CBO PAPER

AN ECONOMIC ANALYSIS OF
THE TAXPAYER RELIEF ACT OF 1997

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NOTES

Some of the provisions discussed in this paper were enacted in the Balanced Budget Act of 1997, a companion bill to the Taxpayer Relief Act of 1997 (TRA-97). For simplicity, this paper refers to all provisions as though they were part of TRA-97.

In discussions of taxpayers, the paper uses the word "family" to denote a taxpaying unit, regardless of whether that unit consists of a single person or a married couple, with or without children.

Numbers in the text and tables may not add up to totals because of rounding.

ERRATA

The revenue estimates shown in Table 1 on pages 2 and 3 are those developed by the Joint Committee on Taxation and the Congressional Budget Office (CBO) at the time that the Taxpayer Relief Act of 1997 (TRA-97) was enacted. Revenue estimates based on more recent information could differ substantially from those provided in this paper.

Furthermore, this analysis considers only information available at the time of enactment. Data from the first tax returns affected by TRA-97 have only recently become available; those data will provide the basis for future analysis by CBO.

The final paragraph of Chapter 3 on page 45 has also been corrected in this electronic version.

PREFACE

This Congressional Budget Office (CBO) paper analyzes the economic impact of the Taxpayer Relief Act of 1997 (and related tax provisions of the Balanced Budget Act of 1997). It assesses how that legislation will affect a variety of economic incentives for individuals and corporations, including incentives to save for postsecondary education and other purposes and to invest, work, and hire low-wage employees. The analysis also looks at how the act affects the tax burdens of taxpayers in different income and demographic groups and the complexity of the tax code.

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SUMMARY

The two reconciliation acts that President Clinton signed into law on August 5, 1997—the Taxpayer Relief Act of 1997 (TRA-97) and its companion, the Balanced Budget Act of 1997—contained the first major cut in federal taxes since the early 1980s. When those laws were enacted, the Congressional Budget Office projected that their tax provisions would reduce federal revenues by about $240 billion over 10 years (compared with what revenues would have been between 1997 and 2007 under previous law). That projection was based on estimates provided by the Congress's Joint Committee on Taxation.

Besides altering the federal government's bottom line, those two laws (referred to collectively here as TRA-97 for simplicity) affect taxpayers in myriad ways. They change the incentives that individuals and corporations face to pay for college education, to save and invest, and to work. They also alter the tax burdens on various types of taxpayers at various income levels. In addition, TRA-97 affects the complexity of the U.S. tax code and the prospects for comprehensive tax reform.

PROVISIONS OF TRA-97 AND THEIR BUDGETARY EFFECTS

The $240 billion tax cut projected to result over 10 years from TRA-97 comes from $370 billion in tax reductions partly offset by $130 billion in tax increases. About 70 percent of the gross revenue reduction results from a tax credit for families with children that totals $500 for each child under age 17 and from tax credits and other incentives for postsecondary education. Lower taxes on estates and gifts and on realizations of capital gains, expanded opportunities for saving through individual retirement accounts (IRAs), and easier rules for businesses that are subject to the alternative minimum tax account for most of the rest of the gross revenue reduction. The revenue increase, for its part, results primarily from provisions that extend and restructure excise taxes on air travel and that increase excise taxes on tobacco. Those various provisions of TRA-97 phase in over different periods, but all will be fully effective by 2007.

EFFECTS ON INCENTIVES FOR EDUCATION, SAVING, INVESTMENT, AND WORK

The Taxpayer Relief Act provides tax incentives for various types of activities: investment in postsecondary education, saving for retirement, long-term capital investment, and the hiring of low-wage workers. Although society may have an interest in promoting those activities, it is not clear whether the types of tax incentives enacted in TRA-97 will cause noticeable increases in such activities or simply provide tax benefits to people who already engage in them. Furthermore, targeting tax relief toward particular activities creates new complications. Targeted tax relief gives taxpayers incentives to recharacterize activities to qualify for that relief—for example, to convert ordinary income into long-term capital gains or to claim noneducation spending as qualified postsecondary education expenses. Such recharacterization wastes resources and inevitably increases the complexity of the tax code as attorneys at the Treasury Department write rules to limit such efforts.

EFFECTS ON THE TAX BURDENS OF VARIOUS TAXPAYERS

A central goal of the Taxpayer Relief Act—as its name implies—is tax relief. For example, the education incentives in TRA-97 aim not only to promote increased college enrollment but also to reduce the financial burden of postsecondary education on students and their families.

Much of the tax relief is intended to help families with children. The child tax credit is the single largest tax-relief provision in TRA-97. Limitations on who can claim the credit focus that tax relief on middle-income families: taxpayers whose income is above specified thresholds cannot take the credit, and many low-income families qualify for partial or no credits because the credit is refundable only in special circumstances. (Low-income families, however, received substantial tax relief from the Omnibus Budget Reconciliation Acts of 1990 and 1993, principally because of major expansions of the earned income tax credit.)

The child credit, the education credits, and other provisions in TRA-97 will combine to lower the effective individual income tax rate—the amount of federal income tax owed divided by income—for almost all taxpayers. That reduction will average about 1 percentage point, which translates into a drop of about 10 percent in the amount that taxpayers owe. Families with children will see the largest cut in effective tax rates—more than twice as large as that for other families. But effective tax rates as more broadly defined (including payroll and excise taxes as well as individual and corporate income taxes) will decline by somewhat less than that across the board because of the increase in excise taxes on airline travel and tobacco.

EFFECTS ON THE COMPLEXITY OF THE TAX CODE AND COMPREHENSIVE TAX REFORM

Some of the features in TRA-97 are specifically designed to reduce the complexity of the U.S. tax code. For example, the act virtually eliminates taxes on capital gains from home sales (thus reducing the need for most homeowners to keep records), raises the income threshold for paying estimated taxes, increases the standard deduction for taxpayers claimed as a dependent on another tax return, raises the unified credit for estate and gift taxes so fewer estates are taxable, and eases some rules relating to foreign-source income. The act also simplifies several requirements for businesses, particularly in regard to calculating liability for the alternative minimum tax (AMT) and reporting income from certain foreign investments.

Working in the other direction, the various credits, deductions, and multiple tax rates on capital gains in TRA-97 increase the complexity of tax returns for many taxpayers. Although claiming the child or education tax credits is straightforward (entailing only a simple subtraction from the amount of tax owed), determining eligibility to claim those credits may be complicated. In particular, families with income in the ranges over which the credits phase out will find their tax returns more complicated. They will need to make calculations similar to those involved in determining the limits on itemized deductions and personal exemptions that were already part of the tax code. Moreover, taxpayers with capital gains must navigate additional categories of gains and a multiplicity of tax rates. Between 1996 and 1998, the changes in TRA-97 more than doubled the number of lines on the tax forms used to report capital gains. (More recent legislation has slightly reduced that complexity, however.)

More significantly, the credits in TRA-97 make many more families subject to the alternative minimum tax, which requires them to recalculate their taxes using different rules and file additional tax forms. In 1999, however, the Congress passed legislation allowing taxpayers to claim the child credit, the dependent care credit, and the education credits against their AMT liability through 2001, thus protecting many families from having to pay that tax for the next few years.

Many of the changes created by TRA-97 also increase incentives for tax planning, which further exacerbates the complexity of the tax code. Tax rates on capital gains now depend on the type of investment and how long it is held. Choices for retirement saving are more complex: taxpayers need to decide which type of IRA to use on the basis of when they plan to make withdrawals and how they foresee their future tax rates compared with their rates when they make contributions. Decisions about saving for college are more involved because students and parents must study how the new saving opportunities in TRA-97 interact with one another and with the education tax credits, state-sponsored tuition saving programs, and college financial aid.

The objectives of the Taxpayer Relief Act were far more modest than those of recent proposals for comprehensive tax reform. How tax reform will fare following TRA-97 is uncertain. The increased complexity of the tax code could make comprehensive reform more desirable. But TRA-97 is more likely to have diminished the chances for fundamental reform. With more families eligible for a wider range of targeted tax benefits, it is less likely that a majority of taxpayers will be willing to trade the status quo for the uncertain benefits of comprehensive reform.

CHAPTER I

PROVISIONS OF THE TAXPAYER RELIEF ACT AND THEIR EFFECTS ON REVENUES

The Taxpayer Relief Act of 1997 (TRA-97) marked the first broad-based reduction in federal taxes in 16 years.[1] The act will lower total tax revenues by an estimated $240 billion over the 1997-2007 period—or slightly more than 1 percent of federal revenues each year. As a percentage of gross domestic product (GDP), however, the annual reduction will represent less than 0.3 percent. Overall, the tax cuts in TRA-97 are less than half the size, as a percentage of GDP, of the tax increase enacted in 1993 and less than one-tenth the size of the tax cuts enacted in 1981.[2]

The tax reductions in TRA-97 target particular types of taxpayers and economic activity, chief among them families with children. The act's tax credit for children provides the largest amount of tax relief: about $73 billion through 2002 and $155 billion over 10 years, or nearly 42 percent of the act's estimated gross reduction in tax revenues (see Table 1). That credit will also increase outlays for the earned income tax credit (EITC) by making a larger portion of the EITC refundable. (The act does not increase the size of the EITC, just makes more of it refundable.)

Most of the rest of the act's gross tax reduction results from new tax incentives for higher education; reduced taxes on estates, gifts, and capital gains realizations; expanded opportunities for saving through individual retirement accounts (IRAs); and relaxed rules for businesses subject to the alternative minimum tax.

Partly offsetting those tax reductions are more than $130 billion in tax increases, some of which were enacted as part of TRA-97's companion bill, the Balanced Budget Act of 1997. About 60 percent of the total increase comes from extending and modifying taxes dedicated to the Airport and Airway Trust Fund; another 15 percent results from raising tobacco taxes and other federal excise taxes.

The total reduction in revenues caused by TRA-97 is twice as large in the second five years ($162 million) as in the first five years ($80 million). The reason is that many of the provisions that increase revenues phase in slowly. In addition, some of the provisions that reduce revenues have transitional features that produce

1. The last broad-based reduction in federal taxes occurred with the Economic Recovery Tax Act of 1981, although many taxpayers also saw lower taxes after the Tax Reform Act of 1986 and the Omnibus Budget Reconciliation Act of 1993.

2. For more details about the size of the 1997 cuts from a historical perspective, see Appendix A.

TABLE 1. EFFECTS OF THE TAXPAYER RELIEF ACT ON FEDERAL REVENUES (By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	Total, 1997-2002
Provisions That Reduce Revenues							
Child credit	0	-2.7	-15.7	-18.6	-18.4	-18.1	-73.4
Education incentives	0	-3.0	-8.0	-9.2	-9.7	-9.6	-39.4
Reductions in estate and gift tax	0	0	-0.9	-1.3	-1.9	-2.1	-6.4
Reduction in capital gains tax rate	1.3	6.4	0.2	-3.0	-2.9	-1.8	0.1
Expansion of IRAs	0	-0.4	-0.3	0.1	-0.3	-0.9	-1.8
Reduction in AMT	0	-0.3	-0.9	-2.0	-2.5	-2.6	-8.2
Extension of research credit	-0.2	-0.8	-0.6	-0.3	-0.2	-0.1	-2.2
Change in deduction for home offices	0	0	-0.1	-0.2	-0.3	-0.3	-0.9
Increase in health insurance deduction for self-employed	0	0	0	0	-0.1	-0.2	-0.4
Amtrak funding	0	-1.2	-1.2	0	0	0	-2.3
Other	0	-1.3	-1.3	-1.3	-1.2	-1.3	-6.4
Subtotal	1.1	-3.2	-28.8	-35.8	-37.5	-36.9	-141.2
Provisions That Increase Revenues							
Changes in airport and airway excise tax	0	5.8	6.2	6.5	7.0	7.6	33.2
Increase in tobacco taxes	0	0	0	1.2	1.7	2.3	5.2
Other excise taxes	0	0.3	0.3	0.3	0.3	0.3	1.5
Extension of FUTA surtax	0	0	1.1	1.8	1.8	1.7	6.4
Other	0	2.0	2.8	3.0	3.0	3.0	13.9
Subtotal	0	8.1	10.4	12.7	13.8	14.8	60.2
Provisions That Shift Timing of Payments	-1.0	-14.0	11.6	0	-3.0	7.4	1.0
Total Change in Revenues	0.1	-9.1	-6.9	-23.0	-26.7	-14.6	-80.0
Memorandum:							
Additional Outlays from Child Credit and Earned Income Tax Credit	0	0	2.4	3.0	3.1	3.1	11.6
Total Change in Revenues Including Additional Outlays from Credits	0.1	-9.1	-9.3	-26.0	-29.7	-17.8	-91.6

(Continued)

TABLE 1. CONTINUED

	2003	2004	2005	2006	2007	Total, 2003-2007	Total, 1997-2007
Provisions That Reduce Revenues							
Child credit	-17.7	-17.1	-16.3	-15.5	-14.8	-81.4	-154.9
Education incentives	-10.9	-11.4	-11.9	-12.4	-12.9	-59.4	-98.8
Reductions in estate and gift tax	-2.7	-3.2	-5.8	-7.5	-8.9	-28.1	-34.5
Reduction in capital gains tax rate	-3.7	-4.0	-4.2	-4.4	-5.0	-21.3	-21.2
Expansion of IRAs	-1.8	-3.3	-3.8	-4.4	-5.0	-18.4	-20.2
Reduction in AMT	-2.8	-2.6	-2.4	-2.0	-1.9	-11.7	-20.0
Extension of research credit	0	0	0	0	0	0	-2.2
Change in deduction for home offices	-0.3	-0.3	-0.3	-0.3	-0.3	-1.5	-2.4
Increase in health insurance deduction for self-employed	-0.6	-0.9	-0.6	-0.4	-0.6	-3.1	-3.5
Amtrak funding	0	0	0	0	0	0	-2.3
Other	-1.2	-1.3	-1.4	-1.4	-1.5	-6.9	-13.2
Subtotal	-41.8	-44.1	-46.7	-48.4	-50.9	-231.9	-373.0
Provisions That Increase Revenues							
Changes in airport and airway excise tax	8.1	8.7	9.3	9.9	10.6	46.5	79.7
Increase in tobacco taxes	2.3	2.3	2.3	2.3	2.3	11.5	16.7
Other excise taxes	0.3	0.4	0.3	0.3	0.3	1.6	3.1
Extension of FUTA surtax	0.7	-0.1	-0.1	-0.1	-0.1	0.4	6.7
Other	2.3	2.1	2.3	2.4	2.6	11.6	25.5
Subtotal	13.7	13.3	14.0	14.7	15.6	71.4	131.7
Provisions That Shift Timing of Payments	-1.0	0	0	0	0	-1.0	0
Total Change in Revenues	-29.1	-30.8	-32.6	-33.7	-35.3	-161.5	-241.3
Memorandum:							
Additional Outlays from Child Credit and Earned Income Tax Credit	3.2	3.3	3.4	3.5	3.6	16.9	28.6
Total Change in Revenues Including Additional Outlays from Credits	-32.3	-34.1	-36.0	-37.2	-38.8	-178.4	-269.9

SOURCE: Joint Committee on Taxation and Congressional Budget Office.

NOTES: Some of these provisions were part of the Balanced Budget Act of 1997, a companion bill to the Taxpayer Relief Act. The numbers for 1997 through 1999, like those for later years, are CBO estimates made at the time the bills were passed.

IRAs = individual retirement accounts; AMT = alternative minimum tax; FUTA = Federal Unemployment Tax Act.

short-term revenue gains. (Other features, however, such as the expiration of various revenue-reducing provisions, hold down the decrease in the second five years. And the lack of inflation indexing for certain provisions and slower growth rates for some tax bases also mitigate the revenue decline in those years.) Several other provisions of TRA-97 merely shift the payment of taxes from one fiscal year to another —increasing revenues in 1999 and 2002 and lowering them in other years, especially 1998.

All of the provisions of TRA-97 will be completely phased in by 2007. After that, the resulting revenue reductions will continue to grow each year, although more slowly than GDP. That slowdown after 2007 results from diminishing revenue reductions from two major provisions—the child care credit and changes to the alternative minimum tax (AMT)—that more than offset the continued growth of revenue reductions from provisions affecting IRAs and estate taxes.

PROVISIONS THAT DECREASE REVENUES

The provisions in TRA-97 that reduce federal revenues will cut taxes by a total of more than $370 billion over 10 years. Two-thirds of that reduction will come from two sets of provisions: the child credit and the education incentives. Most of the remaining reduction will result from changes in estate and gift taxes, lower tax rates on capital gains, expansion of IRAs, and easing of the corporate AMT.

The revenue effects of TRA-97 are projected to follow an irregular pattern over time because of a combination of phase-ins, expirations, shifts in the timing of payments, and one-time income recognitions for specific provisions.[3] From 1998 through 2002, the provisions that cut taxes decrease revenues by an average of $28 billion per year. During the subsequent five years, that average swells to $46 billion per year.

Child Tax Credit

Under the provisions of TRA-97, taxpayers with children receive a $500 tax credit for each child under the age of 17. (The credit was initially $400 in 1998.) Married couples filing joint returns receive a reduced credit if their adjusted gross income exceeds $110,000; for other taxpayers, that threshold is $75,000. The credit diminishes at a rate of $50 for each $1,000 of income in excess of the thresholds.

3. Income recognitions occur when taxpayers report income on their tax returns that they have not actually received. For example, taxpayers in 2001 may recognize any accrued capital gains and pay taxes on those gains without selling the underlying assets. The recognition of those gains will reset the basis values for the assets.

The credit is expected to reduce federal revenues by $16 billion in 1999 and $19 billion in 2000 but by declining amounts in later years. During its first decade, the child credit will reduce revenues by a total of $155 billion.

The cost of the child credit declines after 2000 because neither the amount of the credit nor the income phaseouts are indexed for inflation. Thus, over time, a greater share of families will receive lower credits as their income rises into the phaseout range or beyond. In addition, for families with fewer than three eligible children, the credit is not applied against the alternative minimum tax. Exemption levels for the AMT are also not indexed for inflation, which means that the AMT will apply to more taxpayers over time; as that happens, fewer families will benefit from the child credit.

Education Tax Credits

TRA-97 offers taxpayers two credits for expenses related to postsecondary education. The HOPE credit equals 100 percent of the first $1,000 and 50 percent of the next $1,000 of tuition and fees paid for the first two years of postsecondary education. Subsequent postsecondary studies qualify for the lifetime learning credit, which equals 20 percent of annual education costs up to $5,000 ($10,000 after 2002). Both credits are nonrefundable and phase out for joint filers with income between $80,000 and $100,000 and for other taxpayers with income between $40,000 and $50,000. Those phaseout ranges are indexed for inflation after 2001.

The two credits and other tax incentives for education in the act will reduce revenues by nearly $100 billion through 2007. The other education incentives include the creation of education IRAs, limited deductibility of interest paid on student loans, penalty-free withdrawals from retirement IRAs to pay for education, and tax-favored treatment of state tuition programs (for more details, see Chapter II). Those incentives will have a relatively small effect on revenues; more than 75 percent of the total $100 billion reduction will stem from the HOPE and lifetime learning credits. Indeed, the revenue reduction will balloon in 2003 when the size of the lifetime learning credit increases. The maximum amount of expenses qualifying for that credit is fixed at $5,000 a year through 2002 but doubles to $10,000 in 2003 and thereafter. (The maximum amount of expenses that qualify for the HOPE credit remains constant through 2001, after which it is indexed for inflation.)

Provisions Affecting Estate and Gift Taxes

Under current law, taxpayers who must pay estate or gift taxes can apply a single credit to either tax to reduce or eliminate the amount they owe. That unified credit

applies over a lifetime; the more a taxpayer uses in a year, the less he or she has available for later years. TRA-97 raises the unified credit in steps, from $202,050 in 1998 to $345,800 in 2006. That change progressively raises the amount of gifts or bequests that is effectively excluded from taxation (from $600,000 in 1997 to $625,000 in 1998, $650,000 in 1999, $675,000 in 2000 and 2001, $700,000 in 2002 and 2003, $850,000 in 2004, $950,000 in 2005, and $1 million in 2006). The act also introduces a $1.3 million exclusion for family-owned businesses and farms.

As under previous law, the unified credit is not indexed for inflation, but TRA-97 adjusts other provisions of estate and gift taxes for inflation. Those provisions include the $10,000 annual limit on gifts, the limit on current-use valuation for family businesses, and the $1 million tax exclusion for gifts and bequests that skip generations.

In all, the changes to estate and gift taxes will reduce revenues by only $6 billion through 2002 but by $34 billion over 10 years. Because the largest increases in the unified credit occur in 2004 and 2005, the revenue reduction from the changes grows rapidly after 2004.

Reductions in the Tax Rates on Capital Gains

TRA-97 lowers the tax rates on capital gains realized after May 6, 1997. Previously, people whose tax rate on other income was 15 percent paid that rate on capital gains from selling assets; people in the 28 percent or higher brackets faced a maximum rate of 28 percent on gains from assets held longer than one year. Now, those rates are 10 percent and 20 percent, respectively. (TRA-97 made those rates apply to gains from assets held for more than 18 months, with gains from assets held between 12 months and 18 months subject to the old rates. But the Internal Revenue Service Restructuring and Reform Act of 1998 eliminated that anomaly and made all gains from assets held longer than 12 months subject to the new rates.) Short-term gains—from assets held for a year or less—continue to be taxed at the same rates as other income.

Even lower rates—8 percent and 18 percent—are being phased in for gains on assets held for more than five years. The 8 percent rate will apply to taxpayers in the lowest income bracket who sell such assets in 2001 or later. The 18 percent rate will apply to other taxpayers for assets purchased after 2001 and held for at least five years. In 2001, taxpayers have a one-time option to pay tax on their accumulated gains from an asset without selling it so they can take advantage of the lower rates on later gains if the asset is held for another five years. (In other words, they are considered as having sold and immediately repurchased the asset at fair market value on January 1, 2001.)

TRA-97 also changes the tax treatment of capital gains from the sale of homes. It eliminates the option of rolling over gains from one home to the next, but it allows joint filers to exclude from their taxable gains up to $500,000 of gains from each home sale ($250,000 for other filers). To qualify for that exclusion, taxpayers must have lived in the home for at least two of the preceding five years and not have claimed the exclusion for a sale in the past two years.

The capital gains provisions in TRA-97 are estimated to reduce revenues by $21 billion over 10 years. But those provisions were expected to raise revenues in 1998 and 1999 by inducing people to sell capital assets in those years. (Data are not yet available to determine whether the initial estimates—a revenue gain of more than $6 billion in 1998 and just over $150 million in 1999—proved accurate.) After 1999, although the lower tax rates will induce taxpayers to realize more capital gains, the provisions will cause revenues to fall. That fall will temporarily diminish in 2001 and 2002 because of the special provision that allows taxpayers to pay taxes on accrued gains at that time. The revenue reductions will start to increase in 2003, when the temporary tax payments on accrued gains end, and they will accelerate slightly in 2006 and 2007, when the reduced tax rate of 18 percent begins to apply to many asset sales.

IRA Expansions

The Taxpayer Relief Act makes two significant changes to the tax treatment of individual retirement accounts: raising the income limits below which people can deduct contributions to IRAs, and creating a new type of account, the Roth IRA.

Previously, couples in which either spouse participated in an employer-sponsored pension plan could deduct up to $2,000 apiece in IRA contributions (the maximum deductible amount) from their taxable income only if their adjusted gross income (AGI) was below $40,000. The amount they could deduct was phased out at higher income levels, and none of their IRA contributions were deductible if their income exceeded $50,000. For individuals covered by a pension, the deductible amount was phased out between $25,000 and $35,000 in AGI. TRA-97 gradually raises those phaseout ranges to between $80,000 and $100,000 for couples (in 2007) and between $50,000 and $60,000 for individuals (in 2005).

Taxpayers who contribute to Roth IRAs will not be able to deduct their contributions, but the investment earnings in those accounts will be completely tax-free when people withdraw them at the qualifying age or for qualifying purposes, such as to buy a home for the first time. The income phaseouts for Roth IRAs begin at $150,000 for couples filing jointly and $95,000 for individuals. The combined annual contribution to both types of IRAs is limited to $2,000 per person.

Those various IRA provisions will decrease federal revenues by growing amounts—from less than $1 billion a year through 2002 to $5 billion in 2007. The revenue effect grows over time for three reasons: the increased income limits for deductible IRAs are phased in; the revenue reduction from Roth IRAs increases as those accounts replace additional taxable assets each year; and revenues receive a temporary boost early on because TRA-97 allows taxpayers with income under $100,000 to shift assets without penalty from deductible IRAs to Roth IRAs. (Those taxpayers must pay income taxes on the transferred amount, minus any transfer of past nondeductible contributions, but their future earnings in the Roth IRAs will be exempt from tax).

Tax Reductions for Corporations and Small Businesses

Among other tax relief for businesses, TRA-97 provides substantial relief from the alternative minimum tax, a provision of the tax code designed to prevent high-income taxpayers from avoiding taxation (see Box 1). For investment assets put in place after December 31, 1998, businesses can calculate depreciation for purposes of the AMT using the same asset lifetimes they use for purposes of the regular corporate income tax, although they must still use the AMT's slower depreciation schedule. (The previous requirement to use longer asset lifetimes for the AMT accounted for the bulk of revenue raised by the alternative tax.) Further, corporations with receipts averaging less than $5 million a year are now exempt from the AMT as long as their gross receipts remain under $7.5 million in future years. In addition, for purposes of the AMT, the legislation allows farmers to use the installment method of accounting.

Under previous law, the alternative minimum tax paid by businesses largely represented a prepayment of tax.[4] Thus, the reduction in the AMT contained in TRA-97 acts in reverse: the tax relief is greatest in the early years and then gradually falls. Over 10 years, using the same depreciation lives for the AMT as for the regular income tax is expected to reduce revenues by $18.3 billion, with the annual reduction peaking in 2004 and declining thereafter. Excluding small businesses from the AMT is expected to cost $762 million between 1997 and 2007, with most of that reduction occurring between 1998 and 2002. The revenue reductions are higher in earlier years as businesses claim their remaining accumulated AMT credits while not accumulating additional AMT liability.

4. Because most of the tax burden from the AMT resulted from the requirement that firms to use a longer lifetime over which to depreciate their plant and machinery, the AMT did not disallow depreciation deductions but rather delayed them until later years, thus making its tax burden largely a prepayment of tax that would otherwise have been paid in later years. To ensure that businesses did not pay tax on the same income again when paying regular tax, the prepayment generated a credit that firms could later use to reduce their regular-tax liability. Because of the credits, the total AMT liability generated by the depreciation preference was expected to decline over time.

Expiring Provisions

Several provisions of the Taxpayer Relief Act, which primarily reduce revenues, expire before the 10-year budget period ends in 2007. As a result, they increase the size of the total tax cut in TRA-97 in the early years but have little effect in later years.

Some of those provisions have expired and been temporarily reinstated many times over the past two decades. The largest is the credit for increasing research and development expenses. It expired on June 1, 1997, and TRA-97 reinstated it through

BOX 1.
THE ALTERNATIVE MINIMUM TAX

A minimum tax was first enacted in 1970 in reaction to reports that some high-income taxpayers were paying little or no income tax because of various preferences in the tax code. The minimum tax was designed to force such taxpayers to pay something. The Congress has modified the structure of the minimum tax many times, but the intent each time was to limit its application to relatively few taxpayers.[1]

That minimum tax was applied in addition to any tax owed under the regular tax system. The current alternative minimum tax (AMT), enacted in 1978, is different. A taxpayer owes the greater of taxes calculated under the regular tax or under the AMT system. The AMT has its own exemptions and deductions, rate schedule, and definitions of income. In addition, most credits allowed under the regular tax cannot be applied against the AMT.

Although it was originally designed to apply to just a few high-income taxpayers, the AMT affects an increasing number of high- and low-income taxpayers each year. The exemption amounts under the AMT ($45,000 for married couples filing jointly, $33,750 for unmarried filers, and $22,500 for married people filing separately) are not indexed for inflation, unlike the personal exemption amounts and standard deductions under the regular income tax. As a result, regular tax liability grows more slowly than liability under the AMT, and over time, more and more returns are subject to the AMT. Both the House and Senate passed versions of the Taxpayer Relief Act that would have raised the AMT's exemption amounts to mitigate that increase, but such a change was not part of the final bill.

1. See Robert P. Harvey and Jerry Tempalski, "The Individual AMT: Why It Matters," *National Tax Journal*, vol. 50, no. 3 (September 1997), pp. 453-473, for a more complete discussion of the AMT before the Taxpayer Relief Act of 1997.

June 30, 1998. (The Tax and Trade Relief Extension Act of 1998, or TTREA-98, extended it through June 30, 1999, and the Tax Relief Extension Act of 1999, or TREA-99, extends it further through June 30, 2004.) In addition, TRA-97 extended for nine months the work opportunity credit, which is available to employers who hire workers from certain targeted groups. (TTREA-98 extended that provision for another 12 months, and TREA-99 added 30 more months.) TRA-97 also extended the benefit for employer-provided educational assistance so it applies to expenses paid for undergraduate courses begun before June 1, 2000. Under that benefit, employees may receive up to $5,250 per year in assistance tax-free, without regard to whether the courses are related to the employee's current job.[5] Those three provisions in TRA-97 were expected to reduce revenues by a total of $1.5 billion in 1998 but by rapidly diminishing amounts thereafter, so their cumulative effect on revenues over 10 years is small.

The Taxpayer Relief Act also introduced new expiring provisions. For example, it provided Amtrak with $2.3 billion in tax refunds, evenly divided between 1998 and 1999. In addition, it established several new tax incentives: those for investment in the District of Columbia expire at the end of 2002; the welfare-to-work credit expires for wages paid to employees who begin work after April 30, 1999; and the tax-advantaged treatment of certain environmental cleanup expenses for "brownfields," which become immediately deductible business expenses, expires for expenditures made after December 31, 2000.[6] The cumulative revenue effect of those new provisions, however, is even smaller than that of the expiring provisions reinstated by TRA-97.

PROVISIONS THAT INCREASE REVENUES

Most of the revenues raised by TRA-97 come from extending existing excise taxes or increasing their rates. A single set of provisions—modifying excise taxes related to the Airport and Airway Trust Fund, which had been scheduled to expire on September 30, 1997—produces about 60 percent of those revenues.[7] The revenue effect of those provisions increases fairly smoothly over time. In contrast, the act raises excise taxes on tobacco in two steps, causing revenues to increase in 2000 and again in 2002. Additional revenues in the first five years of TRA-97 come from extending the payroll tax surcharge for unemployment insurance.

5. TREA-99 further extended that provision through December 31, 2001.

6. TTREA-98 extended the welfare-to-work credit by two months to include workers hired before July 1, 1999, and TREA-99 extended that coverage by another 30 months.

7. An extension of expiring excise taxes is not usually scored as an increase in revenues. However, because these particular taxes had previously expired at the end of 1996, their extension produced a revenue increase.

Changes to Airport and Airway Taxes

The act extends but substantially modifies the 10 percent tax on air passenger tickets. In 2002, the tax rate will fall to 7.5 percent of the purchase price of the ticket, with an additional tax of $3 for each segment of a domestic flight. The act also increases the international departure fee from $6 to $12 and applies it to both departures and arrivals. It broadens the base for the 7.5 percent tax to include cash payments that credit card companies make to airlines for the right to award airline tickets to their customers. The act extends other taxes dedicated to the Airport and Airway Trust Fund without modification; in addition, it specifies that receipts from the tax of 4.3 cents per gallon on aviation fuel, which had gone into the general fund, be deposited in the trust fund instead. The $33 billion in revenue generated by those provisions through 2002 is approximately $4 billion greater than the amount an extension of prior law would have produced.

Increases in Tobacco Taxes

The current excise tax on cigarettes is 24 cents per pack. TRA-97 raises that rate by 10 cents on January 1, 2000, and by another 5 cents on January 1, 2002. The tax rates on other tobacco products, such as pipe tobacco and cigars, will increase by the same percentage. Those changes will generate a total of $17 billion in additional revenues through 2007.

Increases in the Federal Unemployment Tax

The Federal Unemployment Tax Act effectively imposes a 0.8 percent tax on the first $7,000 of wages paid to each employee covered by the federal unemployment insurance program. Those revenues are deposited into accounts designated to pay for the program's administrative costs, the federal portion of extended unemployment benefits, and loans to states. Federal law limits the amount of funds in those accounts; excess funds are distributed to state accounts.

The 0.8 percent tax includes a temporary 0.2 percent surtax that was set to expire at the end of 1998. TRA-97 extends that surtax through 2007 and adjusts the limit on one of the federal accounts so the additional revenues can be retained. Those added revenues are projected to accrue only through 2003, however, because that year the federal accounts will reach the new, higher limits.

PROVISIONS THAT DIRECTLY SHIFT THE TIMING OF TAX PAYMENTS

TRA-97 includes four provisions that change certain taxpayers' payment dates without changing the amount they owe (their tax liability). Those provisions largely shift revenues from 1998 into 1999 and from 2001 into 2002. The shifts are large enough to alter substantially the overall pattern of estimated revenue effects from TRA-97 but not the long-term amount paid or the tax liability in any year. Nevertheless, postponing revenues affects the federal budget by making the government pay more for interest on its borrowing. The largest effects occur in the first few years after TRA-97: revenues decline by $14 billion in 1998 and increase by $12 billion in 1999.

First, TRA-97 temporarily changes the rules that require individuals to pay their tax liability in a timely manner. Taxpayers incur penalties if they do not pay a sufficient portion of their tax in estimated and withheld payments. In the past, certain high-income taxpayers could avoid those penalties by making estimated and withheld tax payments that together totaled at least 110 percent of the tax owed in the previous year. Thus, if a taxpayer's income had increased rapidly, making payments of that amount could allow him or her to delay paying some of the liability until the following year, when the tax return is filed. Taxpayers value such a delay because they can earn a return on the money in the meantime. The act reduces that "safe-harbor" rate to 100 percent in 1998 and to 105 percent in 1999 through 2001; increases it to 112 percent in 2002; then returns it to 110 percent in 2003 and thereafter. (TTREA-98 subsequently raised that rate to 106 percent for 2000 and 2001.) High-income taxpayers were expected to respond by reducing their estimated payments in 1998 and making larger final payments in 1999. In the same way, taxpayers should increase payments in 2002 and reduce them in 2003. Again, the timing of revenue receipts will affect the government’s costs. But because the safe-harbor rate returns to its earlier level after 2002, the changes have no net effect cumulatively over the 10-year budget period.

Second and third, TRA-97 shifts the due dates for paying excise taxes on certain fuels and on airline ticket sales between fiscal years. Fuel tax payments due between August 1 and September 30, 1998, instead became due no later than October 5, 1998. That change shifted $6 billion in receipts from fiscal year 1998 to 1999. Likewise, ticket tax payments due between August 15 and September 30, 1997, became due by October 10, 1997, and those due between August 15 and September 30, 1998, became due by October 5, 1998. Those delays were expected to shift $1 billion in ticket tax payments out of fiscal year 1997 and into 1999. The level of payments in 1998 was expected to be relatively unaffected, although a greater fraction would be paid early in the year and a smaller fraction later.

The fourth timing shift affected the Universal Service Fund, which was established to ensure that telecommunications services are provided to all regions of

the country. The Balanced Budget Act of 1997 would have shifted $3 billion in payments by telecommunications firms from 2001 into 2002, but that provision was later repealed.

THE OUTLOOK FOR REVENUES AFTER 10 YEARS

After the first 10 years, the total annual revenue reduction caused by TRA-97 should continue to grow, but more slowly than the nation's gross domestic product. Reductions because of the child credit and the AMT provisions for businesses are expected to get progressively smaller, both in dollars and relative to GDP, continuing a decline that begins during the 2003-2007 period. By contrast, the reductions from expanding IRAs, increasing the amount of estates and gifts that is excluded from taxation, and cutting tax rates on capital gains should keep growing larger, but not as rapidly as between 2003 and 2007.

The slowdown in revenue reductions from IRAs plays a significant role in slowing the growth of overall revenue reductions after 2007. Three factors contribute to that slowdown: the phase-in of the higher income limits for eligibility for deductible IRA contributions ends in 2007; neither the maximum contribution amount of $2,000 per year nor the income limits are indexed for inflation; and over time, more people will begin to make withdrawals from their accounts.[8]

The growing revenue reductions from changes to estate and gift taxes should also slow markedly in later years. The increase in the unified credit phases in through 2006, causing reductions to grow rapidly during that period. But that growth should slow afterward because the credit reaches a limit in 2006 that is not indexed for inflation.

The decline in revenues caused by relief from the capital gains tax should also slow beyond 2007. Although that decline jumps by 12 percent in 2007, thereafter it should be closer to the 6 percent growth rate projected for 2006. (The uptick in 2007 represents the effects of the reduced tax rate of 18 percent, which first becomes effective for assets sold in 2006.)

8. How long it takes for withdrawals to offset contributions will depend on the purpose for which people use their IRAs. If they use them for long-term saving, such as for retirement, many years pass before significant withdrawals begin. If they use them for shorter-term objectives, such as a down payment on a home, many fewer years might pass. Saving for college education would probably result in withdrawals after an intermediate length of time.

CHAPTER II

EFFECTS ON INCENTIVES TO PAY FOR COLLEGE EDUCATION

In the Taxpayer Relief Act of 1997, the Congress and the Administration addressed the twin problems of ever-increasing costs for postsecondary education and the rising share of financial aid that takes the form of loans. TRA-97 provides tuition tax credits, education savings accounts, and deductibility of interest paid on student loans. Those provisions will help reduce the financial burden on college students and their families. And to the extent that high school graduates do not attend college because of cost, those provisions may induce more of them to continue their education. However, because of the mix of incentives and disincentives, the provisions are unlikely to increase saving for college significantly.

COLLEGE ATTENDANCE AND COSTS

College enrollment rates are at a historical high. In 1997, 65 percent of people between ages 16 and 24 who had graduated from high school the previous year were enrolled in college—20 percentage points more than in 1960 (see Figure 1). Another 10 percent of young people went on to college within two years of graduating from high school. However, one-quarter of high school graduates do not go to college within two years of graduation; how many of them are constrained by cost is not known.

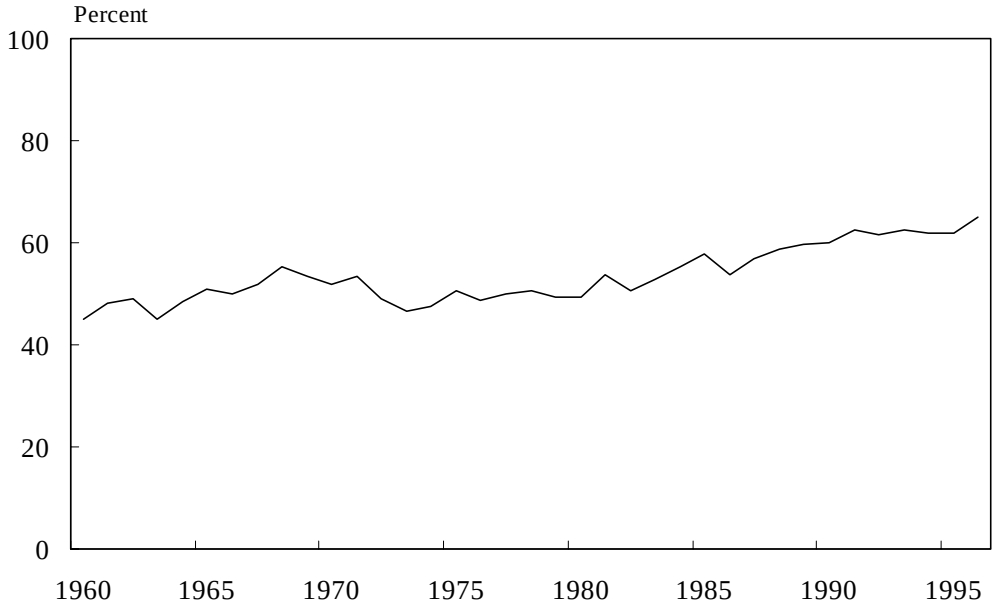
At the same time that college enrollment rates are at record levels, so are college costs. Tuition and fees for the 1999-2000 school year reached an all-time high in real terms (that is, adjusted for inflation).[1] They averaged $1,451 at two-year public colleges, $3,407 at four-year public institutions, and $15,309 at four-year private colleges. Over the past decade, tuition and fees have climbed by 46 percent in real terms for all public colleges and by 39 percent for four-year private colleges (see Table 2).

Financial aid is also at record levels.[2] Since the 1987-1988 school year, aid for college students has increased by 70 percent in real terms—significantly more

1. Department of Education, *1998 Digest of Education Statistics* (March 1999), Table 311; and College Board, *Trends in College Pricing 1999* (New York: College Board, October 1999).

2. The data in this paragraph come from College Board, "1997-98 Increases in College Tuition and Fees Average Five Percent; Student Financial Aid at Record High" (press release, New York, September 17, 1997).

FIGURE 1. COLLEGE ENROLLMENT RATE OF PEOPLE AGES 16 TO 24 WHO GRADUATED FROM HIGH SCHOOL THE PREVIOUS YEAR, 1960-1997



SOURCE: Congressional Budget Office based on Department of Education, *1998 Digest of Education Statistics* (March 1999), Table 183.

than the growth in college costs. Roughly 40 percent of college students receive some form of aid. The composition of that aid, however, has changed markedly since 1987. The share made up of loans rose from just over 40 percent to nearly 60 percent, while the shares made up of federal grants and state aid declined. Furthermore, a larger fraction of loans today are subsidized.

More students now leave college with outstanding education loans, and the balances of those loans are higher than ever.[3] Nearly half of all postsecondary students borrow to pay for schooling, about three-fifths of them from student loan programs and the rest from relatives or other private sources. College seniors attending four-year public institutions during the 1995-1996 school year who had borrowed from federal student loan programs owed an average of $12,800. Those at four-year private colleges owed an average of $15,000. Both of those amounts were significantly higher than for comparable students just three years earlier. In the

3. Data in this paragraph come from Department of Education, National Center for Education Statistics, *Early Labor Force Experiences and Debt Burden*, NCES 97-286 (September 9, 1997), pp. 11-13, 49-64.

TABLE 2. AVERAGE UNDERGRADUATE TUITION AND FEES PAID BY STUDENTS, BY TYPE OF COLLEGE, 1976-1999 (In 1998 dollars)

School Year	All Institutions			Public Institutions			Private Institutions		
	All	Four-Year	Two-Year	All	Four-Year	Two-Year	All	Four-Year	Two-Year
1976-1977	2,534	3,341	949	1,314	1,692	776	6,767	6,950	4,367
1977-1978	2,538	3,330	975	1,321	1,690	789	6,769	6,965	4,401
1978-1979	2,591	3,373	992	1,311	1,661	790	6,922	7,142	4,421
1979-1980	2,562	3,333	993	1,284	1,626	782	6,894	7,103	4,542
1980-1981	2,554	3,326	1,042	1,258	1,593	775	6,930	7,166	4,781
1981-1982	2,635	3,449	1,067	1,291	1,644	785	7,150	7,440	4,712
1982-1983	2,771	3,645	1,150	1,360	1,757	806	7,565	7,905	5,126
1983-1984	2,917	3,835	1,194	1,458	1,878	864	7,937	8,333	5,071
1984-1985	3,115	4,029	1,288	1,524	1,927	916	8,341	8,719	5,469
1985-1986	3,305	4,219	1,346	1,584	1,997	971	8,773	9,276	5,565
1986-1987	3,438	4,523	1,334	1,645	2,102	981	9,391	9,900	5,478
1987-1988	3,526	4,592	1,161	1,747	2,205	1,013	10,024	10,208	5,969
1988-1989	3,663	4,785	1,349	1,771	2,269	1,006	10,283	10,643	6,639
1989-1990	3,732	4,995	1,286	1,782	2,340	994	10,709	11,037	6,830
1990-1991	3,761	5,000	1,356	1,813	2,355	1,028	10,940	11,328	6,947
1991-1992	3,926	5,262	1,419	1,943	2,535	1,121	11,285	11,693	6,880
1992-1993	4,083	5,517	1,481	2,069	2,727	1,190	11,542	11,950	7,034
1993-1994	4,315	5,772	1,577	2,190	2,860	1,268	11,920	12,348	7,182
1994-1995	4,444	5,924	1,635	2,260	2,946	1,310	12,210	12,616	7,598
1995-1996	4,637	6,185	1,627	2,329	3,045	1,325	12,683	13,088	7,584
1996-1997	4,740	6,354	1,602	2,359	3,102	1,325	12,980	13,378	7,515
1997-1998	4,800	6,428	1,607	2,402	3,158	1,339	13,216	13,601	7,653
1998-1999[a]	5,095	6,848	1,656	2,502	3,297	1,386	14,195	14,641	7,748
1999-2000[a]	5,309	7,133	1,730	2,594	3,407	1,451	14,837	15,309	8,018

SOURCES: Department of Education, *1998 Digest of Education Statistics* (March 1999), Table 311; and College Board, *Trends in College Pricing 1999* (New York: College Board, October 1999).

NOTE: Tuition and fees are adjusted for inflation using the CPI-U-X1, one of the consumer price indexes for urban consumers.

2. Extrapolated from values for the 1997-1998 school year using College Board data for 1998-1999 and 1999-2000.

1995-1996 school year, one-third of college seniors had outstanding federal loan balances greater than $15,000, and one-sixth had balances exceeding $20,000.

THE HOPE AND LIFETIME LEARNING CREDITS

To ease some of the burden of rising college costs, TRA-97 established two tax credits for spending on postsecondary education. The HOPE credit allows taxpayers to reduce their tax liability by 100 percent of the first $1,000 and 50 percent of the next $1,000 they spend on tuition and fees for themselves or a dependent student in the first or second year of college. The maximum HOPE credit is thus $1,500 per year for each eligible student. Tuition and fees for subsequent years of postsecondary education qualify for an annual lifetime learning credit, which equals 20 percent of the first $5,000 ($10,000 after 2002) spent for the taxpayer, spouse, and all dependents combined. Thus, the maximum lifetime learning credit is $1,000 per tax return per year ($2,000 after 2002).

Both credits are nonrefundable. They phase out for married couples filing joint returns who have income between $80,000 and $100,000 and for other taxpayers who have income between $40,000 and $50,000. A taxpayer may claim the HOPE credit for some students and the lifetime learning credit for others in a given year, but both credits may not be claimed for the same student in the same year.

In reducing the net cost of college, the credits have two objectives: to ease the financial burden on families with postsecondary students, and to enable more people to continue their education beyond high school. The first goal will be met for all but the poorest and wealthiest families. Whether the second goal is met depends on which students qualify for credits and the size of those credits, whether nonstudents eligible for the credits elect to attend college, and how colleges and universities respond to the credits.[4]

4. Another initial concern was how the credits would be incorporated into the need formulas that the government uses to determine who is eligible for federal financial aid. In subsequent legislation, however, the Congress stipulated that neither credit would be counted in determining a family's expected contribution to a student's college costs in calculating eligibility for federal financial aid. Thus, the credits would not lead to offsetting reductions in financial aid based on the federal aid formula.

Limitations on Which Students Qualify for the Credits

According to economists Jane Gravelle and Dennis Zimmerman, roughly 83 percent of students will qualify for one or both of the education credits.[5] But not all of them will qualify for the full amount, and the rest will not be eligible for any credit. For example, because the credits are not refundable, students and their families who do not owe any federal income tax will not benefit. Gravelle and Zimmerman estimate that 13 percent of postsecondary students come from families who pay no income tax.[6] Other students from low-income families will be unable to take the full value of the credits because their tax liability is too low. However, many of those students qualify for Pell grants (federal aid given to students with the greatest financial need). During the 1995-1996 school year, 30 percent of full-time college students and 20 percent of all college students received Pell grants, averaging more than $1,500, the maximum value of the HOPE credit. Furthermore, the Congress raised the maximum Pell grant in fiscal year 1998 from $2,700 to $3,000.[7]

At the other end of the income scale, the tax credits will not be available to students whose family income exceeds $50,000 ($100,000 for joint filers). In the 1995-1996 school year, 7 percent of independent undergraduates had income over $50,000, and 5 percent of dependent undergraduates had family income over $100,000.[8] Most of those students would be unable to claim either credit.

Another limitation is that the credits apply only to tuition and fees that students or their families pay. If students receive financial aid that pays for tuition and fees, they will not qualify for the credits, even if they have nontuition expenses that make it difficult for them to attend college. To the extent that schools can reallocate their financial aid to pay room, board, and other nontuition costs, students may bypass that limitation. However, policymakers could respond by requiring that federal aid go first to pay for tuition and fees, thus precluding such reallocation.

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5. Jane G. Gravelle and Dennis Zimmerman, *Tax Subsidies for Higher Education: An Analysis of the Administration's Proposal*, Report for Congress 97-581 E (Congressional Research Service, May 30, 1997), p. 15.

6. Ibid.

7. Department of Education, National Center for Education Statistics, *National Postsecondary Student Aid Study: Student Financial Aid Estimates for 1995-96*, NCES 97-570 (August 1997), pp. 14-16.

8. Ibid., p. 11.

The Potential for Increased College Enrollment

The HOPE and lifetime learning credits are designed to enable and encourage more people to attend college and continuing-education programs. Empirical research indicates that tuition levels have little effect on enrollment rates of students from middle- and high-income families, but they can affect students from low-income families.[9] Two independent studies suggest that the HOPE credit could increase college enrollment by as much as 4 percent.[10]

Exactly how enrollment will respond to the two credits is extremely uncertain, however. On the one hand, the 4 percent estimate derives from how students in school respond to tuition increases, not from how nonstudents respond to tuition reductions. To the extent that nonstudents either are unprepared for college or have chosen not to attend for reasons other than cost, they would not decide to go to college even if the price was reduced, so they would be less responsive to tuition credits. Furthermore, because enrollment rates today are 10 percentage points higher than they were 20 years ago, there are fewer nonstudents to respond to tuition assistance. Finally, students with low family income, who are most responsive to tuition aid, are likely to get small or no credits because their tax liability is too low. All three of those factors could lead to a smaller increase in enrollment than predicted.

On the other hand, students already in college may be less responsive to price changes than people not attending college since any change in costs would affect only their remaining school years, not their full period of attendance. In addition, low-income students are more likely to attend schools that charge lower tuition, so the credits could cover a larger fraction of their costs. Both of those factors mean that more students than predicted might use the credits to attend college. In either case, however, the tax credits are unlikely to cause substantial increases in college enrollment.

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9. Michael S. McPherson and Morton Owen Schapiro, *Keeping College Affordable* (Washington, D.C.: Brookings Institution, 1991), p. 54. Based on data from the 1978-1979 school year, the study finds that students from low-income families exhibit an enrollment elasticity of about 0.47; that is, a 10 percent decline in college costs would cause their enrollment to increase by just under 5 percent. More recent research based on data covering the 1980-1992 period found comparable effects. See Thomas J. Kane, *Rising Public College Tuition and College Entry: How Well Do Public Subsidies Promote Access to College?* Working Paper No. 5164 (Cambridge, Mass.: National Bureau of Economic Research, 1995).

10. Kane's 1995 study estimated that a $1,000 increase in tuition at two-year colleges would decrease enrollment by just under 3 percent. That finding suggests that a $1,500 subsidy could increase enrollment by roughly 4 percent. Kane estimated that similar tuition changes at four-year institutions would have only about one-fourth as large an effect. Findings of the study by McPherson and Schapiro indicate that a $1,500 tax credit—which would reduce the cost of two-year colleges by roughly 25 percent—would increase total college enrollment by roughly 4 percent.

The Response of Colleges to the Tax Credits

Another highly uncertain point is how educational institutions will respond to the credits. Because the credits will go to most students, schools could increase their tuition and fees to capture some or all of that money without making most of their current students worse off financially. The one-sixth of students ineligible for the credits could be compensated with increased aid from the schools themselves. To the extent that schools raised tuition, however, students and their families would not benefit from the credits and increases in enrollment would be smaller.

McPherson and Schapiro found that public and private institutions react differently to changes in federal aid to students.[11] An increase of $100 in federal aid induces private schools to help students further by raising their own aid by $20 and not increasing tuition. Public institutions, by contrast, respond to that situation by raising tuition by $50 and not changing their institutional aid. Public schools' response may result because states want to minimize costs to taxpayers while capturing some of the federal aid. McPherson and Schapiro argue that private schools' response is explained by an alternative approach to pricing. Many private colleges and universities do not set tuition as high as demand would allow, electing instead to ration admission on the basis of criteria other than willingness to pay.

Some institutions, particularly those that offer financial aid to significant numbers of students, might choose to reduce aid rather than raise tuition, thus offsetting the value of the tax credits.[12] To the extent that schools base their levels of aid on student need, they may determine that students require less financial assistance if the students or their parents receive tax credits for education expenditures. The net impact on students would be the same from a reduction in aid as from a rise in tuition. However, only 16 percent of undergraduates and 25 percent of graduate students received any institutional aid during the 1995-1996 school year. Because cuts in aid would affect fewer students than increases in tuition, their overall effect would be substantially smaller than the effect of raising tuition. That factor would be partially offset, however, if students receiving institutional aid were more responsive to net costs in deciding whether to attend college than students not receiving aid.

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11. McPherson and Schapiro, *Keeping College Affordable*, p. 191. The potential responses of schools discussed in this paragraph are subject to the same qualifications offered above for enrollment responses. Although the findings derive from data from the late 1970s, there is little reason to expect that institutional responses have changed markedly over the past two decades.

12. Thomas J. Kane, "Rationing College" (paper presented at the American Enterprise Institute conference "Financing College Tuition: Government Policies and Social Priorities," Washington, D.C., May 15, 1997), p. 17.

If schools do not increase tuition or other costs, the tax credits will provide current students and their families with windfall gains. Although the credits will not alter those students' decision about attending school, they may lead some students to choose alternative courses of study. Some students may elect to attend four-year rather than two-year institutions or to pursue majors that involve more years of study or lead to jobs with lower salaries. But the bulk of current students are unlikely to change their behavior because of the credits. For them, the credits will only increase disposable personal or family income and are unlikely to increase the human capital that students acquire.

SAVING FOR POSTSECONDARY EDUCATION

The education provisions in TRA-97 provide both incentives and disincentives for taxpayers to save for postsecondary schooling. The net effect of those conflicting forces is uncertain. By creating education IRAs and broadening the tax advantages of state-sponsored tuition programs, the act increases the after-tax value of education savings, which could induce people to save more to pay college tuition costs. Conversely, by creating the HOPE and lifetime learning tax credits, allowing the penalty-free use of funds from conventional IRAs to pay for college, and letting taxpayers deduct some of the interest they pay on education loans, TRA-97 subsidizes the cost of higher education and reduces the need to save. Furthermore, for families already saving more than the subsidized amounts, the changes will most likely lead only to lower levels of saving.

Individual Retirement Accounts for Education

TRA-97 establishes education IRAs—accounts from which funds may be used to pay the costs of postsecondary education. Taxpayers may contribute up to $500 a year to such accounts for each beneficiary. That amount phases down to zero for married couples filing a joint return who have income between $150,000 and $160,000 and for other taxpayers who have income between $95,000 and $110,000. Although contributions to an education IRA must come from after-tax income, earnings of and withdrawals from an account are never taxed as long as they go to pay allowable education costs. Allowable expenses include tuition and fees as well as room and board for students enrolled at least half time.

Because account earnings are tax-exempt, education IRAs increase incentives to save for college. But if people are already saving for college, education IRAs provide a better vehicle than most other methods of saving and may thus induce people to transfer existing savings rather than to save more. Indeed, taxpayers may even save less if they are on their way to accumulating enough savings for college and now find that they can shelter those savings from tax. However, the fact that the

HOPE and lifetime learning credits cannot be claimed for any year in which funds are withdrawn from an education IRA reduces the value of those accounts.

Taxpayers who qualify for regular, deductible IRAs (discussed in more detail in Chapter III) could find them more attractive than education IRAs because of their greater flexibility. Although education IRAs can be used to pay only the costs of postsecondary schooling, deductible IRAs may be used without penalty for schooling, medical emergencies, first-home purchases, or retirement. Taxpayers who qualify for a deductible IRA would benefit from using an education IRA only if they had saved as much as is allowed in their deductible IRA.

If taxpayers do not qualify for a deductible IRA, they can still save for education expenses through the new Roth IRAs. If funds withdrawn from Roth IRAs are used to pay for college, however, the portion of the withdrawal that represents earnings is taxable, which lessens the value of using those accounts to save for education rather than for retirement or a first-time home purchase. Taxpayers would benefit from using a Roth IRA to save for college only if they valued the greater flexibility of those accounts or if they had saved as much as they were allowed to in an education IRA. One advantage of either deductible or Roth IRAs is that withdrawing money from those accounts for education expenses does not preclude claiming the education tax credits in the same year.[13]

Changes to State Tuition Programs

TRA-97 also extends the allowed uses of state tuition programs to include payment of room and board and to permit distributions from those programs to qualify for either the HOPE or lifetime learning tax credit. Both liberalizations increase the value of such programs as savings vehicles and might therefore increase saving for college. Conversely, the additional subsidy could reduce the need to save for college and thus cause saving to fall.

REDUCTION IN THE COST OF STUDENT LOANS

TRA-97 allows taxpayers to deduct the cost of interest they pay on student loans during the first five years of repayment, up to a specified limit. That limit increases from $1,000 per tax return in 1998 to $2,500 in 2001 and later years. Unlike the education credits, which are deducted from the amount of tax owed, this deduction is subtracted from total income in calculating adjusted gross income. The deduction

13. Note that taxpayers whose income is too high to qualify for Roth IRAs can still qualify for nondeductible IRAs (for which there are no income limits), so with the waiving of penalties for education withdrawals, even those taxpayers have a new tax-preferred means of saving for education expenses.

phases out for taxpayers with AGI between $60,000 and $75,000 for joint returns (which married couples must file to claim the deduction) and between $40,000 and $55,000 for other taxpayers. Deducting interest on student loans reduces the net cost of indebtedness for people who recently left school.

College seniors with federal student loans in the 1995-1996 school year owed an average of $13,400.[14] At current interest rates, new graduates with that amount of debt will pay interest of about $1,000 annually on their loans over the first five years of repayment and thus will be able to deduct virtually all of their interest payments. The average borrower in the 15 percent tax bracket will save about $150 per year—roughly 3 percent of loan payments over the period. Borrowers in higher tax brackets will save more.

Few undergraduate borrowers are likely to be affected by the annual limit on deductible interest, particularly after it reaches $2,500 in 2001. At the current 8.25 percent interest rate on Stafford loans, a student's loan balance would have to exceed $30,000 to reach the limit. But, as noted earlier, fewer than one-sixth of college seniors had loan balances above $20,000 in the 1995-1996 school year.[15]

Students in graduate or professional school are more likely to reach the limit because their loan balances are significantly higher. In 1995-1996, the average postgraduate participant in the Stafford loan program borrowed $11,000; borrowing a similar amount each year over a three-year period of study would yield an average indebtedness of more than $30,000.[16] Adding undergraduate loans to that amount would mean a substantially greater total education debt whose annual interest payments could well exceed the eventual $2,500 limit on deductibility. Such large borrowers would have a much smaller fraction of their loan payments subsidized under the deductibility provision.

LIMITS ON THE PROVISIONS

TRA-97 restricts the use of its various education tax provisions in two ways. First, taxpayers may not contribute funds to both a state tuition program and an education IRA on behalf of the same student in the same tax year. Nor may they withdraw funds from an education IRA for a student in the same year that they claim a HOPE

14. Department of Education, *Early Labor Force Experiences and Debt Burden*, p. 12.

15. Those loan balances include borrowing from all sources of student loans. The basic requirement is that loans must be used within a reasonable time solely to pay qualified education expenses. They may not, however, include loans from relatives or those taken by parents from other sources, such as home-equity loans.

16. Department of Education, *National Postsecondary Student Aid Study*, p. 20.

or lifetime learning credit for that student. Furthermore, taxpayers may not claim both a HOPE credit and a lifetime learning credit for one student in the same tax year, although the two credits may be claimed for one student in different years or for different students in the same year.

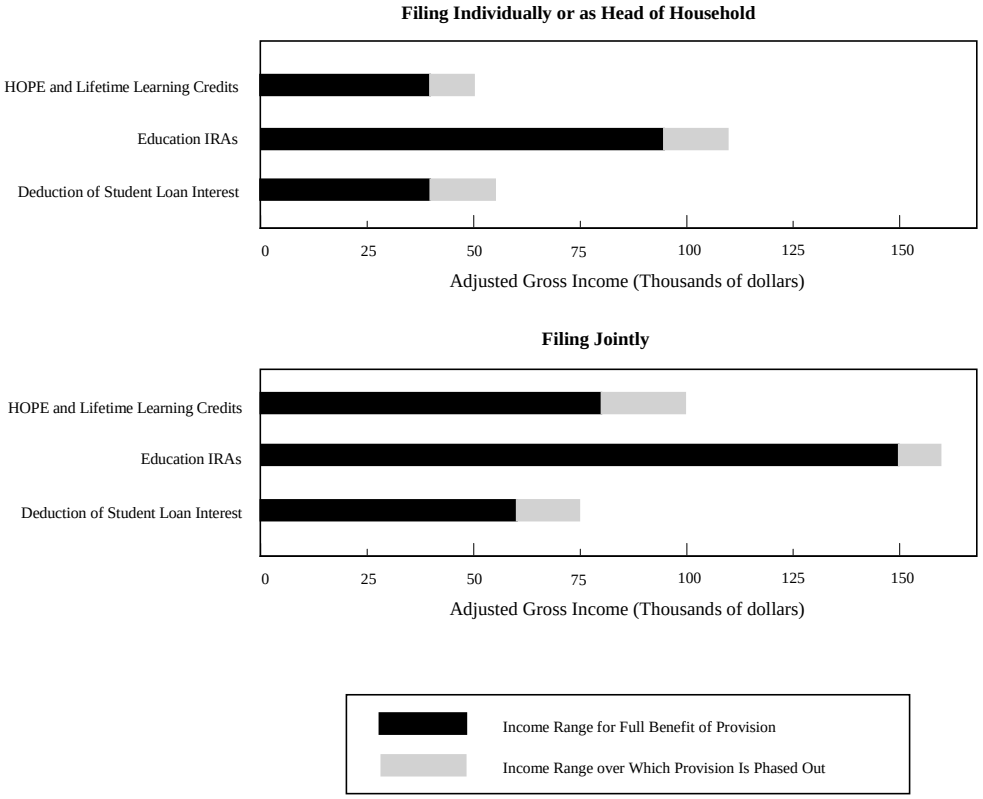
Those limits both complicate decisionmaking about how and when to use each provision and reduce the value of the provisions to taxpayers. For example, a student who completes his or her second year of college in June and begins the third year in September incurs costs for each school year in the same tax year. Expenses for the first half of the year qualify for the HOPE credit, and those for the latter part of the year qualify for the lifetime learning credit. But because a taxpayer cannot claim both credits for that student in a single tax year, he or she must determine the value of each credit, claim the larger, and forgo the smaller.[17] Furthermore, the taxpayer must decide in advance whether to use funds from an education IRA to pay the student's college costs, calculating first the value of lost HOPE or lifetime learning credits that cannot be claimed if IRA funds are withdrawn. A decision about withdrawing IRA funds may hinge on the availability and cost of student loans; that cost in turn is affected by the potential deductibility of interest paid on the loans.

Second, taxpayers are limited in using the various tax provisions if their income exceeds specified thresholds, which differ for each provision and for joint and single filers (see Figure 2). Depending on their income, taxpayers face different choices about education savings and deductibility of expenses. Eligibility to claim the HOPE and lifetime learning credits, contribute to education IRAs, and deduct interest paid on student loans phases out over three different income ranges, adding to the complexity of deciding which provisions to use. Because taxpayers incur expenses and must decide about IRA withdrawals before they know what their total annual income will be, they may find that they have lost eligibility for tax benefits they expected to use.

Those income limits also create differences in the tax liability of married and unmarried couples. Joint filers face higher income ranges over which eligibility for the tax provisions phases out than other taxpayers do. The different ranges can cause a married couple higher or lower tax liabilities than the partners would face if they were not married. For example, consider a couple in which each spouse earns $40,000 and pays $1,000 of interest on student loans. Filing jointly with a total income of $80,000, the couple would be unable to deduct any of the interest in calculating their taxable income. If they were not married, however, each could

17. Tuition and fees covering quarters or semesters that begin during the first three months of a calendar year may be paid during the previous calendar year and qualify for tax credits in the earlier year. Thus, for students at institutions on the semester system, tuition and fees for each full school year could be paid in the calendar year in which the school year starts, and the taxpayer could claim the appropriate credit for the full year's expenses in that year.

FIGURE 2. RANGES OF INCOME OVER WHICH TAXPAYERS QUALIFY FOR EDUCATION TAX PROVISIONS, BY TAX FILING STATUS



SOURCE: Congressional Budget Office.

NOTE: IRAs = individual retirement accounts.

deduct the full $1,000 in interest, and their combined tax liability would fall by $560.[18] The higher tax paid by the couple filing jointly is generally termed a "marriage penalty."[19] (The limit on the amount deductible, because it applies to each tax return, could also create marriage penalties.)[20] Note, however, that the income limits can also reduce a couple's tax liability, creating a "marriage bonus." If only one spouse in the above couple worked, earning $60,000, filing jointly would lower their tax bill by $560 compared with filing individually.[21]

THE NET EFFECT ON SAVING FOR EDUCATION

By providing tax subsidies for postsecondary education, TRA-97 reduces the need for saving. HOPE and lifetime learning credits can finance some or all of the tuition costs of attending college, thus lowering the cost to students and their families and enabling them to save less for education expenses. That effect may be small for most families, since few have significant savings anyway from which to pay for college. But families who have saved for college may choose to substitute the tax credits for savings. Allowing such families to use existing IRA funds for education expenses without penalty could have a similar effect.

The deductibility of interest paid on student loans lowers the cost of borrowing to pay for college and should thus lead students to rely on loans even more than they do already. To the extent that students choose to substitute college loans for savings in financing their education, the deductibility of interest will reduce saving.

The magnitudes of those various factors, and the interactions among them, are uncertain. The new saving incentives would tend to increase saving by some families but possibly reduce it by others. The direct and indirect subsidies for college expenses would tend to reduce saving. Regardless of which factors predominate, the

18. Filing either jointly or individually, the couple would have a marginal tax rate of 28 percent. Deducting the $1,000 interest payments would reduce the tax liability of each spouse by 28 percent of $1,000, or $280. Since each spouse would have those savings, the couple's tax liability would fall by $560.

19. For a complete discussion of marriage penalties and bonuses, see Congressional Budget Office, *For Better or For Worse: Marriage and the Federal Income Tax* (June 1997).

20. After 2000, when the limit reaches $2,500, a married couple will be able to deduct no more than that amount of interest. If the partners are not married, however, their limit will be $5,000.

21. As individuals, the employed spouse's $60,000 income would disqualify him or her from claiming the deduction, and the nonworking spouse would have no income from which to deduct interest payments. In contrast, the couple could deduct the full $2,000 of interest payments, reducing their taxes by 28 percent of $2,000, or $560.

entire package of education provisions is unlikely to increase saving for college significantly.

CHAPTER III

EFFECTS ON INCENTIVES TO SAVE AND INVEST

The Taxpayer Relief Act of 1997 provides incentives to save and invest by expanding tax-preferred individual retirement accounts and reducing taxes on capital gains, estates and gifts, and small businesses. In addition, the act provides special incentives to invest in the District of Columbia. All of those provisions tend to reduce slightly the overall effective tax rate on capital. Thus, in theory, they should increase capital formation (investment in physical capital such as machines, houses, and other buildings). Because the reduction in the tax rate on capital is small, however, those changes are unlikely to have a noticeable effect on the nation's capital stock.

EXPANDED ELIGIBILITY FOR IRAs

TRA-97 expands opportunities to save through tax-preferred individual retirement accounts in two major ways. First, it increases the maximum income that taxpayers with employer-sponsored retirement plans can earn and still deduct some or all of their IRA contributions from their taxable income. Second, it establishes two new IRAs, the Roth IRA and the education IRA (which was discussed in the previous chapter). Contributions to those IRAs are not tax-deductible; however, unlike previous IRAs, earnings on those contributions are not taxed when withdrawn from the accounts. In addition, the Taxpayer Relief Act makes IRAs more attractive as a way to save for shorter-term, nonretirement purposes by eliminating penalties for early withdrawals that are made to pay for education or a first-time home purchase.

Tax-Deductible IRAs

TRA-97 expands the categories of people who may deduct IRA contributions from their taxable income to include taxpayers with higher income and married couples in which one spouse has pension coverage at work. Under previous law, married couples could deduct contributions only if their adjusted gross income was less than $40,000 or neither spouse participated in an employer-sponsored retirement plan; single taxpayers could deduct IRA contributions if their AGI was less than $25,000 or they did not participate in a pension plan at work. In no case could a single taxpayer contribute more than $2,000 or his or her earned income, whichever was less, nor could a married couple contribute more than $4,000 ($2,000 for each spouse) or their total earned income. For people who participated in pension plans,

eligibility to deduct IRA contributions from taxable income phased out over a $10,000 income range, so married couples with AGI above $50,000 and single taxpayers with AGI above $35,000 could not deduct any of their contributions.

The major change that TRA-97 makes to deductible IRAs is to gradually increase eligibility limits on income. The phaseout range will eventually reach $80,000 to $100,000 for married couples (in 2007 and beyond) and $50,000 to $60,000 for single filers (in 2005 and beyond). The law allows even higher phaseout levels for couples in which only one spouse participates in an employer-sponsored retirement plan. For such taxpayers, the maximum deductible IRA contribution phases out between adjusted gross income of $150,000 and $160,000.

Thus, taxpayers with AGI between the old and new phaseout levels are now able to deduct their IRA contributions. That set of people will expand gradually as the phaseout levels rise in a series of steps. According to data from the 1995 Survey of Consumer Finances conducted for the Federal Reserve Board, if the eventual levels were in place now, the total number of eligible households would increase by 18 percent (see Table 3).

What fraction of newly eligible taxpayers will actually make tax-deductible contributions to IRAs is uncertain. Before the Tax Reform Act of 1986, no income limits existed for deducting contributions. Although only about 30 percent of married couples and 10 percent of other taxpayers made IRA contributions, participation rates were higher among upper-income households (see Table 4). However, the world is quite different today. More than three-fourths of newly eligible households have access to a 401(k) plan or another type of employer-sponsored, tax-preferred saving plan, which were virtually nonexistent in the early 1980s (see Table 3). Saving through such plans offers the same tax advantages as a deductible IRA. Thus, the higher income limits for deductible IRAs provide an incentive to save only if newly eligible people have contributed the maximum amount to their 401(k) plan.

Even if some newly eligible taxpayers do contribute to deductible IRAs, their contributions may not represent new saving. The contributions could come from existing savings accounts, borrowing, or ongoing saving. Economists disagree about what effect the universal IRAs available between 1982 and 1986 had on saving. In a 1996 symposium on the topic, three papers reached widely different estimates of the fraction of IRA contributions during the 1982-1986 period that represented new

TABLE 3. CHANGES IN ELIGIBILITY FOR DEDUCTIBLE IRAs

Eligibility Category	Number of Households (Thousands)	Number with Employer-Sponsored Saving Plans[a] (Thousands)	Percentage with Employer-Sponsored Saving Plans[a]
Eligible Before TRA-97			
Individuals and Married Couples Without Pensions	59,950	0	0
Individuals with Pensions (Income below $35,000)	7,432	5,313	71.5
Married Couples with Pensions (Income below $50,000)	11,970	9,124	76.2
Total	79,352	14,437	18.2
Newly Eligible Under TRA-97			
Individuals with Pensions (Income between $35,000 and $60,000)	3,722	2,935	78.9
Married Couples with Pensions (Income between $50,000 and $100,000)	10,900	8,503	78.0
Total	14,622	11,438	78.2
All Households Eligible Under TRA-97			
Individuals and Married Couples Without Pensions	59,950	0	0
Individuals with Pensions (Income below $60,000)	11,154	8,248	73.9
Married Couples with Pensions (Income below $100,000)	22,870	17,627	77.1
Total	93,974	25,875	27.5
Memorandum:			
Percentage Increase in Eligible Households	18.4	79.2	n.a.

SOURCE: Congressional Budget Office tabulations based on the 1995 Survey of Consumer Finances.

NOTE: IRAs = individual retirement accounts; TRA-97 = Taxpayer Relief Act of 1997; n.a. = not applicable.

a. Plans such as 401(k)s.

TABLE 4. IRA PARTICIPATION, BY TAXPAYER'S FILING STATUS AND ADJUSTED GROSS INCOME, 1985

Adjusted Gross Income (Dollars)	Married Couples Filing Jointly			Other Filers		
	Returns with Wage Income (Thousands)	Percentage of Returns with IRA Contributions	Average Contributions for Returns with IRAs (Dollars)	Returns with Wage Income (Thousands)	Percentage of Returns with IRA Contributions	Average Contributions for Returns with IRAs (Dollars)
Less Than 10,000	3,931	5.5	2,006	22,532	1.9	1,486
10,000 to 24,999	12,106	12.4	2,162	17,403	11.4	1,594
25,000 to 49,999	18,742	29.4	2,423	5,285	35.5	1,810
50,000 to 99,999	5,764	61.3	3,041	447	70.8	1,981
100,000 to 199,999	689	85.2	3,244	66	73.6	2,015
200,000 and Over	214	85.2	3,129	20	70.1	2,201
Total	41,445	27.8	2,624	45,753	10.2	1,703

SOURCE: Congressional Budget Office tabulations of data from the 1985 Statistics of Income Survey by the Internal Revenue Service.

NOTE: IRA = individual retirement account.

saving.[1] The first paper concluded that about one-fourth of contributions were new saving, the second that most contributions were, and the third that virtually none were.

Disagreement about the impact of universal IRAs results from the difficulty of inferring how much contributors would have saved if IRA eligibility had not been expanded in 1982. For example, the second paper compared changes in IRA balances for a sample of contributors with changes in their financial assets outside IRAs to conclude that IRAs were mostly new saving. The third paper considered the same sample but also considered changes in home equity and found that higher IRA balances appeared to substitute for saving that would have taken other forms if IRAs had not been available. Similar analytic difficulties will probably hinder future attempts to assess how this latest expansion of IRA eligibility affects saving.

1. The three papers, which appeared in the *Journal of Economic Perspectives*, vol. 10, no. 4 (Fall 1996), are R. Glenn Hubbard and Jonathan S. Skinner, "Assessing the Effectiveness of Saving Incentives," pp. 73-90; James M. Poterba, Steven F. Venti, and David A. Wise, "How Retirement Saving Programs Increase Saving," pp. 91-112; and Eric M. Engen, William G. Gale, and John Karl Scholz, "The Illusory Effects of Saving Incentives on Saving," pp. 113-138. Those three papers made up the symposium.

Roth IRAs

In addition to modifying the income limits for existing IRAs, TRA-97 created a new type of account, the Roth IRA (named for Senate Finance Committee Chairman William Roth). The tax benefits of Roth IRAs are back-loaded: contributions are not deductible, but qualified withdrawals from the accounts are not included in taxable income. (With deductible IRAs, in contrast, contributions are tax-deductible but withdrawals are fully taxable.) Taxpayers can make nondeductible contributions to a Roth IRA up to the lesser of $2,000 or their earned income. Married couples can contribute up to the lesser of $2,000 for each spouse or the couple's total earned income. Those amounts are phased out for joint filers with adjusted gross income between $150,000 and $160,000 and for individuals with AGI between $95,000 and $110,000. The income phaseouts apply without regard to active participation in an employer-sponsored retirement plan.

Taxpayers with AGI less than $100,000 are eligible to roll over or convert their existing IRA balances into a Roth IRA. Rollovers are subject to tax at the time of conversion except to the extent that the amount rolled over was a nondeductible contribution.[2] However, rollovers are not subject to the usual 10 percent penalty on early withdrawals.

Contributions to all types of IRAs (other than education IRAs) are limited to $2,000 a year per person. But with the same nominal limit on deductible and Roth IRAs, the latter allow taxpayers to shelter the equivalent of more before-tax income, because the $2,000 is a limit on after-tax contributions. Thus, taxpayers can accumulate more retirement savings tax-free with a Roth IRA.[3]

Roth IRAs also offer a tax-advantaged vehicle for saving to pension plan participants whose income is too high to qualify for deductible IRAs. Such participants make up about 3 million families, according to the 1995 Survey of Consumer Finances.[4] As with deductible IRAs, however, whether the availability of Roth IRAs will cause increased participation is unclear. Taxpayers who have access to 401(k) plans—more than 80 percent of those 3 million families—already receive a tax-preferred rate of return on new saving through those plans, unless they are

2. Rollovers made before January 1, 1999, are taxed (included in AGI) in equal increments over four years.

3. For an equivalent before-tax contribution, a deductible IRA and a back-loaded IRA provide the same tax benefit over time if tax rates are constant, but not if tax rates at the time of contribution differ from tax rates at withdrawal. Thus, people who can contribute to either deductible or back-loaded IRAs have an incentive to choose the back-loaded form if they anticipate that the marginal tax rate they will face at withdrawal will be higher than their rate at the time of contribution.

4. In this context, families include single people not living with relatives. The Survey of Consumer Finances is thus representative of the entire population.

contributing the maximum amount allowed. Those who are not active participants in employer plans already qualify for the $2,000 annual contribution to deductible IRAs.

Taxpayers who use Roth IRAs for longer-term saving are likely to not have access to other tax-preferred methods of saving or to contribute the maximum amount to those accounts already.[5] Like the increased availability of deductible IRAs, Roth IRAs give those people a greater incentive to save. Those people will also have an incentive to shift existing savings out of previously taxed forms to the new tax-preferred form without increasing their saving, or to save less because the return on that saving is no longer taxed.

Shorter-Term Saving

TRA-97 makes it easier for people to withdraw money from IRAs for various purposes other than retirement. As a result, those accounts may become a more attractive vehicle for shorter-term saving, both compared with IRAs under prior law and compared with 401(k)-type plans. The act waives the 10 percent penalty for IRA withdrawals made before age 59½ if those withdrawals are used to buy a home or pay education expenses. Previously, penalties were waived only if the account holder died or became disabled, purchased medical insurance (if unemployed), faced extraordinary medical expenses, or took the withdrawal as annuity payments. Without penalties, saving for such purposes through a deductible IRA receives the same advantages as saving for retirement. In addition, funds in Roth IRAs may be withdrawn for a first-time home purchase (up to a $10,000 lifetime maximum) without being subject to tax. Withdrawals from Roth IRAs for education expenses, although not penalized, are subject to tax.

If taxpayers anticipate that they may need to withdraw some of their savings for other, nonqualified purposes, they might still find it advantageous to use a deductible or Roth IRA despite the 10 percent penalty. Funds held long enough in an IRA have the advantage of deferred taxes, which can raise the return above that on normal saving (see Figure 3). For example, taxpayers in the 28 percent federal tax bracket who earned a 6 percent annual return would gain from saving in a deductible IRA and paying the penalty if they waited 10 years before making a withdrawal. Making up for the penalty takes much longer when using a Roth IRA, but the penalty for withdrawing funds from those accounts is much more modest in the first few years because it applies only to the interest earned, not the initial contribution.

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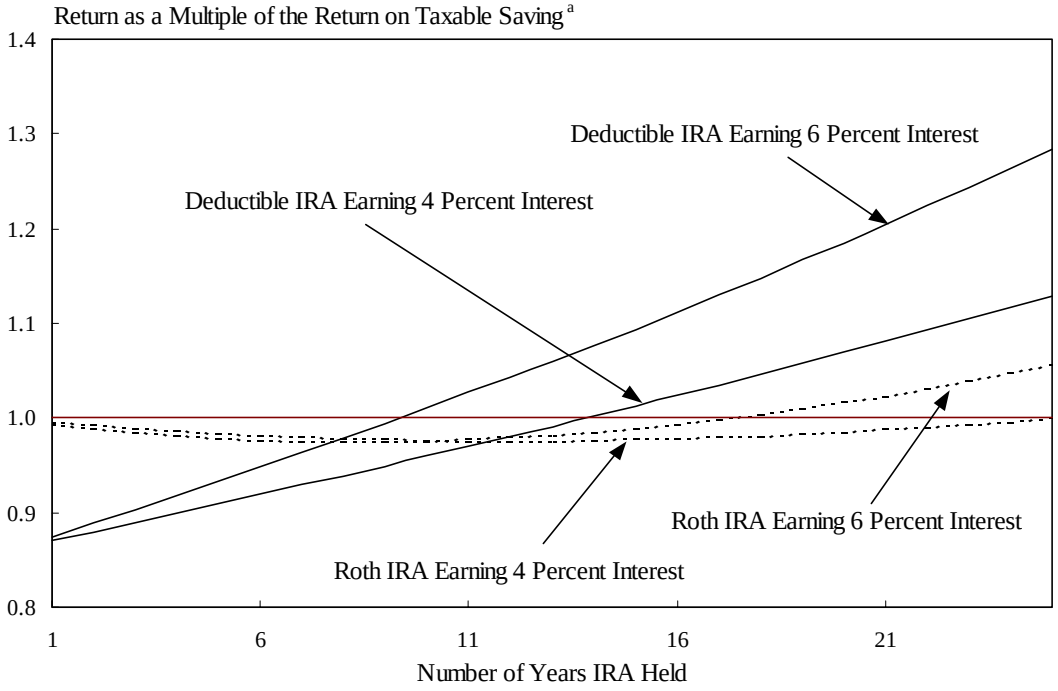
5. Among families who are eligible for Roth IRAs but ineligible for deductible IRAs, only around 542,000 (about 0.5 percent of all families) do not have access to tax-preferred saving plans, according to the 1995 Survey of Consumer Finances.

Overall Effects

The changes in TRA-97 are likely to alter the nature of IRA saving. Compared with previous saving in IRAs, any new saving is more likely to be for nonretirement purposes, and both existing and new saving is more likely to be withdrawn after shorter holding periods. The greater liquidity of IRAs under TRA-97 also suggests that younger households may be more apt to make use of them.

The net effect on total saving is uncertain, however. On the one hand, the increased liquidity of IRAs may cause a shift in existing saving rather than encourage new saving because IRAs become a closer (and tax-preferred) substitute for short-term savings accounts. Increased liquidity could even reduce total saving if people tapped into their IRAs for current needs that seemed more pressing than saving for

FIGURE 3. DOES IT PAY TO USE AN IRA FOR NONQUALIFIED SAVING?



SOURCE: Congressional Budget Office.

NOTE: This figure assumes that the owner of the individual retirement account (IRA) is in the 28 percent tax bracket.

a. The after-tax and after-penalty return on a nonqualified—and therefore penalized—withdrawal from each IRA option, measured as a multiple of the return on an equivalent amount of pretax saving held in a taxable account.

retirement. On the other hand, the increased liquidity of IRAs might boost total saving by expanding the usefulness of tax-preferred saving, so that people perceived the tax change as providing a more favorable return on saving in general and not just on retirement saving.

REDUCED TAX RATES ON CAPITAL GAINS

TRA-97 lowers the tax rate that individuals pay on realized capital gains. It also increases the degree to which that rate varies according to how long the underlying asset has been held. Previously, capital gains on assets held for more than one year were subject to a maximum tax rate of 28 percent. Gains on assets held for a year or less—short-term gains—were taxed at the same rate as ordinary income. (However, any short-term losses in excess of short-term gains could be used to offset long-term gains for tax purposes.) Taxpayers in the 15 percent bracket for ordinary income also paid that rate on all capital gains, regardless of how long the assets were owned.

TRA-97 reduces the rates on capital gains for assets held more than 18 months from 15 percent to 10 percent and from 28 percent to 20 percent (see Table 5). Gains on assets held longer than 12 months but less than 18 months continued to face the higher rates until the Internal Revenue Service Restructuring and Reform Act of 1998 eliminated them starting on January 1, 1998. Gains on assets held for 12 months or less continue to be taxed at the rates for ordinary income. Beginning in 2001, gains on assets held for five years or longer will face even lower rates: 8 percent for taxpayers in the 15 percent bracket and 18 percent for taxpayers in higher brackets (if the assets are acquired after December 31, 2000). In 2001, taxpayers will also have a one-time chance to pay tax on their accumulated gains on an asset so they can then take advantage of the lower rates on future gains. (Separate rules apply to real estate gains attributable to previously claimed depreciation, gains on collectibles, and the already tax-preferred gains on small-business stock.)[6]

Data from individual income tax returns indicate that roughly two-thirds of taxable capital gains come from sales of assets held for more than five years (see Table 5). Tabulations of 1995 tax returns—the most recent year for which full information is available—show a significant clustering of asset sales when the holding periods are just long enough to qualify for long-term tax treatment. That clustering suggests that some taxpayers defer sales to qualify for the lower rate on long-term gains.

6. Long-term gains attributable to previous deductions for real estate depreciation face a maximum tax rate of 25 percent.

TRA-97 also expands the amount of capital gains from selling an owner-occupied home that taxpayers can exclude from taxation. Previously, homeowners could avoid paying capital gains taxes on home sales either by purchasing another home of greater value within two years and rolling over the gain or by using a one-time exclusion of $125,000 if they were 55 or older.

Under those provisions, few people actually paid taxes on home sales, so the tax raised little revenue. In 1993, when more than 3 million homes were sold, fewer than

TABLE 5. DISTRIBUTION AND TAX TREATMENT OF CAPITAL GAINS, BY HOLDING PERIOD

Holding Period (Months)	Percentage of Total Gains	Tax Rate	
		Before TRA-97	Under TRA-97
Up to 12	5	Same as ordinary income	Same as ordinary income
12 to 18	3	28 percent maximum	28 percent maximum[a]
18 to 60	25	28 percent maximum	10 percent maximum for taxpayers in the 15 percent bracket; 20 percent for taxpayers in other brackets
Over 60	67	28 percent maximum	Through 2000, same as above; starting in 2001, rates drop to 8 percent and 18 percent[b]

SOURCE: Congressional Budget Office computations based on the Internal Revenue Service's panel data on sales of capital assets (1985, 1993, and 1994). For related tabulations, see Gerald Auten and Jeanette Wilson, "Sales of Capital Assets Reported on Individual Income Tax Returns, 1985," *Statistics of Income Bulletin*, vol. 14, no. 4 (Spring 1999), p. 132.

3. The Internal Revenue Service Restructuring and Reform Act of 1998 eliminated this rate for gains on assets held between 12 months and 18 months. Starting on January 1, 1998, all gains on assets held for 12 months to 60 months are taxed at 10 percent or 20 percent.

b. The 8 percent rate applies to taxpayers in the 15 percent bracket for gains realized in 2001 or later; the 18 percent rate applies to taxpayers in higher brackets for gains on assets acquired after 2001.

148,000 taxpayers reported a taxable gain from a home sale, and they paid less than $300 million in taxes on those gains.[7]

TRA-97 allows taxpayers to exclude $500,000 if filing jointly (or $250,000 otherwise) of capital gains on the sale of a home every two years. But it eliminates the provision by which taxpayers could roll over gains from one home to the next. Although few people paid capital gains taxes on home sales before TRA-97, the former rules caused some taxpayers either to purchase larger homes than they would have preferred or to delay selling until they qualified for the exclusion at age 55. Thus, the total economic burden and the effective tax rates that such homeowners face may decrease because of TRA-97, even if the actual amount of taxes paid does not change significantly.

Effective Tax Rates on Asset Sales

Besides lower tax rates, long-term gains receive various tax advantages compared with other forms of income. First, they benefit from the deferral of tax payments because taxes on accrued gains are postponed until gains are actually realized. Second, long-term gains on assets left as a bequest are not taxed through the income tax system (although, like all forms of bequeathed wealth, they may be taxable under the estate and gift tax). Some estimates suggest that about half of all capital gains accrued by individuals escape taxation because they are not realized before the owner dies.[8] Third, some long-term gains on corporate stock are untaxed because the stock is held by tax-exempt institutions such as pension funds.[9] Fourth, as discussed above, capital gains on home sales are hardly ever taxed.

At the same time, long-term capital gains (and other types of capital income) are at a disadvantage compared with other forms of income because taxes are paid on the nominal gains from the sale of an asset without any adjustment for inflation.

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7. Leonard Burman, Sally Wallace, and David Weiner, "How Capital Gains Taxes Distort Homeowners' Decisions," *Proceedings of the Eighty-Ninth Annual Conference on Taxation of the National Tax Association, 1996* (Washington, D.C.: National Tax Association, 1997), p. 385.

8. Alan Auerbach, "Capital Gains Taxation and Tax Reform," *National Tax Journal*, vol. 42, no. 3 (September 1989), p. 394; and Jane G. Gravelle, *Limits to Capital Gains Feedback Effects*, CRS Report to Congress 91-250 (Congressional Research Service, March 1991).

9. Almost 40 percent of corporate stock is held by institutions exempt from individual income taxes, such as pension plans; see Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States: Annual Flows and Outstandings, 1991-1996* (September 15, 1997), Tables L.100, L.100a, and L.213. Because those plans are partially constrained by funding limits, only about one-fourth of marginal investment in stock is likely to come from such tax-exempt entities.

Taking into account deferral, the portion of gains that is not taxed, and the maximum rate of 28 percent on long-term gains, the Congressional Budget Office (CBO) estimates that before TRA-97, the effective personal tax rates on nominal capital gains—the average rates people actually pay—were well below the statutory tax rates. Those effective rates were 9.4 percent for gains on corporate stock, 10.6 percent for gains on noncorporate assets (fewer of which are held by tax-exempt entities), and close to zero for gains on owner-occupied housing. CBO estimates that TRA-97 lowers the effective rate for gains on corporate stock to 7.3 percent and the rate for gains on noncorporate assets to 8.0 percent. The rate for gains on owner-occupied housing should remain close to zero. But because capital gains make up just a small fraction of all income from capital, the effect of those changes on the overall effective tax rate on capital is less than 1 percentage point.[10]

The Economic Effect of Lower Tax Rates on Capital Gains

The effect that lower tax rates will have on incentives for capital formation depends on two things: how the new rates change the overall effective tax rate on capital and thus the net return on saving, and how households and businesses respond to that change. Although in theory the response could be either positive or negative, empirical studies suggest that a small but positive response is likely.[11] Given that finding and the small change in the overall effective tax rate on capital, the capital gains tax reductions in TRA-97 are expected to have little effect on total capital accumulation.

Those tax reductions may or may not lead to more efficient use of existing capital, which would improve economic well-being with no increase in the total capital stock. The overall income tax system—corporate and individual rates together—taxes corporate income more heavily than noncorporate income and gives preferential treatment to owner-occupied housing. Changes in the tax rates on capital gains affect some types of capital or sectors of the economy more than others. For example, they reduce the effective tax rate on corporate capital relative to that on noncorporate capital and both of those rates relative to the rate on owner-occupied

10. The overall effective tax rate on capital is the percentage reduction in the real pretax rate of return on capital caused by most federal and state taxes. The effects of taxing nominal rather than real capital gains are incorporated in this measure, even though those effects are not included in the nominal tax rates at the beginning of the paragraph.

11. See Douglas W. Elmendorf, *The Effect of Interest-Rate Changes on Household Saving and Consumption: A Survey*, Finance and Economics Discussion Series No. 1996-27 (Federal Reserve Board, 1996). Elmendorf surveys both direct econometric estimates and indirect simulation approaches and concludes only that the range of estimates is very broad but in the positive values. His discussion suggests, however, that only in rare instances have economists found elasticities greater than 0.5; that is, for a given percentage change in the net-of-tax rate of return, saving responds by less than half that amount, at best.

housing.[12] The effects of those changes are uncertain. On the one hand, TRA-97 moves some effective tax rates closer together, possibly reducing the influence of capital gains taxes on how the total stock of capital is allocated among the corporate, noncorporate, and owner-occupied-housing sectors. On the other hand, it increases the difference between taxes on capital gains and on other forms of capital and labor income as well as among taxes on different types of capital gains (depending on the holding period). Those new differences in tax rates could increase tax-sheltering activities and the degree to which taxes affect people's financial decisions.

The reduction in tax rates on capital gains might also encourage investment in new enterprises and riskier projects, both of which are more likely to be financed by equity than by debt. To the extent that too little such investment occurs otherwise, the lower tax rates might spur innovation and raise productivity. However, little empirical evidence exists to document the importance of such effects.

GREATER TAX EXEMPTION FOR ESTATES AND GIFTS

TRA-97 gradually raises the credit that taxpayers can apply against their liability for estate and gift taxes. Thus, the act increases the amount of cumulative transfers that are effectively tax-exempt from $600,000, which it has been since 1987, to $1 million by 2006. The act also provides special exemptions for transfers of family-owned businesses, which effectively generate an immediate $1.3 million exemption.

Very few people leave behind a taxable estate. Fewer than 2 percent of deaths each year result in payment of any estate tax, although that percentage has nearly doubled since the mid-1980s. Before TRA-97, it was projected to grow rapidly, nearly doubling again by 2007. But the changes enacted in TRA-97 will effectively eliminate that growth, keeping the percentage roughly constant.

With rates as high as 55 percent, the estate tax can have a significant impact on accumulated wealth. But only estates that fall between the old and new exemption levels will benefit from the higher credits. In 1995, 44 percent of taxable estates were worth between $600,000 and $1 million, although those estates accounted for only about 17 percent of the total value of taxable estates and only about 6 percent of estate tax liabilities (see Table 6).

One potential benefit of lower estate taxes is faster growth of the nation's capital stock if people save more. Whether the larger credit will generate additional

12. The reduction in the cost of capital and in the effective tax rate is largest in the corporate sector, partly because capital gains account for a larger fraction of the return on investment in the corporate sector and partly because TRA-97 reduces the tax rate on some real estate investments by less than the rate on corporate stock. Real estate accounts for a large part of the capital stock in noncorporate businesses.

TABLE 6. DISTRIBUTION AND TAX TREATMENT OF TAXABLE ESTATES, 1995

Gross Value of Estate (Dollars)	Number of Taxable Returns	Total Gross Value of Estates (Billions of dollars)	Total Tax Liability (Billions of dollars)
600,000 to 1 Million	13,827	11.2	0.7
1 Million to 2.5 Million	12,712	18.9	3.0
2.5 Million to 5 Million	3,298	11.3	2.7
5 Million to 10 Million	1,105	7.8	2.1
10 Million to 20 Million	390	5.4	1.4
20 Million or More	231	12.7	2.0
Total Taxable Estates	31,563	67.2	11.8

SOURCE: Congressional Budget Office tabulations based on Barry W. Johnson and Jacob M. Mikow, "Federal Estate Tax Returns, 1995-1997," *Statistics of Income Bulletin* (Summer 1999), pp. 91, 96.

NOTE: Less than 2 percent of estates were taxable in 1995.

capital depends on whether lower taxes induce people to accumulate larger estates. That in turn depends on why people leave bequests—an issue on which economists have reached no firm conclusions.[13] If bequests are accidental, occurring only because people overestimate how long they will live, bequests will not respond to changes in the estate tax. In that case, increasing the tax credit would affect neither the size of estates nor capital accumulation. If, instead, people accumulate wealth with the intention of leaving money to their descendants or influencing their heirs' behavior, a reduction in estate taxes could affect how much they choose to save and hence the amount of capital accumulation.

Even if bequests are intentional, however, the effect of lowering estate taxes is uncertain. On the one hand, higher credits could encourage people to save more for bequests because the effective return on such saving is greater. On the other hand, higher credits enable people to leave the same after-tax bequest with less saving and so may lead them to consume more and save less, thus decreasing capital

13. See A. Masson and P. Pestieau, "Bequest Motives and Models of Inheritance: A Survey of the Literature," in Guido Erreygers and Toon Vandevelde, eds., *Is Inheritance Legitimate? Ethical and Economic Aspects of Wealth Transfers* (Berlin: Springer-Verlag, 1997).

accumulation.[14] Furthermore, research indicates that people expecting bequests may work less and save less than they would otherwise.[15] That effect is small but would further reduce capital accumulation. Economic analyses have not determined the relative importance of those effects on capital accumulation, but the last two probably offset the beneficial effect of increased saving for intentional bequests.[16]

Although they may not have a significant effect on overall capital accumulation, the tax provisions for estates and gifts in TRA-97 could alter the composition of investment. Constraints on cash flow sometimes force small, family-owned businesses to sell off their enterprises to pay estate taxes. The $1.3 million exemption, together with a reduction in the interest rate on installment payments of the tax, will lessen the tax liabilities of such businesses and may allow more of them to survive inheritance. Also, to the extent that people now devote resources to planning to avoid paying taxes, reductions in the estate tax could free up those resources for more productive uses.

TAX REDUCTIONS FOR CORPORATIONS AND SMALL BUSINESSES

The Taxpayer Relief Act provides substantial relief to corporations from the alternative minimum tax. Previous depreciation rules for the AMT raised the pretax cost of capital for companies by requiring them to depreciate assets more slowly over longer lifetimes than under the regular income tax. That requirement reduced write-offs in the years immediately after an asset was put in service. TRA-97 eliminates the difference in allowable depreciation lifetimes. Thus, for investment assets put in place after December 31, 1998, corporations can calculate depreciation for purposes of the AMT using the same asset lifetimes they use for purposes of the regular tax. (TRA-97 does not change the requirement that companies use slower methods of depreciation under the AMT, however.) In addition, the act exempts small

14. In fact, for taxpayers accumulating estates greater than $1 million in value (or greater than $1.3 million for family-owned businesses), the larger credits only increase after-tax bequests. They do not affect the tax rate on additional saving, making significantly greater saving—and hence capital accumulation—unlikely.

15. Douglas Holtz-Eakin, David Joulfaian, and Harvey Rosen, "The Carnegie Conjecture: Some Empirical Evidence," *Quarterly Journal of Economics*, vol. 108, no. 2 (1993), pp. 413-436; and David Joulfaian and Mark O. Wilhelm, "Inheritance and Labor Supply," *Journal of Human Resources*, vol. 29, no. 4 (Fall 1994), pp. 1205-1234.

16. Two recent studies examine how estate and gift taxes influence the way wealth is transferred but fail to shed light on the question of how taxes affect wealth accumulation. One study, using a single year of survey data, found that people give less than expected during their lives, despite the tax advantages of gifts over bequests at death; see James Poterba, "Estate and Gift Taxes and Incentives for *Inter Vivos* Giving in the United States" (paper presented at the American Enterprise Institute, Washington, D.C., June 17, 1999). The second study, based on tax return data, found that the difference between tax rates for estates and gifts significantly affects the way wealth is transferred; see David Joulfaian, "Choosing Between Gifts and Bequests: How Taxes Affect Wealth Transfers" (draft, Department of the Treasury, September 1999).

businesses—those with receipts averaging less than $5 million a year over a recent period—from the AMT altogether.

In a recent analysis of the corporate AMT, economist Andrew Lyon found that the adjustment for AMT depreciation is one of the most significant factors in making companies subject to the tax.[17] According to Lyon, eliminating that adjustment—in terms of both asset lifetimes and depreciation methods—would greatly reduce the possibility that a firm would pay AMT and would bring the cost of capital for any firms still subject to it closely in line with the cost of capital under the regular income tax. For example, for a company that had been paying AMT for six years, the cost of investing in equipment would decline from about 7.4 percent to about 7.0 percent, compared with a cost of about 6.9 percent under the regular tax. That change corresponds to a change of a few percentage points in effective tax rates, but many firms move on and off the AMT frequently, so the average change in effective tax rates would be lower. Lyon did not calculate the effect of eliminating only the differences in asset lifetimes, as TRA-97 does, but his numbers for a similar policy suggest that it would provide about half of the decline in the cost of capital, at least for equipment.

TRA-97 is expected to reduce the cost of capital for firms subject to the AMT, bringing their effective tax rates on capital closer to those of other firms. Most economists would view that shift as a more efficient allocation of resources; there is no reason why firms permanently subject only to the regular tax system should be given greater incentives to invest than firms subject to the AMT.

Exempting small businesses from the AMT is likely to increase investment in those businesses, but it could lead to a misallocation of investment. On the one hand, that exemption reduces both the amount of total investment subject to the AMT and the overall cost of capital, potentially improving the overall allocation of capital in the economy and encouraging increased capital formation. On the other hand, it might cause overinvestment of resources in small businesses, diverting resources away from possibly more productive uses in larger firms, and could discourage small businesses from expanding.

In addition to the changes related to the AMT, TRA-97 provides more generous deductions for certain types of expenses of self-employed people and extends the tax credit for research and experimentation. Together, all of the tax reductions for businesses in the act tend to reduce the overall effective tax rate on capital in the economy.

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17. Andrew B. Lyon, *Cracking the Code: Making Sense of the Corporate Alternative Minimum Tax* (Washington, D.C.: Brookings Institution, 1997), Chapters 2 and 5.

INCENTIVES TO INVEST IN THE DISTRICT OF COLUMBIA

TRA-97 also creates tax incentives intended to promote investment in the District of Columbia. Businesses within a designated "D.C. Enterprise Zone" qualify for a 20 percent credit on the first $15,000 of wages paid to employees who are residents of the District, an additional credit of $20,000 on expensing under section 179 of the Internal Revenue Code, and tax-exempt financing for specified facilities within the zone. The zone designation—which is effective from January 1, 1998, through December 31, 2002—applies to all census tracts that have a poverty rate of 20 percent or more or that were part of a previously designated enterprise community.

Gains from selling assets located in a qualified D.C. Enterprise Zone that were acquired after 1997 and held for more than five years are exempt from capital gains tax. For purposes of the capital gains provisions, the D.C. Enterprise Zone includes all census tracts with a poverty rate of 10 percent or higher—provided that at least 80 percent of an establishment's total gross income derives from actively conducting a qualified business within the zone.

First-time home buyers who purchase a principal residence in the District qualify for a tax credit of up to $5,000 of the price. First-time home buyers are any person or couple who has not owned a home in the District during the past year. The credit phases out for couples with adjusted gross income between $110,000 and $130,000 and for individuals with AGI between $70,000 and $90,000. The credit is available through December 31, 2000.

THE NET EFFECT ON SAVING AND INVESTMENT

Several provisions in TRA-97 would reduce the overall effective tax rate on capital. The changes to the alternative minimum tax are probably the most significant in that regard, with lesser effects from the reduction in tax rates on capital gains, the expansion of IRAs, and the increased exemptions in the estate tax. Taken together, however, those provisions would reduce the overall effective tax rate on capital by only a few percentage points (although the changes facing particular firms or households could be much greater).

Changes in the after-tax rate of return have the potential to encourage capital formation, but economic analyses have reached widely differing conclusions about how much they actually affect saving and investment. Furthermore, other provisions of TRA-97, such as the child credit, raise families' after-tax income without increasing incentives to save and therefore are likely to cause increased consumption. The changes to IRAs suggest that the nature of tax-preferred saving—both who saves in tax-preferred accounts and for what—could change, and some new IRA incentives

would encourage additional saving for particular purposes (such as a first-time home purchase or education expenses).

Even without having a major effect on the total stock of capital, TRA-97 might still improve the allocation of capital within the economy by reducing the influence of capital gains taxes, estate taxes, and the AMT on investment decisions. However, other features of the law may cloud that optimistic view. TRA-97 exacerbates the tax distinction between capital gains and other forms of income: the lower tax rates on capital gains might encourage people to find tax shelters or to characterize fully taxable income as capital gains on their tax returns. Many of the features of TRA-97 that reduce the overall effective tax rate on capital also increase the complexity of the tax code and hence the burden on taxpayers (discussed in Chapters V and VI). Greater compliance costs could easily offset any benefits from increased capital formation.

In spite of some disagreement among economists, however, the combined effect of the spending and revenue provisions of TRA-97 and the Balanced Budget Act of 1997 is likely to be an increase in total national saving. By adding to the budget surpluses projected for future years, the two acts in combination should boost federal saving, lower interest rates, and increase gross domestic product.

CHAPTER IV

EFFECTS ON INCENTIVES TO WORK

The Taxpayer Relief Act of 1997 provides limited incentives for employers to hire low-wage workers by expanding and extending the work opportunity tax credit (WOTC) and by introducing the welfare-to-work tax credit (WWTC). In addition, although TRA-97 does not directly change tax rates on earnings, it raises or lowers the marginal tax rate (the rate that applies to an additional dollar of taxable income) for some taxpayers through the income-based phase-ins and phaseouts of its various credits and deductions. Changes in marginal tax rates could affect those taxpayers' decisions about working. But because the changes are confined to income in certain ranges and are partially offsetting, overall they should have little effect on work.

NEW AND EXPANDED TAX CREDITS

The work opportunity tax credit partially reimburses companies for the cost of employing various people whose families receive welfare: adults under age 25, veterans, ex-felons, teenagers working at summer jobs, and disabled people. The credit was created in 1996 and modeled on the targeted jobs tax credit, which existed from 1971 through 1994. Before TRA-97, companies received a credit equal to 35 percent of the first $6,000 paid to eligible workers during their first year, provided they worked at least 180 days or 400 hours (20 days or 120 hours for summer employees). TRA-97 introduces a two-tiered subsidy rate: 25 percent for employ-ment of 120 hours to 400 hours and 40 percent for employment of 400 hours or more. It also allows recipients of Supplemental Security Income to qualify for the credit.

The WOTC had been scheduled to expire on September 30, 1997, but TRA-97 extended it to June 30, 1998. (The Tax and Trade Relief Extension Act of 1998 extended it another year, to June 30, 1999, and the Tax Relief Extension Act of 1999 extended it through 2001.) The changes to the credit made in TRA-97 are expected to cost a total of $385 million.

In a separate provision, TRA-97 creates a welfare-to-work tax credit that applies to certain long-term welfare recipients. Its structure is similar to that of the WOTC. Employers receive a 35 percent credit the first year and a 50 percent credit the second year on the first $10,000 of each year's wages, for a total credit of up to $8,500. The welfare-to-work credit applies to workers hired between January 1998 and April 1999. (TTREA-98 extended it by two months to include workers hired

before July 1, 1999, and TREA-99 further extended it through 2001.) As defined in TRA-97, that credit was projected to cost a total of $106 million.

The credits are intended to increase employment among workers from the targeted groups by making it cheaper for companies to hire them. However, the credits may also have other effects. Several studies have indicated that targeted tax credits such as these may stigmatize workers who fall into one of the qualifying groups, making companies less likely to hire them.[1] Conversely, employers may hire workers who are eligible for the credit in place of equally needy workers who do not fall into one of the approved categories. In either case, the credits could increase employee turnover, since the subsidy per worker has a limited duration. And if many of those workers would have been hired anyway, the credit is just a transfer—a windfall—to the employer.

The changes in TRA-97 address some of those issues. The WOTC gives companies additional incentives to employ and retain eligible workers by reducing the minimum employment period to 120 hours and increasing the subsidy rate to 40 percent for employees who work 400 hours or more. The new WWTC also encourages employee retention by providing tax credits for up to two years, with larger credits in the second year. In addition, employers can claim a WOTC only if they confirm that an applicant is eligible before offering him or her a job (which was not the case with the old targeted jobs tax credit). That provision is intended to reduce windfalls to employers and have a larger effect on employment.

Studies of the targeted jobs tax credit and similar programs have concluded that although they help targeted groups slightly, tax credits by themselves are less valuable than programs that include job training and other services.[2] However, such credits may have a more substantial impact now, since time limits have been imposed on receiving welfare.[3]

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1. See, for example, Gary Burtless, "Are Targeted Wage Subsidies Harmful? Evidence from a Wage Voucher Experiment," *Industrial and Labor Relations Review*, vol. 39 (October 1985), pp. 105-114; and Kevin M. Hollenbeck and Richard J. Willke, *The Employment and Earnings Impacts of the Targeted Jobs Tax Credit*, Staff Working Paper (Kalamazoo, Mich.: Upjohn Institute for Employment Research, February 1991), pp. 91-107.

2. Lawrence Katz, *Wage Subsidies for the Disadvantaged*, Working Paper No. 5679 (Cambridge, Mass.: National Bureau of Economic Research, July 1996).

3. David O'Neill and June O'Neill, *Lessons for Welfare Reform* (Kalamazoo, Mich.: Upjohn Institute for Employment Research, 1997).

CHANGES IN MARGINAL TAX RATES

Marginal tax rates determine how much the government claims on an additional dollar of income. Higher marginal tax rates reduce the after-tax returns on labor and capital and thus reduce incentives to work and save. High rates also increase incentives to shift income to tax-preferred forms (such as fringe benefits), shift savings to tax-preferred assets (such as tax-exempt bonds), and increase charitable giving.

Marginal tax rates are not the same as effective tax rates (also referred to as average tax rates), which are taxpayers' total taxes divided by total income. Effective tax rates are key to understanding the tax burden on taxpayers and its distribution (discussed in Chapter V), whereas marginal tax rates are more important when considering the effect of a tax system on taxpayers' behavior.

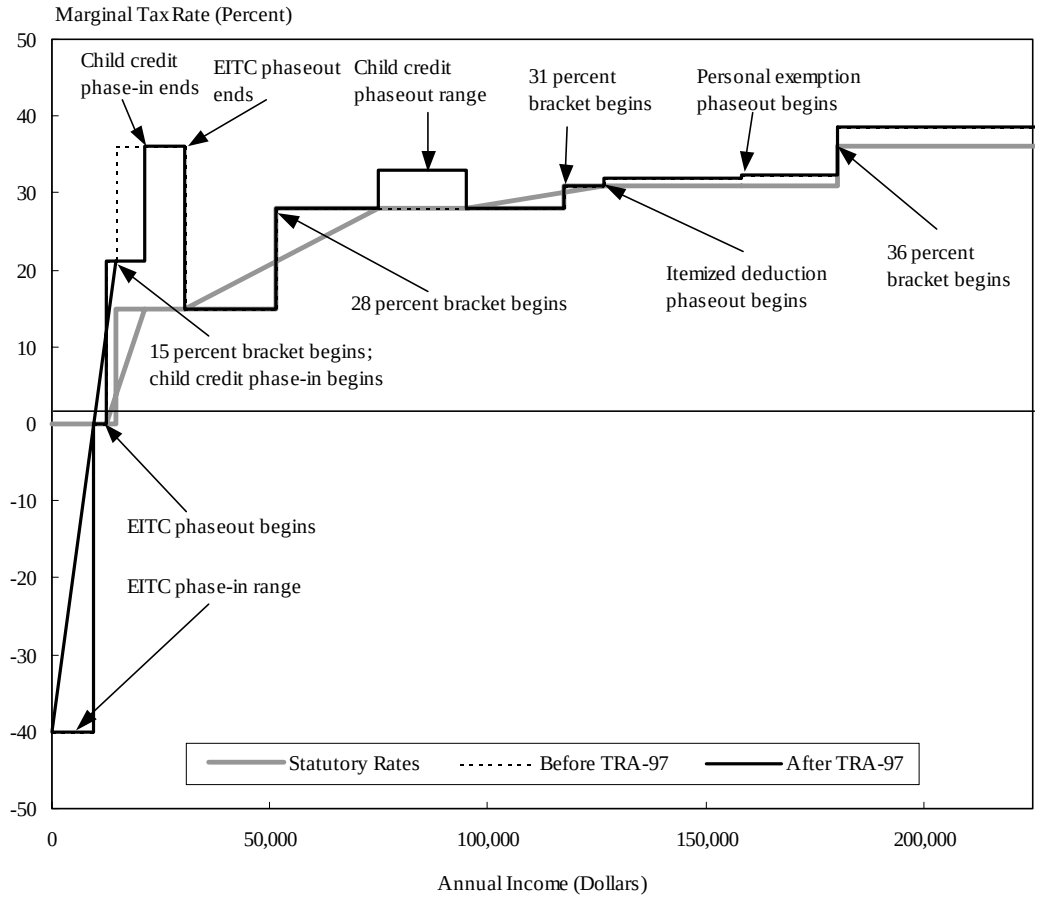
The statutory marginal rate structure of the federal income tax—with brackets of 15 percent, 28 percent, 31 percent, 36 percent, and 39.6 percent—is readily apparent. But other provisions of the tax system can raise or lower those rates over specific ranges of income.[4] The phase-in and phaseout of the child credit and the earned income tax credit, as well as the phaseout of personal exemptions, all affect the marginal rates that taxpayers face (see Figures 4, 5, and 6). Phasing out a particular benefit limits its budgetary costs by targeting the benefit toward taxpayers who are deemed to be more deserving or needy, usually because of low income. At the same time, it increases marginal tax rates because in the phaseout range, an additional dollar of earnings causes a reduction in the benefit. TRA-97 did not change the statutory rate structure (the tax brackets), but it introduced many credits and deductions that phase out over certain income ranges, which has the effect of raising the marginal tax rate for some taxpayers.

Child Credit

Of all of the provisions in the Taxpayer Relief Act, the child credit will affect marginal tax rates for the greatest number of families. For taxpayers whose income exceeds $110,000 (filing jointly) or $75,000 (filing individually), the allowable child credit decreases by $50 for each $1,000 of income (or fraction thereof). That reduction effectively raises the marginal tax rate by 5 percentage points over the phaseout range. The phaseout range amounts to $10,000 for each child, so, for example, the marginal tax rate for a couple with three children would rise if their income was between $110,000 and $140,000 (see Figure 5).

4. For a discussion of the full range of tax provisions affecting marginal rates, see U.S. Congress, Joint Committee on Taxation, *Present Law and Analysis Relating to Individual Effective Tax Rates*, Joint Committee Print JCS-3-98 (February 3, 1998).

FIGURE 4. MARGINAL TAX RATES FOR A SINGLE HEAD OF HOUSEHOLD WITH TWO CHILDREN UNDER AGE 17

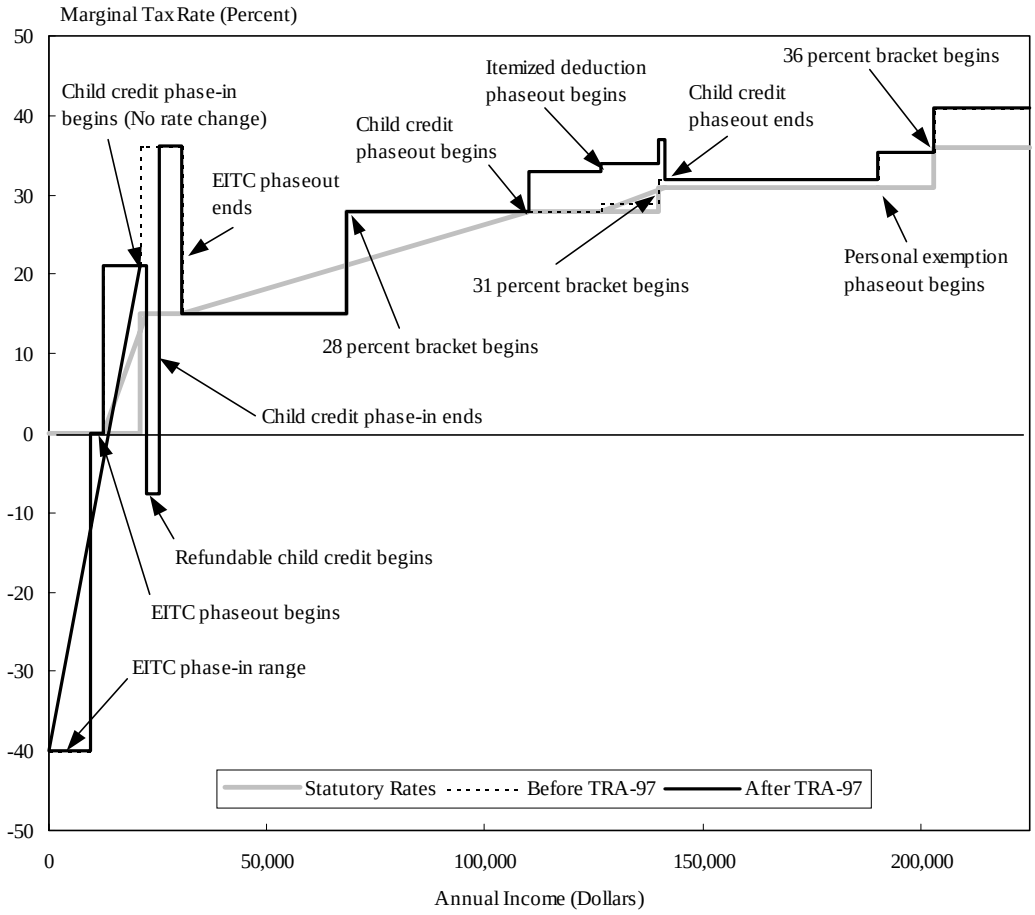


SOURCE: Congressional Budget Office.

NOTES: This figure assumes that all of the taxpayer's income comes from wages and that itemized deductions equal 17 percent of income.

TRA-97 = Taxpayer Relief Act of 1997; EITC = earned income tax credit.

FIGURE 5. MARGINAL TAX RATES FOR A COUPLE WITH THREE CHILDREN UNDER AGE 17

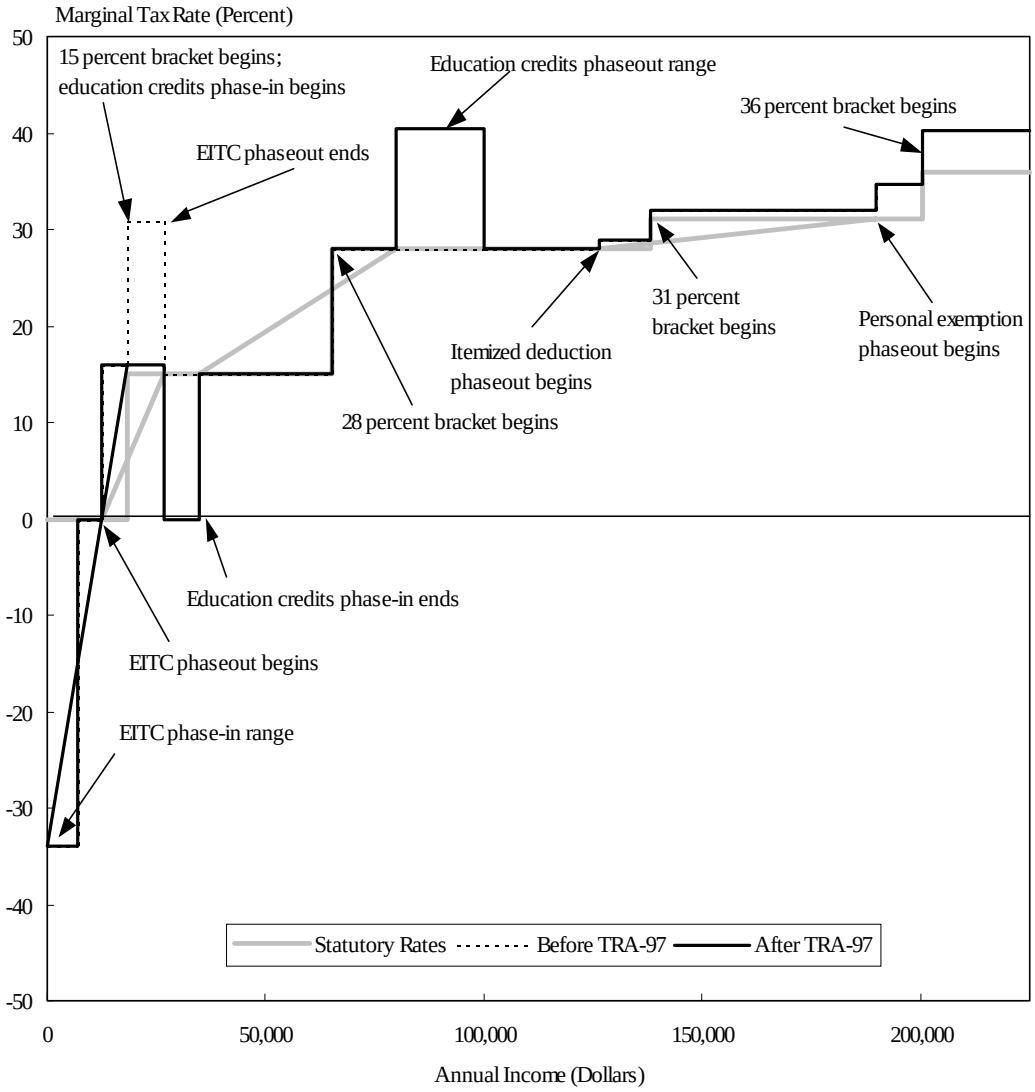


SOURCE: Congressional Budget Office.

NOTES: This figure assumes that all of the taxpayer's income comes from wages and that itemized deductions equal 17 percent of income.

TRA-97 = Taxpayer Relief Act of 1997; EITC = earned income tax credit.

FIGURE 6. MARGINAL TAX RATES FOR A COUPLE WITH TWO CHILDREN IN COLLEGE, ONE ELIGIBLE FOR A HOPE CREDIT AND THE OTHER ELIGIBLE FOR A LIFETIME LEARNING CREDIT



SOURCE: Congressional Budget Office.

NOTES: This figure assumes that all of the taxpayer's income comes from wages and that itemized deductions equal 17 percent of income.

TRA-97 = Taxpayer Relief Act of 1997; EITC = earned income tax credit.

Because the child credit is not generally refundable, any family whose tax liability before the earned income tax credit was less than the full child credit ($500 per child) would not receive the full credit. However, that means the family would have a zero tax rate on additional earnings, because any additional tax liability would be offset by the unused credit. For example, a single mother with two children under age 17 would qualify for a $1,000 credit. If she originally owed $600 in taxes, she would pay no tax, but $400 of the credit would go unused. If she then earned another $1,000 dollars, her tax liability would increase by $150, but that would be offset by $150 of the unused credit, so she would still pay no tax. Before TRA-97, if she had earned an additional $1,000, she would have paid the additional $150 in tax. The act reduces her marginal tax rate from 15 percent to zero, thereby encouraging additional earnings.

The EITC itself has a major effect on marginal tax rates. Families with income in the phase-in range for that credit face negative marginal tax rates because an additional dollar of earnings increases the credit.[5] Families with income below the phaseout range who receive the maximum EITC have a zero marginal tax rate associated with the credit because an extra dollar of earnings does not change the amount of the credit. Families with income in the phaseout range have a marginal tax rate above the statutory rate because each additional dollar of income reduces the credit. Thus, a single parent with two children and income in the phaseout range of the EITC could face a marginal tax rate of 36 percent—the 15 percent statutory rate plus a 21 percent phaseout rate for the EITC (see Figure 4). With the child credit in place, that marginal tax rate is reduced to 21 percent until the parent has sufficient earnings (and thus sufficient income tax liability) to qualify for the full child credit.

For most families, the child credit does not alter the effects of the EITC on marginal tax rates. The exception is families who have three or more children, who cannot claim the full child credit, and who pay more in Social Security payroll taxes than they receive in the EITC. Those families get a rebate equal to the amount by which the employee portion of their Social Security and Medicare taxes exceeds the EITC. Up until such families receive the full amount of the child credit, additional earnings cause the amount of the refundable child credit to increase by more than the amount of additional income tax (including the reduction in the EITC). For a married couple with three qualifying children and only wage income, that large decrease in the marginal rate occurs in an income range of $22,068 to $24,996 in 1999 (see Figure 5). Over that interval, the couple's marginal tax rate on earnings falls from 36 percent to -7.65 percent; that is, an additional $100 of earnings leads not to a $36 increase in taxes but rather to a $7.65 increase in the couple's refundable credit.

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5. For a discussion of the effects of the EITC on marginal tax rates and work incentives, see Jane G. Gravelle, *The Earned Income Tax Credit (EITC): Effects on Work Effort*, CRS Report for Congress 95-928 S (Congressional Research Service, August 30, 1995).

That decline of nearly 44 percentage points in the marginal tax rate is a strong incentive to earn more. But it is unclear whether taxpayers who fall into that narrow income range will perceive the incentive. Even if they do, recent research suggests that the choice of how many hours to work depends less on economic incentives than the decision to enter the labor force does. Consequently, the increased incentive may induce nonworking spouses to join the labor force but have little effect on hours of work for those already employed.[6]

Education Incentives

The two tax credits for education expenses—the HOPE credit and the lifetime learning credit—are not refundable. Thus, like the child credit, they will reduce the marginal tax rate to zero for some taxpayers (those whose basic tax liability is less than their education credits).

Like the child credit, the education credits also phase out for taxpayers with higher income: between $80,000 and $100,000 for joint filers and between $40,000 and $50,000 for individual filers. The extent to which that phaseout increases marginal tax rates varies depending on the amount of eligible expenses and the size of the phaseout range. A couple with income in the phaseout range who spend more than $2,000 on the education of one child eligible for a HOPE credit and more than $5,000 on the education of a second child eligible for a lifetime learning credit would have an effective increase of 12.5 percentage points in their marginal tax rate, since the potential combined $2,500 in credits would be phased out over $20,000 of income between $80,000 and $100,000 (see Figure 6).[7] A single parent in the phaseout range who spends at least $2,000 apiece on the education of two children eligible for HOPE credits would see his or her marginal tax rate rise by 30 percentage points, since a potential combined $3,000 in credits would be phased out over $10,000 of income. A temporary increase of that size in marginal tax rates could lead taxpayers to change how much they work or cause them to shift income to other years.

The provision allowing some interest on student loans to be deducted can also reduce marginal tax rates to zero for some taxpayers (but not over as large an income range as an equivalent credit would). This tax benefit phases out between $60,000 and $75,000 of adjusted gross income for joint filers and between $40,000 and

6. See James Heckman, "What Has Been Learned About Labor Supply Behavior in the Past Twenty Years?" *American Economic Review*, vol. 83 (May 1993), pp. 116-121.

7. The HOPE credit equals 100 percent of the first $1,000 and 50 percent of the next $1,000 of qualifying expenses, or a total of $1,500. The lifetime learning credit equals 20 percent of up to $5,000 of qualifying expenses, or $1,000.

$55,000 for individual filers. When the provision is fully phased in (in 2001), taxpayers will be able to deduct up to $2,500. Those with income in the phaseout range could see their marginal tax rate increase by up to one-sixth. For example, a 28 percent rate would rise to 32.7 percent.

Individual Retirement Accounts

Phasing out a tax credit increases the amount of taxes paid, whereas phasing out the deductibility of IRA contributions reduces the amount that a taxpayer can invest tax-deferred. It is difficult to put a value on the right to make such contributions, so estimating the change in marginal tax rates that results from the phaseout of IRA contributions is problematic. Benefits from IRAs accrue over time and are hard to value in terms of today's taxes.

Traditional economic theory estimates the value of the right to contribute to an IRA as the difference in present value between saving in an IRA and saving in a normally taxed account. That value depends on present and future marginal tax rates, future interest and inflation rates, the length of time that the taxpayer plans to hold the investment, the taxpayer's discount rate, and the probability that the taxpayer will want to spend the invested money earlier than planned. Few taxpayers consider all of those factors when deciding whether and how much to contribute to IRAs. An alternative estimate might assume that taxpayers consider only their immediate tax savings and thus treat the benefit as simply a normal deduction, ignoring future taxes on withdrawals. Most taxpayers, however, probably fall somewhere in between.

A taxpayer who considers only the immediate tax benefits of contributing $2,000 to an IRA would see the benefit of tax deferral as equivalent to a tax deduction. The phaseout range for all taxpayers lasts for $10,000, so marginal tax rates for taxpayers with income in that range increase by one-fifth. A taxpayer in the 28 percent bracket, for example, would see his or her effective marginal rate rise by 5.6 percentage points.

The value of deductible IRAs to taxpayers who take future tax obligations into account is far more complex. In general, because withdrawals are taxable, the right to make tax-deferred contributions to an IRA is worth less than a simple deduction of the contributed amount.

Previously, the $10,000 phaseout range for deductible IRAs started at $40,000 for joint filers and $25,000 for individual filers without pension plans. TRA-97 gradually increases those starting points to $80,000 for joint filers (after 2006) and $50,000 for individual filers (after 2004). Those increases will reduce the number of taxpayers potentially affected by the phaseout, since fewer taxpayers have income at those levels. However, such taxpayers are more likely to take advantage of savings

incentives and thus contribute to IRAs. Those counteracting factors mean that the number of taxpayers affected by the IRA phaseout is likely to remain relatively small.

Roth IRAs create an additional phaseout range between $150,000 and $160,000 for joint filers and between $95,000 and $110,000 for individual filers. Because the long-term benefits of Roth IRAs are similar to those of deductible IRAs, the phaseout effect should be similar. But myopic taxpayers—those who consider only the immediate deductibility of contributions—would not place any value on a Roth IRA because contributions to it are not deductible and thus have no immediate tax benefit.

The availability of IRAs, like other tax preferences, may serve to lower the effective marginal tax rate of some people with low tax liabilities (such as those with low income). However, few low-income taxpayers participate in IRAs.

CHAPTER V

EFFECTS ON TAX BURDENS

As its name implies, the Taxpayer Relief Act of 1997 had tax relief as one of its central goals. The act provides tax credits for families with children, credits for the costs of postsecondary education, and other tax cuts. Those provisions, combined with tax changes in the Balanced Budget Act of 1997, will reduce the effective federal individual income tax rate (the ratio of federal individual income tax to total family income) by just under 1 percentage point overall. The total effective federal tax rate will decline by somewhat less than the individual rate because of increases in excise taxes on airfares and tobacco products.

Most income groups will see about the same small percentage-point reduction in effective income tax rates, on average. Taxpayers in the lowest income group, however, will see little if any decline in their effective income tax rate. And they could end up paying higher total taxes depending on how they are affected by the increased excise taxes.

TAX RELIEF FOR FAMILIES WITH CHILDREN

Some of the impetus for the tax relief in TRA-97 was concern about slowly growing or stagnant after-tax income for lower- and middle-income families. Most of that lack of growth in after-tax income, however, results from anemic growth in before-tax income rather than an ever-increasing federal tax bite. Total effective federal tax rates for middle-income families—particularly the middle 60 percent—are less than 1 percentage point higher, on average, than they were in the mid-1980s. Moreover, the income tax portion of those rates is slightly lower. Rising federal payroll taxes, chiefly for Social Security and Medicare, have more than offset the decline in income taxes. But even though federal taxes may not be the primary culprit in families' stagnant after-tax income, tax relief is a direct way to increase their income.[1]

Another impetus for the changes in TRA-97 was the desire to provide more help to families raising children. Such a desire is not new. A major part of the tax changes made by the Omnibus Budget Reconciliation Acts of 1990 and 1993 (OBRA-90 and OBRA-93) involved tax relief for low-income families with children through expansions of the earned income tax credit. Those expansions caused a

1. Taxes may also have an effect on before-tax income through their influence on labor supply and saving. Such effects are generally associated with changes in marginal tax rates rather than effective (or average) tax rates.

dramatic decline in federal taxes for such families. Whereas families with children in the lowest income quintile faced an effective federal tax rate of roughly 10 percent in 1985, by 1996 that rate had dropped to about 4 percent because of increases in the EITC.

Effects of the Child Tax Credit

The child credit and other provisions in TRA-97 extend tax relief to families with children who would not otherwise be eligible for the EITC because either their income is too high or they have no earnings. The $500 credit for each child under age 17 does not begin to phase out until $110,000 of adjusted gross income for couples filing jointly or $75,000 for other filers. The length of the phaseout range varies depending on the number of eligible children. For families with one or two children, the credit is not refundable, but because it is subtracted from income tax liability before the EITC is, the child credit can increase the portion of the EITC that is refundable.[2] For families with three or more children, the child credit is at least partially refundable if it exceeds their income tax liability and if the employee portion of their Social Security payroll taxes is greater than their EITC.

Approximately 25 million families were eligible for full or partial child credits for the 1998 tax year. That number represented about 65 percent of all families with at least one child under age 17. However, most low-income families (11.5 million) did not qualify because they had no income tax liability, and about 1.5 million high-income families did not qualify because they had income above the phaseout level.

Other Features of the Income Tax That Benefit Families with Children

The child credit joins a number of other features of the federal individual income tax that reduce the tax burden for families with children compared with the burden for other types of families.[3] Those features include:

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2. For example, in 1999, a married couple with one child under 17 and earnings of $19,450 will have a tax liability (before credits) of $600 and qualify for an EITC of $1,195. In the absence of the child credit, the family would receive a refund of $595 (the refundable portion of the EITC). But the $500 child credit reduces the family's tax liability before the EITC to $100, thus increasing its refund to $1,095.

3. See Harvey E. Brazer, "Income Tax Treatment of the Family," and Alicia Munnell, "The Couple vs. the Individual Under the Federal Personal Income Tax," in Henry J. Aaron and Michael J. Boskin, eds., *The Economics of Taxation* (Washington, D.C.: Brookings Institution, 1980); and Jane G. Gravelle, "Income Tax Treatment of the Family," in Paul L. Menchik, ed., *Household and Family Economics* (Norwell, Mass.: Kluwer Academic Publishers, 1996).

- *Dependent Exemptions.* Taxpayers are allowed a fixed exemption from income for themselves, their spouse, and dependents. The exemption, which is indexed for inflation, is $2,750 per person for the 1999 tax year. That amount represents a tax savings of $413 for people in the 15 percent tax bracket and $770 for people in the 28 percent bracket. Taxpayers with 1999 income above $189,950 (married couples) and $126,600 (single filers) lose 2 percent of their exemption for every $2,500 of income above those thresholds.

- *Head-of-Household Filing Status*. Different tax rate schedules apply to married, single, and head-of-household filers. Although married couples with children face the same rate schedule as childless couples, single taxpayers with dependent children can file as a head of household and benefit from a lower rate schedule than other single taxpayers. Taxpayers who choose not to itemize deductions can deduct a standard amount from their adjusted gross income. That deduction is not related to income but depends only on filing status.[4]

- *Earned Income Tax Credit*. Depending on their earnings and number of children, low-income taxpayers can receive a significant tax credit. For families with one qualifying child, the maximum EITC in 1999 is $2,312 (equal to 34 percent of their first $6,800 of earnings); for families with two or more qualifying children, it is $3,816 (40 percent of their first $9,540 of earnings). For taxpayers with no qualifying children, the maximum credit is $347 (7.65 percent of their first $4,530 of earnings). The EITC declines as a family's income rises above $12,460 (or $5,670 with no children), falling to zero at income levels of $26,928 with one child, $30,580 with two or more children, and $10,200 with no children (see Figure 7).

- *Dependent Care Credit*. People who purchase care for a qualifying dependent child or adult so they can work may receive a nonrefundable tax credit for some of those expenses. The size of the credit falls from 30 percent of expenses for families with income of $10,000 or less to 20 percent for families with income over $28,000. Qualifying expenses are capped at $2,400 for one dependent and $4,800 for two or more. In general, they cannot exceed the taxpayer's earnings, or in the case of a married couple, those of the lower-earning spouse.

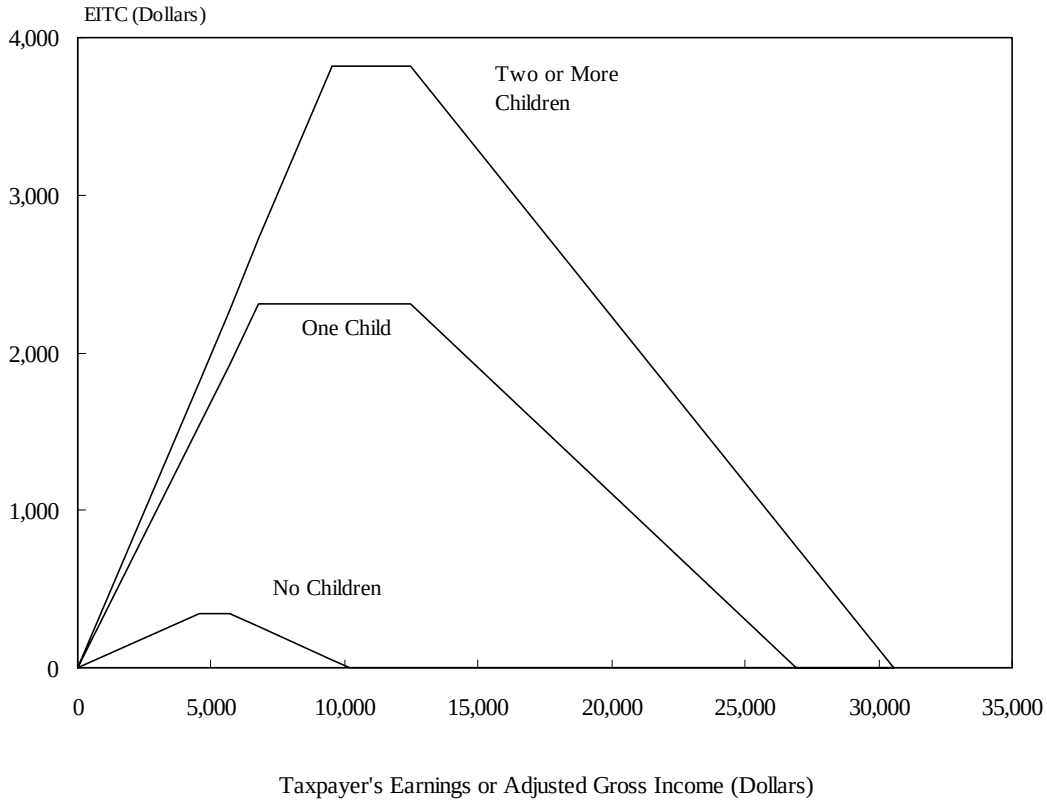
4. For the 1999 tax year, standard deductions are $7,200 for married couples filing jointly, $4,300 for single filers, and $6,350 for head-of-household filers. Single parents with children can thus claim a larger deduction than their childless counterparts, but married couples get no higher deduction if they have children.

Income Tax Thresholds

Together, personal exemptions, the standard deduction, and the EITC establish a level of income that a family can earn and not be subject to federal income tax. That level—the tax threshold—varies by type and size of family. For example, in the absence of TRA-97, a married couple with two children could have earned $25,541 in 1999 before owing any federal income tax (see Table 7). The child credit increases that 1999 tax threshold for families with qualifying children by nearly $2,800, to $28,315.

The threshold is high enough that families with children pay no federal income tax unless their earnings are well above the poverty level. Indeed, almost all such families whose earnings are equal to the poverty level qualify for a refundable

FIGURE 7. EARNED INCOME TAX CREDIT IN 1999, BY NUMBER OF CHILDREN AND EARNINGS



SOURCE: Congressional Budget Office.

TABLE 7. TAX THRESHOLDS AND FEDERAL TAX LIABILITIES OF FAMILIES AT THE POVERTY LEVEL IN 1999, BY FILING STATUS AND SIZE OF FAMILY, WITH AND WITHOUT THE TAXPAYER RELIEF ACT (In dollars)

		Married Couple Filing Jointly					Head of Household	
	Single Filer	No Children	One Child	Two Children	Three Children	Four Children	One Child	Two Children
Poverty Level Income	8,667	11,156	13,410	16,895	19,822	22,261	11,483	13,423
Income Tax Threshold								
Before TRA-97	8,114	12,700	21,375	25,430	26,575	27,718	19,627	23,932
After TRA-97	8,114	12,700	22,980	28,200	30,952	37,036	21,240	26,707
Income Tax at the Poverty Level[a]								
Before TRA-97	125	0	-2,160	-2,882	-2,253	-1,752	-2,312	-3,613
After TRA-97	125	0	-2,160	-2,882	-2,253	-1,752	-2,312	-3,613
Payroll Tax at the Poverty Level								
Before TRA-97	663	853	1,026	1,292	1,521	1,703	878	1,027
After TRA-97	663	853	1,026	1,292	1,521	1,703	878	1,027
Combined Tax at the Poverty Level[a]								
Before TRA-97	788	853	-1,134	-1,590	-732	-49	-1,434	-2,586
After TRA-97	788	853	-1,134	-1,590	-732	-49	-1,434	-2,586
Memorandum:								
Combined Tax at the Poverty Level as a Percentage of Poverty Level Income[a]								
Before TRA-97	9.1	7.7	-8.5	-9.4	-3.7	-0.2	-12.5	-19.3
After TRA-97	9.1	7.7	-8.5	-9.4	-3.7	-0.2	-12.5	-19.3

SOURCE: Congressional Budget Office.

NOTE: TRA-97 = Taxpayer Relief Act of 1997.

a. Negative tax liability indicates receipt of a refundable earned income tax credit.

EITC that equals or exceeds their portion of the Social Security and Medicare payroll tax (see Table 7).

CHANGES IN FEDERAL TAX BURDENS

Although the tax credit for children is the single largest source of tax relief in TRA-97, other provisions—such as education credits, reduced tax rates on capital gains, and expanded opportunities for tax-preferred saving through IRAs—will also lower taxes for many families.[5]

Comparisons Among Families in Different Income Groups

Under TRA-97, all income groups should see a decline in their effective rates for federal individual income taxes (see Figure 8).[6] Families in the lowest income quintile will see the smallest change. But because of refundable credits, those families, on average, receive payments rather than pay income tax and thus have a negative effective tax rate.

Effective rates for total federal taxes (payroll and excise taxes as well as income taxes) will not reflect the same decline because TRA-97 increased federal excise taxes on airline travel and tobacco. Indeed, because of the increase in excise taxes, the total effective tax rate for families in the lowest income quintile will rise slightly—by about 0.3 percentage points, or $30 per year, on average. Of course, not all families in an income group will see the same effect: those who smoke or fly will pay the most additional taxes. Other families will be affected if the cost of other goods rises because of higher airfares.

Similar effects appear when the percentage change in after-tax income rather than effective tax rates is used to measure the impact of TRA-97 among different income groups (see Table 8). The act will raise after-tax income by roughly the same percentage (0.5 to 1.1 percent) in all but the lowest income quintile. Families in that quintile will see their after-tax income decline slightly. Another measure that some analysts favor looks at the shares of the total tax cut that go to different income groups. That measure is difficult to interpret, however, without knowing the shares of income going to the various groups or the share of total taxes that each group paid before the tax changes.

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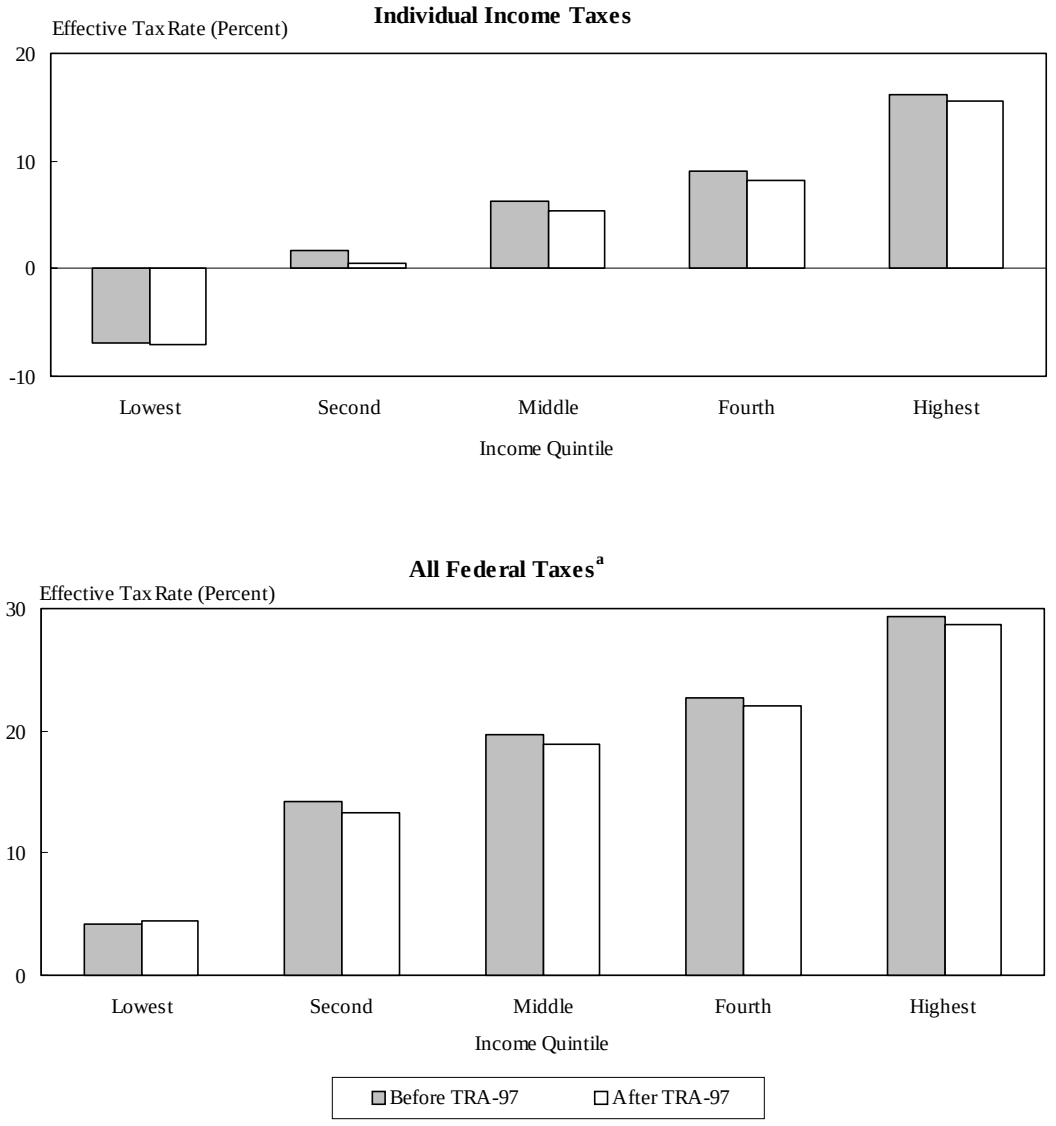
5. For ease of exposition, "families" in this discussion include single people not living with relatives.

6. The quintiles shown in Figure 8 are defined using families' pretax cash income adjusted for differences in family size. The projected effects of TRA-97 among quintiles are similar if income is not adjusted for family size; see Appendix B for further details.

FIGURE 8. EFFECTIVE RATES FOR FEDERAL INDIVIDUAL INCOME TAXES AND TOTAL FEDERAL TAXES, BY INCOME QUINTILE, BEFORE AND AFTER THE TAXPAYER RELIEF ACT



SOURCE: Congressional Budget Office.

NOTE: Families are ranked by cash income adjusted for family size, with an equal number of people in each quintile.

a. Includes individual and corporate income taxes, payroll taxes, and excise taxes.

TABLE 8. TOTAL FEDERAL TAX BURDENS BEFORE AND AFTER THE TAXPAYER RELIEF ACT, MEASURED AT 1998 INCOME LEVELS

Income Category	Total Federal Taxes: Average Before TRA-97 (Dollar)	Total Federal Taxes: Change After TRA-97 In Dollars	Total Federal Taxes: Change After TRA-97 In Percent	Total Federal Taxes: Percentage of Total Change	Income After Tax: Average Before TRA-97 (Dollars)	Income After Tax: Change After TRA-97 (Percent)	Effective Tax Rate (Percent): Before TRA-97	Effective Tax Rate (Percent): After TRA-97
By Quintile or Other Percentage Category								
Quintiles								
Lowest	370	30	8.3	-1.9	8,400	-0.4	4.2	4.5
Second	3,170	-210	-6.6	13.2	19,100	1.1	14.2	13.3
Middle	7,270	-280	-3.9	17.7	29,700	0.9	19.7	18.9
Fourth	12,600	-330	-2.6	20.5	43,000	0.8	22.7	22.1
Highest	38,600	-780	-2.0	50.7	93,300	0.8	29.3	28.7
All Families	12,400	-310	-2.5	100.0	38,300	0.8	24.4	23.8
Top 10 Percent	56,900	-1,170	-2.1	38.3	127,700	0.9	30.8	30.2
Top 5 Percent	84,900	-1,850	-2.2	30.8	178,000	1.0	32.3	31.6
Top 1 Percent	245,000	-6,870	-2.8	21.9	441,900	1.6	35.7	34.7
81 Percent to 90 Percent	19,800	-390	-2.0	12.4	58,000	0.7	25.5	25.0
91 Percent to 95 Percent	28,200	-470	-1.7	7.5	76,000	0.6	27.1	26.6
96 Percent to 99 Percent	46,900	-660	-1.4	8.9	115,400	0.6	28.9	28.5

(Continued)

TABLE 8. CONTINUED

Income Category	Total Federal Taxes: Average Before TRA-97 (Dollar)	Total Federal Taxes: Change After TRA-97 In Dollars	Total Federal Taxes: Change After TRA-97 In Percent	Total Federal Taxes: Percentage of Total Change	Income After Tax: Average Before TRA-97 (Dollars)	Income After Tax: Change After TRA-97 (Percent)	Effective Tax Rate (Percent): Before TRA-97	Effective Tax Rate (Percent): After TRA-97
By Dollar Income								
Less Than 10,000	380	40	9.9	-1.6	5,720	-0.6	6.2	6.8
10,000 to 20,000	1,400	30	2.3	-1.6	13,400	-0.2	9.5	9.7
20,000 to 30,000	4,000	-70	-1.7	3.0	21,000	0.3	15.8	15.6
30,000 to 40,000	6,600	-210	-3.1	8.0	28,200	0.7	19.0	18.5
40,000 to 50,000	9,600	-300	-3.2	9.2	35,100	0.9	21.5	20.8
50,000 to 75,000	14,400	-440	-3.0	22.4	47,000	0.9	23.4	22.7
75,000 to 100,000	21,700	-640	-2.9	16.3	64,100	1.0	25.3	24.5
100,000 to 200,000	35,200	-820	-2.3	19.9	95,000	0.9	27.0	26.4
200,000 and Over	166,100	-4,080	-2.5	24.6	317,000	1.3	34.4	33.5
All Families	12,400	-310	-2.5	100.0	38,300	0.8	24.4	23.8

SOURCE: Congressional Budget Office tabulations based on CBO's January 1997 economic forecast.

NOTES: TRA-97 = Taxpayer Relief Act of 1997.

The table shows the estimated effects of the Taxpayer Relief Act of 1997 if its changes in tax law (as fully implemented) applied at 1998 levels of income. Those changes are the child credit, the HOPE and lifetime learning credits, the reduced tax rates on capital gains, the changes to individual retirement accounts (IRAs), the airline ticket tax, the cigarette tax, the health insurance deduction for self-employed people, and the changes to corporate taxes.

The estimated effect of the provisions for IRAs and capital gains measures not the expected cash-flow change in taxes but the expected economic benefit of those provisions to taxpayers. For example, the benefit of a contribution to a Roth IRA in 1998 accumulates over many years. The tax benefit in the first year is relatively small, but the tax effect is very large because of the up-front deduction, even though the taxpayer will eventually owe taxes when withdrawing funds from the account. The benefits of the IRA changes are measured by calculating the expected present value of the tax savings, over a taxpayer's lifetime, from contributing to an IRA in 1998. The effect of the capital gains rate reduction is measured at the level of realizations that would have been expected without TRA-97. Although the rate changes will induce additional capital gains realizations, the benefits of those changes are calculated at the level of realizations assumed to be in effect without TRA-97 (to avoid confusing taxpayers' voluntary response with the benefit they receive from the cut in tax rates). The table presents an alternative measure of the new effective tax rate that includes those additional realizations in the income base and the additional taxes paid on those realizations in the numerator.

Family income (before taxes) is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, and all cash transfer payments. Income also includes the employer's share of Social Security and federal unemployment insurance payroll taxes and the corporate income tax. For purposes of ranking by adjusted family income, income for each family and individual is divided by the projected 1998 poverty level for a household of that size. Quintiles contain equal numbers of people. Families and individuals with zero or negative income are excluded from the lowest income category but included in the total.

Changes in individual income taxes are distributed to families and individuals paying those taxes. Changes in payroll taxes are distributed to families and individuals who pay those taxes directly or pay them indirectly through their employer. Changes in federal excise taxes are distributed to families and individuals according to their consumption of the taxed good or service. Changes in corporate income taxes are distributed to families and individuals according to their income from capital.

Most of the estimates presented here reflect the expected change in families' tax burdens compared with economic activity before TRA-97. They are not estimates of the actual taxes that families will pay after TRA-97 because families could behave differently in response to the tax changes. Although actual taxes paid are of some interest, they may be a poor measure of whether a tax change has made taxpayers better off. For example, a large decrease in the tax on capital gains could cause people to realize substantially more gains and thus pay more tax on those gains, in spite of the lower tax rate. It would be hard to argue, however, that those people were worse off because they paid more taxes; they could choose instead not to increase their realizations of gains and so pay less tax. Their decision to realize more gains indicates that doing so makes them better off, even after they pay tax on those gains.

In any case, the projected impact of the tax cuts in TRA-97 does not change much if it takes changes in taxpayers' behavior into account. In the case of the above example, including the taxes paid on additional realizations of capital gains that result from the lower tax rate—and including those realizations in the measure of income—has no effect on the change in effective tax rates for most income groups. It has only a modest effect on the change for the highest-income group.[7]

Comparisons Among Different Types of Families

Changes in effective tax rates among income groups mask important distinctions in the effects on different types of families (see Table 9). Not surprisingly, the changes from TRA-97 are much greater for families with children than for families without children. Effective tax rates change very little in the top four income quintiles for elderly families and others without children. Families with children in the second and middle quintiles receive the largest cut, but their effective tax rates still exceed those for elderly families.

The small increase in effective tax rates for the lowest quintile occurs for all types of families, although it is somewhat larger, on average, for childless families headed by people under age 65. Changes in taxes for specific families depend on how much they engage in the activities subject to higher excise taxes.

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7. Incorporating that behavioral response would actually lower effective tax rates for high-income taxpayers because any additional capital gains realizations face a maximum tax rate of 20 percent—less than the effective tax rate estimated for those taxpayers without taking the additional realizations into account. For example, taxpayers in the highest income quintile would face an estimated effective tax rate of 28.5 percent if the behavioral response was taken into account, compared with 28.7 percent if capital gains realizations were assumed not to change as a result of the lower tax rate on gains (as shown in Table 8).

TABLE 9. EFFECTIVE TOTAL FEDERAL TAX RATES BEFORE AND AFTER THE TAXPAYER RELIEF ACT, BY TYPE OF FAMILY AND ADJUSTED FAMILY INCOME (In percent)

	Families with Children		Elderly Families[a]		Other Families[b]	
Income Quintile	Before TRA-97	After TRA-97	Before TRA-97	After TRA-97	Before TRA-97	After TRA-97
Lowest	0	0.2	2.9	3.1	13.1	13.8
Second	15.2	13.2	5.6	5.8	18.3	18.5
Middle	21.5	19.8	10.4	10.6	21.8	21.8
Fourth	23.8	22.5	15.2	15.2	23.8	23.8
Highest						
81 percent to 90 percent	26.1	25.0	20.8	20.7	26.2	25.9
Top 10 percent	30.9	30.3	30.2	29.4	31.0	30.4
All Quintiles	23.7	22.5	19.6	19.4	26.8	26.5

SOURCE: Congressional Budget Office.

NOTE: Each income quintile includes one-fifth of all people, ranked by family income adjusted for family size. Tax rates shown for the lowest quintile exclude people in families with negative income.

a. Families without children headed by someone age 65 or older (includes people age 65 or older living alone).

b. Families without children headed by someone under age 65 (includes people under age 65 living alone).

PENALTIES AND BONUSES FOR MARRIED COUPLES

One issue of concern to the Congress recently has been the federal income tax liability of married couples. Because of differences in tax brackets, standard deductions, and phaseout ranges for particular provisions, married couples filing jointly can incur higher or lower taxes than they would if they could file individual returns. Couples who owe more tax because of joint filing are said to incur a "marriage penalty," whereas those whose tax liability is lower under joint filing receive a "marriage bonus." A 1996 study by the General Accounting Office identified more than 50 provisions of the federal individual income tax code that give rise to marriage penalties and bonuses.[8]

8. General Accounting Office, *Income Tax Treatment of Married and Single Individuals*, GAO/GGD-96-175 (September 1996).

Despite Congressional concern about marriage penalties and bonuses, some provisions of TRA-97 create new ones. For example, the act allows taxpayers with income below specified limits to exclude some or all of the interest they pay on student loans. For individual taxpayers, that exclusion phases out as adjusted gross income rises from $40,000 to $55,000; for joint returns, it phases out between $60,000 and $75,000 of AGI. Those ranges can generate either marriage penalties or bonuses. A couple in which both spouses earn $40,000 is ineligible for the exclusion on a joint return, although both spouses could exclude interest if they could file individually. Such a couple thus incurs a marriage penalty. In contrast, a couple in which only one spouse works, earning $60,000, can deduct student loan interest on a joint return, although neither spouse could if they had to file as individuals. That couple receives a marriage bonus. Different levels of phaseout income for the child credit, the HOPE and lifetime learning credits, and IRAs also create penalties and bonuses.

Besides phaseout ranges, TRA-97 contains other provisions that can affect married couples filing jointly. Two of the education provisions impose limits on each tax return that do not differ by filing status. The lifetime learning tax credit is limited to 20 percent of the first $5,000 ($10,000 after 2001) in qualified expenses for postsecondary education per return. Thus, a couple is limited to a maximum credit of $1,000 ($2,000 after 2001) on a joint return, whereas if they could file separately, each spouse could qualify for that maximum, effectively doubling their combined limit. The deduction of interest paid on student loans is also limited to $1,000 ($2,500 after 2000) per return. That limit effectively cuts in half the potential benefit of the provision for joint filers.

Finally, changes in the rules governing individual retirement accounts reduce marriage penalties for some couples. Previous law did not allow married taxpayers with income above specified limits to deduct IRA contributions if either husband or wife participated in a retirement plan. For joint returns, that limitation meant that someone whose spouse had a retirement plan might not be able to use a deductible IRA to save for retirement. TRA-97 removes income restrictions on deducting IRA contributions for people who do not have their own retirement plan, even if their spouse does. At the same time, however, because income limits on the conversion of deductible IRAs to Roth IRAs are identical for individuals and married couples, the act's IRA provisions also impose new marriage penalties.

CHAPTER VI

EFFECTS ON THE COMPLEXITY OF THE TAX CODE AND COMPREHENSIVE TAX REFORM

The Taxpayer Relief Act of 1997 contains a number of provisions that simplify tax law for individuals and businesses. In general, those provisions affect small groups of individual taxpayers, some small businesses, companies that depreciate assets for calculating the alternative minimum tax, and multinational corporations that have income from foreign sources. For many individuals, however, other provisions of TRA-97 that complicate tax law are likely to outweigh the simplifications. Those provisions will make decisionmaking more complex for some taxpayers, increase the amount of time they spend preparing tax returns, and subject more families to the AMT. What effect the simplifications and complications in TRA-97 will have on prospects for comprehensive tax reform is unclear. But in the main, those changes appear to represent a step away from the goals of comprehensive reform.

REDUCED COMPLEXITY FOR INDIVIDUALS

Most of the provisions that simplify tax law for individuals are narrowly focused and will affect relatively few taxpayers. The significant provisions include changes in the treatment of capital gains on home sales, an increase in the threshold for estimated taxes, a rise in the standard deduction for taxpayers who are claimed as a dependent on another taxpayer's return, an increase in the exemption for children under 14 from alternative minimum tax, and more liberal rules relating to foreign-source income and taxes.

Capital Gains on Home Sales

TRA-97 allows individual filers to exclude from their income up to $250,000 in capital gains on home sales; joint filers can exclude up to $500,000. That exclusion is generally permitted each time a taxpayer sells a principal residence but usually no more than once every two years. Because most homeowners are likely to have gains on home sales far below the excludable limits, they will no longer have to keep detailed records of housing expenses so as to calculate those gains.[1]

1. No calculation of gain would be needed if a home sold for less than the exclusion. Because a substantial majority of homes cost less than $250,000, most sales would clearly involve no taxable gain. That situation could change, however, if housing prices inflated sharply in future years. Homeowners who expected to have gains below the limits could find that they were liable for taxes they might have avoided if they had maintained complete records establishing that their gains were below the exclusion.

Under prior law, gains on home sales were taxed at the same rates as gains on other investments. But those gains could be rolled over if the taxpayer bought another home within two years at a cost equal to or greater than the sales price of the previous residence. That provision required homeowners to maintain detailed records for many years and discouraged most owners from buying less expensive homes or renting. (Taxpayers over 55 were permitted a one-time exclusion from income of up to $125,000 in gains from the sale of a principal residence.) The new provision not only simplifies recordkeeping for most homeowners but also expands their options.

Estimated Taxes

Estimated tax is the method of paying taxes on income that is not subject to withholding—such as alimony, interest, rental income, and self-employment income—and on other income from which not enough tax is withheld. Previously, taxpayers were required to make estimated tax payments during the year if their tax return for that year was likely to show an amount owed of at least $500. TRA-97 raises that threshold to $1,000.

Individual taxpayers must pay an additional tax for any underpayment of estimated tax unless their estimated payments (including withholding from wages) total at least 100 percent of their tax liability for the previous year (a higher percentage in the case of taxpayers with adjusted gross income over $150,000) or 90 percent of their tax liability for the current year. However, the additional tax is not imposed if the tax payment due at filing is less than $1,000. Raising the threshold to that level means that taxpayers with small amounts of additional tax liability in excess of their withheld taxes are relieved of the requirement to make estimated tax payments.

Standard Deduction for Dependents and AMT Treatment of Certain Minor Children

TRA-97 increases the standard deduction for taxpayers who are claimed as dependents on other people's returns. Under prior law, such taxpayers could themselves claim a standard deduction equal to $700 (in 1998) or the amount of their earned income up to the standard deduction for individual filers ($4,250 in 1998), whichever was greater. The act increases that amount to the larger of $700 or the sum of the taxpayer's earnings plus $250 (both indexed for inflation after 1998), up to the individual standard deduction. That change means that dependents with earnings less than the standard deduction who also have a small amount of other income will not have to compute and pay tax.

TRA-97 also increases the AMT exemption amount for a child under 14. Children's income other than earnings (such as interest or dividends) above a deductible amount is taxed at the parents' marginal tax rate rather than the child's. That "kiddie tax" limits the opportunity for parents to reduce their taxes by transferring income-producing assets to their minor children. A child subject to the kiddie tax may also owe taxes under the alternative minimum tax. Under prior law, calculation of the child's AMT liability depended on the parents' AMT calculations. The act increases and simplifies the AMT exemption for minor children to the lesser of $33,750 or the sum of the child's earned income plus $5,000 (indexed for inflation after 1998). As a result, the AMT will affect fewer children.

Foreign-Source Income and Tax Credits

TRA-97 contains several provisions that will simplify filing for hundreds of thousands of people who claim foreign tax credits. Such credits are intended to reduce the tax liability of U.S. taxpayers who pay tax on foreign-source income in other countries. Individuals who pay $300 or less in foreign taxes ($600 or less for joint filers) and whose foreign-source income is passive (that is, does not involve direct participation in business operations) need no longer file a separate form to claim the credit. In addition, individuals who pay foreign income taxes when accrued may use the average exchange rate for the taxable year to convert their payments to U.S. dollars instead of the exchange rate prevailing at the time the taxes were paid, as before. (That rule does not apply to tax payments denominated in an inflationary currency, as defined by regulations.)

TRA-97 also simplifies the accounting of foreign tax credits for purposes of the alternative minimum tax. Under prior law, limits on foreign tax credits had to be computed for both regular-tax and AMT purposes, which required deductions to be allocated and apportioned separately. Under TRA-97, taxpayers may elect to use the ratio of foreign-source regular taxable income to total AMT income in determining their AMT foreign tax credit limit, rather than the ratio of foreign-source AMT income to total AMT income. Foreign-source regular taxable income may be used only to the extent that it does not exceed total AMT income.

In addition, TRA-97 specifies that when individuals acquire foreign currency and dispose of it in a personal transaction, any gains they make because of changing exchange rates are not taxable if the gains amount to $200 or less. The treatment of exchange rate losses is unchanged. (Gains or losses arise because foreign currency is treated as property for purposes of federal income taxes.)

REDUCED COMPLEXITY FOR BUSINESSES

Besides simplifying some provisions for individual taxpayers, TRA-97 reduces the complexity of two types of corporate income taxes: the alternative minimum tax and taxes on foreign income. Small corporations are now exempt from the AMT, and other corporations can use the same depreciation schedules for recently acquired assets in calculating their AMT liability as in calculating their regular-tax liability. Because most minimum tax payments result from differences in depreciation lives between the two tax schedules, that change effectively eliminates the AMT on those assets. In addition, TRA-97 simplifies the provisions that govern foreign tax credits for U.S. companies that invest in international joint ventures and reduces filing requirements for large corporate shareholders by changing the definition of passive foreign investment companies.

The Corporate AMT

Under TRA-97, corporations whose average annual gross receipts are less than $5 million in the first three tax years after December 31, 1993, are exempt from the AMT, so long as their average annual gross receipts over all subsequent three-year periods do not exceed $7.5 million. That change meant that more than 90 percent of corporations were exempt from the AMT in 1998—although only a small percentage of them had owed AMT before that. (Partnerships and S corporations continue to be exempt from the AMT, as they were under prior law.) Moreover, any corporation excluded from the AMT in 1998 because of the new provision that fails to meet the test in a subsequent year is subject to the AMT only for transactions entered into after the company lost its status as a small corporation. In the near term, those changes simplify the filing requirements for many small corporations that previously had to calculate their tax liability under both the regular corporate income tax and the AMT.

The threshold for gross receipts is not indexed for inflation, so many firms excluded from the alternative minimum tax in 1998 may have to file AMT returns in the future. But because depreciation rules for the AMT have changed, those firms are likely to have low AMT liability.

In addition, TRA-97 sets the AMT's depreciation lives for property placed in service after 1998 equal to those of the regular corporate tax. Assets placed in service before that remain subject to the earlier rules. As a result, corporations must still calculate their AMT liability using depreciation rules that differ from those used for the regular tax. In fact, the calculations may be more complex until pre-1998 assets have been fully depreciated, because companies will face multiple rules for assets of different ages.

Nevertheless, the change will eliminate AMT liability for many corporations. The reason is that much of the difference between regular-tax and AMT depreciation results from differing asset lives, not from the type of depreciation calculation per-formed. Indeed, most AMT liability occurs from adding the depreciation difference back into AMT income, so the new rule should reduce both the number of corporations paying AMT and the liability of those that do.

Foreign Income

Two foreign tax provisions in TRA-97 simplify filing requirements for large multinational corporations. The first modifies the foreign tax credit rules for investments in 10/50 corporations. Such corporations—often called joint ventures—are defined by their ownership: not less than 10 percent owned by one U.S. shareholder or more than 50 percent by all U.S. shareholders. Before TRA-97, companies that received dividends from 10/50 corporations had to file a separate Form 1118 for each 10/50 venture in which they invested to claim a foreign tax credit for those dividends. Starting in 2003, the law allows them to allocate 10/50 income among existing types of income used for foreign tax credit purposes.

That provision will reduce paperwork for its beneficiaries (primarily large corporations), but it may also complicate how those corporations allocate their income by source. At the same time, by reducing the disincentives for U.S. companies to become minority owners in international joint ventures, it should improve the competitiveness of companies that use such ventures to gain footholds in foreign markets.

The second change relating to corporations' foreign income involves certain foreign investments of multinational companies that are classified as passive foreign investment company (PFIC) investments. Prior to TRA-97, repatriated income from those investments was subject to potentially high tax rates, and U.S. corporations with such investments experienced complex tracking and filing requirements. TRA-97 changes the definition of a PFIC, reducing the overlap with similar types of companies (those with Subpart F income) and causing fewer corporate investments to be classified as PFIC investments. That change greatly simplifies the filing and investment-tracking requirements for PFIC shareholders, most of which are large corporations.

ADDED COMPLEXITY FOR INDIVIDUALS

The provisions that complicate tax law will affect many more individuals than the provisions that simplify it. Most of the additional complexity is associated with tax relief, especially TRA-97's credits and deductions. Several provisions—in particular,

the expanded options for tax-preferred savings accounts, the reduced rates on capital gains, the education and child tax credits, and the interactions between those credits and the alternative minimum tax—will complicate taxpayers' decisionmaking and make tax preparation more time-consuming.

Savings Incentives

As explained in Chapter III, TRA-97 greatly expands opportunities for tax-preferred saving by raising income limits for tax-deductible IRA contributions, creating Roth and education IRAs, and allowing funds from individual retirement accounts to be used for purposes other than retirement. The different income limits, holding periods, and flexibility of the various IRAs make it harder for taxpayers to decide which accounts are best for them. The education and Roth IRAs have considerably higher income limits than deductible IRAs. But Roth IRAs require taxpayers to hold an account for at least five years before withdrawals are tax-free, whereas education IRAs have no minimum holding period. However, education IRAs can be used only to pay educational expenses without incurring a penalty, whereas Roth IRAs can be used without penalty for a wider range of purposes.

Taxpayers who are eligible to contribute to either a deductible or a Roth IRA and who are saving for retirement will have to choose between the two on the basis of whether they expect their tax rate at retirement to be higher or lower than their current rate—a forecast that is inherently uncertain. Parents saving for their children's education will face many more choices than before (see Table 10 on page 76). They can save through either deductible or Roth IRAs and put a little more away in education IRAs. Or they can contribute to state prepaid tuition programs or to private accounts in their names or their children's names. Moreover, all of those choices may limit the availability of education credits and financial aid when their children attend college. Choosing among so many options requires both calculation and guesswork and is much more complicated than under previous law.

Capital Gains

The capital gains provisions in TRA-97 apply different tax rates to four different holding periods (although the Internal Revenue Service Restructuring and Reform Act of 1998 eliminated one of those periods). In addition, different rates apply to gains from different types of assets as well as to taxpayers in different tax brackets. Special rules also apply to gains from the sale of collectibles, qualified small-business stock, depreciated property, and home sales. Those multiple tax rates increase recordkeeping requirements and complicate the reporting of capital gains income. As a result, Schedule D, the capital gains tax form, expanded from 23 lines in 1996 to 54 lines in 1998.

Child and Education Credits and Deductions

The credits and deductions for children and education in TRA-97 further complicate the tax code. Claiming the child credit requires completing two worksheets. In addition, taxpayers with three or more qualifying children must file an extra form to claim the portion of their credit that exceeds their basic tax liability. Most taxpayers will probably feel that the benefits of the child credit outweigh the added complica-tions, but some may fail to claim the credit because they do not understand or choose not to follow the required procedures.

The education credits and deductions are substantially more complicated. Taxpayers must choose among mutually exclusive claims, which in turn may require them to complete additional forms and worksheets for credits and deductions they may ultimately not take. For example, taxpayers cannot claim a HOPE or lifetime learning credit and also take a tax-free distribution from an education IRA for the same student. Deciding between those two approaches requires calculating the tax savings of each and choosing the more advantageous one. Complications arise even when there is no question about whether to take a credit or deduction. Because the deduction of interest on student loans applies only to the first five years of payback, for example, taxpayers whose tax year spans the fifth and sixth years of paying off student loans must find out how much of the interest that they paid occurred during the fifth year.

Furthermore, in addition to the increased complexity for taxpayers, TRA-97 puts greater demands on schools and lenders. Schools must report amounts of qualified education expenses to students, dividing those expenses between the first two years of postsecondary education, which qualify for the HOPE credit, and later years, which qualify for the lifetime learning credit. Lenders must tell borrowers not only how much interest they paid on student loans during the year but also how that interest divides between payback years. Such requirements do not fall only on lenders who specialize in student loans but on lenders more generally, because the requirement for deductibility is only that the loan be used to pay qualified education expenses.

Alternative Minimum Tax

Perhaps the most complicating aspect of the child and education tax credits is that they will substantially increase the number of taxpayers subject to the alternative minimum tax. Like most tax preferences, those credits are not allowed under the

TABLE 10. COMPARISON OF VARIOUS METHODS OF SAVING FOR COLLEGE

	Conventional Saving		Prepaid
	By Child	By Parents	Tuition Program
Type of Income Saved	After-tax	After-tax	After-tax
Tax Treatment of Earnings	Taxed annually at child's rate[a]	Taxed annually at parents' rate	Deferred (can use credits)
Limits on Deposits	None	None	Cannot contribute in any year when contributing to an education IRA
Limits on Use	None	None	Only to attend specified colleges; only for tuition, fees, room, and board
Advantages	Low tax rate on earnings	Smaller effect on financial aid	Protection against tuition inflation
Disadvantages	Large effect on financial aid	Parents' tax rate on earnings	Lose value if student attends other schools

(Continued)

AMT. Thus, taxpayers whose regular tax liability is below their AMT liability because of the credits will have to pay AMT and lose some portion of those credits.[2]

The following example illustrates how that can occur. A married couple with two children and income of $80,000 in 2005 would have taxable income of $58,900 after claiming the couple's standard deduction and the personal exemptions for all four family members (see Table 11). Assuming they have no college expenses, the couple would owe $10,051 under the regular tax before applying child credits—and $9,051 after reducing their tax by a total credit of $1,000. In computing the amount

2. The Tax and Trade Relief Extension Act of 1998 allowed taxpayers to claim their personal credits —including the child and education credits—in full against their AMT liability for the single tax year beginning after December 31, 1997. The Tax Relief Extension Act of 1999 extended that provision through 2001. The credits are still disallowed for later years, however.

TABLE 10. CONTINUED

	Individual Retirement Accounts		
	Education	Deductible	Roth
Type of Income Saved	After-tax	Pretax	After-tax
Tax Treatment of Earnings	Untaxed	Deferred	Untaxed
Limits on Deposits	$500 per child per year, but cannot contribute in any year when contributing to a prepaid tuition program	$2,000 per person per year	$2,000 per person per year
Limits on Use	Cannot use with education tax credits for the same student in the same year	Funds withdrawn avoid penalty if used to pay for college	Funds withdrawn avoid penalty if used to pay for college
Advantages	Tax-free accumulation of earnings	Deferral of taxes on both contributions and earnings	Deferral of taxes on earnings
Disadvantages	Must use for education or roll over (or pay penalty)	Must use only for specific purposes (or pay penalty)	Must use only for specific purposes (or pay penalty)

SOURCE: Congressional Budget Office.

4. Earnings above specific limits ($1,400 in 1999) are subject to parents' tax rate.

of AMT they might owe, the couple cannot claim the standard deduction or personal exemptions but instead can claim a single exemption of $45,000. But because they cannot claim child credits against their AMT liability, that liability would be $9,100. Thus, they would have to pay that amount rather than the $9,051 of regular tax. In effect, the AMT would limit the value of their child credits to $951, not the full $1,000 provided by TRA-97.

TABLE 11. HYPOTHETICAL REGULAR AND ALTERNATIVE MINIMUM TAX FOR A MARRIED COUPLE WITH TWO CHILDREN IN 2005 (In dollars)

	Regular Tax	Alternative Minimum Tax
Wages	80,000	80,000
Personal Exemptions	-12,800	n.a.
Standard Deduction	-8,300	n.a.
AMT Exemptions	n.a.	-45,000
Taxable Income	58,900	35,000
Amount of Tax Owed	10,051	9,100
Child Credit	-1,000	n.a.
Amount of Tax Owed After Child Credit	9,051	9,100
Memorandum:		
Amount of Unused Child Credit	0	49

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable; AMT = alternative minimum tax.

Under prior law, the number of taxpayers who would have incurred AMT liability in excess of their regular-tax liability was projected to rise from 1 million to 10 million over 10 years. The child and education credits will increase that number by between 3 million and 5 million over 10 years. Moreover, those numbers understate how many taxpayers will have to deal with the complexities of calculating their AMT because many more people will need to compute their AMT liability to see whether they owe additional tax.

In the case of the child credit, about 350,000 returns that would otherwise have been eligible for that credit in 1998 were expected to lose part or all of their credit because of the interaction with the AMT. Most of those returns would still have been subject to the AMT without the credit, but some would not, and the value of their disallowed child credits was projected to about $400 million. Ten years later, about 7 million returns will have reduced child credits because of the AMT, and roughly 3 million of those would not have been subject to the AMT otherwise. The disallowed credits will total about $6 billion that year.

Without reform of the individual AMT, those effects will continue to grow. Legislation raising the exemption amounts in the AMT or indexing them for inflation could eliminate much of the interaction, but such change would greatly decrease tax revenues. The reason is that the higher exemptions would not only affect taxpayers eligible for education and child credits but also lower taxes for people subject to the AMT for other reasons. Alternatively, the effect of the credits on the AMT could be avoided by allowing taxpayers to claim the credits in full against their AMT liability in all future years, not just through 2001 as under current law.

PROSPECTS FOR COMPREHENSIVE TAX REFORM

TRA-97 was enacted against a backdrop of ongoing discussion about comprehensive reform of the U.S. tax system. The act is not a comprehensive reform, nor was it billed as such. Opinions differ about whether it has made the prospects of comprehensive reform more or less likely.

Although they are quite different in appearance, most current proposals for comprehensive tax reform share the following characteristics. They would broaden the tax base by eliminating some exclusions, deductions, and credits in the current system. They would flatten and simplify the rate structure by establishing fewer, lower tax rates and would lessen the difference in rates among different sources and uses of income. In addition, they would move the tax base away from income and closer to consumption by reducing taxes on savings.

On all but that final characteristic, TRA-97 represents a move away from comprehensive reform. It introduces new credits and exclusions, does not flatten tax rates (but instead raises them over certain income ranges through the phaseouts of credits and deductions), and creates greater disparities in tax rates among different sources of income (between capital gains and ordinary income and among investment in stock, real estate, and owner-occupied housing). However, the act is a small step toward a more consumption-based system because it reduces taxes on certain savings and generally increases excise taxes while lowering income taxes.

TRA-97 may have offsetting effects on the likelihood of comprehensive reform. On the one hand, after taxpayers have had to deal with the complexities of the new credits and deductions, they may have greater interest in overhauling the existing system. On the other hand, the new credits and exclusions will give more taxpayers a vested interest in the status quo and thus make them less willing to trade existing benefits for the possibilities of fundamental reform. Moreover, TRA-97 may have set the tone for additional changes to the tax code in the near term. Projected budget surpluses could provide a strong impetus to use the tax code to further specific policy objectives, such as child care or health care, at the cost of federal revenues, which in turn could lead to more credits and exclusions. Nevertheless,

TRA-97 may already have achieved some aspects of comprehensive tax reform by expanding tax exclusions for savings.

APPENDIX A

THE BUDGETARY EFFECTS OF THE TAXPAYER RELIEF ACT FROM A HISTORICAL PERSPECTIVE

The estimated impact of the Taxpayer Relief Act of 1997 (TRA-97) is not particularly large by recent historical standards. But neither is it insignificant. As a share of the nation's gross domestic product (GDP), the tax cuts in TRA-97 are about half the size of the tax increases enacted in the Omnibus Budget Reconciliation Act of 1993 (see Table A-1). The last major legislation before TRA-97 to provide a net reduction in taxes was the Economic Recovery Tax Act of 1981. As a percentage of GDP, the cuts in that act were more than 10 times larger than the ones in TRA-97. However, the Tax Equity and Fiscal Responsibility Act of 1982 repealed or modified a number of the provisions of the 1981 legislation before they took effect.

TABLE A-1. REVENUE EFFECTS OF MAJOR FEDERAL TAX LEGISLATION PASSED BETWEEN 1981 AND 1997, AS ESTIMATED AT THE TIME OF ENACTMENT (By fiscal year, as a percentage of projected gross national product at the time)

	Economic Recovery Tax Act of 1981	Tax Equity and Fiscal Responsibility Act of 1982	Deficit Reduction Act of 1984	Tax Reform Act of 1986	Omnibus Budget Reconciliation Act				Taxpayer Relief Act of 1997[a,b]
					1987	1989	1990	1993[a]	
1981	-0.1								
1982	-1.2								
1983	-2.6	0.5							
1984	-3.7	1.0							
1985	-4.5	1.0	0.3						
1986	-5.5	1.1	0.4						
1987		1.3	0.5	0.3					
1988			0.5	-0.3	0.2				
1989			0.5	-0.3	0.3				
1990				0.1	0.3	0.1			
1991				0.2	0.2	0.1	0.3		
1992					0.2	0.1	0.5		
1993						0.1	0.4		
1994						0.1	0.4	0.4	
1995							0.4	0.6	
1996								0.7	
1997								0.7	
1998								0.7	-0.1
1999									-0.1
2000									-0.3
2001									-0.3
2002									-0.2
2003									-0.3
2004									-0.3
2005									-0.3
2006									-0.3
2007									-0.3

SOURCE: Congressional Budget Office.

NOTE: Revenue estimates include changes in outlays that result from changes in the earned income tax credit.

5. Measured as a percentage of projected gross domestic product rather than gross national product.

6. Includes the revenue effects of the Balanced Budget Act of 1997.

APPENDIX B

EFFECTIVE FEDERAL TAX RATES UNDER ALTERNATIVE MEASURES OF INCOME

The effects of the Taxpayer Relief Act of 1997 (TRA-97) vary among families with different incomes. In Chapter V, Table 9 shows how the act changed effective federal tax rates for families of different types and income levels. The measure of income used in that table adjusted income for family size by dividing a family's total pretax cash income by the federal poverty threshold for a family that size.[1] Such an adjustment recognizes that larger and smaller families have different needs. For example, under that adjustment, a four-person family requires roughly twice as much income as a person living alone to have the same adjusted family income. The effect of the adjustment is to move larger families into lower income categories and smaller families into higher categories.

Not adjusting incomes for differences in family size yields a different distribution of families by income category. But it does not change the qualitative effects of TRA-97 on effective federal tax rates (see Table B-1). Using unadjusted cash income rather than adjusted family income to rank families results in lower effective tax rates for all income categories of families with children and higher rates for elderly families and nonelderly childless families (comparing Table B-1 with Table 9 in Chapter V). However, the absolute changes in effective rates caused by TRA-97 are quite similar under the two alternative measures of income.

Both measures count cash income but do not encompass all forms of income that a family might receive. In particular, they exclude income received in kind, such as food stamps, housing assistance, health care, or employer-paid fringe benefits like health or life insurance premiums. In addition, they include capital gains only when the gains are realized by selling assets; accrued but unrealized gains are not counted. A more comprehensive measure of income would most likely rank families differently than either of the approaches used in this paper and thus might show different effective federal tax rates. But such a comprehensive measure of income is unavailable because of a lack of adequate data.

1. For a more complete discussion of alternative measures of family income, see Roberton Williams, David Weiner, and Frank Sammartino, "Equivalence Scales, the Income Distribution, and Federal Taxes," Technical Paper 1999-2 (October 1998), available from the Congressional Budget Office's Tax Analysis Division. Pretax income includes the employer's share of payroll taxes as well as corporate income taxes allocated to families on the basis of ownership of capital. It does not include income received in kind or unrealized capital gains, both of which would be part of a more comprehensive measure.

TABLE B-1. EFFECTIVE TOTAL FEDERAL TAX RATES BEFORE AND AFTER THE TAXPAYER RELIEF ACT, BY TYPE OF FAMILY AND FAMILY'S CASH INCOME (In percent)

	Families with Children		Elderly Families[a]		Other Families[b]	
Income Quintile	Before TRA-97	After TRA-97	Before TRA-97	After TRA-97	Before TRA-97	After TRA-97
Lowest	-2.4	-2.0	3.7	3.9	16.1	16.6
Second	11.9	10.6	8.9	9.1	21.5	21.7
Middle	20.4	18.6	13.6	13.7	24.0	24.0
Fourth	23.1	21.7	19.5	19.4	25.4	25.2
Highest						
81 percent to 90 percent	25.1	23.8	23.6	23.4	26.9	26.5
Top 10 percent	29.9	29.2	31.8	30.8	31.7	31.1
All Quintiles	23.7	22.5	19.6	19.4	26.8	26.5

SOURCE: Congressional Budget Office.

NOTE: Each income quintile includes one-fifth of all people, ranked by family cash income. Tax rates shown for the lowest quintile exclude people in families with negative income.

7. Families without children headed by someone age 65 or older (includes people age 65 or older living alone).

8. Families without children headed by someone under age 65 (includes people under age 65 living alone).

Cash income could be adjusted for things besides differences in family size, such as differences in prices of goods and services or differences in the number of workers in a family (and hence its employment-related costs). Such adjustments might well affect the distribution of families by income. However, data limitations make those adjustments problematic.

The income distributions shown here and in Chapter V derive from measures of annual income. But because families often base their consumption on expected rather than actual income, economists generally consider income measured over longer periods to be a more accurate assessment of well-being. In this case, however, examining effective *annual* tax rates among categories that were defined by income over longer periods could present a misleading picture of the progressivity of the tax system.

Nevertheless, none of the adjustments discussed above (other than measuring income over longer periods of time) would be likely to change qualitatively the effective tax rates reported in this paper—or the effects of TRA-97 on those rates.