under any option is necessarily arbitrary. If the depreciation period was too long under the

option, advertising would be overtaxed relative to other economic activities

REV-27 ELIMINATE PRIVATE-PURPOSE, TAX-EXEMPT BONDS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Eliminate All Private-Purpose, Tax-Exempt Bonds	0.1	0.6	1.2	1.7	2.1	5.7
Raise the Cap and Extend Limits on Volume to New Issues of All Private-Purpose Bonds	0.1	0.2	0.4	0.6	0.8	2.1

SOURCE: Joint Committee on Taxation.

Tax law permits state and local governments to issue bonds that are exempt from federal taxation and thus bear lower interest rates than taxable bonds. For the most part, the bonds' proceeds have financed public investments such as schools, highways, and water and sewer systems. Beginning in the 1960s, however, state and local governments began to issue a growing dollar volume of tax-exempt bonds to finance quasi-public facilities, such as ports and airports, and private-sector projects, such as housing and shopping centers. Those bonds eventually became known as "private-purpose" bonds because the beneficiaries of the tax-exempt borrowing were private, nongovernmental entities.

Private-purpose, tax-exempt bonds include mortgage bonds for rental housing and single-family (in some cases two-family) homes; bonds for exempt facilities, such as airports, docks, wharves, mass transit, and solid waste disposal; small-issue bonds for manufacturing facilities and agricultural land and property for first-time farmers; student loan bonds, which state authorities issue to increase funds available for guaranteed student loans; and bonds for nonprofit institutions, such as hospitals and universities.

Although private-purpose bonds provide subsidies for activities that may merit federal support, tax-exempt financing is not the most efficient way to provide assistance. With a direct subsidy, the benefit would go entirely to the borrower; with tax-exempt financing, the borrower of funds shares the benefit with

the investor in tax-exempt bonds. In addition, because tax-exempt financing is not a budget outlay, the Congress may not routinely review it as part of the annual budget process.

The Congress has placed restrictions on tax-exempt financing several times, beginning in 1968. During the 1980s, those restrictions included limiting the volume of new issues of tax-exempt bonds for some activities and eliminating or setting expiration dates on the use of tax-exempt bonds for other facilities. The Congress, however, frequently postponed some of the expiration dates. In the Omnibus Budget Reconciliation Act of 1993, the Congress permanently extended the use of mortgage bonds for single-family (and some two-family) homes and the use of small issues for manufacturing facilities and agricultural land and property for first-time farmers.

The Tax Reform Act of 1986 included interest earned on newly issued private-purpose bonds in the base for the alternative minimum tax and placed a single state-by-state limit on the volume of new issues of tax-exempt facility bonds, small issues, student loan bonds, and housing and redevelopment bonds. Those state limits on volume are the greater of \$50 per resident or \$150 million a year. Bonds for publicly owned airports, ports, and solid waste disposal facilities and bonds for nonprofit 501(c)(3) organizations (primarily hospitals and educational institutions) are exempt from the limits on issues of new bonds. However, large pri-

vate universities and certain other nonprofit institutions may not issue tax-exempt bonds if they already have more than \$150 million in tax-exempt debt outstanding.

If the Congress eliminated tax exemption for all new issues of private-purpose bonds, the gain in revenue would be about \$6 billion in 1998 through 2002. That amount assumes that at least some construction of airports and sewage and solid waste facilities would qualify for tax-exempt financing because they are governmental in nature. Eliminating the tax exemption would eventually raise the cost of the services provided by nonprofit hospitals and other facilities that currently qualify for tax-exempt financing, but it would also result in more efficient allocation of resources.

Including all bonds for private nonprofit and quasi-public facilities under a single state limit on volume--while raising the limits beginning in 1998 to, say, \$75 per capita or \$200 million a year--would increase revenues by \$2 billion in 1998 through 2002. Those changes would curb the growth of all private-purpose bonds without sharply reducing their use. The curb would primarily affect bond issues for nonprofit hospitals, which are not included in the current cap. The proposal would also apply to bonds for airport facilities, such as departure gates, that are for the exclusive private use of airlines under long-term leases, but would continue to allow unlimited tax-exempt financing of public airport facilities, such as runways and control towers.

REV-28 REDUCE TAX CREDITS FOR REHABILITATING BUILDINGS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Repeal Credit for Nonhistoric Structures and Reduce Credit for Historic Structures to 15 Percent	a	0.1	0.1	0.1	0.1	0.5
Repeal Both Credits	0.1	0.2	0.2	0.2	0.2	0.9

SOURCE: Joint Committee on Taxation.

a. Less than \$50 million.

The Congress enacted tax credits for rehabilitation to promote the preservation of historic buildings, encourage businesses to renovate their existing premises rather than relocate, and encourage investors to refurbish older buildings. The credit rate is 10 percent for expenditures on commercial buildings built before 1936, and 20 percent for commercial and residential buildings that the Department of the Interior has certified as historic structures because of their architectural significance.

The credits favor commercial use over most rental housing and may therefore divert capital from more productive uses. Moreover, in favoring renovation over new construction, the credits may encourage more costly ways of obtaining additional housing and commercial buildings.

Rehabilitation may have social benefits when it discourages the destruction of historically noteworthy buildings. The government could promote that objective at a lower cost, however, by permitting a credit only for the renovation of certified historic buildings and lowering the credit rate. Some surveys indicate that a 15 percent credit would be sufficient to cover the extra costs of both obtaining certification and undertaking rehabilitation of historic quality. Reducing the credit for historic structures to 15 percent and repealing the credit for nonhistoric structures would increase revenues over the 1998-2002 period by about \$0.5 billion. Repealing both credits would raise about \$0.9 billion over the same period.

REV-29 REPEAL THE LOW-INCOME HOUSING CREDIT

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current- Law Revenues	0.1	0.3	0.6	1.0	1.3	3.3

SOURCE: Joint Committee on Taxation.

The low-income housing credit (LIHC) subsidizes the construction and substantial rehabilitation of low-income rental housing. Individuals and corporations who qualify for the LIHC receive tax credits over a 10-year period that are worth up to 70 percent, measured in present value, of the construction or rehabilitation costs of qualifying projects. The percentage is limited to 30 percent for projects that receive other federal subsidies.

To qualify for the LIHC, project owners must set aside at least 20 percent of rental units for families whose income is below 50 percent of area median income, or 40 percent of units for families whose income is below 60 percent of median income. Rents are restricted. The set-aside and rent restrictions apply for at least 15 years. State housing agencies allocate the credits subject to statutory limits.

The low-income housing credit will reduce federal revenue by \$2.8 billion in 1997 and is estimated to grow to \$3.9 billion by 2000. Repealing the tax credit for new projects would raise \$3.3 billion from 1998 through 2002.

Housing assistance could be provided to the same number of people at lower cost if the assistance was provided in the form of an expanded housing voucher program. Low-income tenants can use housing vouchers to pay for all or part of the rent for the housing of their choice, as long as it meets minimum standards for habitability. By contrast, the low-income housing credit subsidizes only new and substantially rehabilitated housing, which is the most expensive kind of housing.

High overhead costs also make some housing subsidized by the LIHC even more expensive to produce

and rent. Private investors in low-income housing syndicates require high rates of return to compensate for the inherent risk of such investments, as well as the specific risks imposed by the credit itself. For example, projects that fail to comply with the requirements of the program may be subject to heavy penalties. Also, some investors cannot use the credits every year because of the limits on passive losses and on the use of business tax credits. Moreover, the administrative and marketing costs in organizing low-income housing syndicates are high, averaging 20 percent of project costs in some cases.

Advocates of the LIHC argue that it, in combination with subsidies such as rental assistance under section 8 of the United States Housing Act of 1937, assists many poor families and can be an important part of neighborhood revitalization efforts. In addition, affordable housing that meets minimal housing standards is in short supply in some areas with low-income families. For those reasons, a supply subsidy such as the LIHC might be a more effective policy tool than a demand subsidy such as housing vouchers. In addition, advocates argue that lower-middle-income people who benefit from the credit are neglected by traditional housing programs, which primarily assist poor families. Moreover, they believe that state governments, which allocate the credits, are better able to assess the housing needs of their communities than a federal bureaucracy.

Although providing support for low-income housing through housing vouchers instead of the LIHC could potentially provide assistance to the same number of families at lower cost, budget constraints on discretionary spending might make it difficult to repeal the credit in favor of an expanded voucher program funded by annual appropriations. The discretionary spending

limits of the Balanced Budget and Emergency Deficit Control Act of 1985 (as amended in 1990 and 1993) already impose severe constraints on funding for exist-

ing discretionary programs. Expanding the housing voucher program would subject those programs to even greater budgetary pressures.

REV-30 TAX CREDIT UNIONS LIKE OTHER THRIFT INSTITUTIONS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Tax All Credit Unions	0.5	0.9	0.9	0.9	0.9	4.1
Tax Credit Unions with More Than \$10 Million in Assets	0.5	0.8	0.8	0.8	0.8	3.7

SOURCE: Joint Committee on Taxation.

Credit unions are nonprofit institutions that provide their members with financial services such as accepting deposits and making loans. The federal income tax treats credit unions more favorably than competing thrift institutions, such as savings and loan institutions and mutual savings banks, by exempting their retained earnings from tax. As a result, more credit unions and fewer taxable thrifts exist than would otherwise be the case. That situation reduces economic efficiency in that competing institutions might otherwise provide the same services but at a lower cost.

Credit unions, savings and loans, and mutual savings banks were originally all tax-exempt, but in 1951 the Congress removed the tax exemptions for savings and loans and mutual savings banks. It considered them to be more like profit-seeking corporations than nonprofit mutual associations.

Since 1951, credit unions have come to resemble those other thrift institutions in certain respects. Credit unions no longer limit membership to people sharing a common bond, which was usually employment. Since 1982, the regulators have allowed credit unions to extend their services to others, including members of other organizations (this policy is currently undergoing legal challenge). In addition, most credit unions allow members and their families to participate permanently, even after members have left the sponsoring organization. Credit union membership has grown from about 5 million in 1950 to almost 70 million today. That leap in numbers offers evidence that credit unions, like tax-

able thrifts, now serve the general public. In addition, credit unions retain earnings like thrift institutions. Credit unions argue that they retain earnings as protection against unexpected events, but other thrift institutions argue that credit unions use the retained earnings to finance expansion. Moreover, credit unions are becoming more like savings and loans and mutual savings banks in the services they offer. A significant number of credit unions offer such services as first and second mortgages, direct deposit, access to automatic tellers, preauthorized payments, credit cards, safe deposit boxes, and discount brokerage services.

Many smaller credit unions, however, retain the characteristics of nonprofit mutual organizations and perhaps should not be subject to taxation. For instance, only volunteers from the membership manage and staff some of those credit unions. Moreover, many of those smaller credit unions do not expand their membership beyond their immediate common bond or provide services comparable to competing thrift institutions. To protect those smaller credit unions, the Congress could choose to exempt from taxation those credit unions with assets below \$10 million. Such an action would exempt about two-thirds of all credit unions from taxation, although they hold only about 8 percent of all assets in the credit union industry.

Taxing all credit unions like other thrift institutions would raise \$4.1 billion in 1998 through 2002. Taxing only credit unions with assets above \$10 million would raise about \$0.4 billion less.

REV-31 REPEAL TAX PREFERENCES FOR EXTRACTIVE INDUSTRIES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Repeal Expensing of Exploration and Development Costs	0.3	1.0	0.9	0.8	0.7	3.7
Repeal Percentage Depletion	0.3	0.4	0.4	0.5	0.5	2.1

SOURCE: Joint Committee on Taxation.

The current tax system favors extractive industries (oil, gas, and minerals producers) over most other industries through two types of tax preferences. First, certain exploration and development costs incurred by extractive producers may be immediately deducted ("expensed") rather than recovered more slowly through deductions for depreciation. Second, certain types of extractive companies (independent producers and royalty owners) may elect to use the "percentage depletion" method to recover costs rather than the standard "cost depletion" method. Under percentage depletion, cumulative depletion deductions may exceed actual costs of investment. As a result, the tax system subsidizes production.

Eliminating those two tax preferences would improve the allocation of resources while raising significant revenue. Repealing the expensing of exploration and development costs would raise \$3.7 billion in 1998 through 2002, assuming that firms could still expense costs from unproductive holes and mines. Repealing the percentage depletion would raise \$2.1 billion over the same five-year period.

Repeal Expensing. Certain types of oil and gas producers and producers of hard minerals may deduct some exploration and development costs at the time such costs are incurred rather than over time as the resulting income is generated. That immediate deduction of costs contrasts with the normal tax treatment facing other industries, in which costs are deducted more slowly according to prescribed rates of depreciation or depletion. The Tax Reform Act of 1986 established uniform capitalization rules that require certain direct and indirect costs allocatable to property to be either

deducted when inventory is sold or recovered over several years as depreciation deductions (so that any deduction of costs is postponed to the future). However, intangible drilling and development costs and mine development and exploration costs are exempt from those rules. Thus, the expensing of such costs results in a tax preference for extractive industries that does not exist for most other industries.

Expensible exploration and development costs include costs for excavating mines and drilling wells. They also include prospecting costs for hard minerals but not for oil and gas. Although current law allows full expensing for independent oil and gas producers and noncorporate mineral producers, it limits expensing to 70 percent of costs for "integrated" oil and gas producers (companies involved in substantial retailing or refining activities) and corporate mineral producers. Firms subject to the 70 percent limit must deduct the remaining 30 percent of costs over a 60-month period.

Repeal Percentage Depletion. The percentage depletion method of cost recovery allows certain types of extractive companies (independent producers and royalty owners, or "nonintegrated" companies) to deduct a certain percentage of a property's gross income in each taxable year, regardless of the actual capitalized costs. In contrast, other industries (and since 1975, integrated oil companies as well) use the cost depletion method. Under cost depletion, the costs recovered cannot exceed the taxpayer's expenses in acquiring and developing the property. But under percentage depletion, they may. Thus, the percentage depletion method results in a tax preference for certain types of extractive companies

that does not exist for other companies. Unlike the expensing of exploration and development costs, however, percentage depletion applies only to a small subset of total oil, gas, and minerals production because it excludes the large integrated producers.

Current law typically allows nonintegrated oil and gas companies to deduct 15 percent of the gross income from oil and gas production up to 1,000 barrels per day. The Omnibus Budget Reconciliation Act of 1990 made percentage depletion even more generous, however, for those nonintegrated companies that are considered to be "marginal" producers (those with very low total production or production that is entirely made up of heavy oil). The deduction for marginal properties can be up to 25 percent of gross income if the market price of oil drops low enough.

Producers of hard minerals may also use percentage depletion, but the statutory percentages vary. Minerals eligible for percentage depletion include, but are not limited to, sand (5 percent), coal (10 percent), rock asphalt (14 percent), iron ore (15 percent), oil shale (15 percent), gold (15 percent), and uranium (22 percent). Tax law limits the amount of percentage depletion to 100 percent of the net income from an oil and gas property and 50 percent of the net income from a property with hard minerals.

Economic Inefficiency Associated with the Preferences. Both expensing and percentage depletion were established in the early part of this century. Although the original rationale for expensing was that the costs of exploration and development were considered ordinary operating expenses, continuing both types of preferences has been justified on the grounds that oil and gas are "strategic minerals," essential to national energy security.

However, expensing and percentage depletion distort the efficient allocation of resources in several ways. First, the preferences cause resources to be overallocated to drilling and mining, when some of those resources might be used more productively elsewhere in the economy. Second, although the preferences might reduce dependence on imported oil in the short run, they encourage current extraction, perhaps at the cost of reduced future extraction and greater future reliance on foreign production. Third, the preferences may result in an inefficient allocation of production within those extractive industries, since the subsidies are not systematically related to the economic productivity of investments. For example, percentage depletion is a subsidy according to gross income and not according to investment. Thus, it encourages developing existing properties over exploring for new ones. As another example, producers who pay the alternative minimum tax must defer or even forgo both types of preferences, regardless of the economic productivity of their investments.

REV-32 CAPITALIZE THE COSTS OF PRODUCING TIMBER

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current- Law Revenues	0.3	0.5	0.5	0.5	0.5	2.3

SOURCE: Joint Committee on Taxation.

The current tax system allows timber producers to deduct immediately ("expense") most of the production costs of maintaining a timber stand. That tax treatment contrasts with the uniform capitalization rules applied to most other industries. Established under the Tax Reform Act of 1986, such rules require that production costs not be deducted until the sale of the produced goods or services. When businesses do not account for costs properly, business income is not measured correctly because the costs of producing goods and services are not matched with the sale of the goods and services.

Although the costs of planting a timber stand are in fact subject to capitalization rules, subsequent maintenance and production costs are not. Timber producers can expense indirect carrying costs, such as property taxes, interest, insurance costs, and administrative overhead, as well as the costs of labor and materials to remove unwanted trees and to control fire, disease, and insects. By allowing timber producers to deduct such production costs before the timber is harvested or sold, the tax code in effect subsidizes timber production by deferring tax that producers otherwise would owe on their income. (Under certain circumstances, however, the deferral granted to noncorporate producers of timber may be greatly curtailed by the limits of the tax code on losses from passive business activities.)

The original rationale for expensing timber production costs was a general perception that such costs were maintenance costs and thus deductible as ordinary costs of a trade or business. When the Tax Reform Act of 1986 established uniform capitalization rules, the costs of producing timber were exempted, as were the exploration and development costs associated with oil, gas,

and minerals production (see REV-31). The general reason given for those exemptions was that applying the rules to those industries might have been unduly burdensome.

Expensing timber production costs distorts investment behavior in two ways: more private land is devoted to timber production, and trees are allowed to grow longer before they are cut. Unless timber growing offers spillover benefits to society that are not captured by market prices, the tax preference leads to an inefficient allocation of resources and an inefficient harvesting rate.

Whether or not timber production offers important spillover benefits is unclear. Standing timber provides some spillover benefits by deterring soil erosion and absorbing carbon dioxide (a gas linked to global warming), but cutting timber can lead to soil erosion. In addition, producing and disposing of wood and paper products contribute to pollution.

Capitalizing the costs of timber production incurred after December 31, 1997, would raise \$2.3 billion in revenue from 1998 through 2002 by accelerating tax payments from timber producers. In the long run, capitalizing timber production costs would raise the price of domestic timber and lower the value of land used to grow it. Moreover, lease payments to private land owners by timber growers would probably fall, causing some land that historically has been devoted to growing timber to be used in other ways. In the short run, however, capitalizing timber production costs might lower the price of domestic timber because producers would have an incentive to harvest timber earlier.

REV-33 REPEAL THE PARTIAL EXEMPTION FOR ALCOHOL FUELS
FROM EXCISE TAXES ON MOTOR FUELS

	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Addition to Current- Law Revenues	0.4	0.5	0.5	0.5	0.5	2.4

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

The tax code imposes excise taxes on motor fuels, but it partially exempts fuels that are certain blends of gasoline and alcohol. Repeal of the partial excise tax exemption would raise \$2.4 billion in revenues over the 1998-2002 period. That estimate assumes that the Congress also repeals the alcohol fuels credit, an alternative tax benefit that can be used instead of the partial excise tax exemption. The credit, however, is in almost all cases less valuable than the exemption and is rarely used.

The exemption rate depends on the percentage of alcohol in the fuel and whether the alcohol was made from a fossil fuel (nonrenewable) or nonfossil fuel (renewable) source. The exemption applies only to alcohol fuels produced from nonfossil fuel sources. For example, gasohol, which is 90 percent gasoline and 10 percent (renewable) ethanol--an alcohol fuel produced primarily from corn and sugar--receives a 5.4 cents per gallon exemption from the 18.3 cents per gallon tax on gasoline.

One purpose of the tax benefit--enacted in the late 1970s--was to increase national security by reducing the demand for imported oil and thereby reducing U.S. dependence on foreign oil sources. Another purpose was to provide an additional market for U.S. agricultural products by encouraging domestic production of ethanol. Over the last several years, U.S. environmental action has increased the value of ethanol by mandating the oxygen content of motor fuels in many areas of the country. Use of oxygenated fuels in motor vehicles generally produces less carbon monoxide pollution than does gasoline.

Before the Clean Air Act Amendments of 1990 were enacted, the tax benefits encouraged energy producers to substitute ethanol for gasoline--and successfully so. Motor fuels blended with ethanol made up less than 1 percent of the total motor fuels market in 1980, but that proportion grew to nearly 7 percent by 1990. Since ethanol production uses more resources than gasoline production, the resulting allocation of resources may create economic inefficiencies if the value of those resources in alternative uses becomes greater than the value of the diminution in air pollution.

The Clean Air Act Amendments reduced the need for the partial excise tax exemption. In that legislation, the Congress mandated the minimum oxygen content of gasoline in areas of the country with unacceptable levels of air pollution.

In the areas where the mandate applies, the partial excise tax exemption for alcohol fuels affects the type of oxygenating agent used but not the total use of oxygenated fuels. The exemption only applies to oxygenated fuels made from renewable resources, effectively meaning ethanol. The other major source of oxygen in gasoline is methyl tertiary butyl ether (MTBE), which does not receive a tax benefit because it is made from natural gas. Given the mandate, ethanol primarily competes with MTBE, not gasoline, in those markets.

The tax benefit encourages the use of higher-cost ethanol rather than lower-cost MTBE. Some proponents of ethanol argue that it is better for the environment than MTBE. But that argument is not settled. Ethanol appears to reduce carbon monoxide emissions

from automobiles more than MTBE does. However, ethanol evaporates quickly, especially in hot weather, contributing to ozone pollution. In response, companies have developed ethyl tertiary butyl ether (ETBE), a product derived from ethanol that does not have the same problem of evaporation. It also qualifies for the tax benefit. ETBE, however, does not contribute to reduced carbon monoxide emissions, as does ethanol.

Repealing the excise tax exemption could result in higher federal outlays for price support loans for grains, offsetting a portion of the deficit reduction from the increase in revenues. An increase in outlays--not included in the budget estimates shown above--would probably be much smaller than the estimated revenue increase.

REV-34 IMPOSE A VALUE-ADDED TAX

Addition to Current- Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Impose a 5 Percent Rate, with a Comprehensive Base	0	98.0	188.8	197.8	207.6	692.2
Impose a 5 Percent Rate, with Food, Housing, and Medical Care Excluded	0	51.9	99.8	104.3	109.1	365.1

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are based on an effective date of January 1, 1999. They are net of reduced income and payroll tax revenues, but do not reflect added administrative costs.

A value-added tax (VAT) is a form of general tax used in more than 50 countries, including Canada, Japan, and all other member countries of the Organization for Economic Cooperation and Development (OECD) except Australia and the United States. It is typically administered by taxing the total value of sales of all businesses, but allowing businesses to claim a credit for taxes paid on their purchases of raw materials, intermediate materials, and capital goods from other businesses. As a result, only sales to consumers end up being taxed.

A 5 percent VAT on a broad consumption base (as defined in Table 6-3) would increase net revenues by about \$98 billion in 1999 and by nearly \$700 billion through 2002. Most VATs, however, do not tax such a broad base. The typical VAT, for example, excludes education, rental housing, medical care, and hard-to-tax items such as basic financial services. A 5 percent VAT on a narrower base (as defined in Table 6-3) would net only about \$52 billion in 1999 and \$365 billion through 2002. Those revenue estimates assume that collections would not begin until January 1, 1999, because the Internal Revenue Service would need more than a year to set up a VAT.

A VAT might be preferable to an income tax increase because it would not discourage saving and investment by taxing their return. In addition, a broad-based VAT with a single rate would distort economic decisions less than an equal revenue increase in selec-

tive consumption taxes. The VATs that have been enacted in other countries, however, include many tax preferences and multiple rates. Such a tax would distort choices about consumption more than a single-rate, broad-based VAT and could be more distorting than higher income tax rates.

A VAT makes the price consumers pay higher than the price sellers receive. Therefore, adopting one would cause an initial jump in the overall consumer price level because the government computes the consumer price index on a tax-inclusive basis. The increase in the price level, however, would not necessarily lead to further inflation, depending on how the Federal Reserve System responded. Many experts believe that the Federal Reserve would adjust the money supply in a way that would maintain nominal income. Under that scenario, macroeconomic models generally predict little inflation beyond the initial price jump.

The VAT is a regressive tax in the sense that families with lower annual income would pay a larger share of their income in taxes. That effect occurs because the ratio of consumption to annual income is higher for low-income families than for high-income families. A VAT is less regressive over a person's lifetime than in a single year because income and consumption nearly match over a lifetime, even though income tends to fluctuate annually more than consumption does. Many economists believe that lifetime measures of tax burdens are more meaningful than annual measures.

Table 6-3.
The Size of Two Possible Tax Bases
for a Value-Added Tax, 1995

Items Included in Tax Base	Amount (Billions of dollars)
Broad Tax Base	
Total Personal Consumption in Gross	
Domestic Product	4,925
Net Purchases of Residential Structures	<u>290</u>
Subtotal	5,215
Exclusions from the Base ^a	
Rental value of housing	-710
Religious and welfare activities	<u>-137</u>
Subtotal	-847
Total	4,368
Narrower Tax Base	
Total Personal Consumption in Gross	
Domestic Product	4,925
Exclusions from the Base ^a	
Rental value of housing	-710
Religious and welfare activities	-137
All medical care (including insurance)	-883
Food consumed at home	-411
Food furnished to employees	-8
Food produced for farm consumption	b
Brokerage, banking, and life insurance services	-293
Local transit (excluding taxis)	-6
Clubs and fraternal organizations	-13
Tolls for roads and bridges	-3
Private education and research	<u>-111</u>
Subtotal	-2,575
Total	2,350

SOURCE: Congressional Budget Office based on the national income and product accounts.

a. The excluded amount assumes that the specified consumption is taxed at a zero rate.

b. Reduction of less than \$500 million.

A VAT could be made slightly less regressive by granting tax preferences for the goods and services low-income people generally consume. Those preferences, however, would substantially increase the costs of enforcement and compliance, and they would reduce revenues. Another way to lessen the VAT's regressivity would be to allow additional exemptions or refundable credits for low-income people under the federal income tax. But exemptions for low-income people would also reduce the revenue gain and would cause many people to file tax returns who otherwise would have no need to file.

Like any new tax, a VAT would impose additional administrative costs on the federal government and additional compliance costs on businesses. If the United States adopted a VAT that was similar to the ones used in the OECD countries, those costs could be substantial. They would be lower if the VAT exempted more small businesses from collecting the tax and if it taxed as many goods and services as possible at the same rate.

A retail sales tax is another way to tax consumption. Because a sales tax is collected entirely at the retail level, however, the incentive to evade a sales tax would be much greater than the incentive to evade a VAT. Moreover, because the sales tax lacks an effective credit mechanism for the taxes that businesses pay on their purchases, it taxes some business purchases by mistake. No OECD country uses a retail sales tax at the national level instead of a VAT.

Other ways to tax a broad consumption base are possible, even though no country has ever tried one. A tax on consumed income, such as the Unlimited Saving Account approach suggested by Senator Domenici and former Senator Nunn, would tax income but with an exclusion for net savings. Under a tax on consumed income, taxpayers could deduct all contributions to qualified savings accounts but would pay tax on net withdrawals. Because individuals would pay tax on a measure of their total consumption, the tax could include a graduated rate schedule, like the rate schedule of the individual income tax. That schedule would make the consumed-income tax less regressive than a VAT.

REV-35 IMPOSE A BROAD-BASED ENERGY TAX

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Impose a Tax on the Carbon Content of Fossil Fuels (\$19.50 per ton)	14.3	21.5	21.9	22.2	22.5	102.4
Impose a Tax on the Heat Content of All Fuel Sources (33 cents per million Btus)	14.1	21.2	21.5	21.8	22.1	100.7
Impose an Ad Valorem Tax on All Fuel Sources (3.8 percent of value)	13.4	20.5	21.4	22.2	22.9	100.4

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Broad-based energy taxes fall into three types: a carbon tax, a Btu tax, and an ad valorem tax. A tax on the carbon content of fossil fuels (coal, oil, and natural gas) would help to reduce global warming by reducing carbon emissions. The tax, however, would be relatively harsh on coal-producing regions and regions that generate more electricity from coal than from other fuels. A tax on the heat content of fuels (measured in British thermal units, or Btus) that raised the same revenue would be more regionally neutral but would be less effective in reducing carbon emissions. An ad valorem tax on energy raising the same amount of revenue would increase energy prices in a nondistortionary way, but would also be less effective in reducing carbon emissions than a carbon tax. None of those options would significantly reduce U.S. dependence on foreign oil.

Broad-based energy taxes also would have adverse distributional effects because families with lower annual income spend a larger share of their income on energy than families with higher income. The distributional effects of energy taxes are not generally very different, however, from those of a general consumption tax, such as a value-added tax (see REV-34), which would not further environmental goals.

All three options would cause a small one-time increase in the U.S. general price level and an offsetting one-time decline in the dollar's foreign exchange value. The prices of energy-intensive goods would increase more than the general price increase, and the prices of goods that are not energy intensive would increase less. As a result, the prices of goods produced in the United States that are energy intensive--such as aluminum and chemicals--would rise when valued in foreign currency, making those U.S. products less competitive in world markets. Similarly, the prices of goods produced in the United States that are not energy intensive would fall when valued in foreign currency, making them more competitive in world markets.

To alleviate the adverse effects on the domestic energy and energy-intensive industries, the United States could institute border adjustments on a limited or extensive basis. A limited border adjustment might levy the energy tax on imported energy and rebate the tax on exported energy. All three options make that adjustment. The adjustment eases the impact on the domestic energy industry, but not the impact on domestic producers of energy-intensive goods. More extensive border adjustments on the energy content of all goods would also mitigate the adverse effects on energy-intensive

industries. However, they would be complicated and costly to administer and might violate the General Agreement on Tariffs and Trade. Therefore, they are not included in these options.

Impose a Tax on the Carbon Content of Fossil Fuels. A tax of \$19.50 per ton of carbon content (in 1998 dollars) of coal, oil, and natural gas, if it was indexed for inflation, would raise about \$100 billion from 1998 through 2002. The relative carbon content of the three fossil fuels would dictate the specific tax rate for each fuel. That tax rate, based on average carbon content, is equivalent to a tax of approximately \$12 per ton of coal, \$2.50 per barrel of oil, and \$0.30 per thousand cubic feet of natural gas (in 1998 dollars).

Imposing a carbon-based tax at the minemouth, wellhead, or dockside for imports could discourage the use of fossil fuels and also encourage switching from higher carbon-emitting fuels to lower ones, thereby reducing subsequent emissions of carbon dioxide (CO₂). The Congress could impose higher tax rates on fossil fuels than assumed in this option. It could, for example, impose taxes either at levels that would discourage future increases in CO₂ emissions or at levels that would reduce emissions from current amounts by some target date.

Recent scientific evidence on the potential for global warming through an intensified greenhouse effect has prompted international concern about the emissions of greenhouse gases such as CO₂. The United States, along with some 150 nations, signed a climate treaty at the June 1992 "Earth Summit" conference in Brazil. Limiting emissions of greenhouse gases by developed countries in 2000 to 1990 levels was one key objective. In 1993, the Administration announced its Climate Change Action Plan for reducing greenhouse gases through a set of 40 voluntary actions by the private sector.

U.S. action, however, would not significantly reduce global CO₂ concentrations in the atmosphere if other countries did not make similar efforts. In addition, since scientists do not fully understand how emissions of greenhouse gases affect atmospheric concentrations, even reducing CO₂ emissions significantly may not prevent global warming. Moreover, a tax that significantly reduced emissions could impose economic costs that exceeded the benefits of such a policy. Ad-

justing to lower energy use would be costly, especially in energy extracting and processing industries and in energy-intensive manufacturing sectors. Furthermore, other means of controlling greenhouse gases could be adopted. Also, the cost of carrying out emission-control strategies in the future may be much lower as a result of improvements in technology. Thus, waiting to restrict emissions may be more efficient.

Compared with the other broad-based energy tax options, the carbon tax would impose greater costs on colder regions of the country, like the Northeast and Midwest, and on regions that produce electricity primarily from coal. Coal-producing regions might also be hurt relatively more as utilities switched from coal to other energy sources to produce electricity.

Impose a Tax on the Heat Content of All Fuel Sources. A tax of 33 cents per million Btus (in 1998 dollars) imposed on all energy sources and indexed for inflation would also raise about \$100 billion from 1998 through 2002. The relative heat content of coal, oil, and natural gas would dictate the specific tax rate for each fuel. That tax rate, based on average heat content, is equivalent to a tax of approximately \$7.00 per ton of coal, \$1.80 per barrel of oil, and \$0.35 per thousand cubic feet of natural gas (in 1998 dollars).

Under this option, the change in relative prices between fossil fuels is similar to the change in relative prices under the carbon tax option because the carbon content of fuel is closely related to the heat content of fossil fuels. On average, the tax rates in this option are lower than those under the carbon tax option because the tax base is broader, including nuclear, hydropower, and other renewable resources. Nonetheless, the tax rate on natural gas is higher than under a carbon tax because the heat content is higher relative to the carbon content for natural gas than for coal and petroleum. Because the average price increases for fossil fuels would be smaller under a Btu tax than under a carbon tax, the reduction in CO₂ emissions would not be quite as large as under the option for a carbon tax.

The tax would be easiest to administer if the Internal Revenue Service (IRS) collected it at the points where fossil fuels enter the economy--minemouth, wellhead, or dockside for imports--because that would minimize the number of taxpayers. The tax would need to be imposed on fuel used in the fuel production and dis-

tribution industries to capture all of the energy consumed. If the tax was not imposed on alternative fuels --including hydroelectricity, nuclear, geothermal, and synthetic fuels--then the regional disparities of the tax would be magnified. For example, the Northwest generates more electricity from hydropower than other regions of the country.

The House of Representatives passed one version of a modified Btu tax in 1993. The Congress did not approve that option, however.

Impose an Ad Valorem Tax on All Fuel Sources. A tax of 3.8 percent levied at the retail level on all forms

of energy would also raise about \$100 billion over the 1998-2002 period. An ad valorem tax applied at the retail level would leave the relative prices of different energy sources unchanged and therefore would not encourage consumers to switch from one form of energy to another. As a result, it would not decrease CO₂ emissions as much as a carbon tax for the same revenue increase. In addition, enforcement would be relatively costly with such a tax because the IRS would collect it from a large number of retailers. If the IRS collected the tax at an earlier stage of the distribution process, tax enforcement would be less costly, but the tax would then affect relative energy prices because different fuels have different markups at the retail level.

REV-36 INCREASE EXCISE TAXES ON TOBACCO AND ALCOHOLIC BEVERAGES

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Increase the Cigarette Tax to 48 Cents per Pack	2.6	3.4	3.5	3.5	3.5	16.5
Increase the Cigarette Tax to 99 Cents per Pack	6.4	8.4	8.5	8.6	8.7	40.6
Increase All Alcoholic Beverage Taxes to \$16 per Proof Gallon	3.6	4.4	4.4	4.4	4.4	21.2
Index Cigarette and Alcohol Tax Rates for Inflation	0.2	0.5	0.7	1.1	1.3	3.8

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Federal alcohol and tobacco taxes raised about \$13 billion in 1996, including \$7 billion from taxes on distilled spirits, beer, and wine and \$6 billion from taxes on tobacco. Together they represented nearly one-quarter of revenues from all excise taxes and about 1 percent of total federal revenues.

Smoking and drinking can create costs to society that the prices of tobacco and alcoholic beverages do not reflect. Examples of those "external costs" include higher health insurance costs to cover the medical expenses linked to smoking and drinking, the effects of cigarette smoke on the health of nonsmokers, and the loss of lives and property in alcohol-related accidents.

By raising the price of tobacco and alcoholic beverages, excise taxes can result in consumers' paying the full cost for smoking and drinking. If excise taxes lead to reduced consumption of tobacco and alcoholic beverages, then increasing them would decrease the total external costs that smoking and drinking produce. If those external costs primarily come from heavy or abusive consumption, however, higher taxes on tobacco and alcoholic beverages could unduly penalize moderate and infrequent smokers and drinkers. Furthermore,

some research suggests that, at least for tobacco, current taxes may more than adequately compensate for the external costs that smokers impose on society.

Increasing excise taxes to reduce consumption may be desirable regardless of the effect on external costs if consumers are either unaware of or underestimate the harm that their smoking and drinking does to them. If most consumers of cigarettes overestimate rather than underestimate the risks involved with smoking, as some studies have shown, then additional taxes would not be warranted. Teenagers, however, may not be prepared to evaluate the long-term effects of smoking and drinking. Evidence suggests that teenage smoking and drinking declines in response to higher prices for tobacco and alcoholic beverages. A number of national medical organizations have supported a substantial increase in the existing federal excise tax on tobacco in the interests of reducing teenage smoking.

Taxes on tobacco and alcoholic beverages are regressive when compared with annual family income; that is, such taxes are a greater percentage of income for low-income families than for middle- and upper-income families.

Increase the Cigarette Tax. The current federal excise tax on cigarettes is 24 cents per pack. Raising it to 48 cents a pack would increase net revenue by \$16.5 billion between 1998 and 2002. Raising it to 99 cents a pack, as included in President Clinton's 1993 Health Security Act, would increase net revenues by about \$40 billion between 1998 and 2002.

Increase All Alcoholic Beverage Taxes. Current federal excise taxes on beer and wine remain much lower than the federal excise tax on distilled spirits in terms of the tax per ounce of ethyl alcohol. The current tax on distilled spirits of \$13.50 per proof gallon results in a tax of about 21 cents per ounce of alcohol. The current tax on beer of \$18 per barrel results in a tax of about 10 cents per ounce of alcohol (assuming an alcoholic content for beer of 4.5 percent), and the current tax on table wine of \$1.07 per gallon results in a tax of about 8 cents per ounce of alcohol (assuming an average alcoholic content of 11 percent).

Increasing the federal excise tax to \$16 per proof gallon for all alcoholic beverages would raise about \$21 billion between 1998 and 2002. A tax of \$16 per proof gallon would result in a tax of about 25 cents per ounce

of ethyl alcohol. It would raise the tax on a 750-milliliter bottle of distilled spirits from about \$2.14 to \$2.54, the tax on a six-pack of beer from about 33 cents to 81 cents, and the tax on a 750-milliliter bottle of table wine from about 21 cents to 70 cents.

Index Cigarette and Alcohol Tax Rates for Inflation. Indexing cigarette and alcoholic beverage tax rates annually for inflation during the preceding year would raise nearly \$4 billion between 1998 and 2002. Indexing those taxes would prevent inflation from eroding real tax rates and would avoid the need for abrupt increases in the future.

An alternative to indexing would be to convert current unit taxes on quantities of those goods to ad valorem taxes, which equal a percentage of the manufacturer's price. That method would link tax revenues to price increases, although it would tie revenues to the price of taxed goods, not the general price level. A shortcoming of the ad valorem tax is that it might create incentives for manufacturers to lower sales prices artificially to company-controlled wholesalers in order to avoid part of the tax.

REV-37 INCREASE TAXES ON PETROLEUM AND MOTOR FUELS

Addition to Current- Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Impose an Excise Tax on Domestic and Imported Oil (\$5 per barrel)	7.9	19.9	20.2	20.5	20.8	89.3
Impose an Oil Import Fee (\$5 per barrel)	2.9	11.8	12.3	12.8	13.3	53.1
Increase Motor Fuel Excise Taxes by 12 Cents per Gallon	10.3	13.6	13.2	13.1	13.2	63.4

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Increasing petroleum taxes could raise significant amounts of revenue, encourage conservation by making petroleum more expensive, reduce pollution, and decrease the country's dependence on foreign oil suppliers. The United States depends on foreign sources for about half of its oil and about one-fifth of its total energy. Experience illustrates that such dependence on foreign sources exposes the U.S. economy to potential interruptions in petroleum supplies and to volatile petroleum prices.

Imposing new or higher petroleum taxes would raise petroleum prices and reduce consumption, thus helping to promote conservation. To the extent that taxes on oil reduced the demand for imported oil, foreign suppliers would absorb part of the tax through lower world oil prices. To the extent that petroleum taxes reduced petroleum consumption, the taxes would also reduce carbon dioxide emissions and could, therefore, contribute to efforts to reduce global warming.

Petroleum taxes would have different effects on taxpayers in different parts of the country and with different incomes. Taxes that increased the relative price of fuel oil would have the greatest impact on consumers in the Northeast, and taxes that increased the relative price of gasoline would have the greatest impact on consumers in the West. In addition, taxes on gasoline and other petroleum products absorb a greater percent-

age of income for low-income families than for middle- and upper-income families.

Taxing petroleum is not the only way of reducing dependence on foreign oil supplies. Stockpiling oil would arguably be a better way of coping with the risks of increased dependence on imports because it would not artificially reduce current energy use by households and businesses. That argument is based on the premise that, aside from the problem of interruptions in supply, world oil prices accurately reflect real resource costs and thus already provide an appropriate incentive to conserve.

Impose an Excise Tax on Domestic and Imported Oil. An excise tax of \$5 per barrel on all crude oil and refined petroleum products--both domestically produced and imported--would raise revenues by about \$90 billion from 1998 through 2002. It could increase the price of a gallon of gasoline or fuel oil by as much as 12 cents.

A tax on oil would increase the price that consumers must pay, giving them an incentive to use less oil either through conservation efforts or by switching to an alternative source of energy such as natural gas or coal. The tax would cause oil reserves to decline in value and coal and gas reserves to increase in value. Those shifts in value would discourage exploring for

and producing oil. At the same time, it would encourage producing coal and natural gas.

An oil tax, whether on all oil or only imported oil, would raise the relative costs for industries that use oil as their primary production input (for example, the petrochemical and paint industries). Consequently, domestic companies in those industries would find it more difficult to compete with foreign companies that would pay less for oil. To ameliorate that loss in competitiveness, imposing the same tax rate on the oil content of competing imports would be necessary. Such a tax would be cumbersome to design and administer and may violate the General Agreement on Tariffs and Trade.

Impose an Oil Import Fee. As an alternative to an excise tax on all oil, the Congress could impose the tax only on imported crude oil and refined petroleum products. An oil import fee of \$5 per barrel would raise revenues by about \$53 billion from 1998 through 2002.

An oil import fee would allow domestic suppliers to charge a higher price and still remain competitive with imports, providing an incentive to increase domestic crude oil production and a windfall to some domestic oil producers. Like the tax on all oil, the fee would also maintain incentives for conservation by increasing energy prices.

An oil import fee would reduce U.S. dependence on foreign oil in the short term, although in the long term it might increase dependence by depleting U.S. oil supplies faster. Domestic and foreign oil are relatively close substitutes, and therefore, the difference in the prices consumers would pay for them would be slight. But foreign producers would receive a lower net price than domestic producers because of the fee. A large portion of that difference between the net price that domestic and foreign producers would receive represents a transfer of income from domestic consumers to domestic producers. Consequently, the federal government would receive only about half of the increase in consumers' expenditures for oil under an import fee because the United States imports nearly half of the oil it consumes and demand is insensitive to price in the short run.

Because an oil import fee would reduce U.S. demand for imported oil, important U.S. trading partners

might object to it. Under the terms of the United States-Canada Free Trade Agreement, Canadian oil imports would be exempt from an import fee. However, a similar exemption does not apply to Mexican oil under the North American Free Trade Agreement. Because imports from Canada now account for about 15 percent of U.S. oil imports, the Canadian exemption reduces the fee's revenue potential substantially. Legislation imposing a fee would require special rules to prevent other countries from avoiding the tax by shipping oil through Canada.

Increase Motor Fuel Excise Taxes. Federal motor fuel taxes are currently 18.3 cents per gallon of gasoline and 24.3 cents per gallon of diesel fuel. Revenue from a portion of the tax (4.3 cents per gallon) goes into the general fund. The remaining revenue goes into the Highway Trust Fund and several related trust funds. State governments also impose gasoline and diesel taxes, ranging from 7.5 cents to 34 cents per gallon.

Many analysts consider the overall tax to be too low. In comparison with motor fuel tax rates in other countries, many of which are well over \$1 a gallon, U.S. tax rates are still among the lowest in the world. The average national price of all grades of gasoline is still 10 cents to 15 cents per gallon cheaper than it was in March 1981, when it reached a peak of about \$1.40 per gallon. In real terms, that represents a decline of nearly 50 percent. If the price of gasoline had remained constant at the real level it reached in 1981, the price would now be around \$2.40 per gallon. Therefore, an additional tax of 12 cents or even 50 cents per gallon would not put the total cost of gasoline above what consumers have already experienced in real terms.

A tax increase would reduce consumption of gasoline and diesel fuel by encouraging people to drive less or purchase more fuel-efficient cars and trucks. In addition, the tax would offset, though imperfectly, the costs of pollution and road congestion that automobile use produces. A rate increase on motor fuel taxes would not adversely affect U.S. producers relative to foreign producers because final consumers and the domestic transportation industry purchase most of the motor fuel.

Increasing tax rates on motor fuels would impose an added burden on the trucking industry and on people who commute long distances by car, who are not neces-

sarily the highway users who impose the highest costs of pollution and congestion on others. Pollution and congestion costs are much higher in densely populated areas, primarily in the Northeast and coastal California, whereas per capita consumption of motor fuel is highest in rural areas.

A 12 cent increase would raise revenue by about \$13 billion per year. It would raise the total federal tax to 30.3 cents per gallon.

Some people have proposed even larger tax increases, such as 50 cents per gallon. An increase that large would produce significant adjustment costs for

people and businesses who have based decisions about where they live and work and their choice of vehicle on low gasoline prices. Phasing in the tax increase, however, would reduce those costs by allowing businesses and consumers more time to adjust. Five successive annual 10 cent increases would raise about \$52 billion per year after being fully phased in and nearly \$150 billion from 1998 through 2002.

To reduce the deficit, the Congress could allocate the increased revenues to the general fund--as it did with a portion of the added revenues from the rate increases in 1990 and 1993--rather than using the additional revenues to finance further highway spending.

REV-38 IMPOSE EXCISE TAXES ON WATER POLLUTANTS

Addition to Current-Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Impose a Tax on Biological Oxygen Demand	1.2	1.7	1.6	1.6	1.5	7.6
Impose a Tax on Toxic Water Pollutants	0.2	0.2	0.2	0.2	0.2	1.0

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

Major facilities that discharge pollutants directly into water or indirectly into sewer systems are currently subject to regulations that specify pollution abatement technology or impose concentration limits on their discharges. Taxes on water pollutants discharged by those facilities could provide a significant source of revenue and could encourage further reductions in pollution below the level that current regulations require. Generally, firms subject to water pollution standards do not pay taxes or fees on effluents (discharges) that regulations still allow.

According to a 1994 survey of water quality conducted by the Environmental Protection Agency (EPA), about 36 percent of the surveyed miles of river fail to meet water quality standards at some time during the year. Two types of water pollutants that contribute to this failure are oxygen-depleting substances and toxics. Biological oxygen demand (BOD) measures the effect of pollutants that encourage algae growth, which in turn depletes oxygen necessary to sustain aquatic life. (One BOD equals 1 milligram of oxygen consumed per 2.2 pounds of effluent.) Harmful levels of toxic chemicals and metals can persist and accumulate in the environment because they do not readily break down in natural ecosystems. One option is to impose a tax on BOD discharges. A second option is to impose a tax of varying rates on certain toxic discharges.

Taxes can reduce pollution in a cost-effective manner because they encourage firms with the lowest abatement costs to reduce pollution, while allowing firms

with high abatement costs to continue polluting and pay the tax. Reductions in discharges caused by the tax would be economically efficient if the additional abatement costs were less than or equal to the social benefits from reduced pollution levels. However, accurate estimates of additional social benefits from reducing pollution levels do not exist in many cases. In addition, imposing a tax on one class of pollutants might reduce other pollutants because some wastewater treatment processes reduce several pollutants simultaneously. However, the tax option might raise constitutional issues concerning federal taxation of local governments, thereby requiring direct taxation of primary sources that discharge to publicly owned treatment works (POTWs) rather than taxing the POTWs themselves.

Tax on Biological Oxygen Demand. Most of the high-volume BOD dischargers (sometimes referred to as point sources) are POTWs, paper and pulp mills, food processors, metal producers, and chemical plants. Discharges by point sources total about 10.6 million pounds of effluent per day, and publicly owned treatment works discharge about 9.6 million pounds of that amount.

The cost of controlling discharges at POTWs and many industries subject to the Clean Water Act regulations averages about 50 cents to 75 cents per pound of effluent removed. A charge on BOD discharges could encourage manufacturing facilities and POTWs that face lower abatement costs to reduce pollution. Assuming effluents record an average concentration of 22

BOD, a tax of about 65 cents per pound of effluent discharged would raise \$7.6 billion from 1998 through 2002.

The costs of administering a BOD water pollution excise tax would be small because allowable levels of BOD discharges are specified in the permits that state and local governments issue to every source of water pollution. Levying a tax on effluents from POTWs, as well as from large industrial dischargers, would ensure that the tax base included all of the largest dischargers of BOD. A recent report on water quality submitted to the EPA by states, tribes, and other jurisdictions ranks municipal sewage treatment plants as the second highest source of impairment to water quality for rivers, lakes, and estuaries (agriculture and urban runoff were ranked as number one). If a tax could not be levied for constitutional reasons directly on POTW discharges, the POTWs themselves could collect the tax from polluters that discharge into sewer systems.

Tax on Toxic Water Pollutants. Manufacturers in the United States discharged 66 million pounds of toxics into water directly in 1994 and more than 250 million pounds of toxics into water indirectly through sewers. Toxic pollutants generally include organic chemicals (such as solvents and dioxins), metals (such as mercury and lead), and pesticides. Those toxics may pose a threat to the aquatic environment and to human health.

The amount of environmental harm that toxic water pollutants cause depends on their toxicity. The EPA has devised a weighing method to indicate the toxicity of various pollutants. Using that weighing system makes it possible to measure the quantities of different

types of toxics by their "toxic pound equivalents," which the EPA defines as the pounds of the pollutant multiplied by its toxic weight. This option adopts tax rates developed by the Congressional Research Service (CRS) in a study on the discharges of manufacturing firms in 1987. CRS defined five categories of pollutants based on their toxicities. The tax rates varied from 0.65 cents per pound for the least toxic category of pollutants to \$63.40 per pound for the most toxic category. Those rates correspond to a charge of \$32.35 for the equivalent of each toxic pound. The variable tax rates provide firms with a greater incentive to reduce their most toxic discharges.

According to the EPA, the cost of controlling the equivalent of another toxic pound varies among industries, ranging from \$1.50 to \$606.00 (in 1991 dollars). The tax, therefore, could encourage industries and firms with low abatement costs to reduce their toxic discharges and would raise \$1 billion from 1998 through 2002.

The Internal Revenue Service could use information that the EPA's Toxic Release Inventory (TRI) provides on toxic discharges by manufacturing firms to assess tax payments, or the EPA could collect the tax on behalf of the Internal Revenue Service. An important consideration, however, is that the accuracy of TRI data is questionable. The TRI contains self-reported data, and many facilities that meet the reporting requirements fail to file reports or file inaccurate ones. To improve the accuracy of the TRI database and enhance enforcement, frequent auditing would be necessary.

REV-39 IMPOSE EXCISE TAXES ON AIR POLLUTANTS

Addition to Current- Law Revenues	Annual Added Revenues (Billions of dollars)					Five-Year Cumulative Total
	1998	1999	2000	2001	2002	
Stationary Sources						
Impose a Tax of \$300 per Ton on Sulfur Dioxide	2.4	3.5	3.3	3.1	2.9	15.2
Impose a Tax of \$3,000 per Ton on Nitrogen Oxides	15.2	21.8	20.6	19.7	19.1	96.4
Impose a Tax of \$1,900 per Ton on Particulate Matter	2.2	3.2	3.0	2.9	2.8	14.1
Impose a Tax of \$4,000 per Ton on Volatile Organic Compounds	26.2	37.7	35.5	34.1	33.0	166.5
Mobile Sources						
Impose a One-Time Emission Tax Averaging \$250 per Vehicle on New Automobiles and Light Trucks	1.6	2.3	2.1	2.0	1.9	9.9

SOURCE: Joint Committee on Taxation.

NOTE: Estimates are net of reduced income and payroll tax revenues.

The Clean Air Act requires the Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards designed to protect public health and welfare. The EPA defines acceptable levels for six air pollutants: sulfur dioxide (SO₂), nitrogen oxides (NO_x), ozone (O₃), particulate matter (PM-10), carbon monoxide (CO), and lead (Pb). The pollutants SO₂ and NO_x are considered primarily responsible for acid rain, which the EPA believes degrades surface waters, damages forests and crops, and potentially increases the incidence of respiratory ailments. Large industrial sources, notably coal-fired electric utilities, emit significant quantities of those pollutants. Industrial production and the use of automobiles and trucks emit NO_x and volatile organic compounds (VOCs), which combine with sunlight and other compounds to produce ozone pollution. Electric utilities and motor vehicles emit particulate matter when they burn fossil fuels. Particulate matter can carry heavy metals and cancer-

causing organic compounds into the lungs, thus increasing the incidence and severity of respiratory diseases. Carbon monoxide is produced primarily by motor vehicles and residential woodburning, and it can also pose direct health hazards. Exposure to lead may cause neurological disorders and cardiovascular disease. Discharges of lead were significantly reduced with the phaseout of leaded gasoline. In 1994, however, about 62 million people lived in areas that did not meet the EPA's National Ambient Air Quality Standards because of unacceptable levels of at least one of the six principal pollutants.

With some minor exceptions, firms subject to air pollution standards must incur the costs needed to reduce emissions to comply with regulations. Most firms do not, however, pay taxes or fees on emissions that regulations still allow, although major point sources are expected to pay approximately \$400 million annually in

user fees to cover program costs of state operation permits under the Clean Air Act Amendments of 1990. The 1990 amendments also adopted a new acid rain control program that introduces a market-based system for emission allowances to reduce SO₂ emissions. An emission allowance is a limited authorization to emit a ton of SO₂. Affected electric utilities are allotted tradable allowances based on their past fuel use and statutory limits on emissions. Once the allowances are allotted, the act requires that annual SO₂ emissions not exceed the number of allowances held by each utility plant. Firms may trade allowances among each other, bank them for future use, or purchase them through periodic auctions held by the EPA. The market for allowances is structured to encourage firms with relatively low costs of abatement to reduce their emissions and sell surplus allowances to firms that have relatively high costs of abatement.

The 1990 Clean Air Act Amendments strengthened components of the earlier law for mobile sources of pollution. The tailpipe standards for cars, buses, and trucks were tightened, and inspection and maintenance programs were expanded to include more regions with pollution problems as well as to allow for more stringent tests. The amendments also introduced several regulations to reduce air pollution from mobile sources. The act mandated that improved gasoline formulations be sold in some polluted cities to reduce levels of carbon monoxide and ozone. It also provided new programs that set low emission standards for vehicles to encourage the introduction of even cleaner cars and fuels. Despite the progress to date in controlling air pollution from motor vehicles, mobile sources continue to have a significant impact on national air quality. On average nationwide, highway motor vehicles contribute one-quarter of all VOC emissions, almost one-third of NO_x emissions, and over 60 percent of CO emissions. A tax related to emissions from mobile sources could provide an additional incentive for consumers to purchase cleaner cars and trucks.

The incremental cost of controlling pollution from stationary sources varies, given the numerous sources. The four options that tax pollution from stationary sources would base the tax rates on an estimate of the average cost of reducing an additional ton of pollution. Consequently, some firms with low abatement costs might reduce pollution below allowable standards. The option that taxes emissions from mobile sources could

also reduce pollution levels. (See REV-35 and REV-37 for other taxes that might reduce emissions of air pollutants.) Reductions in emissions as a result of the taxes would be economically efficient if the additional abatement costs were less than or equal to the social benefits. However, accurate estimates of additional social benefits from reducing pollution levels do not exist in many cases. The revenue estimates for the options discussed below all assume that some reduction in emissions occurs as a result.

Tax Emissions of SO₂ and NO_x from Stationary Sources. Imposing taxes of \$300 per ton of SO₂ emissions and \$3,000 per ton of NO_x emissions from all stationary sources would raise roughly \$15 billion for SO₂ and \$96 billion for NO_x from 1998 through 2002. Basing the tax on the terms granted in air pollution permits, which all polluting firms must acquire, would minimize the costs of administration for the Internal Revenue Service. The present monitoring and reporting system for stationary sources that the EPA and state regulators operate could be used to enforce the tax.

The proposed tax on SO₂ could reduce pollution below the mandated amounts contained in the 1990 amendments. Some electric utilities and manufacturing plants might switch to coals with lower levels of sulfur because that would be less costly than paying the tax, and others might choose to operate their most heavily emitting plants less frequently or to install new SO₂ control devices. The tax system could interact with the tradable allowance system, thereby allowing the government to collect revenues based on emission levels and firms to collect the proceeds from the sale of allowances. (The average sale price of allowances would probably adjust downward in the event of a tax.) The tax on NO_x could also reduce emissions below mandated levels contained in the 1990 amendments if some firms adopt currently available abatement techniques whose capitalized costs are lower than the tax they would otherwise pay.

Tax Emissions of PM-10 from Stationary Sources. A tax of \$1,900 per ton of particulate matter would raise about \$14 billion from 1998 through 2002. Some electric utilities and manufacturing plants might install improved electrostatic precipitators, wet scrubbers, or other equipment that reduces PM-10 emissions to lower their tax burdens. This tax could be administered in the same manner as the taxes on SO₂ and NO_x.

Tax Emissions of VOCs from Stationary Sources.

Stationary sources of volatile organic compounds range from huge industrial facilities such as chemical plants, petroleum refineries, and coke ovens to small sources such as bakeries and dry cleaners. Their vast number and diversity make it difficult to estimate emissions and the costs of abatement. A tax of \$4,000 per ton on all VOC emissions from stationary sources might promote some abatement and would generate slightly over \$165 billion in revenues from 1998 through 2002.

The advantage of a broad-based tax on VOCs is that it would capture small sources, which the EPA estimates are responsible for approximately 80 percent of all emissions from stationary sources. Because stationary sources emitting less than 2.5 tons of VOCs per year are not currently subject to federal regulation, a broad-based VOC tax would be administratively harder to carry out than a tax on large sources alone. Assessing the tax on small sources through technology-based estimates of emissions rather than measured emissions would reduce administrative costs but make the incentives less precise.

Tax Emissions of NO_x, VOCs, and CO from Mobile Sources.

A one-time tax imposed on new automobiles and light trucks could be based on grams of NO_x, VOCs, and CO emitted per mile as estimated under the EPA certification tests for emissions that are required for every new vehicle. The tax could be administered like the "gas guzzler" excise tax. The EPA would determine the tail-pipe emissions for each new model of light-duty vehicles, and the tax would be based on those emission rates. The auto dealer would collect the tax on behalf of the Internal Revenue Service from the vehicle's purchaser.

Such a tax averaging \$250 per new vehicle could raise \$10 billion in revenues from 1998 through 2002. Vehicles made in earlier years have been excluded from the estimate because of the administrative problems of collecting a tax on older vehicles. A disadvantage of excluding them, however, is that vehicles from earlier years contribute a large share of the emissions from mobile sources. In addition, the tax would encourage people to delay purchases of new vehicles by raising their price.