

# **TREASURY DEPARTMENT ESTIMATES OF TAX CHANGES: A REVIEW AND ANALYSIS**



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# TREASURY DEPARTMENT ESTIMATES OF TAX CHANGES: A REVIEW AND ANALYSIS

In recent decades it has been the practice of government revenue offices to estimate the effects of a change in tax law upon various income groups. To perform this distributional analysis, households must first be assigned to particular income groups on the basis of their income levels. Taxpayers might expect that such estimates would use the same familiar income measure they use on their own tax returns. Use of an unfamiliar income measure to classify taxpayers could be misleading because it would be like comparing apples and oranges. For example, tax benefits provided to middle class taxpayers might appear as if they were diverted to upper-income taxpayers. Nonetheless, this is the effect of the methodology currently used by the U.S. Department of the Treasury.

The statistical evidence reviewed here leads to several conclusions. First, the Treasury's income statistics considerably overstate income levels for most households, make middle class taxpayers appear to be "richer" than they themselves would recognize, and thus can generate misleading results. Second, the contention that there would be a significant shift in the tax burden away from the top income earners under the Congressional tax legislation is factually incorrect. Although the Treasury has failed to provide relevant information on this point, reconstruction of the Treasury tax burden tables by the Joint Economic Committee (JEC) demonstrates that the tax shares of each income group before and after the tax reduction are unchanged.

## FAMILY ECONOMIC INCOME

The Treasury income concept differs greatly from the commonly used adjusted gross income (AGI) concept used by taxpayers on their tax returns. For example, the Treasury's Family Economic Income (FEI) concept adds to income imputed rental value of owner-occupied housing, fringe benefits, most non-taxable cash transfer payments, inside build-up of IRAs and pensions, and other items.<sup>1</sup> The central problem is that when the Treasury releases a table on projected changes in tax burdens by income group, it is natural for the public to view it in the context of commonly used income tax measures. Nonetheless, when this kind of Treasury table is seen in newspapers or TV news by millions of taxpayers, they are not aware that the table is based on an income definition few have heard of and even fewer understand.

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<sup>1</sup> There are few sources of information on the Treasury methodology. See James R. Nunns, "Distributional Analysis at the Office of Tax Analysis," in *Distributional Analysis of Tax Policy*, Washington, D.C., 1995, pp.111-119, and Susan Nelson, "Family Economic Income and Other Concepts Used in Analyzing Tax Reform," in *Compendium of Tax Research*, Office of Tax Analysis, U.S. Department of the Treasury, Washington, D.C., 1987.

Analyzing FEI's impact on a specific income level is difficult because FEI departs so radically from other income concepts. One approach used below is to compare FEI income levels at a specific point in the income dispersion to a comparable point in other income data. For example, the income levels at the 20th, 40th, 60th, and 80th percentiles can be estimated using the Internal Revenue Service (IRS) tax return data<sup>2</sup> and compared with the corresponding points in the FEI data using the quintile boundaries disclosed by the Treasury. As can be seen in the table, the overstatement of income under FEI ranges from 68 to 95 percent.

<b>Treasury Overstatement of Income</b>			
<b>Percentile</b>	<b>Tax Return Date (AGI)</b>	<b>FEI</b>	<b>% Overstated</b>
20th Percentile	\$8,701	\$16,950	94.80
40th Percentile	\$18,363	\$32,563	77.33
60th Percentile	\$31,866	\$54,578	71.84
80th Percentile	\$55,540	\$93,222	67.85

Source: U.S. Department of the Treasury and JEC calculations.

## **INCLUSION OF HOUSEHOLDS WITHOUT TAX LIABILITY**

Another major problem results from the fact that the Treasury data include many millions of non-filers with no income or payroll tax liability, generally for legitimate reasons sanctioned by tax policy. In addition, there are millions of households who do not pay taxes and also rely on federal and state public assistance. Common sense might question whether it is appropriate to include those without tax liability in an analysis of income tax changes.

Since most of these non-filers without tax liability will be assigned to the bottom quintiles, the predictable outcome is that any income tax reduction will not appear to provide significant benefits to low income households. Thus, the Treasury method does not really analyze the effects of tax changes on taxpayers, but on taxpayers and non-taxpayers alike. In addition, despite the term "*Family* Economic Income," many of these non-filers' actually are non-family households -- that is, single persons. Thus it would not be surprising that an income tax cut with a child tax credit provided much larger average benefits to taxpaying families than to those who are non-filers without children who are disproportionately assigned to the bottom fifths. The larger relative presence of non-filers and single persons in the bottom quintiles means that the average benefits of an income tax reduction in a distribution table will appear to be lower than they otherwise would be.

<sup>2</sup> Internal Revenue Service, *Statistics of Income Bulletin*, Winter 1996-97, 1997, p.147.

Furthermore, the addition of many millions of non-taxpayers at the bottom of the income range ratchets up the relative position of taxpayers in the income distribution. For example, millions of taxpayers who were in the fourth quintile are pushed up into the top fifth of households. In other words, the Treasury approach increases taxpayer income in relative as well as in dollar terms.

### **FAMILY ECONOMIC INCOME (FEI) IS UNFAMILIAR TO MOST TAXPAYERS**

In sum, given the context of a discussion on tax policy, most citizens would refer to the income concept used on their tax return, which is AGI. Estimates of tax effects based on FEI cannot be understood in light of AGI because they are very different concepts. Only a very small group of academic specialists outside of Washington would have any familiarity with FEI, and they can in no way be regarded as representative of the general population. When the Treasury attempts to frame a discussion on tax changes using an arcane income concept that greatly differs from the income concept actually used by all taxpayers on their tax returns, it is certain to mislead many about the impact of pending tax legislation.

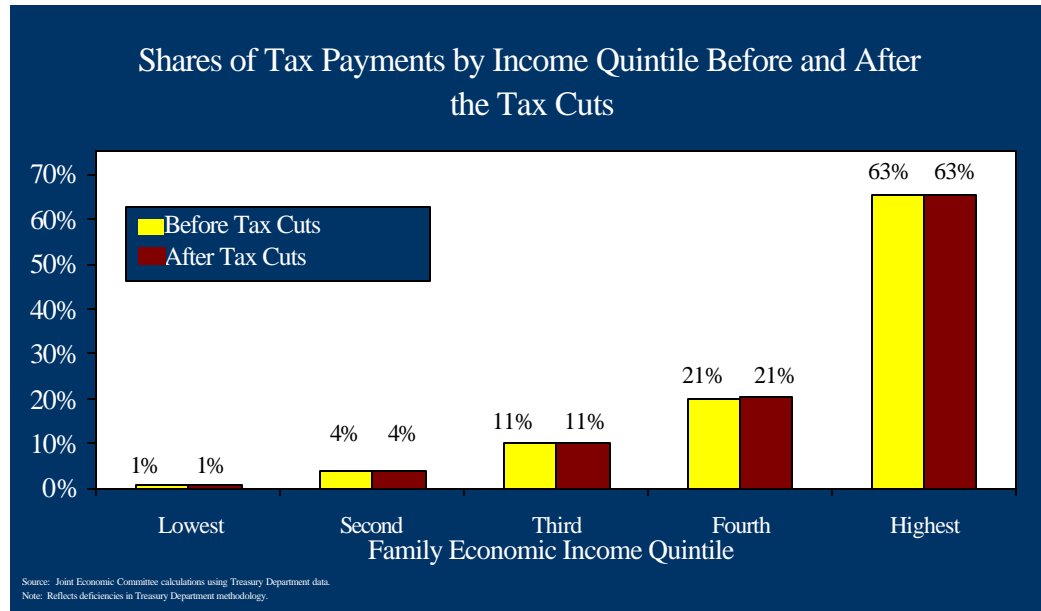
As discussed, one major problem in distributional analysis under FEI is that its overstatement of income levels can produce misleading results. For example, the Treasury Department recently released a table stating that 67.9 percent of the benefits of a pending tax bill would be received by those in the top quintile, taxpayers earning \$93,222 or more.<sup>3</sup> However, the comparable point in the IRS data is reached at \$49,150 in 1994 dollars, or about \$55,540 in adjusted 1998 dollars; these taxpayers in the top fifth pay 74 percent of personal income taxes. Thus tax benefits that appear to be targeted at taxpayers with incomes over \$93,222, commonly supposed to be a very small elite group, actually would benefit a broad group of middle class taxpayers who bear most of the income tax burden. These middle class taxpayers only appear to be “rich” by the inflation of their income under the Treasury’s methodology.

### **TAX SHARES UNCHANGED BY CONGRESSIONAL TAX REDUCTION LEGISLATION**

The selective release of a limited amount of data on tax changes by the Treasury leaves the impression that the Congressional tax legislation is skewed. However, data on the tax changes are meaningful only in the context of the relationship between current and future tax payments, and this information was not released by the Treasury Department. Since the Treasury has failed to release tax data that would permit the tax changes to be viewed in this context, the JEC has used a mathematical technique to reconstruct the Treasury database. The results of this JEC analysis put the Treasury data on the tax reduction in an appropriate context. The JEC analysis reconstructed the Treasury data both by income quintile and by income class.

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<sup>3</sup> Letter from Treasury Secretary Robert Rubin to Ways and Means Committee Chairman Bill Archer, dated June 11, 1997.

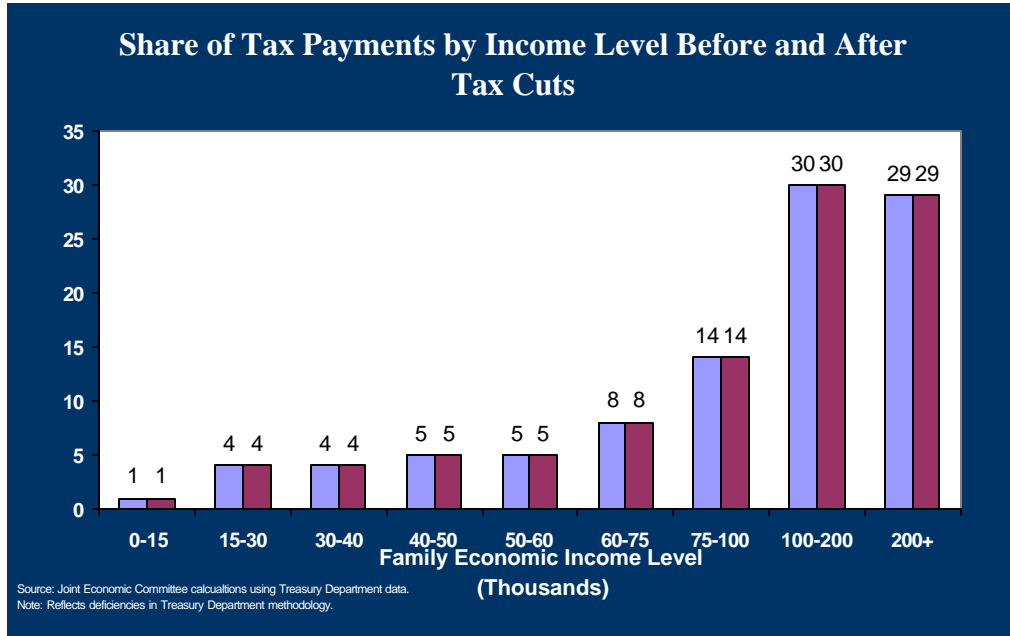


Graph 1 presents the tax shares by income quintile (each quintile represents one fifth of households). **As can be seen, the tax share of the top fifth is the same before and after the tax reduction, at 63 percent. Likewise, the tax shares of the bottom and middle fifths are unchanged by the tax reduction.** Note that the bottom fifth pays 1 percent of the tax burden, while the next to lowest quintile assumes 4 percent of this burden, with or without the tax legislation. In other words, far from redistributing the tax burden as charged, the Congressional tax bills leave it unchanged. It is also worth noting that with or without the tax legislation, the tax system is sharply progressive in its impact.

The results of this JEC analysis are especially remarkable given the biases in the Treasury methodology. For example, certain tax payments on capital gains that would result from lower capital gains tax rates and associated unlocking effects are ignored in the *distributional analysis*, even though they are acknowledged for the purposes of the Treasury's overall *revenue analysis*. In other words, in estimating the effects of a capital gains tax reduction, the Treasury's analysis of distribution and revenues are internally inconsistent. Furthermore, the official Treasury methodology on capital gains revenue estimates are inconsistent with three in-depth studies published by the Office of Tax Analysis (OTA) in the Treasury Department.<sup>4</sup> Furthermore, by omitting any effect on

<sup>4</sup> Jonathan D. Jones, *An Analysis of Aggregate Time Series Capital Gains Equations*, OTA Paper 65, U.S. Department of the Treasury, 1989; Robert Gillingham, John Greenlees, and Kimberly D. Zieschang, *New Estimates of Capital Gains Realization Behavior: Evidence from Pooled Cross-Section Data*, OTA Paper 66, U.S. Department of the Treasury, 1989; and Gerald E. Auten, Leonard E. Burman, and William C. Randolph, *Estimation and Interpretation of Capital Gains Realization Behavior: Evidence From Panel Data*, OTA Paper 67, U.S. Department of the Treasury, 1989.

economic growth, the indirect benefits of improved economic incentives are ignored. **The reality of income mobility, documented by the JEC and Treasury for a number of years, is also overlooked.**



Graph 2 presents the tax shares by income class. Once again, there is no change in the tax shares of the various income groups before and after the Congressional tax legislation is taken into account.

This graph supplies a more detailed view of the tax burden by dividing households into more groups than does the quintile breakdown. Once again, the households in the bottom group bear 1 percent of the tax burden, while those over \$75,000 of FEI assume about 73 percent of the tax burden before and after the tax reduction is taken into account. As suggested previously, many of the households in this group over \$75,000 of FEI are actually middle class taxpayers with much lower levels of AGI. **Once again, even according to the reconstructed Treasury data, there is no change in the tax shares of any income group before and after the Congressional tax reduction is taken into account.**

**CONCLUSION**

The statistical evidence demonstrates that the Treasury Department’s FEI measure significantly overstates income for most households. The result is that tax relief for many middle class taxpayers appears as tax relief for upper-income taxpayers.

A JEC reconstruction of an undisclosed set of Treasury data shows that, although tax relief is provided for all income groups, their shares of the tax burden are unchanged before and after the Congressional tax reduction is taken into account. The results of this JEC analysis demonstrate the misleading effects of an incomplete release of data and illustrate why the Treasury Department should be more open and less selective in providing information to the public.

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