Poverty Levels and Federal Tax Thresholds: 2001

By
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Jonathan Forman and Hilary Nolan set forth the income amounts at which various low-income families will owe taxes using the poverty income guidelines and factoring in the earned income credit and the child tax credit.

This article compares the federal tax thresholds of various family units with their poverty income guidelines.1 Basically, this article shows that low-income families with children generally will not owe any federal taxes for 2001.2 On the other hand, at least some low-income, unmarried individuals and families without children will owe federal taxes for 2001, as their federal tax thresholds are lower than their poverty income guidelines. The changes made by the Economic Growth and Tax Relief Reconciliation Act of 2001 are incorporated into the calculation of these thresholds.3

Poverty Levels and Net Federal Tax Thresholds

At the outset, Table 1 compares the 2001 federal tax thresholds and poverty income guidelines for unmarried individuals and for married couples.4 Consider a family of four consisting of a married couple and two children. Row 1 of Table 1 shows that this family unit’s poverty income guideline for 2001 is $17,650.

Row 2 of Table 1 shows the simple income tax thresholds for family units of different sizes. The simple income tax thresholds are determined by summing each family unit’s standard deduction and its personal exemptions. For 2001, a married couple with two children can file a joint tax return and claim a $7,600 standard deduction and four $2,900 personal exemptions.5 Consequently, the couple will not have to pay any income tax unless its income exceeds the $19,200 simple income tax threshold ($19,200 = $7,600 + [4 x $2,900]).

Row 3 of Table 1 shows each family unit’s income tax threshold after taking into account the effects of the earned income credit6 and the child tax credit.7 For example, for 2001, a typical married couple with two young children can claim an earned income credit of up to $4,008 and two child tax credits worth up to $600 per child. Consequently, taking into account the earned income and child tax credits, a typical married couple with two children will not actually owe any income tax until its income exceeds $31,738.8

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On the other hand, because the Social Security tax system has no standard deductions or personal exemptions, family units must pay Social Security taxes starting with their first dollar of earned income. Hence, Row 4 of Table 1 shows that zero is the Social Security tax threshold for all family units. Finally, Row 5 of Table 1 shows the combined income and Social Security tax threshold (i.e., net federal tax threshold) for various family units. These thresholds occur at the income level at which a taxpayer’s preliminary income plus Social Security tax liabilities minus earned income and child tax credits equals zero. For example, a typical married couple with two children will not actually have a net federal tax liability for 2001 unless its income exceeds $25,535.

Similarly, Table 2 compares the 2001 federal tax thresholds and poverty income guidelines for heads of household with one to four children.

### Federal Taxes at the Poverty

The two tables in this section show the 2001 federal tax liabilities of various family units with earnings exactly equal to their respective poverty income guidelines. At the outset, Table 3 shows the 2001 federal tax liabilities at the poverty level for unmarried individuals and for married couples. Consider a hypothetical family of four consisting of a married couple with two children. Again, Row 1 shows that the couple’s poverty income guideline in 2001 is $17,650.

Assuming that the couple has exactly that much earned income in 2001, Row 2 shows that the couple will be entitled to an income tax refund of $3,813. As the couple’s income tax refund in Row 2 will be greater than its Social Security tax liability in Row 3, the couple will be entitled to receive a net refund of $2,462 from the federal government, as shown in Row 4. Finally, Row 5 expresses the couple’s net federal tax liability as a percent of income: for 2001, the couple will have a net federal tax liability equal to -14.0 percent of its poverty-level income.

Similarly, Table 4 shows the 2001 federal tax liabilities at the poverty level for heads of household with one to four children.

### Conclusion

The four tables in this article show that very few low-income workers will owe federal taxes for 2001. Quite simply, the
earned income credit and the child tax credit will offset the Social Security and preliminary income tax liabilities of millions of low-income workers. In fact, most low-income families with children will receive significant subsidies from the federal government—via the earned income and child tax credits. All in all, the earned income credit and the child tax credit are important programs for low-income workers.


Of note, the new 10-percent income tax rate applies to the first $6,000 of taxable income for unmarried individuals, the first $10,000 for heads of household, and the first $12,000 for married couples filing joint returns. Code Sec. 1(i). For the 2001 tax year, most taxpayers will receive an advance payment of this rate-cut benefit in the form of a tax rebate, paid out during 2001. Code Sec. 6428. The credit is computed as five percent (the difference between the 15-percent rate and the 10-percent rate) of the amount of income that would have been eligible for the new 10-percent rate. For example, a typical married couple will receive a $600 rebate check ($600 = 5% x $12,000) from the Treasury in 2001. For simplicity, the computations in this article apply the new 10-percent rate, in lieu of the five-percent credit.


4 The table reflects the assumptions that all family income consists of wages or salaries earned by a single worker, that families of two or more include a married couple (rather than an unmarried head of household with one or more dependents), that all family members are under age 65 and not blind, that all family units are eligible for the earned income credit and that all children qualify for the child tax credit. Also, only the employee’s portion of Social Security taxes is considered.

5 Rev. Proc. 2001-13, 2001-3 IRB 337. For 2001, the basic standard deduction amounts are $7,600 for married couples filing jointly and surviving spouses; $6,650 for heads of household; $4,550 for unmarried individuals; and $3,800 for married individuals filing separately. Aged or blind individuals generally are entitled to claim additional standard deduction amounts of $900, except that aged or blind unmarried individuals can claim additional standard deduction amounts of $1,100. The personal exemption amount is $2,900.

6 Code Sec. 32. The earned income credit is a refundable credit available to certain low- and moderate-income workers. For 2001, childless individuals between the ages of 25 and 65 are entitled to an earned income credit of up to $364. The credit is computed as 7.65 percent of the first $4,760 of earned income. The maximum credit is reduced by 7.65 percent of earned income.
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The child tax credit is available to individuals with qualifying children. For the year 2001, the employee portion of Social Security taxes is 7.65 percent of the first $80,400 of wages, plus another 1.45 percent of wages in excess of $80,400. Social Security Administration, Cost-of-Living Increase and Other Determinations for the Year 2001, 65 Fed. Reg. 63,663 (2001).

Algebraically, each computation in Row 4 involved determining the appropriate equation for computing each family unit's combined income and Social Security tax liability after its earned income and child tax credits and solving for the income level at which that tax liability is equal to zero.

For example, in 2001, for a married couple with two children with income (I) in excess of $19,200, the couple's combined income and Social Security tax liability (T) can be determined by the following formula:

\[
T = .10 x (31,200 - \$19,200) + .15 x (I - 31,200) - (4,008 - .2106 x (I - \$10,000)).
\]

Setting T equal to zero and solving for I shows that the couple's income tax threshold after the earned income and child tax credits is $3,738.


Algebraically, each computation in Row 5 involved determining the appropriate equation for computing each family unit's combined income and Social Security tax liability after its earned income and child tax credits and solving for the income level at which that tax liability is equal to zero.

For example, in 2001, for a married couple with two children with income (I) in excess of its $19,200 simple income tax threshold, but less than the $31,200 level, at which the taxpayer enters the 15-percent tax bracket, the couple's income tax liability (T) can be determined by the following formula:

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T = .10 x (31,200 - \$19,200) + .15 x (I - 31,200) - (4,008 - .2106 x (I - \$10,000)) - (2 x \$600).
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