

The distributional implications of the Tax Reform Act of 1986

by Daniel H. Weinberg

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In any tax reform package, attempts can be made to restructure the tax system to be more generous to one particular group than to another and to affect economic behavior. The changes made by the Tax Reform Act of 1986 (TRA) cannot be characterized simply. On the one hand, TRA will reduce marginal tax rates, presumably to encourage work effort, thereby increasing total income. The lower marginal rates are also expected to reduce tax avoidance by making it less profitable. Clearly, reducing tax rates helps those with higher incomes. On the other hand, both the personal exemption and the standard deduction will be raised substantially. As a result, many families will be removed from any income taxation.

The purpose of this article is to display estimates of the net effect of the TRA on the distribution of income, using microsimulation methodology to examine the impact of the tax changes.¹

Microsimulation of tax changes

The basis for my analysis of the distributional impact of tax reform is the TRansfer Income Model (TRIM), level 2, developed at the Urban Institute to model the effects of government tax and transfer policies.² The Tax Reform Act of 1986 was modeled by economically aging the March 1984 Current Population Survey (CPS) to 1988 and applying both the old and the new tax law.³ The model uses the sample weights to aggregate the information on the 64,485 sample families to national totals. TRIM simulates only individual income and payroll taxes, not business taxes, and cannot

simulate the impacts of most special provisions in the tax code (such as income averaging), only general provisions affecting the kinds of income reported on or imputed to the CPS.⁴ TRIM does not simulate behavioral response to tax changes; in particular, the effects of the TRA on the economy as a whole due to changes in individuals' work effort or corporate investment behavior are not simulated.

To present distributional analyses by income class, I have developed an alternate definition of income, "available family income" (AFI), which I believe more accurately reflects a family's accessible resources and thus their ability to pay taxes than does adjusted gross income (AGI), the concept most often used in tax analysis. AFI adds together wages and salaries, self-employment income (farm and nonfarm), interest, dividends, rent, pensions (private and government), unemployment insurance, social security, workers' compensation, public assistance, food stamps, veterans' benefits, "other" cash income as reported on the CPS (e.g., scholarships), net capital gains received, and employer contributions to health insurance, pension plans, and legally required benefits.⁵

Simulation results

Table 1 presents the distribution of tax liabilities in 1988 under the old law and the new law in 1988 dollars. Families are divided into income deciles (tenths) on the basis of their available family income in 1988 (a classification that does not change when alternate tax laws are simulated). While there will actually be an *increase* in the percentage of *taxable* income paid in taxes from 18.5 percent to 19.3 percent, because of the changes in the definition of taxable income (resulting from such changes as the increase in the personal exemption), there will be a *reduction* in the percentage of AFI paid in income taxes, from 11.6 percent to 10.6 percent. The system remains progressive, with the share of income going to taxes rising as income rises.⁶

TRIM estimates that the Tax Reform Act will lead to a reduction in 1988 individual income taxes of \$32 billion (in 1988 dollars), or 7.9 percent (5.6 percent of total payroll plus income taxes). This averages \$337 per family.⁷ Figure 1 illustrates the distribution of the tax reduction. Many of the families in the lowest two income deciles will be removed from the income tax rolls completely, with the two deciles averaging net income tax refunds of \$18 and \$12 per family respectively (see Table 1). Note, however, that since payroll

Table 1

**Income Tax Liability by Income Decile: Comparison of the
Tax Reform Act of 1986 with Previous Law (1988 dollars)**

Available Family Income by Decile	Income Tax per Family	Share of Total Income Taxes	Income Taxes as a Percentage of:	
			Available Family Income	Taxable Income
<i>1988 Old Law</i>				
1st (\$0- 6,274)	\$-9	0.0%	-0.2%	-2.2%
2nd (\$ 6,275-10,492)	35	0.1	0.4	2.2
3rd (\$10,493-15,763)	320	0.8	2.4	6.5
4th (\$15,764-21,612)	890	2.1	4.8	9.3
5th (\$21,613-28,041)	1,645	3.9	6.6	11.3
6th (\$28,042-35,752)	2,617	6.2	8.2	13.0
7th (\$35,753-44,765)	3,863	9.1	9.6	14.6
8th (\$44,766-56,658)	5,506	12.9	10.9	16.3
9th (\$56,659-75,569)	8,128	19.1	12.5	18.7
10th (> \$75,569)	19,536	45.9	17.4	26.1
Top 5% (\$>95,658)	26,727	31.4	19.0	28.8
All families	4,253	100.0	11.6	18.5
<i>1988 New Law</i>				
1st (\$0- 6,274)	\$- 18	0.0%	-0.5%	-217.6%
2nd (\$ 6,275-10,492)	- 12	0.0	-0.1	-3.0
3rd (\$10,493-15,763)	186	0.5	1.4	9.1
4th (\$15,764-21,612)	701	1.8	3.8	13.2
5th (\$21,613-28,041)	1,416	3.6	5.7	14.6
6th (\$28,042-35,752)	2,341	6.0	7.4	15.5
7th (\$35,753-44,765)	3,445	8.8	8.6	16.0
8th (\$44,766-56,658)	4,848	12.4	9.6	16.7
9th (\$56,659-75,569)	7,376	18.8	11.4	18.5
10th (> \$75,569)	18,881	48.2	16.8	23.5
Top 5% (\$>95,658)	26,369	33.7	18.8	25.0
All families	3,916	100.0	10.6	19.3

Source: Estimates generated by TRIM using the March 1984 Current Population Survey adjusted for economic growth.

Note: Deciles exclude families with negative income.

taxes were not affected by the TRA, families with earnings still have substantial tax liability, mitigating the impact of the TRA. The average percentage reduction in taxes paid declines monotonically from the second to the tenth decile, while the average dollar amount increases monotonically from the first to the ninth decile.

The effects of the TRA can also be seen in Figure 2, which presents another method of assessing effects on the income distribution. In that figure, "winners" and "losers" have been defined as those whose tax liability would decrease or increase more than 5 percent, respectively. Only about 10 percent of families in the lowest decile and about 30 percent of families in the second decile are winners (have more than a 5 percent decrease in their income tax liability) because so few of them have any income tax liability under either law. More than half of all families in each of the other deciles will be winners under the new tax law, while at most 15 percent of any decile will be losers. The distribution of winners and

losers (for those that have any tax liability) is fairly uniform across the income distribution.

One- and two-parent families with children are the big winners (see Table 2, p. 14), with childless families and single individuals getting below-average tax reductions. The elderly also have only a small tax reduction (1.9 percent), in part because they no longer have two personal exemptions and they typically do not have dependents.

Conclusion

All measures of the impact of the Tax Reform Act of 1986 indicate that it will slightly decrease posttax income inequality, when compared to previous law. It is not known yet whether the act will induce a change in total personal income through individual or corporate effects or whether it will have other behavioral effects. ■

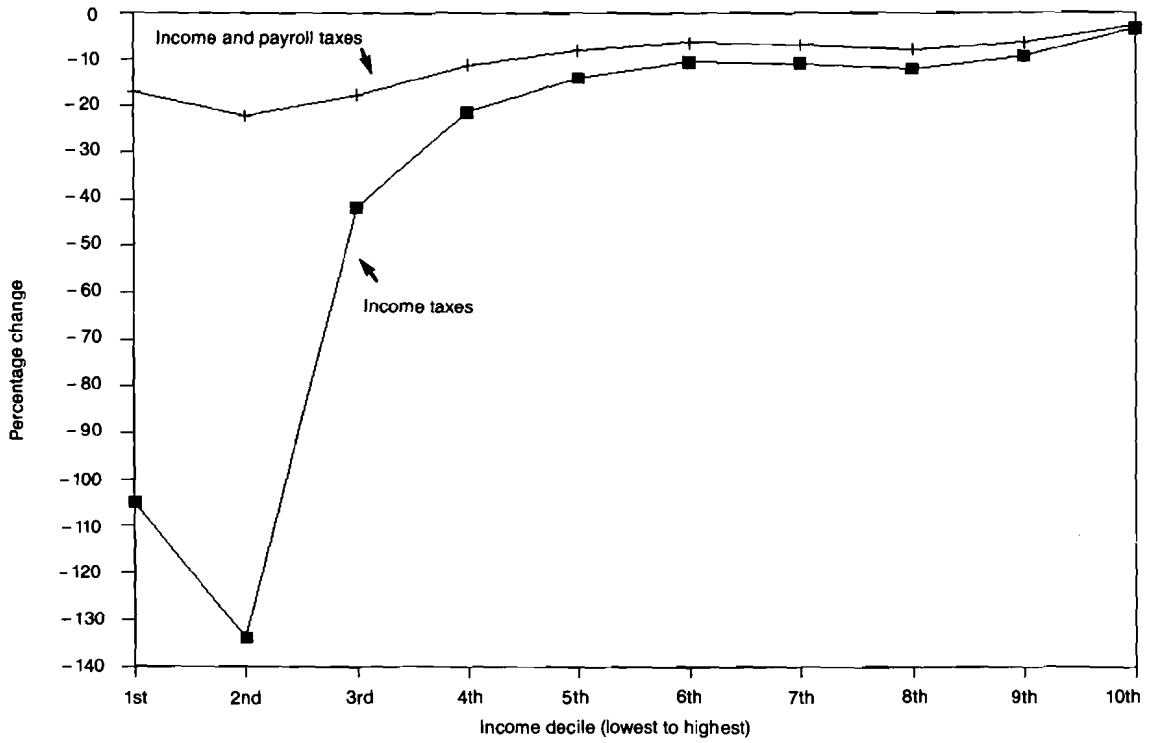


Figure 1. Percentage Change in Taxes: Tax Reform Act of 1986 vs. Old Law (as of 1988)

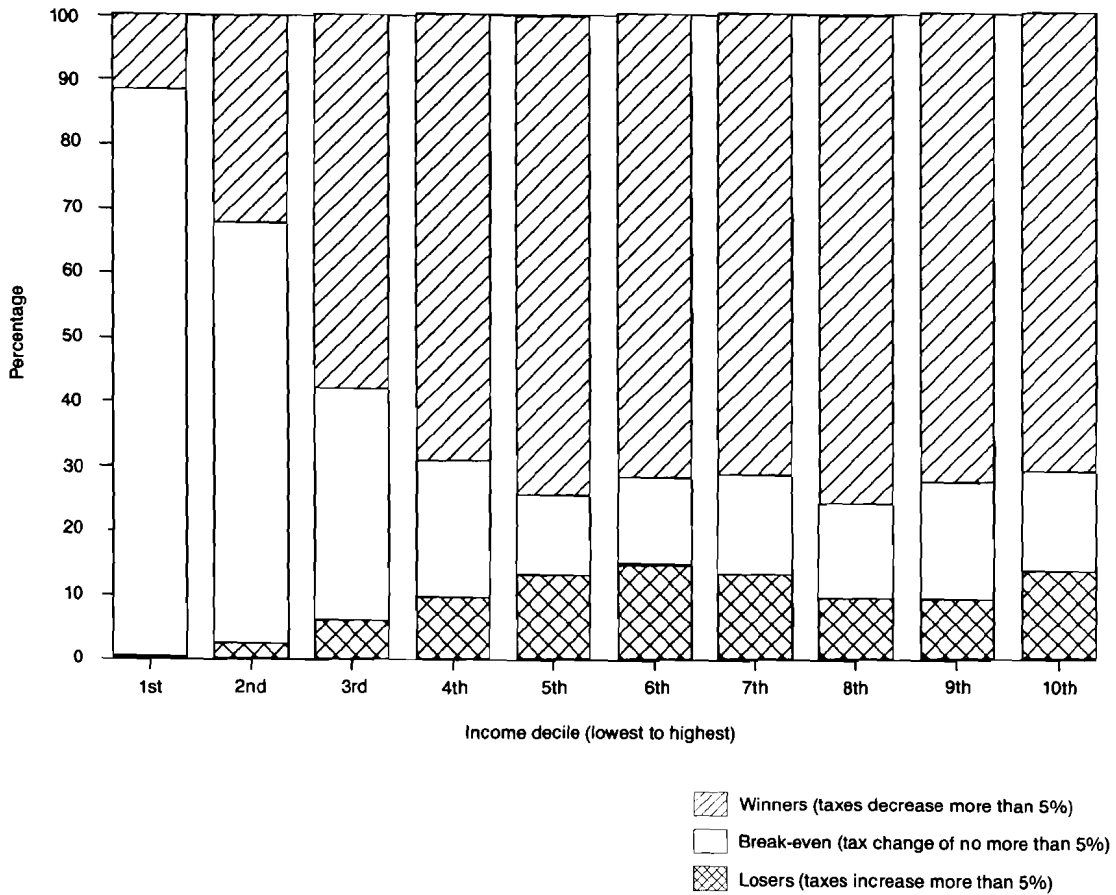


Figure 2. Winners and Losers in New vs. Old Law: Tax Reform Act of 1986 (as of 1988)

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Table 2

Effects in 1988 of the Tax Reform Act of 1986 on Demographic Groups as Compared to Previous Law

Demographic Group	Percentage Decrease in Taxes	
	Income Taxes	Income plus Payroll Taxes
All Families	7.9%	5.6%
<i>By Family Type</i>		
Two-parent families with children	10.2	6.9
Couples with no children	7.2	5.3
Single-parent families with children	11.7	7.2
Single individuals	4.9	3.5
<i>By Race/Ethnicity</i>		
White	7.9	5.6
Black	7.8	5.1
Hispanic	12.4	7.7
<i>By Age of Head</i>		
Elderly (65+)	1.9	1.9
Nonelderly	8.8	6.2

Source: Estimates generated by TRIM using the March 1984 Current Population Survey adjusted for economic growth.

¹ See Daniel H. Weinberg, "The Distributional Implications of Tax Expenditures and Comprehensive Income Taxation," *National Tax Journal*, 40 (June 1987) 237-253, for further information on the methodology used.

² See Randall Webb, Clara Hager, Douglas Murray, and Eric Simon, *TRIM Simulation Modules Manual* (Washington, D.C.: Income Security and Pension Policy Center, The Urban Institute, 1983).

³ Economic aging is accomplished by increasing different economic income amounts (wages, interest, etc.) for households by different growth factors to account for both inflation and increases in productivity.

⁴ Imputations were done for capital gains and losses, itemized deductions, fringe benefits and other noncash transfers, Individual Retirement Accounts, and child-care expenditures.

⁵ While it is clear that in a steady state, the government would not tax both pension contributions and pension benefits, both have been included in AFI. Since pension contributions have not in the past been taxed, presumably any new tax law would phase in their taxation by progressively exempting pension benefits. In the first year of implementation, both would be fully taxable.

⁶ Since the lowest decile has so little taxable income, the aggregate income tax refund for this group is actually more than twice as large as their taxable income (but only 0.5 percent of their AFI).

⁷ To obtain the average income tax change per family, subtract the lower panel of column 1 (new law) from the upper panel of column 1 (old law) in Table 1.

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