

Designing Tax Cuts to Benefit Low-Income Families

Frank J. Sammartino

With support from the Bush administration, the Federal Reserve Board Chairman, and Congress, a major cut in the federal income tax is almost certain. The question now is what type of cut it should be. Proponents often speak as though all tax cuts would benefit all groups. Not all income tax cuts are alike, however. Many popular options in fact provide no benefit to low-income families.

The reason is simple. Low-income families pay little or no income tax and thus would receive little help from proposals that reduce only positive income tax liabilities. Although most low-income families do not pay federal income taxes, they do work and pay federal payroll and excise taxes, as well as substantial state and local taxes in many jurisdictions. Fairness does not dictate that all tax relief should go to low-income families, but neither should they be totally left out.

Comparing the relative benefits of different types of tax cuts to families at varying income levels helps shed light on how tax relief can, indeed, benefit all families. The discussion here compares five types of tax cuts that are representative of recent proposals:

- An across-the-board income tax rate cut,
- An increased standard deduction and a widening of the bottom income tax bracket,
- An increased child care credit,
- An increased earned income tax credit (EITC), and
- A refundable payroll tax credit.

The comparison reveals that the most important feature of tax relief, if it is to benefit low-income Americans, is full refundability (e.g., that the benefit not be limited by a taxpayer's income tax liability). Of the proposals analyzed here, the two that would benefit low-income families most are an expanded EITC and a refundable payroll tax credit. Over 40 percent of the benefits of either option would go to households with incomes below \$30,000 a year.

A more generous child credit would provide limited benefit to low-income families, even if it were refundable for all families (it is currently refundable only for families with three or more children), because the child credit's refundability is limited to the amount by which a family's payroll tax liability exceeds any EITC.¹ About 60 percent of the benefits from both the child credit options analyzed here would go to households with incomes between \$30,000 and \$75,000.

Almost 40 percent of the benefits from an increased standard deduction and a widening of the lowest tax bracket would go to the 15 percent of people in households with incomes over \$100,000; over 50 percent of the benefits of an across-the-board income tax rate cut of 5 percent would go to those households.

Measuring the Relative Benefit from Tax Cuts

The five tax cut comparisons discussed here are displayed in table 1, along with the provisions of current law that would

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TABLE 1. *The Simulated Federal Tax Cut Options***I. Tax Rate Cut of 5 Percent****Current Law:** Five tax brackets with rates of 15, 28, 31, 36, and 39.6 percent.**Option:** Retain current tax brackets, cut tax rate in each bracket by 5 percent.**II. Larger Standard Deduction and Wider Bottom Tax Bracket****Current Law:** In tax year 1998, standard deductions were \$7,100 for married couples, \$6,250 for heads of households, and \$4,250 for single taxpayers. After personal exemptions and standard (or itemized) deductions were subtracted, a 15 percent tax rate applied to the first \$42,350 of income for couples, \$33,950 for household heads, and \$25,350 for singles.**Option:** Increase all standard deductions and the income limit for the 15 percent tax bracket by 18 percent. For example, for married couples the standard deduction would rise to \$8,350 and the 15 percent bracket would extend to income up to \$49,950.**III. Increased Child Tax Credit****Current Law:** \$400 credit for each child under 18 in 1998 (\$500 in all subsequent years). The credit is refundable only for families with more than two children, and only up to the amount by which the family's payroll tax exceeds their EITC.**Option (Variant A):** Increase the credit to \$1,300 per child, with refundability limited to current rules.**Option (Variant B):** Increase the credit to \$1,200 per child, extend refundability to all families, regardless of size, and keep current limit on refundable amount.**IV. Increased Earned Income Tax Credit****Current Law:** In tax year 1998, the credit equaled 40 percent of the first \$9,390 of earnings for families with two or more children, 34 percent of the first \$6,680 of earnings for families with one child, and 7.65 percent of the first \$4,460 of earnings for single workers. The credit was reduced if income exceeded \$12,260 for families with children and \$5,770 for single workers.**Option:** Increase the phase-up rate and the income threshold at which the credit phases out by 25 percent (e.g., the credit for a family with two children would equal 50 percent of the first \$9,390 of earnings, raising the maximum credit from \$3,756 to \$4,695, and the credit would be reduced if income exceeded \$15,320).**V. Refundable Payroll Tax Credit****Current Law:** No credit**Option:** A new refundable credit equal to the employee share of payroll taxes (7.65 percent of earnings) up to a maximum credit of \$500 per person. The credit would phase out at the rate of \$50 for every \$1,000 of adjusted gross income (AGI) in excess of \$42,000 for couples and in excess of \$25,200 for other taxpayers.

be changed. Each option is simulated as if it were law in 1998—the latest year for which data were available—using the Urban Institute's Transfer Income Model (TRIM).²

To accurately measure the taxpayer benefits of tax cut options appropriately, two requirements must be met. First, the options being compared should have equal overall implications for the federal budget: Because tax cuts can reduce the money available for federal programs, many of which benefit low-income families, a fair analysis should ensure that any reductions in these benefits be equal across tax cut proposals. The options assessed here

would each reduce 1998 federal revenues by about \$34 billion.

The second requirement is that the measured benefit reflect the tax cut's impact on economic well-being—the income the family has to spend. Many analyses violate this requirement by measuring the benefit as the percent change in a household's tax liability, making it seem that low-income families derive the most benefit from income tax cuts because they pay so little tax to begin with. For example, suppose a tax cut reduces the tax liability of a family with income of \$20,000 from \$200 to \$0 and the liability of a family with income of \$200,000 from \$40,000 to

\$32,000. The low-income family's tax is cut by 100 percent, the high-income family's by 20 percent, but while the lower-income family's after-tax income has increased by 1 percent, the higher-income family's has by 5 percent. Most people would not think the low-income family in this example had in fact benefited more than its high-income counterpart.

Two measures are used here to capture changes in economic well-being. The first is the change in the average tax rate (i.e., the fraction of *each* dollar of income that goes in tax) facing different income groups.³ This measures the tax cut as a percentage of the family's pre-tax income. The greater the reduction in an income group's average tax rate, the greater their benefit. The second measure is the percentage change in after-tax income. Again, those income groups with larger percentage increases in after-tax income receive larger relative benefits from the tax cut.

The Federal Tax Burden on Low-Income Americans

The federal income tax system is progressive: The higher a family's income, the higher its taxes as a percentage of income. Most low-income families currently pay little or no federal income tax. Two changes have contributed the most to reducing low-income families' federal taxes. First, increases in the personal exemption and standard deductions, enacted in 1986, removed many low-income families from the tax rolls. The level of inflation-adjusted income at which a family of four begins to pay tax is nearly double what it was before 1986 and is significantly above the federal poverty level (FPL). Second, several tax bills, especially in 1990 and 1993, greatly increased the EITC, a tax credit applied to low-income families' wages that phases out as income rises above a certain level. It provides the largest benefits to work-

ers with children, but a small credit is also available to childless workers. Because the EITC is specifically designed to assist low-income working families, the recent expansions of the credit have had profound effects on the overall tax burdens faced by such families. About 19 million taxpayers now receive the EITC, claiming nearly \$30 billion in credits. About \$23 billion of the EITC represents net refunds (credits in excess of positive income tax liabilities).

The child credit enacted in 1997, in contrast, provides little tax relief for many low-income families with children because it is generally not refundable. Only families with three or more eligible children can receive a refund if their total credit exceeds their income tax, and even then the refund is limited to the amount by which their payroll taxes exceed any EITC. Thus, families with no income tax liability and fewer than three children receive no benefit from the credit, while families with low income tax liability receive only a partial benefit. In 1998, only about two-thirds (25 million) of families that filed a tax return and had at least one child under age 17 claimed full or partial child credits; these totaled over \$15 billion. Of the approximately one-third of families with children that received no credit, most (11.5 million) were low-income families who had no income tax liability. Only about 700,000 families benefited from the credit's refundability provision.

In sharp contrast to the progressive rate structure of the federal income tax, the payroll tax is levied at a single rate, paid by both workers and their employers, that is currently 6.2 percent of earnings for Old Age, Survivor, and Disability Insurance (OASDI), and 1.45 percent for the Hospital Insurance program (Medicare). Low-income families actually pay a higher proportion of income in payroll taxes than do high-income families, for two reasons: The tax is

levied only on earnings (not on investment income), and the OASDI portion of the tax exempts earnings above a certain level (\$76,200 in 2000).⁴

Although almost all working Americans pay positive payroll taxes, and three-quarters of U.S. families pay more in payroll taxes than in income taxes, many low-income families receive more in refunds than they owe in taxes, because their EITC exceeds the sum of their payroll and income tax liabilities. As shown in the top panel of table 2, for example, a married couple with two children and income equal to the FPL would have received a net income tax refund of about \$2,882 in 1999. Since they would have paid payroll taxes of \$1,292 in that year (assuming that all their income is earnings, and counting only the employee-paid portion of the payroll tax), they would have received a net refund of \$1,590 on their federal taxes.⁵

Relative Benefits of Different Tax Cut Options

A good way to see the relative impacts of different tax cut options is

to look at the percent of the total benefit going to different income groups. To provide context for this discussion, the share of current federal income tax and of current income and payroll taxes is also shown in table 3.

The only options with appreciable benefit shares going to the lowest income groups are options IV and V—the increased EITC and the payroll tax credit (table 3). Most of the benefits for both (46 percent and 41 percent, respectively) go to families with incomes of less than \$30,000 a year.

Increasing the child credit (options IIIa and IIIb) would provide about 60 percent of the benefits to families with incomes between \$30,000 and \$75,000. A slightly higher share would go to families with income at and just below the lower end of that income range if smaller families were made eligible for the credit's limited refundability.

Options I and II would do little for low-income families. Over 60 percent of the benefits from raising the standard deduction and increasing the income range for the 15 percent tax bracket would go to households

TABLE 2. Federal Income and Payroll Taxes Paid by Low-Income Families, 1999

	Annual Income		
	100 Percent of FPL	150 Percent of FPL	200 Percent of FPL
Married Couple with Two Children			
Income Tax	-2,882	-1,032	1,339
Payroll Tax	1,292	1,939	2,585
Total	-1,590	907	3,924
Single Parent with Two Children			
Income Tax	-3,613	-2,200	51
Payroll Tax	1,027	1,540	2,054
Total	-2,586	-660	2,105
Single Adult			
Income Tax	125	893	1,543
Payroll Tax	663	995	1,326
Total	788	1,888	2,869

Source: Urban Institute calculations. For details see Sammartino (2001, table 1).

Notes: In 1999, the federal poverty level (FPL) was \$16,895 for a married couple with two children, \$13,423 for a single parent with two children, and \$8,667 for a single adult under age 65.

Payroll tax includes only the employee portion of Social Security (OASDI) and Medicare (HI) payroll taxes.

with incomes over \$75,000. Only the 25 percent of taxpayers currently facing statutory rates greater than 15 percent would benefit if the income range for the 15 percent bracket were increased. Furthermore, those taxpayers at the low end of the 28 percent income bracket, who have a small portion of their income taxed at that rate, would receive only a small benefit from the bracket widening.

Over 50 percent of the benefits from a 5 percent across-the-board cut in tax rates would go to households with incomes of \$100,000 or more (representing only 15 percent of the population). This benefit share is less than their current share of federal income taxes but more than their current share of combined income and payroll taxes.

Measured as the percentage increase in after-tax income, neither the across-the-board cut in tax rates nor the increase in standard deductions and the widening of the bottom tax bracket are progressive changes in taxes. The percentage gain in after-tax income increases with family income; in the case of the across-the-board cut in tax rates, the largest increases are for families with the highest incomes (table 4). The refundable payroll tax credit is the most progressive option, with the lowest-income families seeing the largest percentage gains in after-tax income.

Table 5 shows how the different options would affect low-income families with children by comparing the average income tax rates currently faced by two-parent families with children under 18 with the rates they would face under the various tax cut options. The impact of the child credit's refundability limit is again clear. The proposals to increase the EITC or to create a new refundable payroll tax credit would have the biggest impact on low-income families, boosting those families' refunds. Both

TABLE 3. *Percent Share of Baseline Income Taxes and Payroll Taxes and Simulated Tax Cuts, by Income Level (All Households, 1998)*

Income	Percent Share of Baseline Taxes			Percent Share of Simulated Tax Cuts				
	Income Taxes	Income and Payroll Taxes	5 Percent Cut in Tax Rates (I)	Increased Child Credit				
				Increased Standard Deduction, Wider Bottom Bracket (II)	\$1,300 Credit, Partially Refundable for Large Families* (IIIa)	\$1,200 Credit, Partially Refundable for All Families (IIIb)	Increased EITC (IV)	New \$500 Refundable Payroll Tax Credit (V)
\$0 to \$10,000	-0.4	0.1	0.0	0.3	0.0	0.0	2.9	5.1
\$10,000 to \$20,000	-0.6	1.2	0.8	2.3	0.1	0.3	14.6	16.0
\$20,000 to \$30,000	1.8	3.9	2.8	4.3	3.3	5.3	29.0	20.1
\$30,000 to \$40,000	4.4	6.5	5.0	6.5	12.0	14.1	30.6	19.3
\$40,000 to \$50,000	5.3	7.1	5.7	8.2	14.7	14.8	13.2	15.1
\$50,000 to \$75,000	16.1	19.4	16.6	17.2	33.6	31.8	7.0	16.6
\$75,000 to \$100,000	14.7	16.0	14.7	23.5	20.1	18.8	1.8	4.1
\$100,000 to \$200,000	30.6	27.2	28.6	30.5	16.0	14.7	0.8	3.3
\$200,000 and over	28.2	18.7	25.6	7.3	0.2	0.2	0.1	0.4
All Incomes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Urban Institute TRIM microsimulation model. For details see Sammartino (2001, table 10).

* Families with more than two children.

credits apply only to families with earnings, so the impact on families with children is much greater than the impact on other low-income families and individuals, about 40 to 50 percent of whom are elderly. Families with children and income below \$20,000 would see an average increase in their net refunds of 5 to 6 percent of family income from the increased EITC, and a somewhat smaller increase from the payroll tax

credit. Families with incomes of \$20,000 to \$30,000 would see an increase of about 9 percent of income from the EITC option, and about 2.5 percent from the payroll tax credit.

Conclusion

Whether or not a tax reduction disproportionately benefits low- or high-income families is only one criterion by which to judge its merits.

TABLE 4. *Percentage Change in Average Income after Tax, by Income Level (All Households, 1998)*

Income	Percentage Change in Average After-Tax Income after Simulated Tax Cuts					
	5 Percent Cut in Tax Rates (I)	Increased Standard Deduction, Wider Bottom Bracket (II)	Increased Child Credit			New \$500 Refundable Payroll Tax Credit (V)
			\$1,300 Credit, Partially Refundable for Large Families* (IIIa)	\$1,200 Credit, Partially Refundable for All Families (IIIb)	Increased EITC (IV)	
\$0 to \$10,000	0.0	0.1	0.0	0.0	1.2	2.1
\$10,000 to \$20,000	0.1	0.3	0.0	0.0	1.9	2.1
\$20,000 to \$30,000	0.3	0.4	0.3	0.5	2.8	1.9
\$30,000 to \$40,000	0.4	0.6	1.0	1.2	2.5	1.6
\$40,000 to \$50,000	0.5	0.7	1.3	1.3	1.1	1.3
\$50,000 to \$75,000	0.6	0.6	1.3	1.1	0.3	0.6
\$75,000 to \$100,000	0.8	1.2	1.0	0.9	0.1	0.2
\$100,000 to \$200,000	0.9	1.0	0.5	0.5	0.0	0.1
\$200,000 and over	1.6	0.4	0.0	0.0	0.0	0.0
All Incomes	0.7	0.7	0.7	0.7	0.7	0.7

Source: Urban Institute TRIM microsimulation model. For details see Sammartino (2001, table 13).

* Families with more than two children.

TABLE 5. Average Federal Tax Rates before and after Simulated Tax Cuts, by Income Level (Two-Adult Families with Children, 1998)

Income	Average Federal Tax Rate, Current Law		Average Federal Income Tax Rate after Simulated Tax Cuts (percent)						
	Income Taxes	Income and Payroll Taxes	5 Percent Cut in Tax Rates (I)	Increased Standard Deduction, Wider Bottom Bracket (II)	Increased Child Credit, Partially Refundable for Large Families* (IIIa)	Increased Child Credit, Partially Refundable for All Families (IIIb)	Increased EITC (IV)	New \$500 Refundable Payroll Tax Credit (V)	
\$0 to \$10,000	-19.8	-9.9	-19.8	-19.9	-19.8	-20.0	-24.8	-24.3	
\$10,000 to \$20,000	-14.8	-3.4	-14.8	-14.9	-14.8	-15.0	-21.1	-18.2	
\$20,000 to \$30,000	-4.4	7.8	-4.5	-4.7	-5.3	-6.0	-13.1	-7.0	
\$30,000 to \$40,000	1.6	14.2	1.4	1.2	-1.2	-1.6	-4.8	-0.5	
\$40,000 to \$50,000	4.2	16.9	3.9	4.0	1.0	1.2	1.9	2.5	
\$50,000 to \$75,000	6.7	19.5	6.3	6.5	4.3	4.5	6.3	6.1	
\$75,000 to \$100,000	9.3	21.8	8.8	8.5	7.6	7.8	9.2	9.2	
\$100,000 to \$200,000	13.5	24.3	12.8	12.7	12.6	12.7	13.5	13.4	
\$200,000 and over	23.8	29.7	22.7	23.5	23.8	23.8	23.8	23.8	
All Incomes	10.7	21.7	10.1	10.2	9.2	9.3	9.7	10.2	

Source: Urban Institute TRIM microsimulation model. For details see Sammartino (2001, tables 8 and 9).

* Families with more than two children.

Other goals, such as economic efficiency, tax simplicity, and reduction of taxpayers' compliance burdens, are important as well. Proposals aimed at helping low-income families do not necessarily advance these other goals and may detract from them. When benefits are targeted to particular taxpayers, there must be rules determining who is eligible, increasing tax complexity and creating opportunities for errors and abuse.

In deciding how to take advantage of the opportunity represented by budget surpluses, Congress must first compare tax relief with other options, such as paying down the federal debt or addressing the future insolvency of Social Security and Medicare. If a tax cut is the best option, lawmakers must consider the merits of targeting relatively more tax relief to higher-income families, who have enjoyed extraordinary prosperity over the past decade, when there are many other families

who work and pay taxes but do not enjoy the same economic security.

Endnotes

1. A number of proposals under consideration by Congress would dramatically change the current limits on refundability of the child credit. If enacted, those proposals would provide substantial benefits to low-income families.
2. TRIM computes income and payroll taxes based primarily on (a) detailed income information from the March 1999 Current Population Survey (CPS) and (b) Internal Revenue Service (IRS) data on itemized deductions and other tax variables from individual income tax returns. The current version of the model incorporates most major provisions of the Taxpayer Relief Act of 1997. HOPE and lifetime learning educational expenses credits are not included.
3. For many types of tax impact, the relevant tax rate is the marginal rate—the percent of the last dollar of income that goes to pay taxes. This is the correct concept, for example, in analyzing the impact of tax policy on the incentive to work and save.
4. Some analysts measure the burden of OASDI taxes as taxes paid net of the expected increase in future retirement benefits. This is not the approach taken here.

Although future Social Security benefits are tied to current earnings, the link is not direct. A dollar of additional payroll taxes can result in very different dollar amounts, depending on a worker's marital status and past and future earnings of additional benefits and may produce no benefit increase at all.

5. The federal government also collects corporate income and sales taxes, which are not included here. Most economists agree that corporate taxes primarily burden people who own capital, so those taxes fall disproportionately on higher-income groups. But there is also consensus that the burden of excise taxes on specific goods (e.g., gasoline, alcohol, and tobacco) falls disproportionately on low-income families.

See Sammartino (2001) for details on state income and sales taxes paid by low-income families in a number of representative states.

Reference

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Frank J. Sammartino is a principal research associate at the Urban Institute, with research interests in tax policy, retirement, and income security. He is an expert in the use of microsimulation models to forecast and analyze tax and transfer policies. Prior to joining the Urban Institute in 1999, Mr. Sammartino served as deputy assistant director for tax analysis at the Congressional Budget Office, where he directed tax policy research and was one of the two architects of the models the agency used to project individual income tax revenues and to analyze the distribution of federal taxes among families.



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