
CHAPTER II. DIFFERENCES BETWEEN TAX EXPENDITURE LISTS

Tax expenditures are provisions in the tax code that "allow a special exclusion, exemption, or deduction from gross income or . . . provide a special credit, a preferential rate of tax, or a deferral of tax liability."¹ In general, tax expenditures serve as substitutes for outlay programs to achieve certain national policy goals. Any tax code provision that is not consistent with the reference personal or corporate income tax structure is considered a tax expenditure.

INTERPRETING THE REFERENCE TAX STRUCTURE

The reference tax structure essentially consists of tax rules that define the tax base and include the basic elements of an income tax. For the individual income tax, these rules include the progressive rate structure, the zero bracket amount, and personal exemptions for the taxpayer and each dependent. The rate structure is considered to be constant and tax rates below the 50 percent maximum are not viewed as tax expenditures. The tax rules also allow for the deduction of costs related to producing income, such as business or investment expenses. The reference tax structure views the individual and corporate tax systems separately.² The basic tax rules for the corporate income tax also include deductions for the expenses related to producing income, including depreciation and depletion. Exceptions to these tax rules that provide subsidies to certain classes of taxpayers or firms or create incentives for particular types of economic activities are defined as tax expenditures.

Since the adoption of the Congressional Budget Act of 1974, the Joint Committee on Taxation and the Congressional Budget Office (JCT/CBO) generally have defined tax expenditures by using reference tax rules that

¹ The Congressional Budget Act of 1974, Sec. 3(a)(3).

² This approach essentially treats the corporation and the individual as separate legal entities. It can be argued that under a comprehensive income tax, the two systems would be integrated and all income would be subject only to the recipient's personal tax rate. According to this view, both corporate and personal income would be subject to tax under one integrated system and not under the two independent structures that currently exist.

consist of tax provisions associated with a conventional income tax. The tax base includes income from all sources, with the exception of several items, such as in-kind income or gifts. Capital gains are not counted as income as they accrue, but are included when they are realized by the taxpayer. The measurement of capital income is based on an "historical cost" standard and does not include an adjustment for inflation. Finally, imputed income (from housing or consumer durables, for example) is not included in the definition of the tax base. For purposes of defining and measuring tax expenditures, the JCT/CBO reference tax rules form a modified version of a comprehensive income tax.

Until the fiscal year 1983 budget, there were only a few differences between the Administration and the JCT/CBO tax expenditure lists, reflecting a consensus on the definition of the reference tax structure. In its 1983 "Special Analysis G," however, the Administration revised its procedure for selecting items to include on its tax expenditure list. Under the current Administration rules, two conditions are necessary for a provision to qualify as a tax expenditure:

- o The provision must be "special" in that it applies to a narrow class of transactions or taxpayers; and
- o There must be a general provision to which the "special" provision is a clear exception.³

This method of defining tax expenditures essentially obviates the need for a hypothetical standard to determine which elements should be considered as part of a conventional income tax. The set of general tax rules in the existing tax code is used as the reference standard by which various provisions are ascertained to be "special."

Because the general tax code rules used by the Administration are mostly consistent with the definition of the tax base used by the JCT/CBO, the Administration and the Congress generally agree about which provisions are tax expenditures. Several differences in the rules used, however, result in diverse interpretations of how to apply the tax expenditure concept in certain cases. Thus, the Administration and the JCT and CBO have disagreed about listing certain provisions as tax expenditures.

Even though the approach used by the Administration yields a list of provisions that is quite similar to that of the JCT/CBO, the Administration's selection method raises two concerns. First, the general statutory

³ The Budget of the U.S. Government, Fiscal year 1983, "Special Analysis G," p. G-5.

rules in the tax code are difficult to interpret in certain cases. For example, 60 percent of the gain from the sale of assets held for more than one year is excluded from an individual's income. This provision applies to a broad class of transactions and could be considered a general rule. Thus, it could be argued that the capital gains provision does not constitute a tax expenditure. The Administration does not find the capital gains exclusion sufficiently general, however, and includes it as a tax expenditure. Indeed, its rationale for including capital gains as a tax expenditure is based on the general tax code rule that income from any source is considered taxable.⁴

The second problem with the Administration's selection procedure arises when a general tax code provision conflicts with the economic definition of income. As discussed below, this is especially important in the case of asset depreciation. The general depreciation rule used by the Administration--the Accelerated Cost Recovery System (ACRS)--is inconsistent with actual economic depreciation. As a result, firms are allowed to shelter part of their income from taxation by deducting in excess of actual depreciation. To the extent that general tax rules, as defined by the tax code, conflict with the separate income standard used by the JCT and CBO, discrepancies between the two lists arise.

DIFFERENCES BETWEEN THE LISTS

For fiscal year 1984, the JCT/CBO tax expenditure list contains 13 provisions not included on the Administration list (see Table 2). The rationale for including these items is that they are arguably justifiable and appropriate as long as the list remains purely informational. Because the lists are solely intended to convey the revenue losses from certain code provisions--with no judgment made as to their desirability or effectiveness--there seems little reason to exclude the debatable cases.

The importance of deciding which items legitimately constitute tax expenditures would be much greater if tax expenditures were reviewed more closely as part of the Congressional budget process. If tax expenditures were placed under the purview of the authorizing committees, for example, a clearer delineation of what constitutes a tax expenditure would have to be established. Those provisions that are basic structural parts of the tax code (for example, tax rates or filing units) would not be subject to the jurisdiction of the authorizing committees, but would remain solely under the House Ways and Means and Senate Finance Committees.

⁴ Ibid.

TABLE 2. PROVISIONS INCLUDED IN THE CONGRESSIONAL TAX EXPENDITURE LIST BUT NOT IN THE ADMINISTRATION LIST (By fiscal year, in millions of dollars)

Tax Expenditure	1983	1984	1985	1986	1987	1988
Deferral of Income of Controlled Foreign Corporations	430	345	375	390	420	455
Suspension of Regulations Relating to Allocation Under Section 861 of Research Experimental Expenditures	120	60	a	0	0	0
Exclusion of Payments in Aid of Construction of Water, Sewage, Gas and Electric Utilities	45	75	75	80	75	70
Deductibility of Patronage Dividends and Certain Other Items of Cooperatives	560	580	600	615	640	660
Exclusion of Certain Agricultural Cost-Sharing Payments	50	45	40	30	25	25
Depreciation on Rental Housing in Excess of Straight-line	695	820	885	930	975	1,005
Depreciation on Buildings Other than Rental Housing in Excess of Straight-line	325	365	400	450	495	545
Accelerated Depreciation on Equipment Other than Leased Property	10,525	18,325	21,705	20,270	16,365	15,805
Reduced Rates on the First \$100,000 of Corporate Income	5,690	6,525	7,025	8,060	8,765	9,090
Exclusion of Scholarship and Fellowship Income	415	375	395	410	435	460
Exclusion of Employer-provided Child Care	10	25	55	85	120	155
Deduction for Two-earner Married Couples	3,555	5,835	6,350	6,935	7,600	8,460
Exclusion of Public Assistance Benefits	430	430	440	455	470	485

SOURCES: For the Administration list: The Budget of the United States Government, Fiscal Year 1984, Special Analysis G, "Tax Expenditures," Table G-2 (February 1983); for the Congressional list: Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 1983-1988 (March 7, 1983).

NOTE: The Administration does not list Individual Retirement Accounts as a separate tax expenditure, but includes them in the estimate for the net exclusion of pension contributions and earnings: "plans for self-employed and others." The Administration does include "income of trusts to finance supplemental unemployment benefits," under the heading of "exclusion of other employee benefits," which is estimated to increase tax expenditures by \$20 million in fiscal years 1982 and 1983. The Congressional list omits this item.

a. Less than \$2.5 million.

As mentioned above, one of the major differences between the Administration and the JCT/CBO tax expenditure lists is the treatment of depreciation under ACRS. The Administration's exclusion of ACRS from its list is based on the argument that ACRS constitutes the general income tax rule governing the recovery of the cost of depreciable property. Because ACRS applies to the full range of depreciable assets, it is not viewed as a special provision, but rather as the standard practice. In contrast, the JCT and CBO count as a tax expenditure the ACRS deduction in excess of accelerated depreciation rates for equipment (straight-line depreciation for structures) over an asset's useful life.⁵ Under an economic definition of income, depreciation would be allowed as an expense of earning income and it would be limited to an asset's actual (or economic) depreciation.⁶ Because actual economic depreciation rates are not easily measured, the JCT and CBO have chosen as their depreciation benchmark generally accepted accounting methods based on an asset's expected useful life. Although these methods are not ideal, they may reasonably approximate actual depreciation.

For purposes of this provision, the Administration uses the actual ACRS tax code provision as part of its reference tax structure. As discussed above, there is little relationship between ACRS and an asset's actual depreciation.⁷ ACRS was not intended to reflect actual depreciation—it was adopted to subsidize investment in producers' fixed capital in order to stimulate capital formation. The fact that ACRS is the general tax code rule for cost recovery does not preclude it from consideration as a

⁵ The useful life is an asset's midpoint Asset Depreciation Range (ADR) life. Prior to the legislation of ACRS, the optional 20 percent reduction in an asset's midpoint life under the ADR system was included as a tax expenditure by both the JCT and CBO and the Administration.

⁶ Actual (or economic) depreciation of an asset equals its change in market value from one year to the next. This amount is calculated in constant dollars and indexed for inflation. One of the special problems with the present estimating method is that it fails to account for the reduction in real depreciation allowances that occur because of the interaction between inflation and historical cost accounting. Although the JCT/CBO recognize this as a concern, an adjustment has not been made to reflect this problem.

⁷ See, for example, Gregg A. Esenwein and Jane Gravelle, Effective Tax Rates Under the Accelerated Cost Recovery System (ACRS) and the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), Congressional Research Service (January 3, 1983).

tax expenditure. Because ACRS allows taxpayers to defer tax payments into future periods, it acts as an interest-free loan from the federal government to businesses. To the extent that ACRS results in a deferral of tax liability, it satisfies the Budget Act's standard for inclusion as a tax expenditure.

It should be noted that neither the Administration nor the JCT/CBO reference tax structures include adjustments to capital income to reflect inflation. That is, both standards allow for the taxation of purely inflationary gains, even though an economic definition of income would exclude such gains from the income base. In the case of depreciation, the ACRS rules may more closely reflect economic depreciation, resulting in a better measure of economic income, during periods of relatively high inflation.

The other differences between the Administration and the JCT/CBO lists, shown in Table 2, are discussed in Appendix C.

OUTLAY EQUIVALENTS

Measurement

The JCT/CBO estimates of tax expenditures are based on the amount of revenue that the federal government forgoes as the result of the special provisions in the tax code. "Special Analysis G" of the federal budget presents estimates for tax expenditures calculated according to the outlay equivalent concept, as well as on the traditional revenue loss basis. The outlay equivalent approach is intended to reflect the amount that would be required to provide an equivalent level of resources through a direct expenditure program. Thus, the outlay equivalent concept attempts to make the measurement of tax expenditures correspond to direct expenditures so that they can be compared on the same basis.

For example, if the Congress considered providing incentives for companies to produce more oil, two alternative methods might be used: a tax exclusion (for example, percentage depletion) or a direct outlay (for instance, price supports). In analyzing the two different approaches, it is important to measure the budgetary costs of the different programs on a comparable basis. Suppose the Congress wanted to provide domestic oil companies with an effective oil price increase of \$3.00 per barrel. If the tax code was used, income from oil production could be partially excluded from the corporate tax. In contrast, the federal government could provide price supports to increase the price of oil by \$3.00. This might be handled in a manner analogous to the current price supports for agriculture.

These two oil production incentives can be measured on a revenue loss or an outlay equivalent basis. Consider an oil company that is subject to the 46 percent marginal corporate tax rate and produces 1,000 barrels of oil. Assume that the initial price of oil is \$30.00 per barrel, thereby generating a gross income of \$30,000 for the oil company. Operating expenses for the firm are assumed to be \$20,000 (\$20.00 per barrel), resulting in net taxable income of \$10,000.

By using the tax code, the Congress could raise the effective price of oil by excluding 21.7 percent of the company's gross oil income from taxation. Whereas taxable income per barrel of oil was initially \$10.00, resulting in an after-tax profit of \$5.40 per barrel, the tax exclusion would result in the same pretax net revenue of \$10.00, but the post-tax profit would rise to \$8.40 per barrel. By excluding 21.7 percent of the price of oil from gross income, gross taxable income (per barrel of oil) would be reduced from \$30.00 to \$23.48; net taxable income would be reduced from \$10.00 per barrel to \$3.48 per barrel. The tax per barrel is \$1.60 (.46 x \$3.48), leaving the firm with an after-tax income per barrel of \$8.40 (\$10.00 - \$1.60)--\$3.00 more than the original after-tax profit. In terms of the revenue forgone, this program would reduce tax collections by \$3.00 per barrel of oil, or \$3,000 for the firm as a whole. In this example, the revenue loss estimate from the tax expenditure would be the same \$3,000.

Alternatively, the direct outlay approach would involve paying the oil company a premium over the market price of oil for each barrel it produced. To achieve the same \$3.00 price increase as with the tax expenditure, the government would have to provide the oil firm with a guaranteed price of \$35.56 per barrel, or \$5.56 more than the original market price. The \$5.56 price increase would be reflected as an addition to the firm's taxable income and would be taxed at 46 percent. The extra taxes owed on the \$5.56 price increase would be \$2.56, leaving the firm with an after-tax increase in income of \$3.00 (\$5.56 - \$2.56) per barrel. The federal government's outlay for providing the price premium of \$5.56 would be \$5,560 in this example.

Even though both the tax and the direct outlay programs would result in the same after-tax increase in the price of oil (\$3.00), the gross cost to the government from the tax program would be \$2,560 (\$5,560 - \$3,000) less than the cost of the outlay program. This difference would arise solely because the two programs operate differently.

The gross outlay of \$5,560 for the direct outlay program would include \$3,000 for the higher oil price, plus \$2,560 for the extra income taxes arising from the higher gross income to the firm. If the program only provided a \$3,000 payment, the effective increase in the price of oil to the firm would be only \$1.62--\$1.38 less than the desired outcome. The

amount of direct spending necessary to achieve the same results as the tax program (\$5,560) is the outlay equivalent measure of the tax expenditure program. By definition, the outlay equivalent of a tax expenditure equals the amount necessary to finance an outlay program that would provide a comparable subsidy. This amount is larger than the revenue loss because it is increased in order to reflect the payment of higher income taxes under the outlay program (that is, it is "grossed-up").

These two programs can also be compared on a revenue loss basis that reflects their net effects on the federal deficit. Under this approach, the tax program's revenue loss (\$3,000) would equal the net effect on the budget deficit. When measured on a net budgetary basis, the outlay program also would equal \$3,000. This would occur because the additional gross outlay of \$5,560 gives rise to \$2,560 in additional taxes, yielding a net cost to the government of \$3,000.

From an overall budgetary viewpoint, the outlay equivalent estimates allow specific comparisons to be made between outlays and tax expenditures on a consistent basis. This approach enables the Congress to improve its ability to balance individual tax and spending programmatic alternatives.

Critique of the Outlay Equivalent Approach

One criticism that has been raised against the use of outlay equivalents is that "a concentration on outlay equivalent measurement has the flavor of presupposing the Congress would supplant each tax expenditure with a direct outlay program which exactly duplicates the tax expenditure program."⁸ The objection is based on the argument that an outlay program designed to have the same effect on taxpayers might have strange characteristics. As McDaniel and Surrey explain:

If faced with direct outlay programs having the same benefits as the tax expenditure items, it is a fairly easy conclusion that Congress would not replace them as is. The programs would be expensive as outlay items; they would lack any cost-benefit justification; they would, through the grossing-up, be clearly seen as upside-down programs because the gross-up must, under progressive rates, produce

⁸ Paul R. McDaniel and Stanley S. Surrey, "Tax Expenditures: How to Identify Them; How to Control Them," Tax Notes (May 24, 1982) p. 600.

higher outlays for the well-off as compared to those below the income levels of the upper brackets.⁹

The counter argument to this critique is twofold. First, the outlay equivalent measure does not assume that the Congress would actually enact the comparable outlay program--it merely addresses the question of how much such a program would cost. The outlay equivalent is an analytic device, just as are revenue loss estimates.

Second, the fact that the comparable outlay program has certain specific attributes may be very useful in evaluating current tax expenditures. For example, the fact that an outlay equivalent for a certain tax deduction provides greater benefits to higher income taxpayers (because of the progressive rate structure) may lead some to examine the use of the tax code for providing certain subsidies. Thus, analyzing the outlay program comparable to a tax expenditure may help in evaluating the benefits and costs of the tax expenditure itself. In addition, if some comparable outlay equivalent programs appear strange, it may imply that the tax code is, in fact, a better way to achieve certain national goals than are direct outlays.

Another consideration in the use of the outlay equivalent approach is the design of the comparable program and the proper tax treatment of the resulting outlays. In general, if the funds received from an outlay program would be included in taxable income under the basic tax rules, then the outlays should be increased (or grossed-up) to provide an equivalent after-tax benefit. Tax expenditures that would not result in a change in taxable income under the comparable outlay program need not be increased. The dividing line between tax expenditures that should be increased to determine their outlay equivalents and those that should not is fairly clear-cut. (Appendix D describes how outlay equivalents are derived by the Administration for several tax expenditures.)

Tax expenditures that result in a deferral of tax from the present to future years, such as those related to accelerated depreciation or expensed capital expenditures, are akin to interest-free loans. In calculating outlay equivalents, the deferred taxes, or "loan amounts," that arise from tax deferral provisions are not increased to reflect additional income taxes, because loan proceeds from direct or indirect government loans are exempt from tax under the reference tax rules. For these programs, the revenue

⁹ Ibid.

loss amount is equal to its outlay equivalent under the Administration's rules.¹⁰

A second group of tax expenditures that the Administration does not increase for income taxes are the provisions that directly subsidize the purchase of goods and services, such as the deductions for housing or medical insurance. Instead of providing the subsidy to the consumer, the comparable outlay program is assumed to provide payments directly to the vendors in exchange for an agreement to charge below-market prices. For example, in the case of medical insurance, sellers would receive a direct federal payment in exchange for charging lower insurance premiums. This is analogous to the Medicare or Medicaid programs, in which health-care providers are paid directly for their services. While the source of the vendors' income would shift in part from consumers to the government, their total income would remain unchanged. Similarly, taxpayers would lose their deduction, but would be charged correspondingly lower rates for health insurance. For the mortgage interest deduction, the comparable outlay program would pay lenders to provide subsidized mortgages, similar to the way in which the present guaranteed student loan program operates. As in the case of tax deferral, no gross-up would be needed if taxable incomes were left unchanged by the outlay programs.

For tax expenditure programs that effectively reduce prices paid by consumers for goods or services, the outlay equivalent program need not be designed to provide direct payments to vendors; the subsidy could just as easily be provided to the recipient who currently takes the deduction. Instead of providing a payment to health insurance providers in exchange for below-market insurance rates, the government could pay recipients a matching grant, depending on how much insurance they buy. Again a gross-up is not included by the Administration because the grant is viewed as a price reduction and not as an increment to income. Although the taxpayer is clearly better off with a lower price, the rebate is not considered as taxable income under the reference tax rules. In general, price discounts whether they are provided by the government or by a private business (for example, General Motors) are not considered taxable income.

¹⁰ The interest subsidy from the deferral of tax also is not included in the estimate of the outlay equivalent. In general, for direct government loan programs, the cost of the interest subsidy provided on below-market rate loans is not directly accounted for in the budget. In order to compare a direct lending program with a tax deferral program, it would be necessary to analyze the comparative interest subsidies provided by both programs, as well as the actual loan amounts.

According to another view of the price subsidies provided through the tax system, they should be counted as taxable income; therefore an increase for income taxes would be appropriate in figuring the outlay equivalent. In other words, price reductions for medical care or mortgage interest would constitute additions to taxable income and an increase would be necessary to reflect the extra income taxes. In this view, price reductions provided to employees by the private sector--such as reduced airline fares, free meals, or reduced tuition, would be counted as taxable income under the reference tax rules. Although general price discounts are not usually regarded as taxable income, it can be argued that selective price discounts, whether or not they are related to employment, should be considered taxable. For purposes of the Administration's outlay equivalent estimates, this argument implies that price discounts associated with employment should be grossed-up (for example, military fringe benefits), as well as nonemployment-related price discounts, such as the mortgage interest or medical expense deductions.

Tax expenditures require an adjustment to reflect increased tax payments only if their corresponding outlay programs would generate additional taxable income. (In the example of oil production incentives discussed above, the price support program generated additional taxable income.) Generally, these tax expenditure provisions exempt from taxable income same amount of income that would be taxed under a comprehensive income tax system, such as one in which the tax base included employer-provided fringe benefits, government transfer payments (Social Security, unemployment insurance, railroad retirement, and so forth), and all of capital gains. In addition, business deductions in excess of cost, such as percentage depletion or excess bad debt reserves that are not "repaid" in the form of higher future taxes, would have to be grossed-up, since these provisions effectively result in exclusions from taxable income.

In addition to the gross-up, outlay equivalents can also differ from revenue loss estimates because the outlay program is assumed to be spread out evenly over the year. Typically, revenue loss estimates are affected considerably by the collection patterns of the corporate and personal income taxes. The cash flow of direct spending programs can differ widely from the annual tax collection cycle, and the outlay equivalent calculations often assume an even flow over the year to make the estimates comparable to actual outlay programs. Thus, even for those tax expenditures that do not require an income tax gross-up, differences between the revenue losses and outlay equivalents can occur solely because of differences in timing factors.

The Administration's outlay equivalent and revenue loss estimates are shown in Table 3 for selected tax expenditures. The first five provisions in the table have not been increased to reflect additional income taxes;

TABLE 3. COMPARISON OF REVENUE LOSSES AND OUTLAY EQUIVALENTS FOR SELECTED TAX EXPENDITURES (By fiscal year, in millions of dollars)

Tax Expenditure	Revenue Loss		Outlay Equivalent	
	1983	1984	1983	1984
Deductibility of Medical Expenses	3,105	2,630	2,950	2,635
Deductibility of Charitable Contributions (Education)	775	840	770	805
Deductibility of Mortgage Interest on Owner-Occupied Homes	25,065	27,945	25,255	28,335
Deductibility of Property Taxes on Owner-Occupied Homes	8,765	9,535	8,810	9,645
Deductibility of Nonbusiness State and Local Government Taxes Other than on Owner-Occupied Homes	20,060	21,770	20,000	21,775
Exclusion of Benefits and Allowances to Armed Forces Personnel ^a	2,205	2,250	2,780	2,820
Exclusion of Employee Meals and Lodging (other than Military) ^a	680	725	755	805
Exclusion of Employer Contributions for Medical Insurance Premiums and Medical Care ^a	18,645	21,300	25,412	28,980
Net Exclusion of Pension Contributions and Earnings: Employer Plans ^a	49,700	56,560	70,005	78,780
Exclusion of Employee Benefits: Premiums on Group Term Life Insurance ^a	2,100	2,250	2,910	3,095

SOURCES: Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 1983-1988; the Budget of the United States Government, Fiscal Year 1984, "Special Analysis G."

- a. These tax expenditures have an outlay equivalent in excess of their revenue loss because they have been grossed-up for income taxes.

differences between the revenue loss and outlay equivalent estimates are solely the result of differences in timing. Under the Treasury procedures, these five provisions provide "price discounts" for certain activities and therefore do not generate additional taxable income. In each case, the revenue loss estimate reflects the level of resources that would be needed to provide the same subsidy if it had been provided on the outlay side of the budget.

The second five provisions in Table 3 reflect income taxes that would be payable if the subsidy was provided by a direct outlay program. For example, if military benefits were directly provided through outlays, it would cost \$2,820 million in 1984 to provide the same subsidy that is now provided through the tax code. The revenue loss for this provision is \$2,250 million and the difference (\$570 million) between the two estimates primarily represents the extra taxes that would be required to maintain the same subsidy level if the outlay equivalent approach was used. For budgetary purposes, the outlay equivalent estimate is relevant because it is consistent with other defense outlays that are measured on a pretax basis. In general, any provision that results in an exclusion from income, will require an income tax gross-up to put it on an outlay equivalent basis.

REVENUE LOSS ESTIMATES

Although the outlay equivalent estimates of various tax expenditures are useful in comparing tax versus direct expenditure programs, they are less relevant when the issue is raising revenue by cutting back a tax expenditure. In this context, the net revenue effect is important--not the comparable outlay equivalent. Thus, the traditional revenue loss estimates are more useful for analyzing alternatives for raising revenue.

The revenue loss estimates from tax expenditures do not represent the actual net gain from repeal of a given provision. Two major differences between the revenue loss estimates and the net revenue gain from repeal are the result of transitional provisions and behavioral changes. The revenue loss estimates are based on the assumption that the special provision has been in effect since the year it was actually passed, but in the initial year of any tax change, there would usually be some transitional effects caused by compliance or phase-in rules. When a provision provides benefits spread over more than one year (for example, accelerated depreciation or tax-exempt bonds), a repeal that only affects prospective activity (new investment or new issues of tax-exempt bonds) would raise much less revenue than if the repeal applied retroactively.

However, repeal of tax expenditures that are tax deferrals, such as ACRS or expensed research and development costs, could actually raise

more revenue in the first several years than the estimated revenue loss if the provisions had been in effect for several years before being repealed. This would occur because the revenue loss estimates are the "net" effect of the provision in any year--that is, the difference between deductions under the provision and deductions under prior law. For example, in the case of ACRS, accelerated depreciation allows firms to shift tax payments from the present to future periods. Over the long run, the revenue loss estimate will be the difference between the extra deductions provided by ACRS on new investments and the "repayment or turnaround" of deductions on older investments. (Deductions turn around when actual depreciation is greater than tax depreciation.) If ACRS were repealed after it had been in effect for several years, repeal would raise more revenue than the revenue loss itself. Because the revenue loss estimates are based on the assumption that the provision has been in effect since it actually became a part of the tax code, they may overstate or understate the revenue gain from the repeal of any provision.

It should also be emphasized that the tax expenditure estimates for revenue losses (and outlay equivalents) cannot be simply added together to estimate their combined effect. For example, the revenue loss estimate of several itemized deductions, such as interest, state and local taxes, and medical expenses, is less than the sum of their individual estimates because of interaction with the zero bracket amount. If, for example, the mortgage interest deduction did not exist, this might result in more use of the zero bracket amount by taxpayers who currently itemize deductions, thereby reducing the revenue loss estimates of other itemized deductions, such as those for state taxes or consumer interest. The Treasury has demonstrated the magnitude of this aggregation problem by measuring the combined effect of all itemized deductions that are tax expenditures. In 1982, the sum of the separate estimates for each itemized deduction amounted to a \$81.8 billion revenue loss, whereas when estimated together, the deductions resulted in a revenue loss of only \$62.3 billion, or 24 percent less.¹¹ In this case, the interaction effect with the zero bracket amount significantly reduced the impact of several itemized deductions.

On the other hand, the combined cost of several income tax exclusions could result in a greater revenue loss than the sum of the individual items. This could happen because the combined effect of several exclusions could reduce an individual's marginal tax rate. As less income is excluded, however, the marginal tax rate becomes higher. Because the revenue loss for any provision is the product of the excluded amount times the tax rate, a higher rate, would result in a higher revenue loss. Thus, in

¹¹ The Budget of the U.S. Government, Fiscal Year 1982, "Special Analysis G," p. 212.

measuring the effect of several provisions, care must be taken to consider the possible interaction effects among various tax expenditures and other provisions of the tax code. In their estimates of outlay equivalents, the Administration presents aggregate effects of tax expenditures by budget function, taking into account the interactions between the tax expenditures for each function.

Given these caveats, revenue loss estimates provide useful information on the relative size of various tax expenditures and their growth. The estimates show how widely a provision is being used by taxpayers and provide an indication of the longer run revenue gain from repeal.

CHAPTER III. EXPERIENCE WITH TAX EXPENDITURE BUDGETING IN OTHER COUNTRIES

Since the tax expenditure concept was first developed in the 1960s, several countries have found that a tax expenditure budget--or at least a general listing of tax reliefs and incentives--can be helpful with government budgetary and policy analysis. Listing all tax preferences together enables policymakers to make decisions with a better understanding of the total allocation of government resources among policy objectives, economic sectors, and categories of beneficiaries. By calling attention to the amount of government subsidies delivered through the tax system, tax expenditure budgets may also assist governments that wish to abolish or reduce tax expenditures as a means to reduce government deficits. On the other hand, greater awareness of tax expenditures may also encourage their use if they appear to provide effective means for achieving government goals.

While the United States government has published an annual listing of tax expenditures since 1968, most other governments that publish such lists have become interested in the tax expenditure concept only recently. The Federal Republic of Germany, however, was the first country to supply a comprehensive listing of tax subsidies in its budget documents, after a 1967 law required biennial reports on direct and tax subsidies.

In the late 1970s, high deficits forced some governments to use new institutional procedures to help control government spending. (Table 4 shows the fiscal balances of 14 industrial countries for 1979 through 1984.) Several governments developed tax expenditure lists to help demonstrate the level of government resources devoted to various sectors of their economies. Some of these governments also noted the usefulness of tax expenditure budgets for long-term planning and international comparisons, although they considered these uses less important.

Austria has published an annual report on direct and tax subsidies similar to the German report since 1978. Canada, the United Kingdom, France, Spain, and Australia first published tax expenditure lists (or more general lists of tax reliefs and incentives) in 1979 and 1980. In Japan, estimates of "special tax provisions" (mainly tax expenditures) are now usually provided to the legislature at budget time, even though they are not required by law. Government tax analysts have also begun to develop tax expenditure lists in Sweden, the Netherlands, New Zealand, Ireland, and Belgium.

TABLE 4. GENERAL GOVERNMENT FINANCIAL BALANCES^a
(Surplus (+) or deficit (-) as percentage of nominal GNP/GDP)

	1979	1980	1981	1982 ^b	1983 ^b	1984 ^b
Australia	-1.5	-1.0	-0.1	+0.4	-4.4	-4.6
Austria	-2.5	-2.0	-1.8	-2.5	-3.5	-3.5
Belgium	-6.9	-9.3	-13.1	-12.2	-11.3	-11.3
Canada	-1.9	-2.1	-1.2	-5.3	-6.5	-5.7
Denmark	-1.6	-3.2	-7.1	-9.1	-9.3	-8.3
France	-0.7	+0.3	-1.9	-2.6	-3.4	-3.3
Germany	-2.7	-3.2	-4.0	-3.9	-3.7	-3.1
Italy	-9.5	-8.0	-11.7	-12.0	-11.6	-12.4
Japan	-4.8	-4.5	-4.0	-4.1	-3.4	-2.5
Netherlands	-3.7	-3.9	-4.8	-6.4	-6.9	-6.4
Norway	+1.9	+5.7	+4.8	+4.4	+2.1	+1.5
Sweden	-3.0	-4.0	-5.3	-6.9	-8.0	-8.2
United Kingdom	-3.2	-3.3	-2.5	-2.0	-2.5	-2.5
United States	+0.6	-1.3	-1.0	-3.8	-4.4	-3.9
Total ^c	-1.9	-2.6	-2.7	-4.1	-4.6	-4.2

SOURCES: Organization for Economic Cooperation and Development, OECD Economic Outlook, No. 33 (Paris, July 1983), Table 8, p. 34.

- a. On a United Nations' System of National Accounts basis except for the United States and the United Kingdom which are on a national income account basis. General government financial balances include federal, state, and local government financial balances.
- b. OECD estimates and forecasts.
- c. Weighted average calculated using 1981 GNP/GDP weights and exchange rates.

This chapter describes nine countries' experiences with tax expenditure budgeting. The group includes industrialized countries in which a list of tax expenditures or tax subsidies is now regularly included in the budget documents or in which preparation of a tax expenditure list is underway. The last section of the chapter describes some studies that attempt to provide international comparisons of tax expenditure budgets.

OTHER COUNTRIES' EXPERIENCE WITH TAX EXPENDITURE BUDGETING

The Federal Republic of Germany

Since 1967, the Finance Ministry of the Federal Republic of Germany has been required by law to present to the legislature biennial reports on government subsidies, including both direct subsidies and tax preferences.¹ (Similar information had been regularly provided on an ad hoc basis since 1959.) The first report, published in December 1967, listed 122 tax expenditures, classified according to policy objective, type of beneficiary, and tax source. These tax provisions were also grouped with corresponding direct outlay programs to illustrate the total government subsidy in each policy area.² In their November 1981 report, estimates of direct outlays and tax expenditure revenue losses were added together to provide a measure of government participation in each policy area. Descriptions of each subsidy provision also included the provision's legal basis, the date of enactment, the intended objective, the scheduled expiration date (if appropriate), and a comment on the provision's economic efficiency.

Most provisions in the 1967 list were various types of economic incentives; only ten out of the 122 listed were aimed specifically at social welfare assistance. The 1981 report also contained a large number of economic incentives, with about half of the projected 1982 revenue loss attributed to aid to industry and measures promoting economic growth and

¹ Federal Republic of Germany, Federal Ministry of Finance, The Eighth Report on Subsidies: The Report of the Federal Government on the Development of Financial Assistance and Tax Relief for the Years 1979 to 1982, Bundestag publication 9/986 (Bonn, November 1981), p. iii.

² Phillippe Dumas, French Superintendent of the Treasury, "The Tax Expenditure Concept: A New Instrument for Public Finance Analysis," Banque, No. 384 (May 1979), pp. 587 and 591.

increased saving. The other half represented aid to agriculture, transportation, urbanization, housing, and social welfare (see Table 5).³

In Germany, the total revenue loss from tax expenditures has increased in recent years. But, unlike in the United States, German tax expenditures generally have grown more slowly than tax revenues, increasing at about the same rate as GNP. While federal tax expenditures represented about 4 percent of federal revenues in 1966, and grew to about 9 percent in 1975, they represented only about 8 percent in 1980. About half of the total revenue loss from federal, state, and local tax expenditures in 1982 was from provisions in the federal tax system (mainly income taxes) and about half was from provisions of state and local taxation (mainly property taxes).⁴

The recent apparent reductions in German tax expenditures can be partly explained by the fact that, starting in its 1977 report, the Ministry of Finance adopted a stricter interpretation of the tax expenditure concept and divided German tax expenditures into two lists. Tax subsidies that provide benefits to a large majority of taxpayers are no longer strictly considered tax expenditures and are shown separately in an appendix to the subsidy report. To qualify as a special tax incentive or relief, a provision must be aimed at one of four policy objectives: to preserve certain industries or sectors of the economy or help them adjust to new conditions; to promote increased production and industrial growth; to reduce the prices of certain goods and services supplied to households by central sectors of the economy; or to encourage saving.⁵ Germany uses these practical standards as well as the theoretical standard of a comprehensive income tax to decide whether a given tax provision is a tax expenditure or not.

³ German Federal Ministry of Finance, Eighth Report on Subsidies, Survey 10, p. 24.

⁴ Ibid., p. 24 and various tables. Tax expenditures represented a smaller percentage of federal revenues in 1980 mainly because of the definitional change adopted in 1977.

⁵ The Federal Ministry of Finance's decision to change its definition of tax relief removed about one-third of the tax expenditures previously included (as measured by total revenue loss). Descriptions and estimates of each of these deleted provisions are included, however, as a separate appendix to the report. See Federal Ministry of Finance, Eighth Report on Subsidies, pp. 9 and 24.