FAMILY INCOME AND INCOME TAXES DURING THE ECONOMIC RECOVERY

A JOINT ECONOMIC COMMITTEE STUDY

Vice Chairman Jim Saxton (R-NJ)

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Executive Summary

This report examines the federal tax burden for middle-income married-couple families with two children, and reaches the following conclusions:

- Median income after taxes for married-couple families with two children reached a record high of $57,330 in 2003, an increase of $1,233 (or 2.2 percent) from the 2000 level.

- The income tax relief passed in 2001 and 2003 buoyed income after federal taxes for such families by a combined total of more than $3,500 over the last three years.

- These findings demonstrate that tax reductions are appropriate not only for macroeconomic stimulus, but also to augment disposable family income.

- The data clearly show that middle-income families received significant relief from the 2001 and 2003 tax acts.

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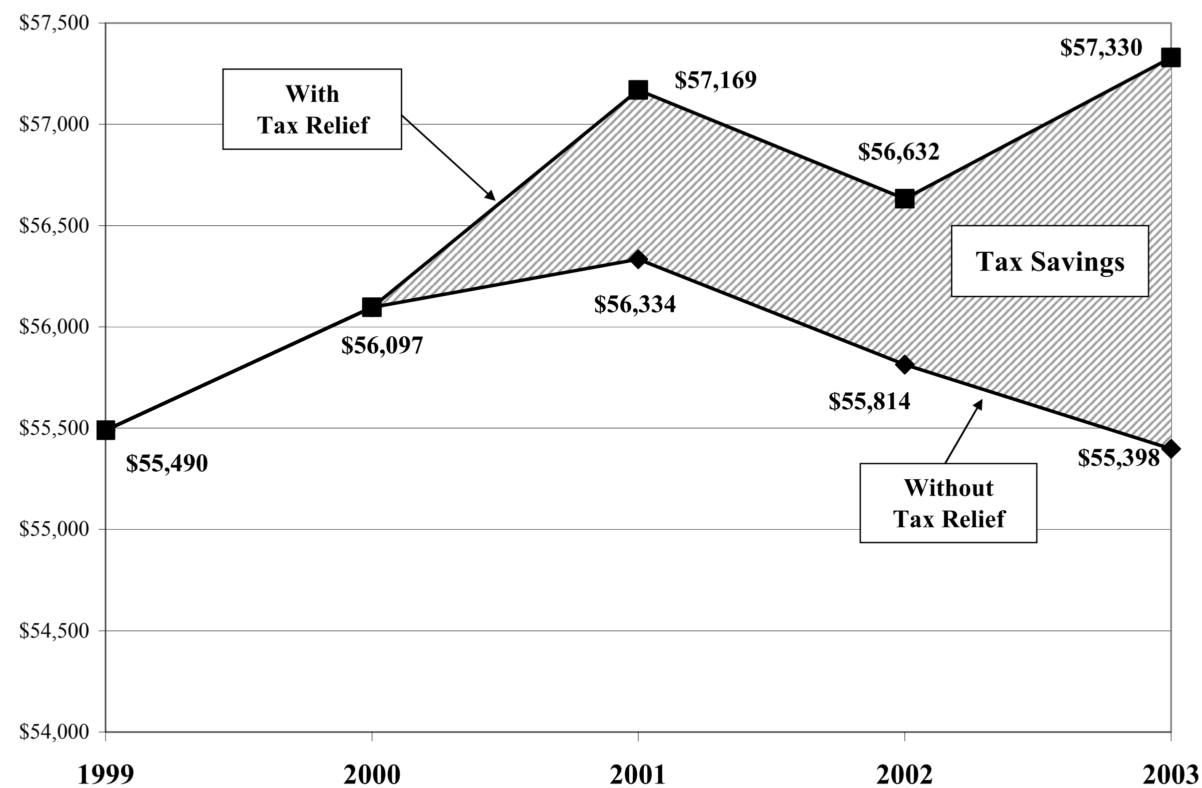
Introduction

Income tax relief passed since 2001 has lifted after-tax incomes for families in each of the last three years. With the application of the new 10 percent tax bracket, marriage penalty relief and child tax credit, the after-tax income of typical married-couple families with two children increased $1,233, or 2.2 percent, in real terms between 2000 and 2003. Compared to what after-tax income would have been without the tax reductions, tax savings in these three years bolstered after-tax income by a combined total of more than $3,500. This after-tax income measure reached a record high in 2003, and in 2001 through 2003 exceeded income levels of all years during the economic boom that ended in 2000. These data clearly show that middle-income families received significant relief from the 2001 and 2003 tax acts.

Figure 1. Real Median Family Income after Federal Taxes, 1999-2003



Source: Joint Economic Committee. Calculations reflect federal income and payroll taxes assuming two children and the standard deduction. Pre-tax income is based on the Census Bureau's estimate of median income for a married-couple family with one or more children. Figures are in constant 2003 dollars.

Taxes and Family Incomes

The health of the U.S. economy was ailing in 2000. The stock market and technology bubbles of the late 1990s burst in early 2000, with the Dow Jones industrial, Nasdaq and S&P 500 indices peaking in the first quarter of that year. Gross private domestic investment fell $55.9 billion in the last six months of 2000, and real gross domestic product actually shrank in the third quarter of 2000, signaling a very weak economy.[1] Manufacturing employment began its period of consecutive declines starting in August 2000. This economic slowdown became a full-blown recession a few months later, lasting from March to November 2001.

The economic slowdown that began in 2000 had the predictable effect of causing family incomes to fall or stagnate. The most recent data from the Census Bureau confirm this effect, showing changes in both directions in each of the last three years. The median pre-tax income for married-couple families with two children was $66,419 in 2003, a net change over 2000 of -$1,011 before the application of any tax relief (Table 1).[2]

Table 1. Real Income for Married-Couple Families with 2 Children (2003$)

					Change 2000-2003	
	2000	**2001**	**2002**	**2003**	**Amount**	**Percent**
With Tax Relief (Current Law)						
Pre-Tax Income	$67,430	$67,758	$66,897	$66,419	-$1,011	-1.5%
After-Tax Income	$56,097	$57,169	$56,632	$57,330	+$1,233	+2.2%
Avg. Inc. Tax Rate	16.81%	15.63%	15.34%	13.68%	-3.1%	NA
With No Tax Relief (Pre-2001 Law)						
Pre-Tax Income	$67,430	$67,758	$66,897	$66,419	-$1,011	-1.5%
After-Tax Income	$56,097	$56,334	$55,814	$55,398	-$699	-1.2%
Avg. Inc. Tax Rate	16.81%	16.86%	16.57%	16.59%	-0.2%	NA
Effect of Tax Cuts						
After-Tax Income		+$836	+$818	+$1,933	+$3,586	
Avg. Inc. Tax Rate		-1.23%	-1.22%	-2.91%	-2.91%	

Source: Joint Economic Committee. Calculations reflect federal income and payroll taxes assuming two children and the standard deduction. Pre-tax income is based on the Census Bureau's estimate of median income for a married-couple family with one or more children. Figures are in constant 2003 dollars. Totals may not sum due to rounding. See the Appendix for additional detail.

A family's economic well-being, however, is a function not of pre-tax income alone, but rather of disposable after-tax income. To estimate the federal tax burden on middle-income families, this analysis turns to a data series produced annually by the U.S. Census Bureau, known as median income for married-couple families with one or more children. Approximately 113

[1] U.S. Bureau of Economic Analysis, Department of Commerce, "GDP Press Release," Table 3 (various releases).
[2] Technically, this figure references the Census data series for married-couple families with one or more children, but for tax purposes this analysis assumes two children. The median is that point which divides the number of families in half, with one-half falling above the median and one-half below. Data available online at http://www.census.gov/hhes/income/dinctabs.html.

million Americans live in such families, representing about 40 percent of the population.[3] Such families have an average size of slightly more than four people. For the purposes of calculating the tax burden, this analysis assumes a family composition of two married adults and two dependent children. The analysis further assumes that this family claims the standard deduction on its federal income tax return.[4]

After taking into account tax relief enacted in 2001 and 2003, such married-couple families actually experienced an increase in income after federal income and payroll taxes. As a result of the tax reductions, the median income after taxes for married-couple families with two children increased $1,233 between 2000 and 2003, in inflation-adjusted dollars (Table 1). Over the three-year period 2001-2003, the tax relief saved such families a combined total of more than $3,500. In the absence of the tax reductions, the after-tax income of such middle-income families would have fallen by approximately $699. Figure 1 displays these trends. The after-tax income levels for 2001, 2002, and 2003 are greater than any year through 2000. The Appendix describes in greater detail the data and methodology behind these estimates.

This analysis calculates the federal tax burden on married-couple families with the median income, assuming the presence of two dependent children and the use of the standard deduction. The analysis does not consider the potential impact of the Alternative Minimum Tax or any other tax relief provision, such as the Earned Income Tax Credit. Two recent laws have implemented major reductions in the personal income tax: the 2001 Economic Growth and Tax Relief Reconciliation Act (EGTRRA) and the 2003 Job and Growth Tax Relief Reconciliation Act (JGTRRA).

Among other things, these bills lowered marginal tax rates, increased the child tax credit, and provided marriage penalty relief. For 2001 and 2002, EGTRRA introduced a new 10 percent marginal tax rate and increased the child tax credit from $500 to $600 per child. JGTRRA accelerated implementation of the 2001 tax bill by raising the child tax credit to $1,000 per child for 2003 and 2004 and expanding the 10 percent marginal tax rate. In addition, JGTRRA provided marriage penalty relief in 2003 and 2004 by increasing the size of the standard deduction for married-couples filing jointly. Although the 2001 and 2003 tax acts contained dozens of tax relief provisions, this analysis focuses solely on the impact of the three provisions described above. The tax calculations in this study are consistent with the findings of a previous Joint Economic Committee study on the impact of the 2001 and 2003 tax acts.[5]

Mirroring the pattern in after-tax income, federal taxes as a share of income also fell sharply due to the tax relief. In the year prior to the tax reductions, federal income and payroll taxes for a married-couple family with two children with the median income averaged approximately 16.81 percent of income. After the first round of tax relief in 2001, federal taxes as a share of income dropped significantly to 15.63 percent, continuing to decrease to 15.34

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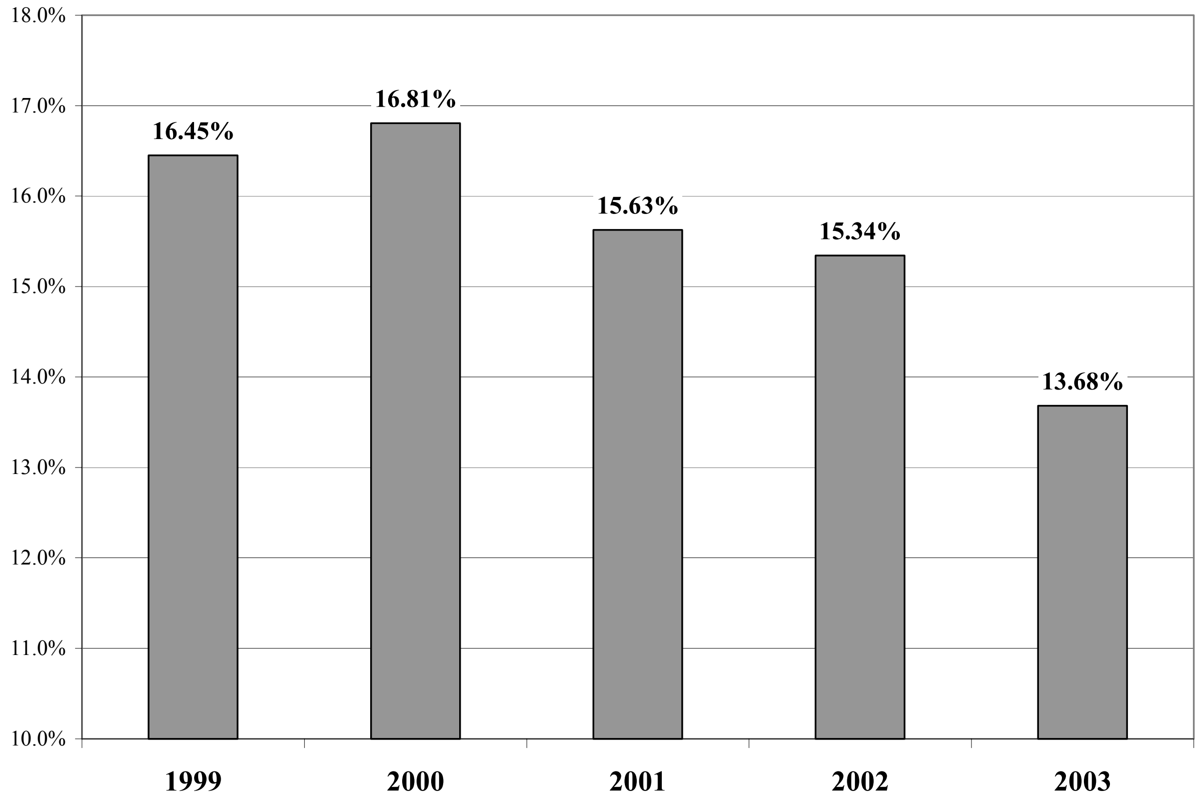
[3] U.S. Census Bureau data, available online at http://ferret.bls.census.gov/macro/032003/hhinc/new04_001.htm and http://ferret.bls.census.gov/macro/032004/faminc/new04_001.htm.

[4] Alternatively, one could assume that the family itemizes its deductions. Under this alternative assumption, after-tax income levels are significantly higher, but exhibit the same general pattern over 2000 to 2003 as under the assumption of a standard deduction. See the Appendix for additional detail.

[5] Joint Economic Committee, U.S. Congress, *Income Tax Savings for Middle-Income Families* (January 2004).

Figure 2. Federal Tax Share of Median Family Income, 1999-2003



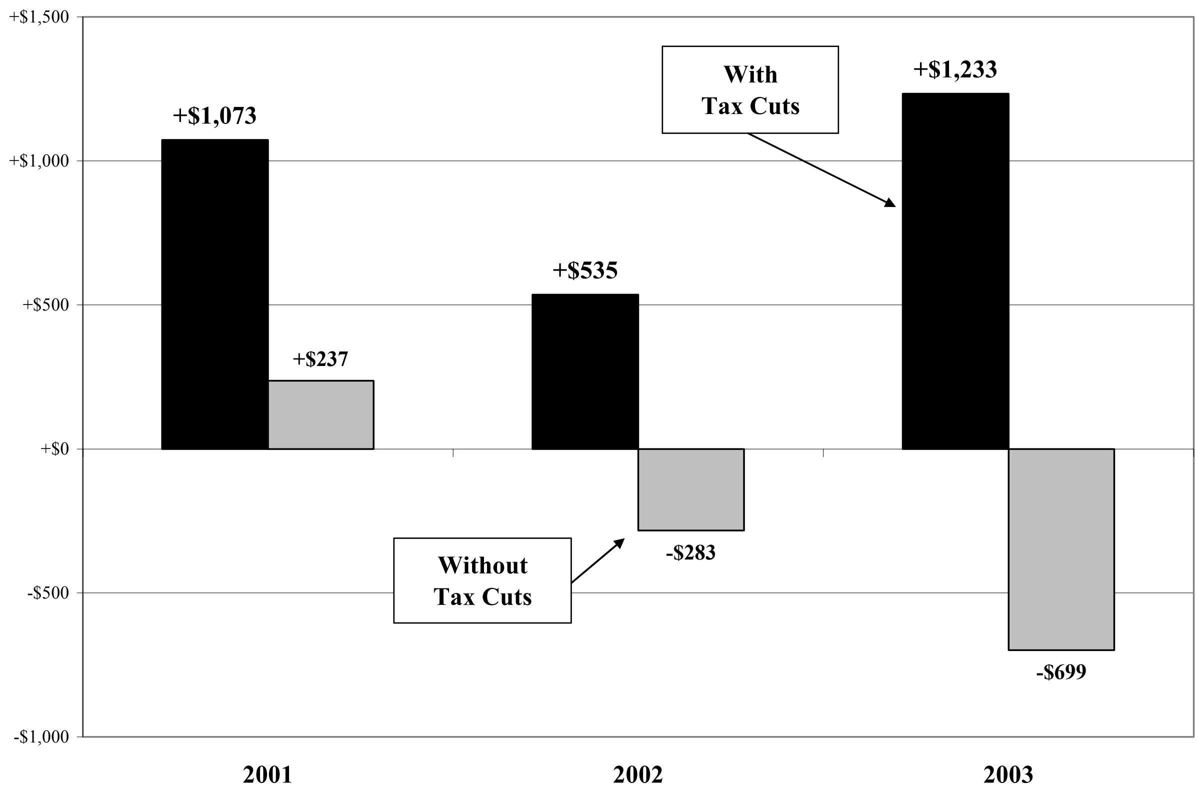
Source: Joint Economic Committee. Calculations reflect federal income and payroll taxes assuming two children and the standard deduction. Pre-tax income is based on the Census Bureau's estimate of median income for a married-couple family with one or more children.

percent in 2002. Following the second round of tax relief in 2003, federal income and payroll taxes averaged 13.68 percent of median income for such families, a decline of 2.91 percentage points between 2000 and 2003. If no tax relief had been enacted, the tax burden on such families would have remained closer to the 2000 level.

Figure 3 shows the cumulative net change in real median income after federal income and payroll taxes, from 2000 to 2003. These data illustrate the importance of tax relief in boosting disposable family incomes. As the data show, with the 2001 and 2003 tax reductions in place, there was a net change of $1,233 in median income after taxes for married-couple families with two children after the first three years. By comparison, if there had been no tax relief, median after-tax incomes would have fallen three years in a row for such families, producing a cumulative decline of $699 by 2003. Thus, the recent tax reduction legislation has resulted in a $1,933 swing in 2003 median income after taxes.

The large increase in the cumulative change in 2003 may appear, at first glance, to be incongruous with the 2002 figure. However, the large boost in after-tax income is directly attributable to the expansion of tax relief in 2003. As noted above, many of the tax relief provisions in effect in 2001 and 2002 significantly increased in magnitude in 2003. For

Figure 3. Cumulative Change in Real Median Income after Federal Taxes Since 2000



Source: Joint Economic Committee. Calculations reflect federal income and payroll taxes assuming two children and the standard deduction. Pre-tax income is based on the Census Bureau's estimate of median income for a married-couple family with one or more children. Figures are in constant 2003 dollars.

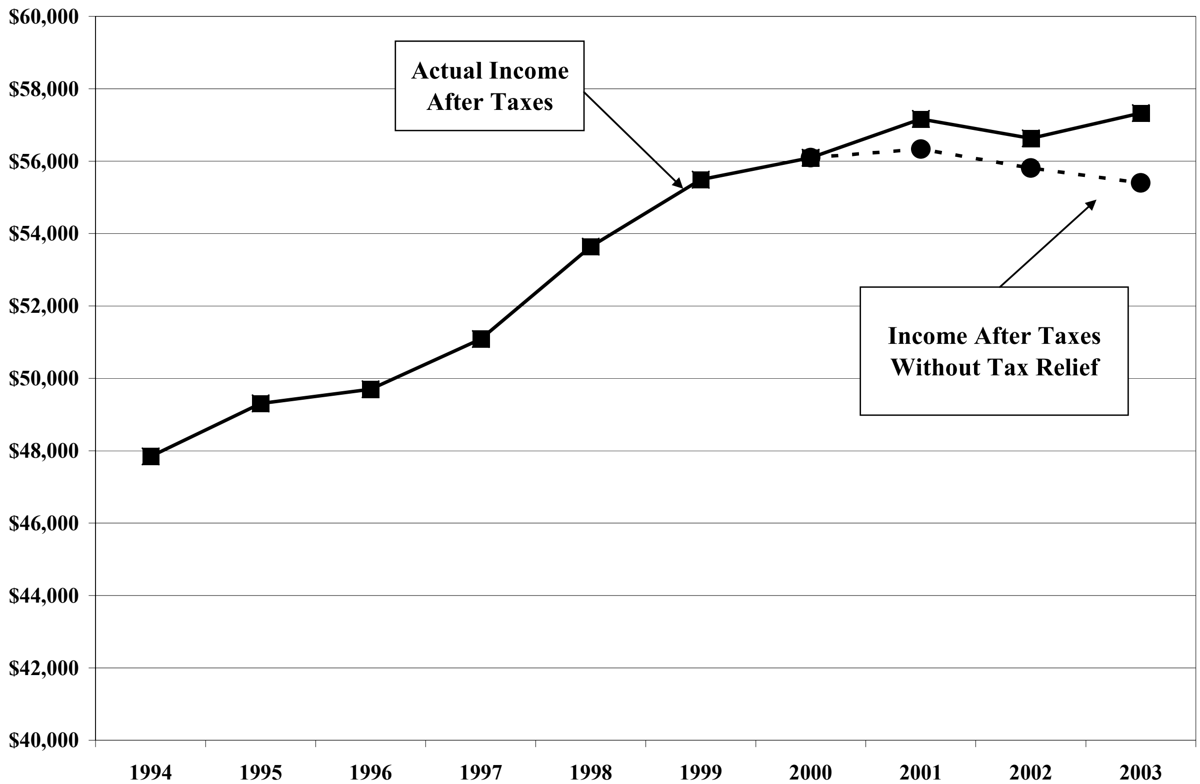
example, the child tax credit jumped from $600 to $1,000, and more income was taxed at the 10 percent marginal rate.[6]

In historical terms, the current level of after-tax income for typical married-couple families compares favorably with previous years. For the unit of analysis used here – married-couple families with two children at the median income – after-tax income is at a record high. Figure 4 displays the tax calculations for this same hypothetical family for the last ten years, 1994-2003. As the data show, 2003 marked the all-time high in after-tax income for such families. In fact, the level of after-tax income for each of the last three years was higher than any year prior to 2001.

Figure 4 also displays what after-tax income would have been for such families in the absence of the 2001 and 2003 tax acts. As can be seen, without the recent tax relief, after-tax incomes for the typical married-couple family with two children would have fallen below 1999's level. The difference between after-tax incomes with and without the tax reductions underscores the importance of tax relief in boosting disposable income for middle-income families.

[6] Table 3 in the Appendix provides details on the tax relief provisions for 2001 to 2004.

Figure 4. Real Median Income after Federal Taxes, 1993-2003



Source: Joint Economic Committee. Calculations reflect federal income and payroll taxes assuming two children and the standard deduction. Pre-tax income is based on the Census Bureau's estimate of median income for a married-couple family with one or more children. Figures are in constant 2003 dollars.

Conclusion

The economic slowdown that began in 2000 resulted in stagnant and falling pre-tax income levels, but tax relief has improved the situation by raising after-tax incomes. From a traditional macroeconomic perspective, tax relief is a potent means of stimulating the economy. In addition, this analysis demonstrates that tax reductions are just as necessary to sustain family incomes while the economy recovers. In this respect, the tax relief of 2001 and 2003 was highly successful, since after-tax family income for typical married-couple families with two children reached a record high in 2003 despite flagging pre-tax incomes. The three tax relief provisions examined here – the 10 percent tax bracket, marriage penalty relief, and the child tax credit – saved the typical married-couple family with two children more than $3,500 over the last three years. This increase in after-tax income indicates that the typical middle-income family of four was better off economically in 2003 than in 2000. The findings also suggest that after-tax family incomes will suffer significantly if the tax relief provisions are allowed to expire.

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Appendix: Methodology

The starting point for the present analysis was to use data from the U.S. Census Bureau on the median income for married-couple families with one or more children as the basis of one tax return. The Census Bureau, as part of its annual data release, produces income estimates for a range of demographic categories. The level of analysis – married-couple families with at least one child – was chosen for this exercise as a broad representation of the well-being of families in America. According to the Census Bureau, in 2003 there were 27 million married-couple families, and approximately 113 million people (about 40 percent of the U.S. population) lived in such families.[7]

The analysis assumes the family files a joint tax return, claims the standard deduction, and has two dependent children under the age of 17.[8] The tax calculations in Table 2 are presented in nominal dollars (i.e., not adjusted for the effects of inflation) except where noted as Real After-Tax Income. The nominal amounts are then converted to constant 2003 dollars that allow comparisons of data from different years. The analysis uses the same inflation measure (CPI-U-RS) that the Census Bureau uses in its calculations.[9]

Taking the median income for married-couple families with one or more children as a proxy for Adjusted Gross Income (AGI), the analysis assumes a joint tax return that claims the standard deduction and four personal exemptions (i.e., two adults plus two children).[10] To arrive at Taxable Income, the standard deduction and personal exemptions are deducted from AGI.[11] Gross Income Tax Liability is calculated using the marginal tax rate schedule in effect for that year.[12] Assuming two dependent children means the family can claim two child tax credits, leading to the family's Net Income Tax Liability. After-Tax Income is simply Pre-Tax Income less the combined Net Income Tax Liability and Payroll Tax estimates. Payroll Taxes are calculated as 7.65 percent of the median income amount.[13] The Average Tax Rate is the combined total of Net Income Tax Liability and Payroll Tax, divided by Pre-Tax Income. Only federal income and payroll taxes levied directly on families are included in the analysis.

Table 2 presents an alternative set of calculations in the bottom half of the table that shows tax liabilities under the assumption of no tax relief. These figures utilize the same income data, but use the tax parameters that would have existed under pre-2001 tax law.[14] In other

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[7] See *supra* note 3.
[8] The assumption of two children deviates from the formal definition of the Census data series used here, which is technically for one or more children. This assumption is appropriate given the fact that the average number of persons in such families was 4.2 in 2003.
[9] Consumer price index data available online at http://www.census.gov/hhes/income/income03/cpiurs.html.
[10] The Census Bureau's definition of money income does not include capital gains or losses. However, since capital gains are not indexed for inflation, it is not possible to make meaningful inflation-adjusted comparisons over time.
[11] Standard deduction and personal exemption levels are from Internal Revenue Service, *Your Federal Income Tax*, Publication 17 (Washington, D.C.: U.S. Department of Treasury, various years).
[12] *Ibid*. For 2001, the 10 percent rate was implemented via a rate reduction credit. For subsequent years, the 10 percent rate existed as a separate tax bracket.
[13] Federal payroll taxes levied on individuals include 6.2 percent for Social Security and 1.45 percent for Medicare. The analysis assumes all income is subject to the federal payroll taxes.
[14] Some pre-JGTRRA tax parameters from Internal Revenue Service, "Rev. Proc. 2002-70, Page 845: Cost of Living Adjustments for 2003," *Internal Revenue Bulletin*, 2002-46 (November 18, 2002), 846-848.

Table 2. Estimated Taxes for Married-Couple Families with Median Income, 1999-2003

	1999	2000	2001	2002	2003
With Tax Relief (Current Law)					
Pre-Tax Income (AGI)	$60,168	$63,126	$65,203	$65,399	$66,419
- Standard Deduction	$7,200	$7,350	$7,600	$7,850	$9,500
- Personal Exemptions	$11,000	$11,200	$11,600	$12,000	$12,200
= Taxable Income	**$41,968**	**$44,576**	**$46,003**	**$45,549**	**$44,719**
Gross Income Tax liability	$6,295	$6,781	$6,401	$6,232	$6,008
- Child Tax Credits	$1,000	$1,000	$1,200	$1,200	$2,000
= Net Income Tax Liability	$5,295	$5,781	$5,201	$5,032	$4,008
Pre-Tax Income	$60,168	$63,126	$65,203	$65,399	$66,419
- Federal Income Tax	$5,295	$5,781	$5,201	$5,032	$4,008
- Federal Payroll Tax	$4,603	$4,829	$4,988	$5,003	$5,081
= After-Tax Income	**$50,270**	**$52,516**	**$55,014**	**$55,364**	**$57,330**
Average Tax Rate	16.45%	16.81%	15.63%	15.34%	13.68%
CPI-U (2003=1.000)	0.906	0.936	0.962	0.978	1.000
Real After-Tax Income	**$55,490**	**$56,097**	**$57,169**	**$56,632**	**$57,330**
With No Tax Relief (Pre-2001 Law)*					
Pre-Tax Income (AGI)	$60,168	$63,126	$65,203	$65,399	$66,419
- Standard Deduction	$7,200	$7,350	$7,600	$7,850	$7,950
- Personal Exemptions	$11,000	$11,200	$11,600	$12,000	$12,200
= Taxable Income	**$41,968**	**$44,576**	**$46,003**	**$45,549**	**$46,269**
Gross Income Tax liability	$6,295	$6,781	$7,005	$6,832	$6,940
- Child Tax Credits	$1,000	$1,000	$1,000	$1,000	$1,000
= Net Income Tax Liability	$5,295	$5,781	$6,005	$5,832	$5,940
Pre-Tax Income	$60,168	$63,126	$65,203	$65,399	$66,419
- Federal Income Tax	$5,295	$5,781	$6,005	$5,832	$5,940
- Federal Payroll Tax	$4,603	$4,829	$4,988	$5,003	$5,081
= After-Tax Income	**$50,270**	**$52,516**	**$54,210**	**$54,564**	**$55,398**
Average Tax Rate	16.45%	16.81%	16.86%	16.57%	16.59%
CPI-U (2003=1.000)	0.906	0.936	0.962	0.978	1.000
Real After-Tax Income	**$55,490**	**$56,097**	**$56,334**	**$55,814**	**$55,398**

Source: Joint Economic Committee. Calculations reflect federal income and payroll taxes assuming two children and the standard deduction. Pre-tax income is based on the Census Bureau's estimate of median income for a married-couple family with one or more children. Totals may not sum due to rounding. Real values are in constant 2003 dollars.
* Hypothetical calculations assuming the same pre-tax income but using tax parameters under pre-2001 tax law.
Source: Joint Economic Committee calculations and Census Bureau data.

words, the bottom half of Table 2 shows after-tax income if there had been no tax relief legislation enacted in 2001 or 2003. As in the previous set of calculations, all amounts are nominal, except for the row labeled Real After-Tax Income.

Because this analysis focuses on the impact of three key tax provisions enacted since 2001 (the 10 percent bracket, marriage penalty relief, and the child tax credit), the tax calculations assume the family claims the standard deduction. Alternatively, one could assume the family claims itemized deductions. The difficulty in making this alternative assumption is knowing how much the itemized deductions total. In 2001, among married-filing-jointly tax returns that itemized, itemized deductions averaged 20.0 percent of AGI across all income groups.[15] One could therefore assume that the median family also claims itemized deductions equal to 20.0 percent of its AGI. Doing so produces after-tax income estimates that are significantly higher than those presented in this paper (since the family has greater deductions). However, the same general pattern emerges under such alternative calculations, with after-tax income increasing substantially between 2000 and 2003.

Table 3 summarizes the relevant tax relief provisions enacted in the 2001 and 2003 tax acts. For each of the three provisions, there are two lines. The first line presents the tax parameter as it would have been in the absence of tax relief legislation (pre-2001 law). The next line shows the tax parameter under current law (i.e., with the tax relief legislation). JGTRRA accelerated implementation of the tax relief in the 2001 act, but is scheduled to expire after 2004. Starting in 2005, the increased tax relief will be scaled back to the original provisions of EGTRRA.

Table 3. Summary of Tax Relief Provisions, 2001-2004

	2000	2001	2002	2003	2004
Child Tax Credit					
Pre-2001 Law	$500	$500	$500	$500	$500
Current Law	$500	$600	$600	$1,000	$1,000
10% Tax Bracket					
Pre-2001 Law	NA	NA	NA	NA	NA
Current Law	NA	$12,000	$12,000	$14,000	$14,300
Standard Deduction for Married Filing Jointly					
Pre-2001 Law	$7,350	$7,600	$7,850	$7,950	$8,150*
Current Law	$7,350	$7,600	$7,850	$9,500	$9,700

* Joint Economic Committee estimate.
Source: Internal Revenue Service.

[15] Calculation based on 2001 tax returns using data from Internal Revenue Service, "Individual Income Tax Returns with Itemized Deductions, 2001: Sources of Income, Adjustments, Deductions, Credits, and Tax Items, by Marital Status" (March 2004), available online at http://www.irs.gov/taxstats/article/0,,id=96978,00.html.