

How Big Are
Total Individual Income
Tax Expenditures, and Who
Benefits from Them?

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How Big Are Total Individual Income Tax Expenditures and Who Benefits from Them?

Stanley S. Surrey coined the term “tax expenditure” when, as assistant secretary of the U.S. Treasury for tax policy in the 1960s, he instructed his staff to compile a list of preferences and concessions in the income tax and estimate their revenue costs. His goals were to focus attention on those tax provisions that were effectively disguised expenditures and to build momentum for a tax reform based on a broad-based income tax (Joint Committee on Taxation 2008; Shaviro 2007; Toder 2005).

Both the Office of Management and Budget (OMB 2008) in its budget presentation and the Joint Committee on Taxation (JCT 2007) compile annual lists of tax expenditures, defined as deviations from the “normal” individual and corporate income tax bases.¹ Until 2002, the budget also included a list of tax expenditures against a transfer tax (estate and gift taxes) baseline, but the fiscal year 2003 and subsequent budgets excluded those items because “there is no generally accepted normal baseline for transfer taxes and ... [the tax was]... repealed under the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA)” (OMB 2002, 95). In principle, tax expenditures could also be defined with respect to other taxes, such as excise taxes, but that has not been done systematically (Davie 1994).

Among the most critical issues in measuring tax expenditures is the appropriate baseline against which to measure deviations. Surrey’s “normal tax” is a comprehensive Haig-Simons-type income tax adjusted to account for administrative realities. On administrative grounds, for example, the baseline taxation of capital gains is on a realization rather than an accrual basis. Income and expenses are not indexed for inflation. More fundamentally, some argue that the baseline might more appropriately eliminate the double taxation of corporate income or even be based on a comprehensive consumption tax, rather than an income tax.²

Other issues involve timing. Some tax breaks, such as the tax exemption for IRA and 401(k) contributions, play out over many years. The annual change in tax revenues can be a very misleading measure of the amount of subsidy provided. For example, traditional and Roth IRAs are (under certain assumptions) economically equivalent, but the time pattern of revenue losses is much different. Traditional IRAs allow a deduction for contributions and earnings with qualifying withdrawals fully taxable. Roth IRAs allow no up-front deduction, but earnings and withdrawals are tax free. A switch from traditional to Roth IRAs, therefore, will reduce reported annual tax expenditures during the budget period, although in fact it simply shifts revenue losses to a later period. To

¹ The Office of Tax Analysis of the U.S. Treasury Department prepares the tax expenditures estimates for OMB.

² See Burman (2003) for a discussion. OMB currently reports alternative presentations based on deviations from a comprehensive income tax and a comprehensive consumption tax. See also Carroll, Joulfaian, and Mackie (forthcoming).

address this problem, OMB also reports the present value of tax expenditures that reflect deferral of tax liability.³

Finally, tax expenditure estimates are “static,” meaning they assume no change in economic behavior if they were eliminated. This means that tax expenditure estimates may be much larger than revenue estimates for eliminating a particular provision. They also could provide a misleading estimate of the cost of a direct spending program alternative because they do not account for the fact that an equivalent spending program would frequently produce income that would itself be subject to tax.

Despite its limitations, most public finance economists believe that measuring tax expenditures is an important part of good budget management because tax expenditures can be designed to have the same effect on beneficiaries as direct spending programs and therefore impose the same opportunity costs in terms of higher taxes, reduced federal spending, and higher deficits. As Surrey and McDaniel note, tax expenditures “represent government spending for favored activities or groups, effected through the tax system rather than through direct grants, loans, or other forms of government assistance” (1985, 3). Although it surely makes sense to run certain programs through the tax system, we should assess their effects on the federal budget and on achieving program objectives the same way we assess direct spending programs.

In some respects, however, OMB and JCT estimates of tax expenditures contain major gaps. They present estimates of the effects of specific tax expenditures on federal revenues assuming all other tax expenditures are in effect, but they provide no tally of the combined effect of groups of tax expenditures. In fact, as we show below, the interactions among tax expenditures can be quite significant and, in some cases, counterintuitive, especially when considered in conjunction with the individual alternative minimum tax (AMT). Further, while the JCT reports the distributional effects of a small group of tax expenditures, no previous study has examined the distributional effects comprehensively. We find that combined tax expenditures for individual taxpayers (excluding those that affect measurement of business income) disproportionately benefit those with higher incomes.⁴

This analysis uses the Tax Policy Center microsimulation tax model to estimate the interaction effects among tax expenditures and the distributional effects of individual tax expenditures and groups of expenditures. The analysis is not comprehensive because it lacks information not reported on tax returns that we cannot impute based on data from other sources. It does, however illustrate some of the subtle and not-so-subtle ways that interactions can affect conclusions about the level and distribution of tax expenditures.

We find that adding separate tax expenditures to compute total costs produces significant errors for some subgroups of provisions, but in the aggregate (and for many

³ See OMB (2008), table 19-4, p. 301.

⁴ We have not estimated tax expenditures (such as accelerated depreciation) that affect the measurement of business income or provide tax credits for businesses. Had we included them and allocated the benefits of corporate preferences to individuals, we expect the distributional effects would tilt even more toward high-income taxpayers.

subcategories) comes close to the correct sum. For all individual income tax expenditures together, adding interaction effects increases the estimated total cost of tax expenditures by 8.4 percent under 2007 tax law (before enactment of the AMT patch) and by 5.1 percent under 2007 tax law with no AMT. But those totals obscure larger changes for categories of tax expenditures. Taking account of interactions among itemized deductions alone, for example, reduces the total cost of all itemized deduction by about 15 percent with the AMT and by about 24 percent without the AMT (which disallows or limits several itemized deductions). For every other category of tax expenditure, taking account of interactions among individual provisions raises the estimate of combined tax expenditures compared with just totaling their separate effects. That outcome occurs because the higher taxable income from a broader tax base raises average marginal tax rates.

The next section reviews the growth of individual income tax expenditures over the past 30 years. Following that, we examine the interactions among tax expenditures, both with and without the AMT, and look at the distribution of tax expenditures both individually and collectively. We then briefly consider the opportunity cost of tax expenditures in terms of forgone spending or higher tax rates. The final section concludes.

Growth in Tax Expenditures

Although the list of tax expenditures and their estimated costs reported by OMB and JCT differ somewhat, the differences are minor and most estimates are fairly close. In addition, some provisions are combined by one agency but estimated separately by the other. For example, the OMB list provides separate estimates of the revenue loss attributable to the exclusion from income tax of contributions and earnings (net of taxation of benefits) from defined benefit plans and employer-sponsored defined contribution retirement plans, while JCT provides a single combined estimate for all employer-sponsored retirement plans.

Both agencies estimate the revenue losses of each tax expenditure as if all the other tax expenditures were in place. They do not display the combined revenue loss of all tax expenditures or subtotals within budget categories. The combined cost of all the tax expenditures generally does not equal the sum of the costs of the separate provisions because one provision may affect the costs of another. For example, if the state and local tax deduction were eliminated, more taxpayers would claim the standard deduction, thereby reducing the cost of other itemized deductions.

Despite the lack of estimates of interaction effects, some analysts and commentators have added up tax expenditures to make general statements about their magnitude, impact on the budget, and comparison to costs of direct spending programs. For example, Toder (1998), while acknowledging the possible errors from ignoring interactions, estimates trends in tax expenditures as a share of GDP between 1980 and 1999 and their division between two categories he labels “social” and “business” tax

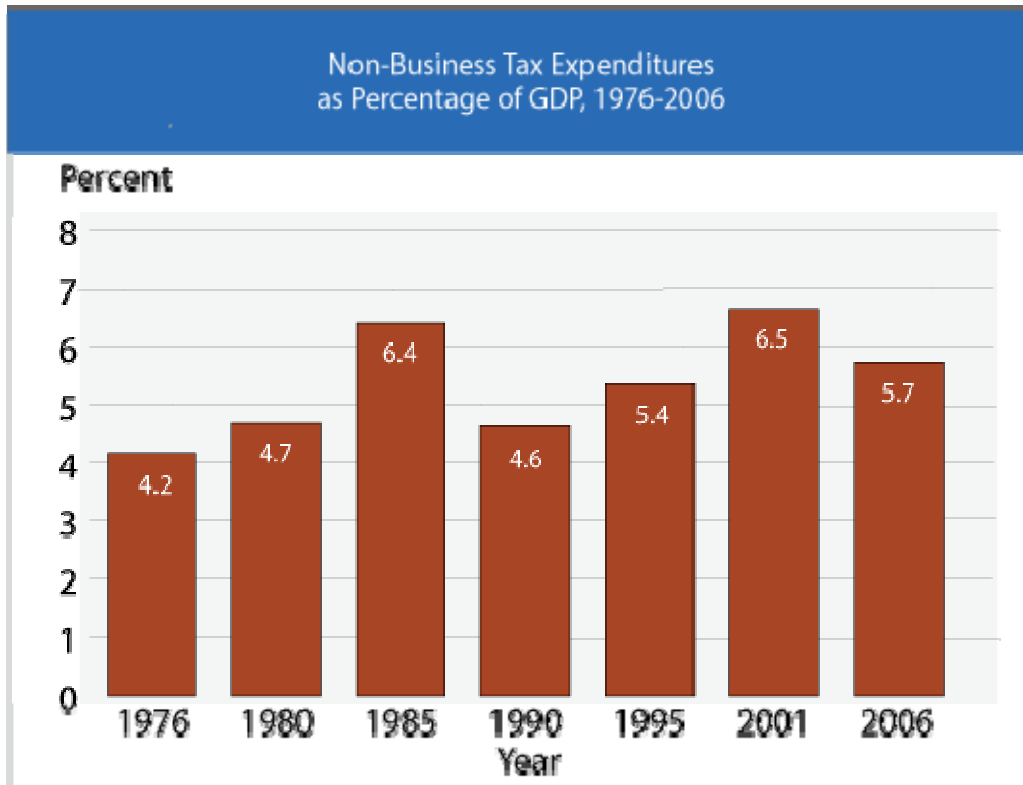
expenditures.⁵ Toder finds that in the aggregate tax expenditures increased between 1980 and 1985, dropped sharply after the tax reform of 1986, and then rose gradually in the 1990s and that over the two decades there was a large shift from business to social tax expenditures. This occurred because the Tax Reform Act of 1986 left most of the largest social tax expenditures intact or only slightly modified (though reduced in cost owing to lower marginal tax rates), while social tax expenditures increased during the 1990s due to new provisions such as tuition tax credits and the child credits and big expansions of some existing provisions, notably the earned income tax credit. In a recent book on the history of U.S. tax policy over the past two decades, Steuerle (2008) updated Toder's calculations through 2003 and estimated that social tax expenditures continued to grow as a share of GDP through 2001 but then declined slightly between 2001 and 2006.

Nonbusiness tax expenditures rose sharply between 1976 and 1985 from 4.2 percent to 6.4 percent of GDP (figure 1). ("Nonbusiness" tax expenditures in the figure include all tax expenditures reported on individual income tax returns except those that affect taxes paid by business, such as depreciation allowances and business tax credits.)⁶ They then dropped between 1985 and 1990 as a result of base-broadening provisions and lower marginal income tax rates in the Tax Reform Act of 1986 but increased again throughout the 1990s, reaching 6.5 percent of GDP in 2001. Between 2001 and 2006, tax expenditures declined slightly as a share of GDP, largely because of lower marginal tax rates and changes in the composition of economic activity (there was no significant base-broadening in the period), but they ended up relatively high compared with most of the past three decades.

If these provisions were classified as federal spending instead of tax benefits, federal expenditures would have been about 30 percent higher in 2006 than OMB reported—slightly over 26 percent of GDP instead of 20.3 percent. Similarly, taxes (before subtracting tax expenditures) would be commensurately higher. But this calculation assumes that individual tax expenditure items can be added up and that interaction effects net to zero. The next section estimates the size of interaction effects (and the error in calculations that ignore them).

⁵ Social tax expenditures are provisions that support social policy goals, such as promoting retirement saving, health insurance coverage, education, and home ownership, supporting activities of charities and local government, and providing income support for low-income families. Examples of social tax expenditures are the mortgage interest deduction, the tuition credits for higher education, the exclusion of employer contributions for health insurance, and the earned income tax credit. Business tax expenditures are provisions generally aimed at promoting saving, investment, and economic growth, including accelerated depreciation for capital investment, the research and experiment tax credit, and preferential taxation of capital gains.

⁶ Figure 1 differs from the measure of "social" tax expenditures in Toder (1998) and Steuerle (2008) because it includes some tax expenditures reported on individual tax returns that Toder labels "business" tax expenditures, such as tax preferences for capital gains. The chart includes the categories of tax expenditures we review in this paper, but shows revenue losses from these provisions attributable to both individuals and corporations, while the estimates we report below are based only on individual tax returns. (For example, because some tax-exempt bonds are held by corporations, OMB characterizes the revenue loss on those bonds as "corporate" tax expenditures.)



Interaction Effects

Although it has long been understood that the combined cost of many tax expenditures could differ from the sum of the separate tax expenditure line items, analysts have not previously examined the interaction among tax expenditures.⁷ We examine the effect of eliminating groups of individual income tax expenditures for tax year 2007, assuming the law in effect before retroactive relief from the AMT was enacted at the end of 2007. We also calculated tax expenditures under an alternative baseline that assumed no AMT was in effect. We did the calculations both ways because the AMT curtails or eliminates many tax expenditures and because eliminating tax expenditures can cause taxpayers to move on or off the AMT, complicating comparisons.⁸

We group tax expenditures by where they appear on the individual income tax form, rather than by budget category, as OMB and JCT present them. We model six types of expenditures: exclusions from income, above-the-line deductions, lower tax rates on long-term capital gains and dividends, itemized deductions, nonrefundable tax credits, and refundable tax credits. Included provisions account for roughly 90 percent of the revenue loss from nonbusiness individual income tax expenditures.⁹ Our estimates are

⁷ In a forthcoming paper, Altshuler and Dietz use the National Bureau of Economic Research TAXSIM model to estimate the combined effects of selected groups of tax expenditures.

⁸ Leiserson and Rohaly (2006) show that the likelihood of owing AMT increases with income up until about \$500,000, but those with very high incomes are much less likely to be affected by the AMT.

⁹ Significant omissions include the capital gains exclusion on home sales (\$37.0 billion); step-up in basis of capital gains at death (\$32.6 billion); exclusion of employee parking expenses (\$2.9 billion), transit passes

generally very close to official estimates, but there are a few notable exceptions.¹⁰ We view these differences as unimportant because our purpose is to show the effects of interactions rather than to provide precise (or improved) estimates of individual tax expenditures.

Exclusions from income are among the largest tax expenditures. With the AMT in place, tax exclusions reduced income tax liability by \$344 billion in 2007 (table 1). Ignoring interactions, the separate tax expenditures total \$323 billion, about 6 percent lower. Interactions raise the tax expenditure figure because eliminating multiple exclusions increases taxable income and thus pushes taxpayers into higher income tax brackets. This makes the cost of each additional exclusion preference higher than if only that one exclusion were eliminated. The increase in taxable income also pushes more than 6 million taxpayers onto the AMT, which imposes higher effective marginal tax rates on most affected taxpayers than the rates they would pay under the regular income tax.¹¹

We obtain smaller but otherwise very similar estimates if we assume no AMT. Overall, we estimate that exclusions from income would reduce 2007 tax revenues by \$325 billion if there were no AMT, about 6 percent more than our \$306 billion estimate for the separate tax expenditures. The tax expenditures without AMT are smaller than with AMT (both with and without interactions) because, as noted above, marginal tax rates are lower for most taxpayers under the regular income tax than under the AMT.

The three above-the-line deductions we estimate total only \$6.4 billion, much less than the tax exclusions. Omitting the AMT raises the estimate slightly—to \$6.6 billion—because the additional deduction for the blind and elderly is an AMT preference item. Because these tax expenditures are collectively so small, their interaction effects are negligible.

Long-term capital gains and dividends are subject to lower tax rates than ordinary income under both the regular income tax and the AMT. Taxpayers in the two lowest income tax brackets are taxed at a 5 percent rate on their gains and dividends in 2007 (zero in 2008), and higher-income taxpayers are taxed at a 15 percent rate. The tax expenditure is the difference between the tax paid under the alternative rate schedule and the regular income tax or tentative AMT that would otherwise be owed. Together, these two provisions reduce income tax revenues by \$96 billion. The sum of these two tax expenditures without interactions is slightly lower (\$94.8 billion) because some low-bracket taxpayers get pushed into the higher bracket by their capital gains or dividends

(\$0.6 billion), and employer-provided child care (\$0.9 billion); and the deduction for higher education expenses (\$1.5 billion).

¹⁰ See the appendix for comparison of tax expenditure estimates.

¹¹ The higher marginal rates under the AMT result because most taxpayers who are affected are in the range where the AMT exemptions are phased out at a 25 percent rate. As a result, they face marginal tax rates of either 32.5 percent or 35.0 percent (125 percent of the 26 or 28 percent statutory AMT rates). See Leiserson and Rohaly (2006).

Table 1. Selected Individual Income Tax Expenditures, Individually and in Groups, Tax Year 2007

	TPC Estimates		AMT Taxpayers (millions)
	w/ AMT (billions of dollars)	no AMT	
Exclusions:			
Exclusion of interest on life insurance savings	18.3	17.5	24.0
Net exclusion of contributions and earnings for retirement plans ¹	126.8	119.9	24.3
Exclusion of interest on tax-exempt bonds	12.2	11.6	23.6
Exclusion of employer contributions for medical insurance	137.7	129.5	28.4
Exclusion of Social Security and railroad retirement benefits	23.0	22.6	23.9
Exclusion of veterans benefits	5.2	5.0	23.6
Subtotal: Exclusions from Income, without interactions	323.3	306.0	
Subtotal: Exclusions from Income, with interactions	343.9	325.5	29.7
percentage change	6.4%	6.4%	
Above the Line Deductions:			
Deductibility of Student Loan Interest	1.1	1.0	23.5
Self-employed medical insurance premiums	3.8	3.7	23.5
Additional deduction for the blind and elderly	1.5	1.9	23.3
Subtotal: above the line deductions, without interactions	6.4	6.6	
Subtotal: above the line deductions, with interactions	6.4	6.6	23.4
percentage change	0.0%	0.1%	
Capital Gains and Dividends:			
Lower tax rates on long-term capital gains	83.7	86.4	23.8
Lower tax rates on qualifying dividends	11.1	10.9	23.7
Subtotal: special tax rates, without interactions²	94.8	97.3	
Subtotal: special tax rates, with interactions	96.0	99.0	23.9
percentage change	1.2%	1.8%	
Itemized Deductions:			
Deductibility of Mortgage interest on owner-occupied homes	92.4	79.9	28.8
Deductibility of State and Local Taxes	39.0	76.5	19.4
Deductibility of Charitable Contributions	43.3	38.5	24.9
Deductibility of Casualty Losses	0.4	0.3	23.5
Deductibility of Medical Expenses	5.6	5.4	23.6
Subtotal: itemized deductions, without interactions	180.7	200.6	
Subtotal: itemized deductions, with interactions	153.5	153.2	29.4
percentage change	-15.0%	-23.6%	
Nonrefundable Credits:			
HOPE tax credit	2.6	3.7	23.1
Lifetime learning tax credit	1.6	2.2	23.2
Credit for child and dependent care expenses	1.9	3.4	23.1
Low and moderate income savers credit	1.9	1.9	23.5
Subtotal: non-refundable credits, without interactions	8.0	11.1	
Subtotal: non-refundable credits, with interactions	8.2	11.3	22.5
percentage change	2.8%	1.6%	
Refundable Credits:			
Child credit ³	44.9	44.9	23.6
Earned income tax credit ³	43.7	43.7	23.5
Subtotal: refundable credits, without interactions	88.6	88.5	
Subtotal: refundable credits, with interactions	89.2	89.1	23.6
percentage change	0.6%	0.6%	
Total: all provisions without interactions	701.8	710.2	
Total: all provisions with interactions	760.5	746.7	35.4
percentage change	8.4%	5.1%	
Total: all provisions with interactions and approximately revenue neutral tax cu	0.3	0.3	35.4
Addendum: Baseline individual income tax revenues	1,020.7	950.9	23.5

Notes

1. Tax expenditure is revenue loss attributable to deduction/exclusion for contributions and earnings net of any tax on withdrawal
2. OMB does not consider the lower tax rates on capital gains and dividends on corporate stock to be a tax expenditure
3. Includes both refundable and nonrefundable portion

and the difference between ordinary and capital gains tax rates varies with income.¹² Were the lower rate eliminated on capital gains, for example, very few taxpayers would face a higher rate on all or part of their dividends because most dividends are already taxed at the maximum 15 percent rate.

The tax expenditure for capital gains and dividends is slightly smaller with the AMT in place than without it because most capital gains are earned by very high income taxpayers who, unlike most taxpayers affected by the AMT, face a higher marginal effective tax rate under the regular income tax than under the AMT.¹³ As a result, eliminating the AMT increases the tax expenditure on capital gains by \$2.7 billion. In contrast, eliminating the AMT reduces the tax expenditure for dividends slightly because a larger share of dividends goes to people with somewhat lower incomes who are more likely than capital gains recipients to face the higher marginal tax rates in the AMT exemption phaseout range.

Itemized deductions have the largest interaction effects. Ignoring them overstates the estimated combined effect of the separate provisions because removing one itemized deduction makes taxpayers more likely to claim the standard deduction and thus reduces the cost of other itemizable deductions. For example, if the mortgage interest deduction were eliminated, millions fewer taxpayers would itemize deductions and thus would get no benefit from deducting charitable contributions or state and local taxes. Even some taxpayers who continued to itemize would find that their remaining itemized deductions were not much greater than the standard deduction, and thus the revenue gain from eliminating the remaining deductions would be reduced. In total, itemized deductions reduced income tax revenues by \$154 billion in 2007, about 15 percent less than the \$181 billion sum of the cost of the separate itemized deduction preferences.

The AMT further complicates these calculations. First, the AMT disallows the deduction for state and local taxes, one of the largest itemized deductions. Thus, because that provision is available only to taxpayers on the regular income tax, the tax expenditure for it is much smaller with the AMT than without it (\$39 billion versus \$77

¹² To see why this is the case, consider a very simplified tax system with two ordinary income tax brackets of 10 and 30 percent, corresponding capital gains and dividend tax rates of 5 and 15 percent, and no AMT. Suppose the lower bracket applies to the first \$50,000 of income and suppose the taxpayer has \$50,000 of capital gains and \$50,000 of dividends. She also has \$25,000 of other income and \$25,000 of deductions, so her taxable income is \$100,000. Under current law, she would owe \$10,000 of tax (5 percent of the first \$50,000 of gains and dividends and 15 percent of the remaining \$50,000). If gains and dividends were all taxed as ordinary income, she would owe \$20,000 (10 percent of the first \$50,000 of income and 30 percent of the next \$50,000), so her tax expenditure on both provisions would be \$10,000 (\$20,000 minus \$10,000). If only gains or dividends, but not both, were taxed as ordinary income, her tax would be \$12,500 (\$50,000 taxed at 10 percent and \$50,000 taxed at 15 percent). Thus, the tax expenditure for each individual provision is \$2,500 and the sum of the two provisions is \$5,000, half of the tax expenditure with interaction effects. The difference is much smaller in the real world because most people with capital gains and dividends have substantial other income, which makes the tax expenditure per dollar of capital gains and dividends for both the two combined provisions and each separate provision equal to the difference between the top ordinary income and top capital gains/dividend tax rates.

¹³ For the distribution of capital gains and dividends by income, see Table T05-0074, available at www.taxpolicycenter.org/T05-0074.

billion).¹⁴ Second, the AMT disallows the standard deduction. With the AMT in place, more taxpayers would continue to itemize when some itemized deductions are eliminated than if there were no AMT. This raises the cost of itemized deductions (other than those directly reduced or eliminated) under the AMT and reduces interactions that lower the combined cost of deductions. Third, the phaseout of itemized deductions for high-income taxpayers (sometimes called “Pease” after the member of Congress who helped create it) does not apply to the AMT, making the combined value of all itemized deductions larger than it would otherwise be. Finally, as with the tax exclusions, the effective tax rate applying to itemized deductions is higher under the AMT than under the regular income tax for most taxpayers, also making tax expenditures allowed against the AMT larger than they would be were the AMT eliminated.

The AMT’s effect varies across the different deductions. As expected, the AMT raises the cost of every individual itemized deduction other than the state and local tax deduction, even the deduction for medical expenses, which the AMT curtails.¹⁵ In contrast, the AMT reduces the cost of the state and local tax deduction. Ignoring interactions, the sum of the individual tax expenditures is larger without the AMT than with it (\$201 billion versus \$181 billion). But accounting for all the complex interactions, the overall tax expenditure for itemized deductions, including interactions, is virtually identical without the AMT (\$153.2 billion) as with it (\$153.5 billion). Interestingly, eliminating all itemized deductions would increase the number of taxpayers affected by the AMT by about 6 million. Most surprisingly, while the AMT is thought to curtail deductions, it has little effect on the aggregate value of itemized deductions.

Tax credits also have interesting interaction effects. Nonrefundable tax credits are limited by a taxpayer’s income tax liability before credits. As a result, the greater the number of tax credits, the smaller the marginal value of each one because taxpayers have less remaining tax liability. Removing one credit therefore increases the revenue cost of the remaining credits, but the effect is small. In total, nonrefundable personal credits reduced income tax liability by \$8.2 billion under 2007 law as we modeled it, just 2.5 percent more than the \$8.0 billion sum of the costs of the individual credits.

The AMT disallowed these tax credits under the tax law we modeled. (The “patch” enacted at the end of 2007 included a provision allowing the use of personal nonrefundable tax credits against the AMT.) Therefore, eliminating the AMT significantly increases the value of credits (compared with the law before the late session patch). But adding up the separate credits without counting the interaction effects continues to reduce their combined cost slightly from \$11.3 to \$11.1 billion.

¹⁴ Other itemized deductions (the deductions for medical expenses, interest on home equity lines of credit, and employee business expenses) are also curtailed by the AMT. We have insufficient information to measure the effect of the limit on home equity lines of credit, and the deduction for employee business expenses is not a tax expenditure but instead an appropriate offset in calculating net income.

¹⁵ AMT taxpayers may deduct only those medical expenses that exceed 10 percent of adjusted gross income (AGI), while the regular income tax sets a 7.5 percent AGI floor for the medical deduction.

Finally, the refundable earned income tax credit and the partially refundable child tax credit have only a small interaction effect.¹⁶ The two provisions would be additive, except for a small interaction effect from a provision that allows an additional child credit to certain families with three or more children based on the relationship of payroll taxes paid to the EITC. Because the AMT allows both credits, the revenue losses are virtually the same with and without the AMT.

Taken as a whole, the individual income tax expenditures that we modeled reduce income tax revenues by \$760 billion, about 75 percent of 2007 income tax liability or about 43 percent of tax liability grossed up to include the tax expenditures. Ignoring all interaction effects would drop the revenue cost almost 8 percent to \$702 billion. Without the AMT, both the total cost of tax expenditures (\$747 billion) and the error from ignoring interaction effects (about 5 percent of the total cost, or \$35 billion) would be smaller. Although it may seem counterintuitive, we find that the AMT increases the total value of individual income tax expenditures when interactions are accounted for by about \$14 billion, or 2 percent. Simply adding up the separate provisions, however, tax expenditures would be calculated as slightly lower (about \$8 billion) in the presence of AMT than without it.

Distribution of Individual Income Tax Expenditures

Tax expenditures in the individual income tax, taken together, benefit taxpayers in all income groups. They benefit high-income taxpayers more than low-income taxpayers in absolute terms and relative to their income, but less relative to the taxes they pay. The distributional effect of eliminating tax expenditures depends on how the budgetary savings are distributed. The calculations presented here assume no AMT. The distributional results in the presence of AMT are qualitatively similar.

With no AMT, eliminating tax expenditures would reduce after-tax income by 11.4 percent in the top quintile, 6.5 percent in the bottom quintile, and 9.6 percent on average for all income groups (table 2). The drop in after-tax income would be proportionately biggest for the highest income taxpayers—13.5 percent for returns in the top 1 percent of the income distribution.

The net distributional effects of eliminating tax expenditures, however, depends on how the government uses the increased revenues. If all the revenue gained were returned to taxpayers in a tax cut or rebate equal to 9.6 percent of income for all families, then after-tax income would increase by 3.1 percent for families in the bottom quintile but decline by 1.8 percent for families in top quintile and 3.9 percent for families in the top 1 percent.¹⁷

¹⁶ The refundable portion of the child tax credit was limited to 15 percent of earnings above \$11,750 in 2007.

¹⁷ This would reduce the top marginal tax rate to 25.4 percent and the bottom rate to 0.4 percent, but it would also require a rebate of 9.6 percent of income to taxpayers currently facing zero marginal tax rates.

Table 2. Distributional Effects of Eliminating Tax Expenditures with No AMT, Tax Year 2007

	Percent Change in After Tax Income (by quintile)						
	Bottom	2nd	Middle	4th	Top	Top 1%	All
Exclusions:							
Exclusion of interest on life insurance savings	-0.02	-0.08	-0.16	-0.29	-0.24	-0.14	-0.22
Net exclusion of employer contributions and earnings, employer plans ¹	-0.09	-0.41	-0.71	-0.42	-2.34	-1.91	-1.57
Exclusion of interest on tax-exempt bonds	0.00	0.00	-0.01	-0.04	-0.24	-0.50	-0.15
Exclusion of employer contributions for medical insurance	0.07	-1.40	-2.03	-2.16	-1.51	-0.27	-1.65
Exclusion of Social Security and railroad retirement benefits	-0.13	-0.60	-0.71	-0.49	-0.09	-0.03	-0.29
Exclusion of veterans benefits	<u>0.00</u>	<u>-0.02</u>	<u>-0.06</u>	<u>-0.09</u>	<u>-0.06</u>	<u>-0.01</u>	<u>-0.06</u>
Subtotal: Exclusions from Income, without interactions	-0.17	-2.51	-3.68	-3.49	-4.48	-2.86	-3.94
Subtotal: Exclusions from Income, with interactions	-0.54	-2.99	-3.79	-3.68	-4.74	-2.90	-4.19
Above the Line Deductions:							
Deductibility of Student Loan Interest	0.00	-0.01	-0.02	-0.02	-0.01	0.00	-0.01
Self-employed medical insurance premiums	0.00	-0.01	-0.03	-0.04	-0.06	-0.06	-0.05
Additional deduction for the blind and elderly	<u>0.00</u>	<u>-0.04</u>	<u>-0.03</u>	<u>-0.05</u>	<u>-0.01</u>	<u>0.00</u>	<u>-0.02</u>
Subtotal: above the line deductions, without interactions	0.00	-0.06	-0.08	-0.11	-0.08	-0.06	-0.08
Subtotal: above the line deductions, with interactions	-0.01	-0.06	-0.09	-0.11	-0.08	-0.06	-0.08
Capital Gains and Dividends:							
Lower tax rates on capital gains (including ag., timber, coal)	0.00	-0.01	-0.02	-0.07	-1.85	-5.33	-1.10
Lower tax rates on dividends	<u>0.00</u>	<u>-0.01</u>	<u>-0.01</u>	<u>-0.05</u>	<u>-0.22</u>	<u>-0.44</u>	<u>-0.14</u>
Subtotal: special tax rates, without interactions	0.00	-0.02	-0.03	-0.12	-2.07	-5.77	-1.24
Subtotal: special tax rates, with interactions	0.00	-0.01	-0.04	-0.12	-2.11	-5.87	-1.26
Itemized Deductions:							
Deductibility of Mortgage interest on owner-occupied homes	-0.01	-0.06	-0.27	-0.78	-1.44	-0.72	-1.03
Deductibility of State and local taxes ²	0.00	-0.03	-0.12	-0.43	-1.51	-1.92	-0.98
Deductibility of Charitable Contributions	0.00	-0.02	-0.09	-0.26	-0.74	-1.04	-0.49
Deductibility of Casualty Losses	0.00	0.00	0.00	0.00	-0.01	-0.01	0.00
Deductibility of Medical Expenses	<u>0.00</u>	<u>-0.04</u>	<u>-0.07</u>	<u>-0.11</u>	<u>-0.06</u>	<u>-0.02</u>	<u>-0.07</u>
Subtotal: itemized deductions, without interactions	-0.01	-0.15	-0.55	-1.58	-3.76	-3.71	-2.57
Subtotal: itemized deductions, with interactions	-0.02	-0.11	-0.38	-1.09	-2.91	-3.24	-1.97
Nonrefundable Credits:							
HOPE tax credit	-0.01	-0.09	-0.10	-0.08	-0.02	0.00	-0.05
Lifetime learning tax credit	-0.01	-0.05	-0.06	-0.04	0.00	0.00	-0.02
Credit for child and dependent care expenses	0.00	-0.03	-0.08	-0.06	-0.03	0.00	-0.04
Low and moderate income savers credit	<u>-0.03</u>	<u>-0.11</u>	<u>-0.07</u>	<u>-0.03</u>	<u>0.00</u>	<u>0.00</u>	<u>-0.02</u>
Subtotal: non-refundable credits, without interactions	-0.05	-0.28	-0.31	-0.21	-0.05	0.00	-0.13
Subtotal: non-refundable credits, with interactions	-0.05	-0.28	-0.33	-0.23	-0.06	0.00	-0.14
Refundable Credits:							
Child credit ³	-0.05	-0.96	-1.31	-0.98	-0.25	0.00	-0.57
Earned income tax credit ³	<u>-5.35</u>	<u>-3.99</u>	<u>-0.88</u>	<u>-0.02</u>	<u>0.00</u>	<u>0.00</u>	<u>-0.56</u>
Subtotal: refundable credits, without interactions	-5.40	-4.95	-2.19	-1.00	-0.25	0.00	-1.13
Subtotal: refundable credits, with interactions	-5.49	-5.00	-2.20	-0.99	-0.25	0.00	-1.14
Total: all provisions without interactions	-5.63	-7.97	-6.84	-6.51	-10.69	-12.40	-9.09
Total: all provisions with interactions	-6.52	-8.16	-6.76	-6.79	-11.36	-13.53	-9.57
Total: all provisions with interactions and approximately revenue neutral tax cut	-5.93	-5.85	-2.30	-0.07	1.74	4.18	0.13

Notes

1. Tax expenditure is revenue loss attributable to deduction/exclusion for contributions and earnings net of any tax on withdrawals
2. Includes both deductibility of state and local tax on owner-occupied homes and deductibility of other nonbusiness state and local taxes
3. Includes both refundable and nonrefundable portions

Alternatively, eliminating tax expenditures could be used to pay for an across-the-board 44 percent reduction in all marginal tax rates, so the top rate could be cut to about 19.6 percent and the bottom rate to 5.6 percent.¹⁸ This revenue-neutral change would on balance help the highest income taxpayers the most because the value of tax expenditures

¹⁸ Given behavioral responses, which are incorporated into official revenue estimates, the rates could be cut even more.

declines as a share of tax liability. With tax expenditures eliminated and marginal tax rates cut proportionately to keep revenue constant, after-tax income would increase by 1.7 percent in the top quintile and by 4.2 percent for the top 1 percent of taxpayers. It would decline in all other quintiles, with the biggest decline (about 5.9 percent) in the bottom two quintiles (see bottom row of table 2).

Finally, the revenue raised from eliminating tax expenditures could be used to finance increased government spending. If the benefits of this spending were equal in absolute dollars for all families, the change would be even more progressive than the effects of an equal tax cut as a share of income because the loss in tax preferences, which would constitute a larger share of income for people with higher incomes, would finance increased benefits that decline relative to income as household income rises.

The distributional effects of removing tax expenditure provisions differ greatly across groups of provisions. Eliminating exclusions lowers after-tax income relatively more for higher-income than for lower-income taxpayers, but their value declines as a share of income at very high income levels. The major exclusions are those for contributions to and earnings from employer-sponsored pension plans (net of taxes on pension benefits) and for employer contributions for medical insurance. Higher-income people generally benefit more from exclusions than those in lower income tax brackets both because they are more likely to be covered by employer pensions and health insurance and because exemptions are worth more to them. But because contributions to tax-qualified pension plans are capped and health insurance outlays do not rise that much with income at the very top, the very highest income taxpayers receive proportionately less benefit from the tax exemptions.

Above-the-line deductions (student loans, higher education expenses, self-employed medical insurance premiums) provide the biggest income gain to middle-income taxpayers and almost no gain to taxpayers in the bottom quintile. Lower tax rates on capital gains and dividends disproportionately benefit the top 1 percent of taxpayers and provide little income gain for anyone else. Itemized deductions provide much larger income gains for high-income than for low-income taxpayers, most of whom use the standard deduction. Nonrefundable credits (child care credits, tuition credits for higher education, and the savers' credit) give the biggest percentage gains for middle-income taxpayers and almost no benefits to the top quintile (because most phase out at higher incomes) and bottom quintile (because they are not refundable). The combination of the child tax credit and EITC offers the biggest income gains for taxpayers in the bottom two quintiles of the income distribution, but the nonrefundable portion of the child credit also provides some benefits in the middle of the income distribution.

To sum up, tax expenditures in the aggregate are a larger share of income, but a smaller share of taxes paid, for high-income taxpayers than for those with low incomes. The distributional effect of replacing all tax expenditures with rate cuts depends on how rates are cut. Reducing all tax rates by the same percentage in place of all tax expenditures would on average help high-income taxpayers and hurt lower-income taxpayers. Cutting all tax rates by equal *percentage points* (or an equal percentage of income) to replace all tax expenditures would on average help low-income taxpayers and hurt high-income taxpayers. And replacing tax expenditures with equal per capita

increases in direct expenditures would benefit low-income taxpayers even more. Of course, large redistributions would also occur *within* income groups: relatively larger users of preferences would more likely lose from the changes while relatively smaller users would gain.

Opportunity Cost of Tax Expenditures

Like direct spending programs, tax expenditures crowd out other spending and require higher tax rates than otherwise needed. Nonbusiness individual income tax expenditures reduced 2007 federal income tax revenues by as much as \$761 billion—and \$747 billion with no AMT (table 1). That amount exceeds total spending on national defense (\$599 billion) or nondefense discretionary spending (\$521 billion) in fiscal year 2008 (Congressional Budget Office 2007). It dwarfs the \$70 billion cost of eliminating the AMT in 2007 (the patch cost about \$50 billion). Clearly, tax expenditures have a significant opportunity cost.

Often, although not always, direct spending programs might be more cost-effective or better meet policy goals. For example, most of the benefit of the tax exclusion for employer-sponsored health insurance goes to high-income people who would likely have insurance even without a subsidy; very little goes to lower-income people who most need help (Burman et al. 2007). The tax exclusion also subsidizes overly generous health insurance that may encourage overspending on health care. Replacing the exclusion with a refundable tax credit would be an improvement, but a better option might be to cap or eliminate the tax exclusion and use the income and payroll tax revenues saved to pay for expanded access to publicly funded health insurance.¹⁹

Some conservatives object to the concept of tax expenditures, arguing that “the tax expenditure concept relies heavily on a normative notion that shielding certain taxpayer income from taxation deprives government of its rightful revenues” (Saxton 1999, i). In fact, tax expenditures, like direct expenditures, require much higher tax rates than otherwise needed. For example, we estimate that eliminating all tax expenditures could finance a 44 percent across-the-board reduction of income tax rates (with no AMT). That would constitute a cut in the top marginal income tax rate from 35 percent to less than 20 percent with no revenue loss.

Of course, eliminating all tax expenditures is neither politically feasible nor desirable. Some advance important public policy goals comparatively effectively, and some (not necessarily the same ones) enjoy overwhelming bipartisan support. Eliminating all tax expenditures would be regressive if the increased revenues were used to reduce all income tax rates proportionately, raising taxes on the two lowest income quintiles by an average of 6 percent of income while cutting taxes on the top 1 percent by about 4 percent of income (table 2). Alternative tax rate structures (including a refundable tax credit) could be designed, however, to be as or more progressive than the current

¹⁹ Feldstein and Gruber (1995) conclude that eliminating the ESI exclusion could fund universal access to health insurance and reduce overall medical spending.

system. Replacing some tax expenditures with spending programs that aid low- and moderate-income households could make the entire system of fiscal transfers more progressive.

The key point is that tax expenditures are a very large part of government spending. Reducing those of lesser merit could yield budgetary saving that could fund policy goals of liberals and conservatives alike.

Conclusions

Tax expenditures have increased as a share of GDP over the past three decades and now add up to a strikingly large share of individual income tax revenues. OMB and JCT annually display lists of tax expenditures and their revenue costs, but those official presentations do not enable computation of the total cost of all tax expenditures because eliminating some could raise or lower the gains from eliminating others. Using the TPC tax simulation model, we estimate for 2007 (before the AMT patch) that eliminating a large share of nonbusiness individual income tax expenditures would raise about 8 percent more revenue than the sum of individual estimates for each provision. The interactions among tax expenditure provisions raise revenues mainly because eliminating some tax expenditures pushes taxpayers into higher marginal rate brackets, raising the revenue gain from eliminating additional ones. For itemized deductions, however, the gain from their complete elimination is less than the sum of the gains from the separate provisions because removing one deduction leads some taxpayers to switch to the standard deduction and thus reduces the incremental gain from eliminating additional deductions.

The AMT affects the overall cost of tax expenditures, but not in the direction one might expect. Although it disallows some tax expenditures (the largest being the state and local tax deductions) and reduces others, the AMT *raises* the cost of tax expenditures because it raises marginal tax rates of most individuals who pay it. In addition, because the AMT has no standard deduction, the negative interaction effects from removing additional itemized deductions under the regular tax are absent for taxpayers subject to AMT.

Tax expenditures vary in their distributional effects; special rates for capital gains and dividends disproportionately favor the highest income taxpayers, while refundable credits go almost entirely to taxpayers in the bottom two income quintiles. Overall, individual tax expenditures raise after-tax incomes more for high-income than for lower-income taxpayers, so their net effect is regressive. That conclusion depends, however, on what the tax rate structure would be like in their absence. If, for example, the alternative to tax expenditures were a proportional across-the-board cut in marginal income tax rates, higher-income groups would see their after-tax incomes increase on average and lower-income groups would lose out. Alternatively, if revenue from eliminating tax expenditures were used to fund an equal per capita increase in direct expenditures, lower-income groups would be the biggest winners.

The tax expenditures we estimated have a huge opportunity cost—about \$750 billion in tax year 2007 alone. These revenues could be used to lower marginal tax rates,

fund more social programs, improve infrastructure, eliminate budget deficits, or promote various other purposes. If used to lower rates across the board, for example, the top marginal income tax rate could fall to 20 percent. While many tax expenditures further important social goals that are worth public fiscal support, either through continued tax subsidies or direct spending programs, others are of more dubious merit. The savings from paring back provisions with lesser economic justification could be used to advance the policy goals of liberals and conservatives alike.

Appendix

Appendix - Comparison of TPC Estimates with OMB and JCT.

	TPC w/ AMT CY07	OMB (FY07)	JCT (FY07)
	(billions of dollars)		
Exclusions:			
Exclusion of interest on life insurance savings	18.3	18.3	26.1
Net exclusion of contributions and earnings for retirement plans ¹	126.8		
Employer contributions		49.2	
Employee contributions to DC plans		42.4	108.6
IRAs		5.7	15.5
Keogh plans		10.9	8.8
Exclusion of interest on tax-exempt bonds	12.2	26.2	25.4
Exclusion of employer contributions for medical insurance	137.7	141.3	105.7
Exclusion of Social Security and railroad retirement benefits	23.0	26.9	22.4
Exclusion of veterans benefits	5.2	4.2	3.5
Subtotal: Exclusions from Income, without interactions	323.3	325.1	316.0
Above the Line Deductions:			
Deductibility of Student Loan Interest	1.1	0.8	0.9
Self-employed medical insurance premiums	3.8	4.4	3.8
Additional deduction for the blind and elderly	1.5	2.2	1.7
Subtotal: above the line deductions, without interactions	6.4	7.4	6.4
Capital Gains and Dividends:			
Lower tax rates on long-term capital gains	83.7	53.1	
Lower tax rates on qualifying dividends	11.1	0.0	127.1
Subtotal: special tax rates, without interactions²	94.8	53.1	127.1
Itemized Deductions:			
Deductibility of Mortgage interest on owner-occupied homes	92.4	79.9	73.7
Deductibility of State and Local Taxes	39.0		
Property taxes on residences		15.5	16.8
Income and other taxes		33.7	33.9
Deductibility of Charitable Contributions	43.3	47.4	41.9
Deductibility of Casualty Losses	0.4	0.3	0.8
Deductibility of Medical Expenses	5.6	4.2	8.4
Subtotal: itemized deductions, without interactions	180.7	181.0	175.5
Nonrefundable Credits:			
HOPE tax credit	2.6	3.3	
Lifetime learning tax credit	1.6	2.2	3.1
Credit for child and dependent care expenses ³	1.9	2.8	3.0
Low and moderate income savers credit	1.9	0.7	0.9
Subtotal: non-refundable credits, without interactions	8.0	9.0	7.0
Refundable Credits:			
Child credit ⁴	44.9	47.5	45.0
Earned income tax credit ⁴	43.7	41.8	44.7
Subtotal: refundable credits, without interactions	88.6	89.3	89.7
Total: all provisions without interactions	701.8	664.9	721.7

Notes

1. Tax expenditure is revenue loss attributable to deduction/exclusion for contributions and earnings net of any tax on withdrawals
2. OMB does not consider the lower tax rates on capital gains and dividends on corporate stock to be a tax expenditure
3. JCT includes the value of the exclusion of employer provided child care
4. Includes both refundable and nonrefundable portion

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