



Tax Policy Center

Urban Institute and Brookings Institution

Why Some Tax Units Pay No Income Tax

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ABSTRACT

About 46 percent of American households will pay no federal individual income tax in 2011, roughly half of them because of structural features of the income tax that provide basic exemptions for subsistence level income and for dependents. The other half are nontaxable because tax expenditures—special provisions of the tax code that benefit selected taxpayers or activities—wipe out tax liabilities and, in the case of refundable credits, result in net payments from the government. Most important of those tax expenditures are provisions that benefit senior citizens and low-income working families with children. While those factors particularly affect lower-income households, different provisions eliminate taxes for other households. Itemized deductions and credits for children and education are more important for middle-income households, while the relatively few high-income nontaxable households benefit most from above-the-line and itemized deductions and reduced tax rates on capital gains and dividends.

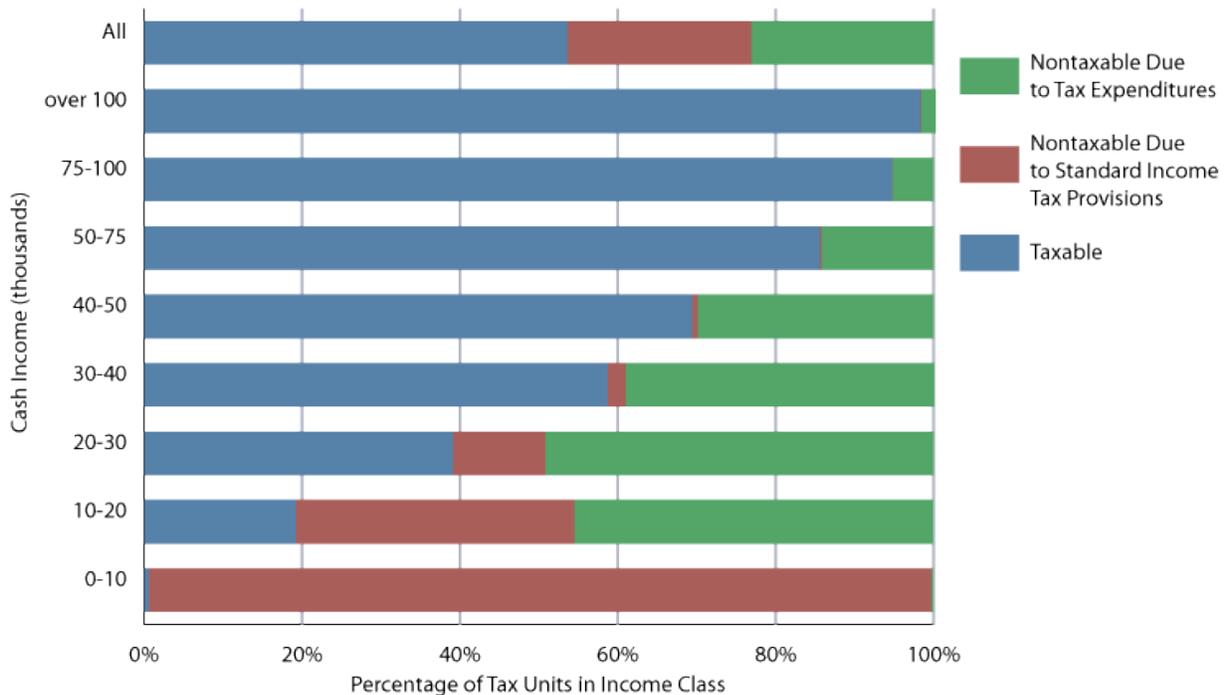
Why Some Tax Units Pay No Income Tax

Just 54 percent of all tax units will pay federal individual income tax in 2011, leaving about 46 percent paying no federal income tax or receiving a net refund. The significant fraction of tax units that do not pay income tax has become a topic of public debate. Some commentators have suggested that the large share paying no income tax is mostly the result of tax expenditures (sometimes referred to as “loopholes” or “tax earmarks”). If that were so, nearly all tax units would pay income tax under a reformed income tax with no tax expenditures. In fact, however, even with all tax expenditures repealed, standard income tax provisions that exempt a basic amount of income would still leave many units nontaxable.

These standard income tax provisions include personal exemptions for taxpayers and dependents and the standard deduction. These provisions are part of the basic progressive income tax structure that intend to exempt subsistence levels of income from tax and to adjust for differences in ability to pay based on family size.

Of all nontaxable units, half would still owe no tax in 2011 if all tax expenditures were repealed and only these standard income tax provisions applied. The other half owes no tax because of tax expenditures. Those proportions vary across income categories. Virtually all nontaxable units in the lowest income group pay no tax because of the standard income tax provisions alone, but this share diminishes rapidly with income and nearly all nontaxable units with incomes above \$30,000 pay no tax because of tax expenditures (see chart 1 and table 1).

Chart 1: Taxable and Nontaxable Tax Units
by Income, 2011



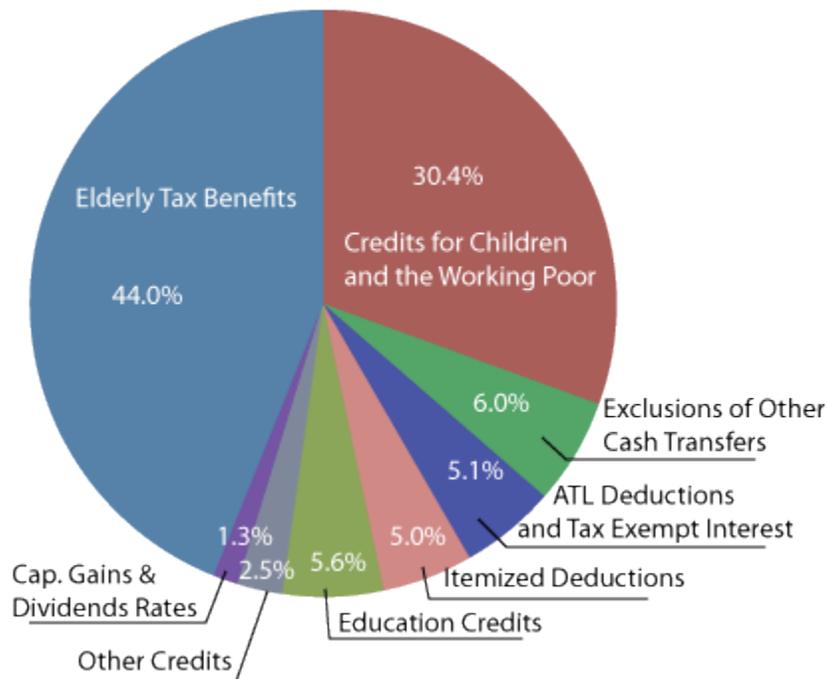
Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0411-2).

To determine which tax expenditures moved tax units from being taxable to being nontaxable, we arranged tax expenditures into eight groups and then estimated how many units became nontaxable when we added each group of tax expenditures sequentially to the standard income tax provisions. These are the eight groups:

- elderly tax benefits (the extra standard deduction for the elderly, the exclusion of a portion of Social Security benefits, and the credit for the elderly);
- credits for children and the working poor (the child tax credit, the child and dependent care tax credit, and the earned income tax credit);
- exclusion of other cash transfers (cash transfer benefits other than Social Security and unemployment, such as TANF and SSI);
- above-the-line deductions and tax-exempt interest;
- itemized deductions;
- education credits;
- other credits; and
- reduced rates on capital gains and dividends (zero rate on gains and dividends that would otherwise be taxed at 10 or 15 percent, 15 percent rate combined with credits).

Of the 38 million tax units made nontaxable by the addition of tax expenditures, 44 percent are moved off the tax rolls by elderly tax benefits and another 30 percent by credits for children and the working poor (see chart 2 and table 2). The other six groups of tax expenditures have much less impact, each making 6 percent or fewer units nontaxable.

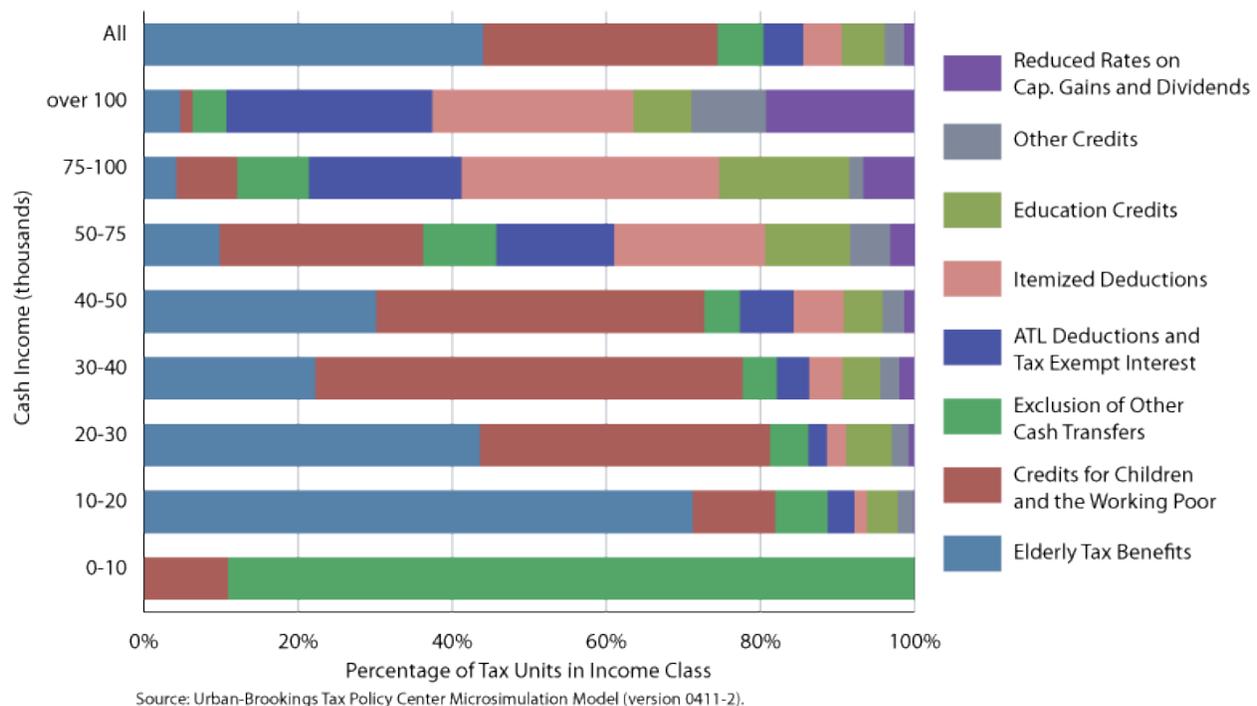
Chart 2: Tax Units Made Nontaxable by Tax Expenditures, 2011



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0411-2).

Among nontaxable units that would face positive tax liability except for tax expenditures, the type of tax expenditure that makes them nontaxable varies substantially by income (see chart 3). For tax units with income below \$50,000, the tax expenditures for the elderly, children, and the poor are most important. For tax units with income between \$50,000 and \$100,000, the child and education credits and itemized deductions move the most units off the tax rolls. For those with income over \$100,000, the above-the-line deductions, itemized deductions, and reduced rates on capital gains and dividends matter most.

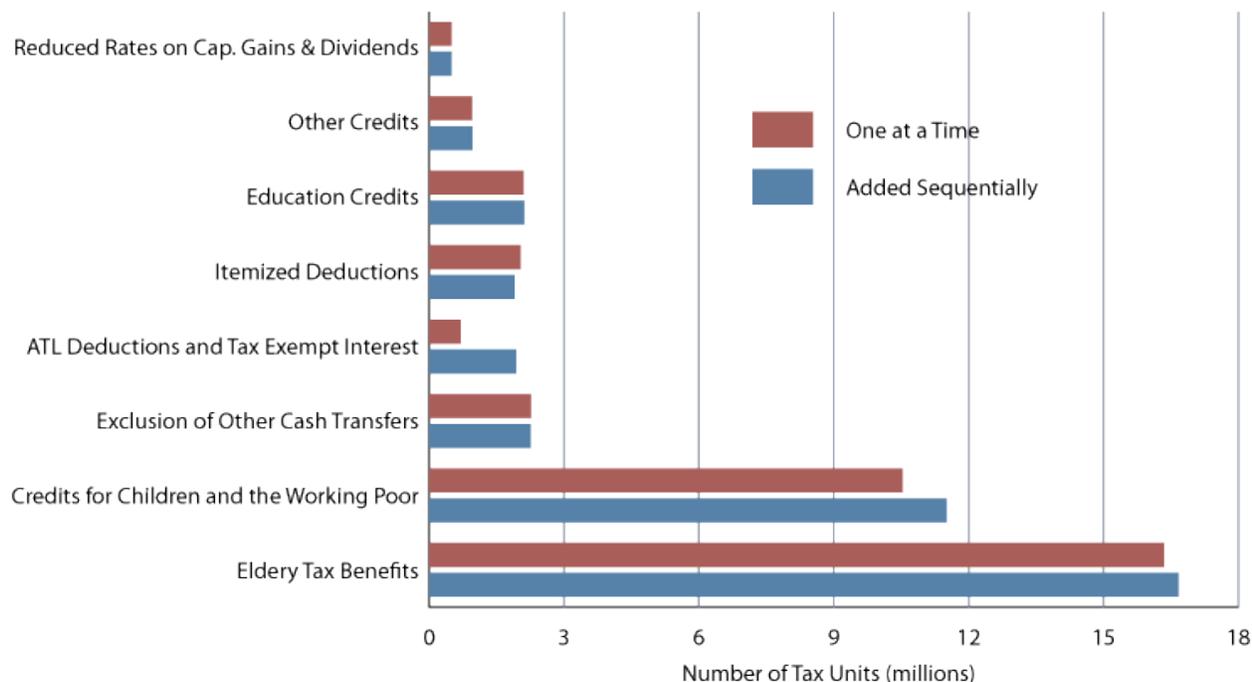
Chart 3: Units Made Nontaxable by Specific Tax Expenditure, 2011



The ordering of the eight groups of tax expenditures may affect the assessed importance of each in making units nontaxable. We therefore also examined each group's separate impact by removing just its provisions while leaving all other tax expenditures in place. For all but one group, these one-at-a-time results differ little from the results of our sequential analysis (see chart 4). For example, repealing the elderly tax benefits (and no other tax expenditures) would make 16.3 million currently nontaxable units taxable, whereas applying the elderly tax benefits as the first set of tax expenditures to the standard income tax provisions makes 16.7 million tax units nontaxable (compare tables 2 and 3). The results differ substantially, however, for the group that includes the tax expenditures for above-the-line deductions and tax-exempt interest. This group has a much smaller individual impact than when it is added on top of other tax expenditures. The difference in impact indicates that typically this group taken alone does not make units nontaxable, but it does make units nontaxable when it interacts with other tax expenditures.

Note that the analysis here covers only the effect of tax expenditures on making units nontaxable. Most taxable units also benefit from tax expenditures. For higher-income units, tax expenditure benefits are often substantial without reducing tax liability to zero because their income tax liabilities under the standard income tax provisions are larger than the tax expenditure benefits. Taking into account all tax expenditures, benefits to high-income units are much larger (both in dollar value and relative to after-tax income) than the benefits received by low- and middle-income units.¹

Chart 4: Units Made Nontaxable by Tax Expenditures
Added Sequentially vs. One at a Time, 2011



Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0411-2).

Units with Zero and Negative Income Tax Liabilities

The standard income tax provisions and most tax expenditure provisions, taken alone or in combination, make tax units nontaxable by reducing their tax liability to zero. But three tax expenditures—the child tax credit, the earned income tax credit and one of the education credits—are refundable credits: if they exceed tax liability, the excess is paid to the tax unit and the unit’s tax liability is negative.

¹ See, for example, tables T11-0086 and T11-0087 (March 31, 2011) at <http://www.taxpolicycenter.org/numbers/displayatab.cfm?Docid=2967&DocTypeID=2> and <http://www.taxpolicycenter.org/numbers/displayatab.cfm?Docid=2968&DocTypeID=2>.

An estimated 42 percent of the 76 million nontaxable tax units will have negative liability in 2011 (see table 4).² Nontaxable units with incomes below \$20,000 or above \$100,000 will more likely owe no tax than have negative income tax liabilities. Nontaxable units with incomes between \$20,000 and \$100,000 will be more likely to have negative income tax liabilities.³

Repealing all tax expenditures would still leave 38 million units nontaxable. With no tax expenditures in place, these units would all have zero income tax liability. Because of the refundable credit tax expenditures, however, nearly 40 percent of those units have negative income tax liability. Another 38 million tax units that would owe tax if only the standard income tax provisions applied are made nontaxable by tax expenditure provisions. Refundable credits result in negative income tax liabilities for about 45 percent of those units.

Some Technical Notes on the Estimates

The results presented in this paper differ slightly from those shown in previous TPC analyses⁴ for two reasons. First, the current analysis considers payment of income tax to a foreign country (to the extent of the foreign tax credit) to be part of the income tax (that is, the foreign tax credit is not considered to be a tax expenditure). Second, this analysis uses a threshold of \$5 of income tax liability to classify a tax unit as taxable; earlier analyses used a \$1 threshold.

The analysis separates nontaxable units into two groups: those that are nontaxable due to standard income tax provisions and those that become nontaxable when tax expenditure provisions are added to the income tax. It uses a modified measure of the “cash income” measure on TPC’s model that excludes items not considered income for income tax purposes.⁵ The analysis then applies the standard income tax provisions, including standard rates, to that modified cash income to determine how many tax units would be nontaxable if only these standard income tax provisions applied. Although cash income is a broad income measure, it excludes certain fringe benefits, most importantly those for employer-provided health insurance and contributions to retirement accounts. Although the income tax exclusions for these fringe benefits are considered tax expenditures, the analysis could not account for them because the cash income measure already excludes them. The analysis, therefore, does not completely isolate the effect of the standard income tax provisions from the effect of tax expenditure provisions on making tax units nontaxable.

² The analysis classifies any unit with income tax liability less than \$5 as nontaxable, any unit with income tax liability between \$5 and -\$5 as having zero liability, and any unit with income tax liability less than -\$5 as having negative liability.

³ While few tax units with income over \$50,000 qualify for the earned income tax credit, many receive the child tax credit of up to \$1,000 per child. The child credit is refundable for families with enough earned income.

⁴ See, for example, table T11-0173 (June 14, 2011) at

<http://www.taxpolicycenter.org/numbers/displayatab.cfm?Docid=3054&DocTypeID=7>.

⁵ The excluded items are the employer’s share of payroll taxes and the corresponding deduction for the self-employed, and the corporate income tax. These taxes are included in cash income in order to make it a measure of income before all taxes. The exclusion of these taxes from income is not considered tax expenditures. For a discussion of which income tax provisions are considered tax expenditures and which are not, see Office of Management and Budget, Analytical Perspectives, Federal Receipts, Tax Expenditures (Chapter 17), *Budget of the United States Government, Fiscal Year 2012*, February 2011.

Table 1
Tax Units with and without Income Tax Liability in 2011

Cash Income Level (thousands of 2011 dollars)	All Units	Units with Income Tax ¹ ("Taxable" units)		Units without Income Tax ² ("Nontaxable" units)		Units without Income Tax Due to:			
		Number (thousands)	Percent of All Tax Units (%)	Number (thousands)	Percent of All Tax Units (%)	Standard Income Tax Provisions ³		Addition of Tax Expenditure Provisions ⁴	
						Number (thousands)	Percent of Tax Units (%)	Number (thousands)	Percent of Tax Units (%)
Less than 10	24,457	157	0.6	24,300	99.4	24,247	99.8	53	0.2
10-20	28,266	5,432	19.2	22,834	80.8	9,989	43.7	12,845	56.3
20-30	20,763	8,111	39.1	12,652	60.9	2,428	19.2	10,223	80.8
30-40	17,188	10,083	58.7	7,106	41.3	387	5.4	6,719	94.6
40-50	13,691	9,505	69.4	4,186	30.6	91	2.2	4,095	97.8
50-75	19,752	16,901	85.6	2,852	14.4	37	1.3	2,814	98.7
75-100	13,684	12,963	94.7	720	5.3	10	1.4	710	98.6
100-200	18,322	17,961	98.0	361	2.0	16	4.5	345	95.5
200-500	5,366	5,312	99.0	54	1.0	5	8.8	49	91.2
500-1,000	907	894	98.5	14	1.5	1	5.8	13	94.2
More than 1,000	433	429	99.0	4	1.0	1 ⁺	23.5	3	76.5
All	163,869	87,762	53.6	76,107	46.4	38,237	50.2	37,870	49.8

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0411-2).

⁺ This figure is anomalous because "cash income" includes rollovers to IRAs, which places some units with otherwise much lower incomes in high income classes.

¹ All units for which regular income tax liability plus alternative minimum tax (AMT) liability less all credits (except the foreign tax credit) is at least \$5.

² All units for which regular income tax liability plus alternative minimum tax (AMT) liability less all credits (except the foreign tax credit) is less than \$5 (which includes negative amounts due to refundable credits).

³ Standard income tax provisions include the standard deduction, personal exemptions for taxpayers and dependents, the exclusion of the portion of retirement income (including Social Security benefits) that represent the return of previously-taxed contributions, and the deductibility of costs of earning income (including expenses that are only allowed as above-the-line or itemized deductions).

⁴ The tax expenditure provisions are described in the footnotes to Table 2.

NOTE: Units with negative incomes are not shown separately but are included in the line for All units.

Table 2
**Tax Units without Income Tax Liability Due to Addition of Tax Expenditure Provisions in 2011:
by Specific Tax Expenditure Provisions (Taken in Order Shown) That Eliminate Tax Liability**

Cash Income Level (thousands of 2011 dollars)	All Units without Income Tax Due to Tax Expenditures	Elderly Tax Benefits ¹	Credits for Children and Working Poor ²	Exclusion of Other Cash Transfers ³	ATL				Reduced Rates on Capital Gains and Dividends ⁸	
					Deductions and Tax- Exempt Interest ⁴	Itemized Deductions ⁵	Education Credits ⁶	Other Credits ⁷		
<i>Number of Units (thousands)</i>										
Less than 10	53	0	6	47	0	0	0	0	0	0
10-20	12,845	9,151	1,378	874	450	204	519	251	19	19
20-30	10,223	4,462	3,846	508	244	252	605	230	76	76
30-40	6,719	1,494	3,729	297	282	289	328	171	128	128
40-50	4,095	1,234	1,745	186	285	266	207	115	56	56
50-75	2,814	275	743	267	429	551	311	146	92	92
75-100	710	30	56	66	141	237	120	13	47	47
100-200	345	13	5	17	90	91	29	34	65	65
200-500	49	2	0	1	15	12	1	5	12	12
500-1,000	13	4 ⁺	2 ⁺	0	3	3	0	0	1	1
More than 1,000	3	0	0	0	2	1	0	0	1	1
All	37,870	16,665	11,510	2,263	1,942	1,907	2,120	965	497	497
<i>Percent of All Units without Income Tax Liability Due to Tax Expenditures</i>										
Less than 10	100.0	0.0	10.9	89.1	0.0	0.0	0.0	0.0	0.0	0.0
10-20	100.0	71.2	10.7	6.8	3.5	1.6	4.0	2.0	0.2	0.2
20-30	100.0	43.6	37.6	5.0	2.4	2.5	5.9	2.2	0.7	0.7
30-40	100.0	22.2	55.5	4.4	4.2	4.3	4.9	2.5	1.9	1.9
40-50	100.0	30.1	42.6	4.6	7.0	6.5	5.0	2.8	1.4	1.4
50-75	100.0	9.8	26.4	9.5	15.3	19.6	11.0	5.2	3.3	3.3
75-100	100.0	4.2	7.9	9.3	19.8	33.4	16.9	1.8	6.7	6.7
100-200	100.0	3.8	1.5	4.9	26.1	26.4	8.5	9.9	18.9	18.9
200-500	100.0	4.7	0.0	1.7	30.7	24.2	2.3	11.0	25.3	25.3
500-1,000	100.0	31.7	11.7	0.4	22.0	25.7	1.1	3.1	4.3	4.3
More than 1,000	100.0	0.0	0.0	0.0	49.5	23.1	0.0	2.2	25.1	25.1
All	100.0	44.0	30.4	6.0	5.1	5.0	5.6	2.5	1.3	1.3

See notes on page 10

Table 3
Tax Units without Income Tax Liability Due to Addition of Tax Expenditure Provisions in 2011:
Number That Would Have Income Tax Liability if Specific Tax Expenditure Provisions (and no Others) Were Repealed

Cash Income Level (thousands of 2011 dollars)	All Units without Income Tax Due to Tax Expenditures	Repeal Elderly Tax Benefits	Repeal Credits for Children and Working Poor	Repeal Exclusion of Other Cash Transfers	Repeal ATL Deductions and Tax- Exempt Interest	Repeal Itemized Deductions	Repeal Education Credits	Repeal Other Credits	Repeal Reduced Rates on Capital Gains & Dividends
<i>Number of Units (thousands)</i>									
Less than 10	53	0	67	38	0	0	4	0	0
10-20	12,845	8,080	1,046	837	92	181	482	245	19
20-30	10,223	4,367	2,929	494	95	230	604	225	75
30-40	6,719	1,734	3,137	299	98	306	325	167	128
40-50	4,095	1,412	1,702	189	87	262	219	115	56
50-75	2,814	630	1,275	302	196	564	318	147	92
75-100	710	84	306	76	54	326	123	12	49
100-200	345	30	56	28	69	139	21	39	69
200-500	49	4 ⁺	6	1	13	24	3	6	14
500-1,000	13	4	0	0	2	4	0	0	1
More than 1,000	3	0	0	0	2	2	0	0	1
All	37,870	16,345	10,529	2,265	707	2,037	2,099	956	505
<i>Percent of All Units without Income Tax Liability Due to Tax Expenditures</i>									
Less than 10	100.0	0.0	127.4	71.4	0.0	0.0	7.1	0.0	0.0
10-20	100.0	62.9	8.1	6.5	0.7	1.4	3.8	1.9	0.2
20-30	100.0	42.7	28.7	4.8	0.9	2.2	5.9	2.2	0.7
30-40	100.0	25.8	46.7	4.5	1.5	4.6	4.8	2.5	1.9
40-50	100.0	34.5	41.6	4.6	2.1	6.4	5.3	2.8	1.4
50-75	100.0	22.4	45.3	10.7	7.0	20.0	11.3	5.2	3.3
75-100	100.0	11.8	43.1	10.6	7.7	45.9	17.3	1.7	6.9
100-200	100.0	8.7	16.3	8.2	19.9	40.5	6.2	11.3	19.9
200-500	100.0	8.2	12.2	1.8	26.2	47.9	5.6	11.4	29.1
500-1,000	100.0	30.6	0.7	0.6	15.6	29.5	2.4	1.6	11.2
More than 1,000	100.0	1.4	0.7	11.0	47.7	51.7	1.3	2.0	31.9
All	100.0	43.2	27.8	6.0	1.9	5.4	5.5	2.5	1.3

See notes on page 10

Table 4
Tax Units without Income Tax Liability in 2011:
Number with Zero and with Negative Income Tax Liability

Cash Income Level (thousands of 2011 dollars)	All Units without Income Tax Liability			Units without Income Tax Due to:					
	Total	with Zero ¹ Tax Liability	with Negative Tax Liability	Standard Income Tax Provisions ³			Addition of Expenditure Provisions		
				Total	with Zero ¹ Tax Liability	with Negative Tax Liability	Total	with Zero ¹ Tax Liability	with Negative Tax Liability
	<i>Number of Units (thousands)</i>								
Less than 10	24,300	17,098	7,202	24,247	17,051	7,196	53	47	6
10-20	22,834	15,204	7,630	9,989	4,693	5,296	12,845	10,512	2,333
20-30	12,652	5,824	6,828	2,428	488	1,940	10,223	5,336	4,887
30-40	7,106	2,219	4,886	387	95	292	6,719	2,124	4,595
40-50	4,186	1,532	2,654	91	24	66	4,095	1,508	2,587
50-75	2,852	885	1,967	37	12	25	2,814	873	1,942
75-100	720	247	473	10	10	0	710	237	473
100-200	361	218	143	16	10	6	345	208	137
200-500	54	42	12	5	4	1	49	38	11
500-1,000	14	10	3	1	1	0	13	10	3
More than 1,000	4	4	1	1	1	0	3	3	1
All	76,107	44,028	32,079	38,237	23,133	15,104	37,870	20,895	16,975
	<i>Percent of All Units without Income Tax Liability Due to Tax Expenditures</i>								
Less than 10	100.0	70.4	29.6	99.8	70.2	29.6	0.2	0.2	0.0
10-20	100.0	66.6	33.4	43.7	20.6	23.2	56.3	46.0	10.2
20-30	100.0	46.0	54.0	19.2	3.9	15.3	80.8	42.2	38.6
30-40	100.0	31.2	68.8	5.4	1.3	4.1	94.6	29.9	64.7
40-50	100.0	36.6	63.4	2.2	0.6	1.6	97.8	36.0	61.8
50-75	100.0	31.0	69.0	1.3	0.4	0.9	98.7	30.6	68.1
75-100	100.0	34.3	65.7	1.4	1.4	0.0	98.6	32.9	65.7
100-200	100.0	60.4	39.6	4.5	2.8	1.7	95.5	57.6	37.9
200-500	100.0	78.3	21.7	8.8	7.6	1.2	91.2	70.7	20.5
500-1,000	100.0	76.1	23.9	5.8	5.6	0.2	94.2	70.5	23.7
More than 1,000	100.0	87.3	12.7	23.5	22.8	0.8	76.5	64.5	12.0
All	100.0	57.8	42.2	50.2	30.4	19.8	49.8	27.5	22.3

See notes on page 10

Notes and Footnotes to Tables 2, 3 and 4

Table 2:

⁺ These figures are anomalous because "cash income" includes rollovers to IRAs, which places some units with otherwise much lower incomes in high income classes.

¹ The extra standard deduction for the elderly, the exclusion of Social Security benefits in excess of the return of previously taxed contributions (which is assumed to be 15 percent of all beneficiaries), and the tax credit for the elderly.

² The child tax credit, the child and dependent care tax credit and the earned income tax credit.

³ Exclusion from income tax for cash transfers (other than unemployment benefits and Social Security benefits), including SSI, TANF, workers' comp, disability and energy assistance.

⁴ Allowance of all above-the-line deductions except deductions for costs of earning income (educator expenses, certain expenses of reservists, moving expenses, penalty for early withdrawal of savings, alimony paid), and the exemption of interest on state and local bonds.

⁵ Allowance of all itemized deductions except deductions for costs of earning income (job expenses and certain miscellaneous expenses subject to a 2 percent of AGI floor); gambling losses would be included but are not available on the tax return data file available to TPC for constructing its microsimulation model.

⁶ The American opportunity and lifetime learning credits.

⁷ All other credits (except the foreign tax credit), including the savers' and general business credits.

⁸ The special rate of zero on capital gains and qualified dividends that would otherwise be taxed at 10 percent or 15 percent. The special rate of 15 percent that applies to capital gains and qualified dividends that would otherwise be taxed at rates above 15 percent can also eliminate tax liability in combination with excess credits from the preceding steps.

NOTE: Units with negative incomes are not shown separately but are included in the line for All units.

Table 3:

⁺ This figure is anomalous because "cash income" includes rollovers to IRAs, which places some units with otherwise much lower incomes in high income classes.

NOTE: Units with negative incomes are not shown separately but are included in the line for All units.

Table 4:

⁺ This figure is anomalous because "cash income" includes rollovers to IRAs, which places some units with otherwise much lower incomes in high income classes.

¹ Tax liability is considered to be zero if regular income tax liability plus alternative minimum tax (AMT) liability less all credits (except the foreign tax credit) is between -\$5 and \$5.

² Tax liability is considered to be negative if regular income tax liability plus alternative minimum tax (AMT) liability less all credits (except the foreign tax credit) is less than -\$5.

³ Note that in this table the tax expenditure provisions are being taken into effect in determining tax liability (only tax expenditure provisions give rise to negative tax liabilities).

NOTE: Units with negative incomes are not shown separately but are included in the line for All units.