# How Marriage Penalties Change under the 2001 Tax Bill 

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#### Abstract

This paper examines how the various provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) change marriage penalties and subsidies for different, hypothetical pairings of heads of household with single workers filing a joint return. Heads of household are assumed to have two children-both eligible for the earned income tax credit (EITC) and Child Tax Credit-and the analysis is conducted for families with total adjusted gross incomes (AGI) of up to $\$ 80,000$, with special attention to those families with combined AGI of $\$ 35,000$ or less who often face marriage penalties from expenditure programs. Additionally, our simulations take place in 2010 when all provisions of EGTRRA will be fully implemented, although we present our results in real 2001 dollars. Our research focus was to examine the additional marriage penalties that heads of household face in the way of loss of valuable tax benefits for which two single, childless taxpayers who marry would not be eligible.

We modeled the impact of six pertinent provisions from the tax bill: the refundable, doubled child credit, the new 10 percent tax bracket, the newly expanded EITC for married couples, the new standard deduction for married couples, the new 15 percent tax bracket for married couples, and the new 25 percent tax bracket. Our findings are (1) EGTRRA does substantially reduce marriage penalties or increase marriage subsidies for most married households or households considering marriage; (2) the child tax credit does the most to reduce marriage penalties; and (3) the impact of the child credit alone dominates that of EGTRRA's "officially advertised" suite of marriage penalty relief programs-namely, the changes for married couples for the standard deduction, EITC, and 15 percent tax bracket.

We suggest that future policy analyses might focus on the reduction in value of the child credit over time because it is not adjusted for inflation; ways in which provisions affecting children can be combined and simplified (e.g., combining the child credit and the EITC); the decreasing necessity for a head-of-household schedule as a mechanism for assisting households with children once child credits are available; integration of the tax code with federal welfare whose phase-out rates tend to penalize marriage more than tax code provisions.


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Various provisions of the U.S. tax code may penalize or subsidize marriage, depending on the mix of income and the number of eligible children two people bring to a marriage. Persons pay a marriage "penalty" when their tax liability as a couple is greater than the sum of their liabilities as single individuals or single heads of household. A marriage "subsidy" is the reverse-the couple's liability is less if the two spouses file as married than if they had filed as singles.

Since 1948, when the nation moved from a system of individual taxation to one dependent on marital status, the effect of income taxes on the decision to marry has sparked debate. ${ }^{1}$ The latest round aired with the passage of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), which contained a suite of relief provisions aimed directly at reducing marriage penalties.

EGTRRA clearly reduces penalties or increases subsidies for single individuals without children who marry. However, the law's effect on penalties and subsidies for heads of household $(\mathrm{HOH})$ with children who marry is less apparent. Also unclear is which provisions are the most effective in reducing penalties for this group. We focus our analysis on marriages between heads of household and single workers for a couple of reasons. First, households with children face larger marriage penalties than childless couples within the tax code and even larger penalties within federal welfare programs. ${ }^{2}$ Second, the design of the very tax programs that target singleheaded families-such as the tax-advantaged HOH filer status, the earned income tax credit, and the child tax credit - is what gives rise to many of these penalties.

Our analysis assesses the law's effect on marriage penalties for hypothetical families ${ }^{3}$ earning up to $\$ 80,000$, with a focus on families earning less than $\$ 35,000$ for whom tax penalties (and penalties from other programs) relative to income tend to be the highest. The families we

[^0]simulate are always assumed to have two children. We simulate tax law in 2010 when all of EGTRRA's provisions have fully phased in, and we express all amounts in 2001 real dollars.

We find that EGTRRA's reforms significantly reduce marriage penalties or increase marriage subsidies for most households. For households with children, the biggest improvements come from (1) the new partial refundability and doubling of the child credit, (2) the expansion of the earned income tax credit (EITC), and (3) the new 10 percent tax bracket. The EITC expansion was one of a broader suite of marriage penalty reduction provisions, while the reformed child credit and 10 percent tax bracket were not initially advertised as reducing marriage penalties. Yet the latter have had a substantial impact on penalties for the group of households studied here. In fact, the child credit does more by itself for moderate-income couples with children than the combined impact of all the provisions of the marriage penalty suite. Still, some families see moderate increases in marriage penalties (or reductions in marriage subsidies), mainly because the overall consequences of the law have simultaneously improved the tax prospects of remaining single.

Figure 1 provides a comprehensive view of the marriage penalty effect of the 2001 legislation. The figures plot the marriage penalty or subsidy at six different income levels under old law (dashed line) and under new law (solid line), depending on the secondary earner's share of household income. In these stylized examples, the secondary earner was assumed to be a head of household with two children prior to marriage. We calculate the couple's marriage penalty or subsidy based on the earnings brought by the head of household to the marriage, ranging from 0 percent to 50 percent of total household earnings, in 10 percent increments. (In appendix tables 1 and 2, we also address scenarios where the head of household is the primary earner, that is, contributes 50 percent to 100 percent of total household earnings. The results are very similar.) The difference between the two lines is the change in penalty or subsidy achieved by the 2001 legislation.

Two conclusions are unavoidable: The new law creates less of a marriage penalty or more of a subsidy at most household incomes and at most income shares for the secondary earner. But where increases in penalties or decreases in subsidies do occur, they are fairly small-that is, under EGTRRA, the winners win a lot while the losers lose little.

Across households, we also note the following:

- Under both old law and new law, the higher the secondary earner's wages, the more penalty (less subsidy) the couple faces. Generally, the more similar two persons' incomes are, the more tax liability they will face if they marry.
- From the perspective of the tax code, marriage outcomes for middle- and lower-income families can go from about $\$ 7,000$ in subsidies to $\$ 4,000$ in penalties.
- The biggest reductions in penalties (or increases in subsidies), to the nearest $\$ 5,000$ of income, are for households earning between $\$ 10,000$ and $\$ 45,000$. A second group of households with roughly $\$ 70,000$ to $\$ 80,000$ of income also generally benefits. In most
cases, the households enjoy some reduction in penalties regardless of the share of earnings ( 0 to 100 percent) brought by the secondary earner. Slight increases in penalties affect some households earning in the $\$ 45,000$ to $\$ 75,000$ range when income is more evenly split between spouses; families earning around $\$ 10,000$ with income that is less evenly split confront slight reductions in subsidies.


## Background

A modest literature exists on marriage penalties in the tax system. It traditionally focused on the taxes a couple would owe when filing as two singles versus the taxes they would owe if they married and filed a joint return. However, over the past 15 years or so, increasing attention has been paid to the situation of heads of household with children, whose special tax status may also cause them to forfeit other significant benefits if they marry. For example, researchers have looked at variations in penalties over time and how these might influence the decision and timing of marriage or divorce (Alm and Whittington 1993, 1995a, b, 1997; Sjodquist and Walker 1995), with differing results. Rosen (1987) and Feenberg and Rosen (1995), in their analyses of changes in tax penalties caused by the Tax Reform Act of 1986 and the Omnibus Reconciliation Act of 1993, respectively, blend distributional analyses with hypothetical couple examples and both record that the amount of penalty or subsidy and the amount of change from old law to new law are often much larger for heads of households than for single filers.

Bull et al. (1999) and the Congressional Budget Office (CBO) (1997) both construct their samples from a cross-section of tax returns filed in a given year (from the IRS Statistics on Income) and describe the pitfalls of deciding who marries or divorces whom. They also note the various strategies for reallocating resources and dependents between spouses thereafter. They attempt to estimate the distributional impact of possible tax reforms on marriage penalties and subsidies (including making widths of tax brackets, the EITC, and the standard deduction for couples twice as wide as for singles). ${ }^{4}$ Eschewing the hazards of predicting "likely" marriages or divorces and the attendant resource reallocation, we more simply calculate penalties and subsidies for possible marriages between heads of household and single workers across a range of incomes; and rather than simulating potential legislation, we simulate the effects of actual law. Our paper is intended as a study of exactly how the 2001 tax legislation-provision by provision-affected marriage penalties and subsidies.

Why are marriage penalties accepted? The notion that married households enjoy economies of scale and lower costs overall than two single households with the same combined income provides one rationale for the practice in our tax and transfer systems of levying higher taxes on married households while paying them lower benefits. Another rationale is that the current system is a compromise between marriage penalties and subsidies, arising from a balancing act

[^1]between the competing desires of couples and singles to avoid penalty because of their tax status.

Penalties or subsidies arise when (1) married couples are required to file jointly and (2) tax rates vary with income. Essentially, income taxed at one rate for a single filer (a rate that might be 0 percent) gets taxed at a different rate for a joint filer. In a purely progressive system, where tax rates increase as income increases, the penalty of a joint return versus a single return (excluding the head of household return for the moment) disappears if the couple's income is treated as evenly divided between spouses; that is, the single filer tax rate and bracket is effectively applied to both spouses' incomes on the joint return. This treatment is achieved by "income splitting," a method that makes the bracket widths for a joint return double those of a single return. The 2001 legislation effectively implemented income splitting for low- and middle-income couples by setting the bottom two tax brackets for married couples at twice the width of the brackets for singles. For a more general, in-depth treatment of how marriage penalties arise, see Bull et al. (1999), CBO (1997), Feenberg and Rosen (1995), or Steuerle (1999).

However, when we add in the effects of refundable tax credits (e.g., the EITC), which decline in value (or "phase out") at a set rate as household income goes up, the analysis of a household's marriage penalties grows more complex. ${ }^{5}$ If we consider the phase-out rate an additional tax rate, then total tax rates do not always increase for households as their income increases. Lower-income households face some of the highest effective tax rates, because additional income may not only lead to taxation within a higher bracket, but also to forfeiture of these tax credits. The EITC, for example, phases out at 21.06 percent. Ironically, once a household's EITC has completely phased out (i.e., the credit is now $\$ 0$ ), that household's effective tax rate actually goes down. Heads of household receiving an EITC who marry a single filer with earnings often face significant marriage penalties.

Take a simple example: For a typical household with two children, the value of the EITC drops 21.06 cents for every dollar of income a household receives above $\$ 13,090$. Suppose a head of household with two children earning $\$ 10,000$ marries someone earning $\$ 15,000$. At a household income of $\$ 25,000$, this couple loses 21.06 percent of the excess of $\$ 25,000$ over $\$ 13,090$, or $\$ 2,508$ of credit, simply because of the marriage. This loss in tax credit is a marriage penalty-resulting from just one tax provision that affects this couple. ${ }^{6}$ The total penalty or subsidy a couple receives reflects the combined impact of all the provisions that force some of their income to be taxed at a different rate when married.

[^2]Another complexity is that penalties incurred by heads of household marrying single workers are usually more severe than singles marrying singles. The tax code now provides heads of household certain additional tax breaks for child rearing that they might lose upon marriage. In particular, while tax brackets for a single filer were set at roughly 60 percent $^{7}$ of those for joint filers prior to the 2001 law, the HOH filing status-created to shelter more income against tax for a single person with children-enjoyed bracket widths set at 80 percent or more of the joint status. Thus, the generosity and social concern that engineered the HOH bracket favors his or her single status, since the HOH filer stands to forfeit even more tax advantages than a single filer by marrying. The 2001 legislation, phased in over several years, widens the tax brackets for joint returns to twice that applied to single filers-removing any potential marriage penalty for two singles no matter how their combined income splits. However, it kept (although usually reduced) special breaks for heads of household.

## BOX 1: Comparing Marriage Penalties under Old and New Law

This paper examines the change in marriage penalties for a given household in going from old to new law. It uses a two-step process to measure this change.

First, we calculate the marriage penalty under a given law using the following equation. The bold variables represent the amount of tax liability for the given filer status.

## Penalty (+) or Subsidy (-) = Married Couple - (Single + Head of Household)

If the result is positive (i.e., the tax liability for the married couple is the larger number), the couple incurs a marriage penalty. If the result is negative (i.e., the tax liability of the married couple is the smaller number), the couple receives a marriage subsidy. If this sounds counterintuitive, use the following rule of thumb:

$$
\begin{aligned}
& \text { Marriage tax liability } \uparrow=+ \text { number }=\text { Penalty } \\
& \text { Marriage tax liability } \downarrow=- \text { number }=\text { Subsidy }
\end{aligned}
$$

Second, we quantify the change in penalties or subsidies between laws by subtracting
Old Law Penalty or Subsidy = Married Couple $-($ Single + Head of Household $)$

- New Law Penalty or Subsidy = Married Couple - (Single + Head of Household $)$
$=$ Net Increase (+) in Penalties (Decrease in Subsidies) Or Net Reduction (-) in Penalties (Increase in Subsidies)

[^3]Again, if the change between old and new law is positive for a given household at a given income, then marriage penalties have increased (or marriage subsidies have decreased); if the change is negative, then marriage penalties have declined (or marriage subsidies have increased).

The amounts of penalty and subsidy shown in figure 1 , as well as for cases where heads of household are the primary or higher earners, can be found in appendix table 1.

Some conventions and background information are useful:

- Comparisons between the effects of the old and new tax laws are calculated using the statutes and levels applying in 2010, the year that EGTRRA is fully implemented. ${ }^{8}$ Moreover, the child credit under new law (as under old law) is not indexed for inflation. Thus, its value declines by 2010. To account for the inflation effects, dollar amounts are expressed in real 2001 dollars, unless otherwise stated.
- Tax filers would need the following adjusted gross income (AGI) before having $\$ 1$ of taxable income: in 2010 a single worker would need to earn $\$ 7,450$ of AGI; a head of household with two children, $\$ 15,350$ of AGI; and a married couple, $\$ 20,700$ ( $\$ 19,200$ under old law) of AGI. ${ }^{9}$ Personal exemptions and standard deductions effectively shield those AGI amounts from tax. These calculations do not include the EITC, which does not affect taxable income or AGI.
- The analysis ignores any potential effect of the alternative minimum tax over the 200110 time frame and does not address whether legislators will extend the 2001 law beyond 2010.


## How EGTRRA Affects Marriage Penalties

The 2001 legislation affected marriage penalties primarily through six tax provisions: (1) the refundable, doubled child credit, (2) the EITC, whose beginning point of phaseout was raised for married couples only, (3) the new 10 percent tax bracket, (4) the standard deduction, expanded for married couples only, (5) the 15 percent tax bracket, also expanded for married couples only, and (6) the new 25 percent tax bracket, lowered from 28 percent. Provisions 2, 4, and 5 comprise EGTRRA's marriage penalty suite-that is, provisions advertised by

[^4]Congress as reducing marriage penalties. Table 1 provides a summary of these provisions and how they reduce penalties.

## Marriage Penalties: A Provision-by-Provision Assessment

This section details how each separate provision of the new law affects marriage penalties for a number of stylized households. Bear in mind that for moderate-income households, the results depend greatly upon whether taxpayers have enough income to make use of provisions, with the EITC being fully refundable, the new child credit being partially refundable, and other benefits (such as the lower 10 percent tax rate) being nonrefundable. ${ }^{10}$

To calculate the separate effect of each provision on marriage penalties, we first strip off EGTRRA's pertinent provisions. Then, we add the new law provisions back in one at a time, "stacking" each in the statutory order in which it affects a worker's AGI. The full results appear in appendix table 2 . Provisions preceded by an asterisk belong to the marriage penalty relief suite. A summary of how different provisions affect five stylized couples appears at the end of this section.
(1) *Standard Deduction. Taxpayers who do not itemize can take a standard deduction, which varies with filing status. ${ }^{11}$ For most moderate-income households, the standard deduction simply boosts the amount of income shielded from tax. The amount of this deduction by filer type is shown in table 1 . The reform sets the deduction for married couples at double that of single filers-an increase from $\$ 7,600$ to $\$ 9,100$. Since only married couples receive an additional benefit, the provision can only decrease marriage penalties or increase subsidies.

We stack the standard deduction provision first since workers subtract deductions and exemptions from their AGI to determine the amount of their income that is actually subject to tax. In our simulations, this policy reduces marriage penalties as follows:

[^5]| Income Level (\$5,000 <br> Increments) | Effect on Marriage <br> Penalties |
| :--- | :--- |
| $\langle \$ 25,000$ | Owes no tax |
| $\$ 25,000$ | $(\$ 64)$ |
| $\$ 30,000$ | $(\$ 225)$ |
| $\$ 35,000$ | $(\$ 225)$ |
| $\$ 40,000$ | $(\$ 225)$ |

The concentrated impact of this policy is well above $\$ 25,000$ up until the point that couples itemize. Married couples earning less than $\$ 25,000$ do not owe tax, while those earning more than $\$ 45,000$ here are assumed to itemize. ${ }^{12}$

As a simple example of how this relief applies, consider two persons who can make full use of their standard deduction whether or not they are married. As a single individual and head of household, they are entitled to combined standard deductions of $\$ 11,200$ (the sum of $\$ 4,550$ and $\$ 6,650$, respectively). When married, they receive only $\$ 7,600$ under old law but receive $\$ 9,100$ under new law-an increase of $\$ 1,500$. The added $\$ 1,500$ of deductions provide $\$ 225$ of penalty relief if the first dollars of taxable income are subject to a 15 percent rate (and less once the new 10 percent rate applies). However, some marriage penalty remains under the new law since the single and HOH would still enjoy higher standard deductions if not married ( $\$ 11,200$ versus $\$ 9,100$ ). Note that the penalty does not exist for two single individuals with no children because neither can make use of the HOH standard deduction.
(2) 10 Percent Tax Bracket. This provision has perhaps the most complicated impact on marriage penalties. Generally speaking, the provision created a new tax bracket that allowed a head of household marrying a single to claim more income against the 10 percent bracket than married couples were able to claim. This change results in some marriage penalty. It also lowered rates, which meant that some couples whose income might have been pushed up into the 15 percent bracket because of marriage were only pushed into the 10 percent bracket. The result is less of a marriage penalty. More details on the new bracket are as follows:

- The new 10 percent rate applies to the first $\$ 11,861^{13}$ of taxable income for a couple, double the range for single filers $(\$ 5,931)$. Hence, again, no marriage penalty-only

[^6]marriage subsidies-accrue to two single individuals without children. The new deduction of up to $\$ 8,472$ for an HOH to be paid at a 10 percent rate, however, means that singles marrying heads of household can see new penalties; their respective deductions of up to $\$ 5,931$ and $\$ 8,472$ could total $\$ 14,403$ when single, compared with their joint deduction of $\$ 11,861$ when married.

- Couples earning $\$ 30,000$ or more, where the formerly single worker earns the majority of income, enjoy a new subsidy of up to $\$ 297$. For these couples, the former head of household never earns enough to make much difference in tax liability (due to his or her personal exemptions and tax-advantaged standard deduction). Thus, the single's earnings generate the marriage penalty or subsidy. The new 10 percent bracket, which is twice as wide for couples as that for singles, means that up to $\$ 5,931$ more (i.e., the additional amount provided by marriage) of the single's income formerly taxed at the 15 percent rate is now taxed at the 10 percent rate. The difference in rates- 5 percent, multiplied by $\$ 5,931$ in some cases-yields a $\$ 297$ subsidy.
- Couples earning less than $\$ 30,000$, where the formerly single worker earns 80 percent or more of the wages, experience a smaller subsidy than under old law. Take the following example: Suppose that a head of household has no income but that the single filer he or she marries does. Marriage effectively wipes out the couple's tax liability, because the larger standard deduction and additional personal exemptions provided by filing a joint rather than a single return are more than enough to offset the former taxable income of the single filer. Under old law, the single worker avoided taxation at a 15 percent rate by marrying; under new law, the single worker avoids taxation at a 10 percent rate. Hence, the amount of tax liability cancelled out by marriage drops because of the new 10 percent rate, causing the effective marriage subsidy to also drop.
- The 10 percent bracket width for heads of household- $\$ 8,472$, a 40 percent tax advantage over singles-is the source of some marriage penalties in the new law. For example, take couples earning $\$ 50,000$, where the income is evenly split. Under the new law, both spouses earn enough to be taxed at the 15 percent rate (before applicable tax credits) before they marry. When unmarried, the single worker's first \$5,931 of income and the HOH's first $\$ 8,472$ of income is taxed at 10 percent, for a total of $\$ 14,403$ taxed at 10 percent. If the two marry, however, only $\$ 11,861$ can be taxed at 10 percent. The remaining $\$ 2,542$, taxed at 10 percent when they were single, is now taxed at 15 percent. The individuals used to pay $\$ 254$ in total; as a married couple, they pay $\$ 381$, an increase of $\$ 127$. This $\$ 127$ is their marriage penalty resulting from the 10 percent bracket. ${ }^{14}$
widths are indexed for inflation each year, but they remain somewhat below their originally legislated levels, particularly the HOH bracket, which will have shrunk by 15 percent of its value.
${ }^{14}$ Note that here we calculate the penalty or subsidy by comparing tax liabilities before and after marriage within the new law, rather than comparing between the old law and new law. We take
- Calculating the benefit of the 10 percent bracket is further complicated by the change in the standard deduction and the child credit. To calculate its separate impact, we first assume that the new standard deduction was in place while the new refundable part of the child credit was not. However, owing to interactions among the provisions, our results are mildly sensitive to which provision we assume was adopted first.
(3) *15 Percent Tax Bracket. The 15 percent tax bracket for a married couple was $\$ 45,200$ in 2001, about 1.67 times the level for a single filer. By 2008, however, the bracket width is double the width of the single filer, or $\$ 54,100$. Consequently, couples may have up to $\$ 8,900$ more income taxed at a lower rate.

In our examples, the expansion of the 15 percent bracket reduces marriage penalties by $\$ 513$ for married households earning $\$ 75,000$ per year and by $\$ 1,040$ for those earning $\$ 80,000$. Under old law, more of these taxpayers' income was taxed at a 28 percent rate.
(4) 28 Percent Rate Drops to 25 Percent. By 2006, the 28 percent bracket will decline to 25 percent. This provision reduces marriage subsidies for many married households earning $\$ 40,000$ or more when the single filer marries someone with little or no income.

Suppose that under old law a single filer taxed at 28 percent married someone without much income, so that the marriage moved more household income into the 15 percent bracket. The change in the marginal tax rate would be 13 percentage points. However, the new law lowers the 28 percent rate to 25 percent, reducing the reduction in the marginal rate to 10 percentage points. Hence, relative to old law, the household's marriage subsidy-and the tax incentive to marry-drops by 3 percentage points for some taxpayers in the 25 percent bracket.

The reduction in marriage subsidies increases as income rises and as more income is concentrated in the single worker's hands. Hence, in our simulations, which only go up to $\$ 80,000$, the couple with the single filer earning $\$ 80,000$ and the head of household earning nothing experience the largest reduction in the marriage subsidy.
(5) The Child Credit. Under old law, failure to index for inflation meant that the child credit would have been worth $\$ 403$ per child by 2010 ( $\$ 500$ in 2001). In addition, the credit phased in only against actual tax liability and was not linked to the beginning phase-out point of the EITC ( $\$ 13,090$ for a two-child household). The new law makes the child credit refundable and doubles its size, allowing the credit to phase in at 15 cents for every dollar earned above $\$ 10,000$ (for 2005 and thereafter, and at 10 cents for 2001-04)—independent of whether a
this approach simply because the 10 percent bracket did not exist under old law, so we have nothing to compare it to.
family owes tax or not. The credit also offsets tax liability up to the maximum value of the credit. ${ }^{15}$

By restructuring the child credit in this way, couples with two children can attain $\$ 1,612$ of credit at an income around $\$ 21,000$ - the salary level at which almost none of the former $\$ 806$ credit for two children would have been available, as the taxpayer owed little or no tax.

Since the new child credit phases in near the point at which the EITC begins phasing out, the child credit phasein helps mitigate the high marginal tax rates and marriage penalties associated with EITC's phaseout. The EITC phases out at 21 cents per additional dollar of income, while the new child credit phases in at 15 cents per dollar. Thus, over a wide income range, a family that used to lose 21 cents in EITC benefits now effectively loses just 6 cents. Recall that variable tax rates tend to cause marriage penalties and subsidies. Because the child credit lowers the high tax rate resulting from adding the EITC phaseout on top of other statutory rates, the taxpayer's combined tax rate is flatter, approximates normal statutory rates, and is less variable.

Here are some examples of child credit-related changes in marriage penalties:

- For an HOH with two children currently earning $\$ 10,000$, no child credit would be available under old or new law. If the HOH married a single individual also making $\$ 10,000$, the child credit still would not be available under old child credit rules, because the couple would not have any taxable income (personal exemptions and the standard deduction offset this income). However, under new law, $\$ 1,500$ of the credit is available, because the couple can receive 15 percent of the income exceeding $\$ 10,000$ (but no more than a total credit of $\$ 1,612$ ).
- Many two-child families at higher income levels that enjoyed the child credit under the old law will now receive an additional $\$ 806$. This additional amount is made possible as a marriage subsidy because the former head of household could not obtain this amount of credit based on his or her own earnings.
- Some higher-earning families in our simulations see either no change in marriage penalty/subsidy or incur a penalty relative to old law. In these cases, the HOH generally earns $\$ 18,000$ or more before marrying.
${ }^{15}$ The refundable portion of the child credit finally included in the EGTRRA legislation largely follows the design of an option first proposed by Isabel Sawhill and Adam Thomas. Robert Cherry, Max Sawicky, David Ellwood, Jeffrey Liebman, Frank Sammartino, Eugene Steuerle, and others were involved in analyzing this option and various alternatives before its adoption. All these authors have expressed interest in simpler designs that attempt to achieve the same objectives, but such options were apparently off the table in 2001. See Cherry and Sawicky (2001), Ellwood and Liebman (2000), Sammartino, Steuerle, and Carasso (2001), Sawhill and Thomas (2001), and Steuerle (2000a, b, 2001) for details of the design and alternatives.
- Case \#1. If the HOH filer receives the maximum child credit (\$806 of nonrefundable credit under old law, or $\$ 1,612$ of refundable credit under new law), marriage and the added income of a spouse do not result in any additional credit. The same is true for a couple with $\$ 50,000$ of income when that income is evenly split between spouses.
- Case \#2. Suppose, under old law, an HOH earning \$18,000 owes \$397 in taxes and receives $\$ 397$ in credits, but then marries and jointly qualifies for the full credit of $\$ 806$. Under new law, the child credit is refundable, and the same HOH would enjoy some 90 percent of the full credit $(\$ 1,465)$ based on her own income before she marries. When she does marry, the additional income her spouse provides qualifies them for $\$ 1,612-$ only an additional $\$ 147$ of credit. Hence, under old law, the HOH gains $\$ 409$ in additional credit by marrying, while under new law, she gains only $\$ 147$ of credit. Relative to old law, her marriage subsidy declines by $\$ 262$. Keep in mind that the new law provided her much more credit lower down the income ladder. Thus, while the reformed child credit has made her and her children better off, it may reduce her marriage subsidy compared with old law if she had moderate earnings on her own.
(6) *Earned Income Tax Credit. EGTRRA modestly extends the income range over which the EITC phases out for married couples, while holding this range constant for other tax filers. These changes can only decrease penalties or increase subsidies because the gains only apply to joint returns. Here, we only discuss the change in EITC parameters for households with two children. (For further discussion, see Burman, Maag, and Rohaly [2002].)

The number of children in a household previously determined the EITC parameters used, not the household's filing status. Thus, under both old and new law, the EITC phases in at a 40 percent rate against the first $\$ 10,020$ of income, where its maximum value of $\$ 4,008$ applies (40 percent of $\$ 10,020$ ). The credit's value remains constant from $\$ 10,020$ to $\$ 13,090$; after that point, it phases out at 21.06 cents for each new dollar earned, until the credit declines to $\$ 0$ at $\$ 32,121$. Hence, the value of the EITC to a household is very sensitive to that household's income-marriage between two persons with earnings often shrinks the credit because additional income causes more of the credit to be phased out.

For married couples filing joint returns only, EGTRRA extends the beginning phase-out point for the EITC credit by $\$ 2,742$. Except at the beginning and end portions of the phaseout (i.e., around $\$ 13,090$ and $\$ 34,863$ ), the net effect is to allow couples with two children to keep an additional $\$ 577$, 21.06 percent times the $\$ 2,742$.

## Summary

Table 2 gives the change in penalties or subsidies under EGTRRA for five stylized households by provision. The entries preceded by asterisks are the provisions in EGTRRA's marriage penalty relief suite. The child credit by itself provides more relief than the suite, in most cases. Summaries on the effects for each couple listed in table 2 follow here.

Couple 1 benefits from the doubling of the child credit, the expansion of the EITC and the standard deduction, and the creation of the new 10 percent tax bracket, but does not earn enough to benefit from the 15 percent bracket expansion or the new 25 percent tax rate.

Couple 2 earns the same amount as couple 1, but its income is more evenly split. This couple benefits less from the child credit as a result of marriage. In this case, the mother as head of household already enjoys a substantial fraction of the full child credit before she marries, so that the additional income from marriage does not really increase the child credit she would have received under old tax law after marrying. The gain in EITC is the dominant benefit this couple receives from marriage.

Couple 3 benefits greatly from the child credit, receiving $\$ 1,500$ relative to old law. While this couple also benefits from the EITC, the two spouses do not earn enough to owe tax beyond the old standard deduction, so that the expanded standard deduction and the new 10 percent tax bracket do not help them.

Couple 4 pays slightly more marriage penalty as a result of the new law. The head of household already enjoyed the full child credit and had lost most of the EITC before marrying. The standard deduction offers no benefit since the couple itemizes. The new 10 percent and 25 percent tax brackets lower the couple's taxes, but the new brackets reduce the gain from marriage relative to old law.

Couple 5 has one worker bringing in most of the earnings to the marriage. The couple receives an additional $\$ 806$ of child credit under the new law. Even with the expanded EITC bracket, the head of household must give up a sizable EITC benefit. The proportionally wider 10 percent bracket for married couples nets another $\$ 297$. The doubling of the 15 percent bracket for couples in proportion to singles is the largest source of additional marriage penalty relief, providing $\$ 1,040$. As with couple 4 , couple 5 itemizes, so the standard deduction does not apply, and the new 25 percent rate reduces the single worker's gain from marriage.

## Conclusion and Directions for Future Policy Work

EGTRRA rolled out a number of provisions, some targeted to reduce marriage penalties for low- and middle-income workers and some that indirectly reduced marriage penalties. For households with children, the refundable, doubled child tax credit, with its broad-based relief, usually does more to reduce marriage penalties than the suite of provisions officially targeted to that purpose. Moreover, its substantial impact has its greatest effect on those households potentially subject to large marriage penalties resulting from other transfer programs. Even where the credit slightly reduces tax incentives to marry (e.g., for some heads of household earning more than $\$ 16,000$ a year by themselves before marriage), the effect is slight. At that income level or higher, these heads of household are also more likely to receive marriage
subsidies from other tax provisions and less likely to pay the penalties associated with welfare programs.

In general, EGTRRA improved the incentives to marry among most couples with children in the moderate-income range of $\$ 10,000$ to $\$ 45,000$ as well as at many other income levels. Households without children (i.e., marriages between two single filers) are even more certain to gain tax advantages as a result of marriage, up to very high incomes. The new law doubles the size of the standard deduction, the width of the 10 percent bracket, and the width of the 15 percent bracket for married filers versus single filers. A few individuals may experience less of a marriage subsidy simply because individual tax rates are lower and because less tax rate reduction can be achieved by moving some income away from a higher single rate toward a lower joint rate.

The data reveal certain areas worth further examination. First, the gradual withering away of the child credit owing to the lack of inflation indexing means that its potential to reduce penalties caused by the EITC is lessened over time. This problem could be solved by indexing the child credit to inflation.

Second, although making the child credit partially refundable helped reduce marriage penalties and increase net after-tax income for many heads of household, the same purposes could be accomplished in a far simpler manner simply by integrating the child credit with the EITC lowering the EITC's 21.06 percent phase-out rate. A more ambitious simplification would be to combine the two credits related to children into a single credit. A further extension would then be to fold in the dependent exemption. Although these options are often proposed for simplification purposes, they also have the advantage of neatly tackling marriage penalty issues. If the benefit of caring for a child can go with the child-regardless of the household's tax filing status and income level-then no marriage penalty or subsidy can arise from the child-related provisions. On a more modest level, a combined credit could phase out at a very slow rate so that a household's configuration and filing status would hardly affect the benefits it receives for having children. ${ }^{16}$ The National Taxpayer Advocate (Olson 2002), the Joint Committee on Taxation (2001), and the U.S. Department of the Treasury (O'Neill 2002) have all recommended a uniform definition of "qualifying child").

Third, the need for a separate head of household standard deduction and tax rate schedule has lessened over time, making the separate HOH tax status somewhat of an anomaly. HOH filing is the only status under which the presence of children essentially causes some income to be taxed as if it were "earned" by those children. Filers of joint returns, by comparison, receive no additional tax relief of this type for caring for children. But both HOH and joint returns can benefit from tax provisions such as child credits, the EITC, and the dependent exemption. The HOH standard deduction was introduced, in part, to raise the tax-exempt level of income for heads of household above the poverty level. Today, this need is less pressing because

[^7]refundable credits are now available. As for the tax-advantaged rate schedule, the head of household with two children cannot reap the benefits at incomes below $\$ 31,000^{17}$ because no net tax is owed before that income level. Thus, eliminating the HOH schedule would remove one major source of marriage penalties. This measure could be accomplished in a way that allocates any potential revenue saving back to households with children in a progressive manner (e.g., by expanding other child-related benefits that are independent of filing status).

A final goal of reform should be to better integrate the EITC phaseout with the phase-out rates of key welfare programs such as food stamps, federal housing assistance, and Medicaid. In some sense, the refundable portion of the child credit was designed with this concern in mind.

Despite EGTRRA, substantial marriage penalties on low- to moderate-income households remain because of the combined impact of all the programs on both the tax and expenditure side of the budget. Policymakers wishing to better the plight of the working poor and bolster incentives to marry should consider EGTRRA marriage penalty relief a platform on which to build future improvements.

[^8]
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# TABLE 1. Marriage Penalty-Related Provisions: New Law versus Old Law 

| $\begin{array}{c}\text { Tax } \\ \text { provision }\end{array}$ | $\begin{array}{l}\text { AGI' or } \\ \text { taxable } \\ \text { income }\end{array}$ | $\begin{array}{l}\text { Prior 2001 law applied } \\ \text { in 2010 }\end{array}$ | EGTRRA in 2010 | $\begin{array}{l}\text { Marriage penalty } \\ \text { effects on joint versus } \\ \text { single + HOH filers }\end{array}$ |
| :--- | :--- | :--- | :--- | :--- |
| $\begin{array}{l}\text { Child tax } \\ \text { credit }\end{array}$ | AGI | $\begin{array}{l}\text { Nonrefundable } \$ 403 \\ \text { credit against tax per child } \\ \text { (not indexed for inflation, } \\ \text { so its } \$ 500 \text { nominal } \\ \text { amount in 2001 declines in } \\ \text { real value over time). } \\ \text { Phases out starting at } \\ \$ 60,480 \text { for an HOH and } \\ \$ 88,704 \text { for a joint return. }\end{array}$ | $\begin{array}{l}\text { Doubled to } \$ 806 \text { per child, } \\ \text { refundable at a } 15 \% \text { rate on } \\ \text { income above } \$ 10,000 . \\ \text { Phase-out levels are } \\ \text { unchanged. }\end{array}$ | $\begin{array}{l}\text { Does the most to reduce } \\ \text { marriage penalties. } \\ \text { Doubling provides an } \\ \text { additional } \$ 403 \text { per child in } \\ \text { many cases; refundability } \\ \text { can add another } \$ 403 \text { per } \\ \text { child for those who } \\ \text { formerly could not make } \\ \text { use of the old credit. } \\ \text { Penalties increased for }\end{array}$ |
| some higher-earning |  |  |  |  |
| couples. |  |  |  |  |$\}$


| TABLE 1. Marriage Penalty-Related Provisions: New Law versus Old Law |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Tax <br> provision | AGIa or <br> taxable <br> income | Prior 2001 law applied <br> in 2010 | EGTRRA in 2010 | Marriage penalty <br> effects on joint versus <br> single + HOH filers |
| $\mathbf{2 8 \%}$ |  |  |  |  |
| bracket | Taxable <br> income | $28 \%$ tax rate <br> Single: $\$ 27,050-\$ 65,550$ <br> HOH: $\$ 36,250-\$ 93,650$ <br> Joint: $\$ 45,200-\$ 109,250$ <br> or $1.67 \times$ Single | Single: Unchanged <br> HOH: Unchanged <br> Joint: $\$ 54,100-\$ 109,250$ or <br> $1.43 \times$ Single | Raises marriage penalties <br> for middle- and higher- <br> income couples, especially <br> those with less even <br> income splits. |

Source: Joint Committee on Taxation (2001) and authors' calculations. Amounts are in real 2001 dollars.
a. Denotes whether parameters apply to adjusted gross income or taxable income. As tax brackets apply to taxable income, add $\$ 7,450$ for singles, $\$ 15,350$ for HOHs , and $\$ 20,700(\$ 19,200$ under old law) for joint filers to see to what AGI the brackets apply if taxpayer takes the standard deduction and all personal exemptions. b. For families with three or more children, the child credit is refundable under old law by the amount that a family's social security taxes exceed its EITC. This provision-known as "full refundability for excess dependents," or FRED - is also applicable for families under new law if it provides them with higher benefits. (Hence, some families need to calculate the child tax credit both ways and take the higher of the two.)

| TABLE 2. Impact of Different Provisions on Marriage Penalties for Five Stylized Households |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Income of married household and respective spousal shares (single/HOH) |  |  |  |  |
|  | 1 | 2 | 3 |  | 5 |
| Provision | \$30k, 70/30 | \$30k, 50/50 | \$20k, 70/30 | \$60k, 60/40 | \$80k, 90/10 |
| Child credit | (\$806) | (\$56) | (\$1,500) | \$0 | (\$806) |
| *EITC expansion | (\$577) | (\$577) | (\$577) | \$0 | \$0 |
| *Std. deduct. expansion | (\$225) | (\$225) | \$0 | \$0 | \$0 |
| 10\% bracket | (\$168) | (\$168) | \$297 | \$127 | (\$297) |
| *15\% bracket expansion |  | \$0 | \$0 | \$0 | $(\$ 1,040)$ |
| 28\%-to-25\% bracket | \$0 | \$0 | \$0 | \$0 | \$851 |
| Total change in marriage penalty | $(\$ 1,776)$ | (\$1,026) | (\$1,780) | \$127 | (\$1,292) |

[^9]FIGURE 1. MARRIAGE PENALTIES/SUBSIDIES UNDER PRIOR 2001 TAX LAW AND EGTRRA FOR A MARRIED COUPLE WITH TWO CHILDREN


[^10]
## APPENDIX TABLE 1. MARRIAGE PENALTIES AND SUBSIDIES UNDER OLD LAW AND EGTRRA (HOH EARNS 0\% TO 50\% OF COUPLE'S INCOME)

(Values are for law effective in 2010, in real 2001 dollars. Assumes married couples and heads of household have two children)

OLD LAW

Table A. Marriage Penalty or Subsidy

| Table A. Marriage Penalty or Subsidy |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | $(1,636)$ | $(1,456)$ | $(1,294)$ | $(1,132)$ | $(971)$ | $(809)$ |
| $\$ 10,000$ | $(4,328)$ | $(3,702)$ | $(3,075)$ | $(2,516)$ | $(2,040)$ | $(1,636)$ |
| $\$ 15,000$ | $(4,738)$ | $(3,913)$ | $(3,088)$ | $(2,247)$ | $(1,307)$ | $(368)$ |
| $\$ 20,000$ | $(4,435)$ | $(3,335)$ | $(2,235)$ | $(1,135)$ | $(35)$ | 1,119 |
| $\$ 25,000$ | $(4,039)$ | $(2,694)$ | $(1,319)$ | 56 | 1,431 | 1,814 |
| $\$ 30,000$ | $(2,843)$ | $(1,279)$ | 286 | 1,934 | 2,792 | 2,840 |
| $\$ 35,000$ | $(2,254)$ | $(429)$ | 1,397 | 3,030 | 3,347 | 3,135 |
| $\$ 40,000$ | $(2,430)$ | $(25)$ | 2,061 | 3,355 | 3,228 | 2,984 |
| $\$ 45,000$ | $(2,956)$ | $(136)$ | 2,582 | 3,451 | 3,050 | 2,424 |
| $\$ 50,000$ | $(3,483)$ | $(349)$ | 2,785 | 3,317 | 2,871 | 1,785 |
| $\$ 55,000$ | $(4,009)$ | $(562)$ | 2,493 | 3,023 | 2,502 | 1,187 |
| $\$ 60,000$ | $(4,536)$ | $(775)$ | 2,194 | 2,520 | 2,024 | 589 |
| $\$ 65,000$ | $(5,062)$ | $(988)$ | 1,894 | 2,018 | 1,332 | 71 |
| $\$ 70,000$ | $(5,589)$ | $(1,201)$ | 1,403 | 1,475 | 538 | - |
| $\$ 75,000$ | $(5,602)$ | $(901)$ | 1,406 | 1,261 | 258 | 458 |
| $\$ 80,000$ | $(5,602)$ | $(587)$ | 1,422 | 1,061 | $(10)$ | 722 |

AMOUNT OF TAX

## NOTE

Tables $A$ and $B$ show marriage penalties (positive numbers) or subsidies (negative numbers) for different households under old and new law. The rows of each table denote the range of household incomes, in increments of $\$ 5,000$. The columns represent the range of income shares we modeled-for a given household income, say $\$ 40,000$, a single filer will earn $100 \%$ $(\$ 40,000)$ to $50 \%(\$ 20,000)$ while an HOH will earn $0 \%(\$ 0)$ to $50 \%(\$ 20,000)$. The outlined, shaded areas indicate the couples that pay marriage penalties under the old law. In table B, we see that most of these couples still face marriage penalties, but usually lower ones. Table C shows this change in marriage penalties between new law and old law. Most couples see substantial drops in penalties or increases in subsidies; those whose penalties are higher only pay slightly more than before

Source: Authors' calculations.

EGTRRA

| Single | 100\% | 90\% | 80\% | 70\% | 60\% | 50\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HOH | 0\% | 10\% | 20\% | 30\% | 40\% | 50\% |
| \$0 |  |  |  |  |  |  |
| \$5,000 | $(1,636)$ | $(1,456)$ | $(1,294)$ | $(1,132)$ | (971) | (809) |
| \$10,000 | $(4,201)$ | $(3,624)$ | $(3,048)$ | $(2,516)$ | $(2,040)$ | $(1,636)$ |
| \$15,000 | $(5,594)$ | $(4,769)$ | $(4,013)$ | $(3,247)$ | $(2,382)$ | $(1,517)$ |
| \$20,000 | $(6,216)$ | $(5,116)$ | $(4,016)$ | $(2,916)$ | $(1,885)$ | (831) |
| \$25,000 | $(5,566)$ | $(4,221)$ | $(2,846)$ | $(1,471)$ | (96) | 618 |
| \$30,000 | $(4,620)$ | $(3,056)$ | $(1,491)$ | 157 | 1,315 | 1,813 |
| \$35,000 | $(3,582)$ | $(1,757)$ | 69 | 1,777 | 2,620 | 2,932 |
| \$40,000 | $(3,684)$ | $(1,353)$ | 733 | 2,327 | 2,800 | 2,804 |
| \$45,000 | $(3,947)$ | $(1,236)$ | 1,397 | 2,790 | 3,064 | 2,402 |
| \$50,000 | $(4,269)$ | $(1,257)$ | 1,756 | 2,964 | 2,916 | 1,912 |
| \$55,000 | $(4,674)$ | $(1,361)$ | 1,711 | 2,932 | 2,538 | 1,314 |
| \$60,000 | $(5,079)$ | $(1,464)$ | 1,659 | 2,740 | 2,151 | 716 |
| \$65,000 | $(5,484)$ | $(1,568)$ | 1,606 | 2,320 | 1,509 | 198 |
| \$70,000 | $(5,889)$ | $(1,672)$ | 1,362 | 1,753 | 788 | 127 |
| \$75,000 | $(6,294)$ | $(1,776)$ | 1,099 | 1,186 | 66 | 85 |
| \$80,000 | $(6,699)$ | $(1,879)$ | 836 | 610 | (655) | (118) |

## AMOUNT OF TAX

Table C. Change in Penalties from Old Law

| Single |  |  |  |  |  | $100 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | 128 | 78 | 28 | - | - | - |
| $\$ 15,000$ | $(856)$ | $(856)$ | $(925)$ | $(1,000)$ | $(1,075)$ | $(1,150)$ |
| $\$ 20,000$ | $(1,781)$ | $(1,781)$ | $(1,781)$ | $(1,781)$ | $(1,850)$ | $(1,950)$ |
| $\$ 25,000$ | $(1,527)$ | $(1,527)$ | $(1,527)$ | $(1,527)$ | $(1,527)$ | $(1,196)$ |
| $\$ 30,000$ | $(1,777)$ | $(1,777)$ | $(1,777)$ | $(1,777)$ | $(1,477)$ | $(1,027)$ |
| $\$ 35,000$ | $(1,328)$ | $(1,328)$ | $(1,328)$ | $(1,253)$ | $(728)$ | $(203)$ |
| $\$ 40,000$ | $(1,254)$ | $(1,328)$ | $(1,328)$ | $(1,028)$ | $(428)$ | $(180)$ |
| $\$ 45,000$ | $(990)$ | $(1,100)$ | $(1,185)$ | $(660)$ | 15 | $(22)$ |
| $\$ 50,000$ | $(786)$ | $(908)$ | $(1,029)$ | $(353)$ | 45 | 127 |
| $\$ 55,000$ | $(665)$ | $(799)$ | $(782)$ | $(91)$ | 36 | 127 |
| $\$ 60,000$ | $(543)$ | $(689)$ | $(535)$ | 219 | 127 | 127 |
| $\$ 65,000$ | $(422)$ | $(580)$ | $(288)$ | 302 | 176 | 127 |
| $\$ 70,000$ | $(300)$ | $(471)$ | $(41)$ | 278 | 249 | 127 |
| $\$ 75,000$ | $(692)$ | $(875)$ | $(307)$ | $(75)$ | $(191)$ | $(374)$ |
| $\$ 80,000$ | $(1,097)$ | $(1,292)$ | $(586)$ | $(451)$ | $(645)$ | $(839)$ |
|  |  |  |  |  |  |  |

AMOUNT OF ADDED OR REDUCED TAX

APPENDIX TABLE 1. CONTINUED. (HOH EARNS 50\% TO 100\% OF COUPLE'S INCOME)
(Values are for law effective in 2010, in real 2001 dollars. Assumes married couples and heads of household have two children)

OLD LAW

Table A. Marriage Penalty or Subsidy

| Single | 0\% | 10\% | 20\% | 30\% | 40\% | 50\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HOH | 100\% | 90\% | 80\% | 70\% | 60\% | 50\% |
| \$0 | - | - | - | - | - | - |
| \$5,000 | - | (162) | (324) | (485) | (647) | (809) |
| \$10,000 | - | (324) | (647) | (971) | $(1,294)$ | $(1,636)$ |
| \$15,000 | - | 431 | 632 | 746 | 355 | (368) |
| \$20,000 | - | 574 | 1,148 | 1,624 | 1,580 | 1,119 |
| \$25,000 | (578) | 515 | 1,481 | 1,881 | 1,841 | 1,814 |
| \$30,000 | (578) | 734 | 1,946 | 2,566 | 2,658 | 2,840 |
| \$35,000 | (578) | 346 | 1,624 | 2,161 | 2,882 | 3,135 |
| \$40,000 | (435) | 357 | 773 | 1,408 | 2,250 | 2,984 |
| \$45,000 | (435) | 456 | 557 | 528 | 1,476 | 2,424 |
| \$50,000 | (435) | 537 | 452 | 255 | 702 | 1,785 |
| \$55,000 | (435) | 597 | 369 | 212 | 113 | 1,187 |
| \$60,000 | (909) | 654 | 341 | 170 | - | 589 |
| \$65,000 | $(1,662)$ | 360 | 312 | 127 | - | 71 |
| \$70,000 | $(2,439)$ | (217) | 230 | 84 | - | - |
| \$75,000 | $(2,702)$ | (387) | 294 | 555 | 514 | 458 |
| \$80,000 | $(2,782)$ | (612) | 195 | 987 | 1,040 | 722 |

AMOUNT OF TAX

## NOTE

Tables A and B show marriage penalties (positive numbers) or subsidies (negative numbers) for different households under old and new law. The rows of each table denote the range of household incomes, in increments of
$\$ 5,000$. The columns represent the range of income shares we modeled-for a given household income, for example, $\$ 40,000$, a single filer will earn $0 \%$ to $50 \%(\$ 20,000)$ while an HOH will earn $100 \%(\$ 40,000)$ to $50 \%(\$ 20,000)$. The outlined, shaded areas indicate the couples that pay marriage penalties under the old law. In table B, we see that most of these couples still face marriage penalties, but usually lower ones. Table C shows this change in marriage penalties between new law and old law. Most couples see substantial drops in penalties or increases in subsidies; those whose penalties are higher only pay slightly more than before.

Source: Authors' calculations.

EGTRRA

| Single | 0\% | 10\% | 20\% | 30\% | 40\% | 50\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HOH | 100\% | 90\% | 80\% | 70\% | 60\% | 50\% |
| \$0 | - | - | - | - | - | - |
| \$5,000 | - | (162) | (324) | (485) | (647) | (809) |
| \$10,000 | - | (324) | (647) | (971) | $(1,294)$ | $(1,636)$ |
| \$15,000 | (402) | (197) | (221) | (331) | (798) | $(1,517)$ |
| \$20,000 | (930) | (303) | (29) | 147 | (170) | (831) |
| \$25,000 | $(1,171)$ | (145) | 805 | 1,185 | 895 | 618 |
| \$30,000 | $(1,421)$ | (110) | 1,103 | 1,659 | 2,012 | 1,813 |
| \$35,000 | (972) | (48) | 1,230 | 1,919 | 2,643 | 2,932 |
| \$40,000 | (829) | (37) | 406 | 1,241 | 2,152 | 2,804 |
| \$45,000 | (687) | 204 | 382 | 573 | 1,521 | 2,402 |
| \$50,000 | (604) | 367 | 410 | 382 | 829 | 1,912 |
| \$55,000 | (604) | 428 | 377 | 339 | 240 | 1,314 |
| \$60,000 | (969) | 485 | 399 | 297 | 127 | 716 |
| \$65,000 | $(1,600)$ | 264 | 420 | 254 | 127 | 198 |
| \$70,000 | $(2,255)$ | (204) | 370 | 211 | 127 | 127 |
| \$75,000 | $(2,910)$ | (776) | 17 | 168 | 127 | 85 |
| \$80,000 | $(3,565)$ | $(1,393)$ | (511) | 86 | 127 | (118) |

AMOUNT OF TAX

Table C. Change in Penalties from Old Law

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - |  |  |


|  | \$5,000 | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$10,000 | - | - | - | - | - | - |
|  | \$15,000 | (402) | (627) | (852) | $(1,077)$ | $(1,152)$ | $(1,150)$ |
|  | \$20,000 | (930) | (877) | $(1,177)$ | $(1,477)$ | $(1,750)$ | $(1,950)$ |
|  | \$25,000 | (594) | (660) | (676) | (696) | (946) | $(1,196)$ |
|  | \$30,000 | (844) | (844) | (844) | (907) | (646) | $(1,027)$ |
|  | \$35,000 | (394) | (394) | (394) | (242) | (239) | (203) |
|  | \$40,000 | (394) | (394) | (367) | (167) | (98) | (180) |
|  | \$45,000 | (252) | (252) | (174) | 45 | 45 | (22) |
|  | \$50,000 | (169) | (169) | (42) | 127 | 127 | 127 |
|  | \$55,000 | (169) | (169) | 8 | 127 | 127 | 127 |
|  | \$60,000 | (60) | (169) | 58 | 127 | 127 | 127 |
|  | \$65,000 | 62 | (96) | 108 | 127 | 127 | 127 |
|  | \$70,000 | 183 | 13 | 139 | 127 | 127 | 127 |
|  | \$75,000 | (209) | (389) | (277) | (386) | (386) | (374) |
|  | \$80,000 | (784) | (781) | (706) | (901) | (913) | (839) |

# APPENDIX TABLE 2. CHANGE IN MARRIAGE PENALTIES BETWEEN PRIOR LAW AND EGTRRA BY INDIVIDUAL PROVISION (HOH EARNS 0\% TO 50\% OF COUPLE'S INCOME) 

(Each number represents a change in tax liability in going from old law to new law for a given hypothetical family with two children.
Positive numbers are penalties, negative numbers are subsidies. All amounts are for new law effective in 2010, in 2001 real dollars.)

1. INDIVIDUAL EFFECT OF *STANDARD DEDUCTION

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | - | - | - | - | - |
| $\$ 20,000$ | - | - | - | - | - | - |
| $\$ 25,000$ | $(64)$ | $(64)$ | $(64)$ | $(64)$ | $(64)$ | $(64)$ |
| $\$ 30,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 35,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 40,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 45,000$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ |
| $\$ 50,000$ | - | - | - | - | - | - |
| $\$ 55,000$ | - | - | - | - | - | - |
| $\$ 60,000$ | - | - | - | - | - | - |
| $\$ 65,000$ | - | - | - | - | - | - |
| $\$ 70,000$ | - | - | - | - | - | - |
| $\$ 75,000$ | - | - | - | - | - | - |
| $\$ 80,000$ | - | - | - | - | - | - |

2. $10 \%$ BRACKET

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | 128 | 78 | 28 | - | - | - |
| $\$ 15,000$ | 297 | 297 | 228 | 153 | 78 | 3 |
| $\$ 20,000$ | 297 | 297 | 297 | 297 | 228 | 128 |
| $\$ 25,000$ | 297 | 297 | 297 | 297 | 297 | 253 |
| $\$ 30,000$ | $(168)$ | $(168)$ | $(168)$ | $(168)$ | $(168)$ | $(168)$ |
| $\$ 35,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ |
| $\$ 40,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ |
| $\$ 45,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(30)$ |
| $\$ 50,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | 127 |
| $\$ 55,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(105)$ | 127 |
| $\$ 60,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | 127 | 127 |
| $\$ 65,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | 127 | 127 |
| $\$ 70,000$ | $(297)$ | $(297)$ | $(297)$ | $(255)$ | 127 | 127 |
| $\$ 75,000$ | $(297)$ | $(297)$ | $(297)$ | $(30)$ | 127 | 127 |
| $\$ 80,000$ | $(297)$ | $(297)$ | $(297)$ | 127 | 127 | 127 |

3. *15\% BRACKET EXPANSION

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | - | - | - | - | - |
| $\$ 20,000$ | - | - | - | - | - | - |
| $\$ 25,000$ | - | - | - | - | - | - |
| $\$ 30,000$ | - | - | - | - | - | - |
| $\$ 35,000$ | - | - | - | - | - | - |
| $\$ 40,000$ | - | - | - | - | - | - |
| $\$ 45,000$ | - | - | - | - | - | - |
| $\$ 50,000$ | - | - | - | - | - | - |
| $\$ 55,000$ | - | - | - | - | - | - |
| $\$ 60,000$ | - | - | - | - | - | - |
| $\$ 65,000$ | - | - | - | - | - | - |
| $\$ 70,000$ | - | - | - | - | - | - |
| $\$ 75,000$ | $(513)$ | $(513)$ | $(513)$ | $(513)$ | $(513)$ | $(513)$ |
| $\$ 80,000$ | $(1,040)$ | $(1,040)$ | $(1,040)$ | $(1,040)$ | $(1,040)$ | $(1,040)$ |

CUMULATIVE EFFECT OF EGTRRA PROVISIONS

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | - | - | - | - | - |
| $\$ 20,000$ | - | - | - | - | - | - |
| $\$ 25,000$ | $(64)$ | - | - | - | - | - |
| $\$ 30,000$ | $(225)$ | $(225)$ | $(64)$ | $(64)$ | $(64)$ | $(64)$ |
| $\$ 35,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 40,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 45,000$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ | $(825)$ |
| $\$ 50,000$ | - | - | - | - | - | - |
| $\$ 55,000$ | - | - | - | - | - | - |
| $\$ 60,000$ | - | - | - | - | - | - |
| $\$ 65,000$ | - | - | - | - | - | - |
| $\$ 70,000$ | - | - | - | - | - | - |
| $\$ 75,000$ | - | - | - | - | - | - |
| $\$ 80,000$ | - | - | - | - | - | - |

CUMULATIVE EFFECT

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 5000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 128,000$ | 297 | 297 | 28 | - | - | - |
| $\$ 20,000$ | 297 | 297 | 297 | 153 | 78 | 3 |
| $\$ 25,000$ | 233 | 233 | 233 | 233 | 233 | 189 |
| $\$ 30,000$ | $(393)$ | $(393)$ | $(393)$ | $(393)$ | $(393)$ | $(393)$ |
| $\$ 35,000$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ |
| $\$ 40,000$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ |
| $\$ 45,000$ | $(379)$ | $(379)$ | $(379)$ | $(379)$ | $(379)$ | $(113)$ |
| $\$ 50,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | 127 |
| $\$ 55,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(105)$ | 127 |
| $\$ 60,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | 127 | 127 |
| $\$ 65,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | 127 | 127 |
| $\$ 70,000$ | $(297)$ | $(297)$ | $(297)$ | $(255)$ | 127 | 127 |
| $\$ 75,000$ | $(297)$ | $(297)$ | $(297)$ | $(30)$ | 127 | 127 |
| $\$ 80,000$ | $(297)$ | $(297)$ | $(297)$ | 127 | 127 | 127 |

CUMULATIVE EFFECT

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | ---: | :---: | :--- | :---: | :---: |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | 128 | 78 | 28 | - | - | - |
| $\$ 15,000$ | 297 | 297 | 228 | 153 | 78 | 3 |
| $\$ 20,000$ | 297 | 297 | 297 | 297 | 228 | 128 |
| $\$ 25,000$ | 233 | 233 | 233 | 233 | 233 | 189 |
| $\$ 30,000$ | $(393)$ | $(393)$ | $(393)$ | $(393)$ | $(393)$ | $(393)$ |
| $\$ 35,000$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ |
| $\$ 40,000$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ |
| $\$ 45,000$ | $(379)$ | $(379)$ | $(379)$ | $(379)$ | $(379)$ | $(113)$ |
| $\$ 50,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | 127 |
| $\$ 55,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | $(105)$ | 127 |
| $\$ 60,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | 127 | 127 |
| $\$ 65,000$ | $(297)$ | $(297)$ | $(297)$ | $(297)$ | 127 | 127 |
| $\$ 70,000$ | $(297)$ | $(297)$ | $(297)$ | $(255)$ | 127 | 127 |
| $\$ 75,000$ | $(810)$ | $(810)$ | $(810)$ | $(544)$ | $(386)$ | $(386)$ |
| $\$ 80,000$ | $(1,337)$ | $(1,337)$ | $(1,337)$ | $(913)$ | $(913)$ | $(913)$ |

## 4. $28 \%$ TO $25 \%$ TAX RATE REDUCTION

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | - | - | - | - | - |
| $\$ 20,000$ | - | - | - | - | - | - |
| $\$ 25,000$ | - | - | - | - | - | - |
| $\$ 30,000$ | - | - | - | - | - | - |
| $\$ 35,000$ | - | - | - | - | - | - |
| $\$ 40,000$ | 74 | - | - | - | - | - |
| $\$ 45,000$ | 195 | 86 | - | - | - | - |
| $\$ 50,000$ | 317 | 195 | 74 | - | - |  |
| $\$ 55,000$ | 438 | 304 | 171 | 37 | - | - |
| $\$ 60,000$ | 560 | 414 | 268 | 122 | - | - |
| $\$ 65,000$ | 681 | 523 | 365 | 207 | 49 | - |
| $\$ 70,000$ | 803 | 632 | 462 | 292 | 122 | - |
| $\$ 75,000$ | 924 | 742 | 560 | 377 | 195 | 13 |
| $\$ 80,000$ | 1,046 | 851 | 657 | 462 | 268 | 74 |

5. DOUBLING OF CHILD CREDIT AND REFUNDABILITY

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | $(750)$ | $(750)$ | $(750)$ | $(750)$ | $(750)$ | $(750)$ |
| $\$ 20,000$ | $(1,500)$ | $(1,500)$ | $(1,500)$ | $(1,500)$ | $(1,500)$ | $(1,500)$ |
| $\$ 25,000$ | $(1,183)$ | $(1,183)$ | $(1,183)$ | $(1,183)$ | $(1,183)$ | $(808)$ |
| $\$ 30,000$ | $(806)$ | $(806)$ | $(806)$ | $(806)$ | $(506)$ | $(56)$ |
| $\$ 35,000$ | $(806)$ | $(806)$ | $(806)$ | $(731)$ | $(206)$ | 319 |
| $\$ 40,000$ | $(806)$ | $(806)$ | $(806)$ | $(506)$ | 94 | 341 |
| $\$ 45,000$ | $(806)$ | $(806)$ | $(806)$ | $(281)$ | 394 | 91 |
| $\$ 50,000$ | $(806)$ | $(806)$ | $(806)$ | $(56)$ | 341 | - |
| $\$ 55,000$ | $(806)$ | $(806)$ | $(656)$ | 169 | 141 | - |
| $\$ 60,000$ | $(806)$ | $(806)$ | $(506)$ | 394 | - | - |
| $\$ 65,000$ | $(806)$ | $(806)$ | $(356)$ | 391 | - | - |
| $\$ 70,000$ | $(806)$ | $(806)$ | $(206)$ | 241 | - | - |
| $\$ 75,000$ | $(806)$ | $(806)$ | $(56)$ | 91 | - | - |
| $\$ 80,000$ | $(806)$ | $(806)$ | 94 | - | - | - |

6. *EARNED INCOME CREDIT BRACKET EXPANSION

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | $(402)$ | $(402)$ | $(402)$ | $(402)$ | $(402)$ | $(402)$ |
| $\$ 20,000$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ |
| $\$ 25,000$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ |
| $\$ 30,000$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ |
| $\$ 35,000$ | - | - | - | - | - | - |
| $\$ 40,000$ | - | - | - | - | - | - |
| $\$ 45,000$ | - | - | - | - | - | - |
| $\$ 50,000$ | - | - | - | - | - | - |
| $\$ 55,000$ | - | - | - | - | - | - |
| $\$ 60,000$ | - | - | - | - | - | - |
| $\$ 65,000$ | - | - | - | - | - | - |
| $\$ 70,000$ | - | - | - | - | - | - |
| $\$ 75,000$ | - | - | - | - | - | - |
| $\$ 80,000$ | - | - | - | - | - | - |

CUMULATIVE EFFECT

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 00$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | 128 | 78 | 28 | - | - | - |
| $\$ 15,000$ | 297 | 297 | 228 | 153 | 78 | 3 |
| $\$ 20,000$ | 297 | 297 | 297 | 297 | 228 | 128 |
| $\$ 25,000$ | 233 | 233 | 233 | 233 | 233 | 189 |
| $\$ 30,000$ | $(393)$ | $(393)$ | $(393)$ | $(393)$ | $(393)$ | $(393)$ |
| $\$ 35,000$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ |
| $\$ 40,000$ | $(448)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ | $(522)$ |
| $\$ 45,000$ | $(184)$ | $(293)$ | $(379)$ | $(379)$ | $(379)$ | $(113)$ |
| $\$ 50,000$ | 20 | $(102)$ | $(223)$ | $(297)$ | $(297)$ | 127 |
| $\$ 55,000$ | 141 | 8 | $(126)$ | $(259)$ | $(105)$ | 127 |
| $\$ 60,000$ | 263 | 117 | $(29)$ | $(174)$ | 127 | 127 |
| $\$ 65,000$ | 384 | 227 | 69 | $(89)$ | 176 | 127 |
| $\$ 70,000$ | 506 | 336 | 166 | 37 | 249 | 127 |
| $\$ 75,000$ | 114 | $(68)$ | $(251)$ | $(167)$ | $(191)$ | $(374)$ |
| $\$ 80,000$ | $(291)$ | $(485)$ | $(680)$ | $(451)$ | $(645)$ | $(839)$ |

## CUMULATIVE EFFECT

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | :---: | :---: | :---: |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | 128 | 78 | 28 | - | - | - |
| $\$ 15,000$ | $(453)$ | $(453)$ | $(523)$ | $(598)$ | $(673)$ | $(748)$ |
| $\$ 20,000$ | $(1,203)$ | $(1,203)$ | $(1,203)$ | $(1,203)$ | $(1,273)$ | $(1,373)$ |
| $\$ 25,000$ | $(950)$ | $(950)$ | $(950)$ | $(950)$ | $(950)$ | $(619)$ |
| $\$ 30,000$ | $(1,200)$ | $(1,200)$ | $(1,200)$ | $(1,200)$ | $(900)$ | $(450)$ |
| $\$ 35,000$ | $(1,328)$ | $(1,328)$ | $(1,328)$ | $(1,253)$ | $(728)$ | $(203)$ |
| $\$ 40,000$ | $(1,254)$ | $(1,328)$ | $(1,328)$ | $(1,028)$ | $(428)$ | $(180)$ |
| $\$ 45,000$ | $(990)$ | $(1,100)$ | $(1,185)$ | $(660)$ | 15 | $(22)$ |
| $\$ 50,000$ | $(786)$ | $(908)$ | $(1,029)$ | $(353)$ | 45 | 127 |
| $\$ 55,000$ | $(665)$ | $(799)$ | $(782)$ | $(91)$ | 36 | 127 |
| $\$ 60,000$ | $(543)$ | $(689)$ | $(535)$ | 219 | 127 | 127 |
| $\$ 65,000$ | $(422)$ | $(580)$ | $(288)$ | 302 | 176 | 127 |
| $\$ 70,000$ | $(300)$ | $(471)$ | $(41)$ | 278 | 249 | 127 |
| $\$ 75,000$ | $(692)$ | $(875)$ | $(307)$ | $(75)$ | $(191)$ | $(374)$ |
| $\$ 80,000$ | $(1,097)$ | $(1,292)$ | $(586)$ | $(451)$ | $(645)$ | $(839)$ |

## CUMULATIVE EFFECT

| Single | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| HOH | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| $\$ \$ 0$ | - | - | - | - | - | - |
| $\$ 50000$ | - | - | - | - | - | - |
| $\$ 10,000$ | 128 | 78 | 28 | - | - | - |
| $\$ 15,000$ | $(856)$ | $(856)$ | $(925)$ | $(1,000)$ | $(1,075)$ | $(1,150)$ |
| $\$ 20,000$ | $(1,781)$ | $(1,781)$ | $(1,781)$ | $(1,781)$ | $(1,850)$ | $(1,950)$ |
| $\$ 25,000$ | $(1,527)$ | $(1,527)$ | $(1,527)$ | $(1,527)$ | $(1,527)$ | $(1,196)$ |
| $\$ 30,000$ | $(1,777)$ | $(1,777)$ | $(1,777)$ | $(1,777)$ | $(1,477)$ | $(1,027)$ |
| $\$ 35,000$ | $(1,328)$ | $(1,328)$ | $(1,328)$ | $(1,253)$ | $(728)$ | $(203)$ |
| $\$ 40,000$ | $(1,254)$ | $(1,328)$ | $(1,328)$ | $(1,028)$ | $(428)$ | $(180)$ |
| $\$ 45,000$ | $(990)$ | $(1,100)$ | $(1,185)$ | $(660)$ | 15 | $(22)$ |
| $\$ 50,000$ | $(786)$ | $(908)$ | $(1,029)$ | $(353)$ | 45 | 127 |
| $\$ 55,000$ | $(665)$ | $(799)$ | $(782)$ | $(91)$ | 36 | 127 |
| $\$ 60,000$ | $(543)$ | $(689)$ | $(535)$ | 219 | 127 | 127 |
| $\$ 65,000$ | $(422)$ | $(580)$ | $(288)$ | 302 | 176 | 127 |
| $\$ 70,000$ | $(300)$ | $(471)$ | $(41)$ | 278 | 249 | 127 |
| $\$ 75,000$ | $(692)$ | $(875)$ | $(307)$ | $(75)$ | $(191)$ | $(374)$ |
| $\$ 80,000$ | $(1,097)$ | $(1,292)$ | $(586)$ | $(451)$ | $(645)$ | $(839)$ |

Note: The second column of tables shows the cumulative impact of adding in each new tax provision's effects. The first column shows the individual impact of each provision on our hypothetical households-in other words, the difference between the current and the preceding cumulative tables. The percentages following the "Single" and " HOH " header rows are the respective shares of income each filer brings to a household of a certain income level. For example, at $\$ 40,000$, under the " $80 / 20$ " column, the single filer earns $\$ 32,000$ and the HOH earns $\$ 8,000$. Asterisks indicate provisions included in the marriage penalty reduction suite.

## APPENDIX TABLE 2. CONTINUED. (HOH EARNS 50\% TO 100\% OF COUPLE'S INCOME)

(Each number represents a change in tax liability in going from old law to new law for a given hypothetical family with two children. Positive numbers are penalties, negative numbers are subsidies. All amounts are for new law effective in 2010, in 2001 real dollars.)

1. INDIVIDUAL EFFECT OF *STANDARD DEDUCTION

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | - | - | - | - | - |
| $\$ 20,000$ | - | - | - | - | - | - |
| $\$ 25,000$ | $(64)$ | $(64)$ | $(64)$ | $(64)$ | $(64)$ | $(64)$ |
| $\$ 30,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 35,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 40,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 45,000$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ |
| $\$ 50,000$ | - | - | - | - | - | - |
| $\$ 55,000$ | - | - | - | - | - | - |
| $\$ 60,000$ | - | - | - | - | - | - |
| $\$ 65,000$ | - | - | - | - | - | - |
| $\$ 70,000$ | - | - | - | - | - | - |
| $\$ 75,000$ | - | - | - | - | - | - |
| $\$ 80,000$ | - | - | - | - | - | - |

2. $10 \%$ BRACKET

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 20,000$ | - | - | - | - | - | 3 |
| $\$ 25,000$ | - | - | - | - | 27 | 128 |
| $\$ 30,000$ | $(41)$ | 266 | - | 3 | 128 | 253 |
| $\$ 35,000$ | $(169)$ | $(169)$ | $(41)$ | $(346)$ | $(238)$ | $(168)$ |
| $\$ 40,000$ | $(169)$ | $(169)$ | $(142)$ | $(17)$ | $(255)$ | $(297)$ |
| $\$ 45,000$ | $(169)$ | $(169)$ | $(92)$ | 127 | 127 | $(297)$ |
| $\$ 50,000$ | $(169)$ | $(169)$ | $(42)$ | 127 | 127 | 127 |
| $\$ 55,000$ | $(169)$ | $(169)$ | 8 | 127 | 127 | 127 |
| $\$ 60,000$ | $(169)$ | $(169)$ | 58 | 127 | 127 | 127 |
| $\$ 65,000$ | $(169)$ | $(169)$ | 108 | 127 | 127 | 127 |
| $\$ 70,000$ | $(169)$ | $(169)$ | 127 | 127 | 127 | 127 |
| $\$ 75,000$ | $(169)$ | $(167)$ | 127 | 127 | 127 | 127 |
| $\$ 80,000$ | $(169)$ | $(142)$ | 127 | 127 | 127 | 127 |

3. *15\% BRACKET EXPANSION

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 20,000$ | - | - | - | - | - | - |
| $\$ 25,000$ | - | - | - | - | - | - |
| $\$ 30,000$ | - | - | - | - | - | - |
| $\$ 35,000$ | - | - | - | - | - | - |
| $\$ 40,000$ | - | - | - | - | - | - |
| $\$ 45,000$ | - | - | - | - | - | - |
| $\$ 50,000$ | - | - | - | - | - | - |
| $\$ 55,000$ | - | - | - | - | - | - |
| $\$ 60,000$ | - | - | - | - | - | - |
| $\$ 65,000$ | - | - | - | - | - | - |
| $\$ 70,000$ | - | - | - | - | - | - |
| $\$ 75,000$ | $(513)$ | $(513)$ | $(513)$ | $(513)$ | $(513)$ | $(513)$ |
| $\$ 80,000$ | $(1,040)$ | $(1,040)$ | $(1,040)$ | $(1,040)$ | $(1,040)$ | $(1,040)$ |

CUMULATIVE EFFECT OF EGTRRA PROVISIONS

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | - | - | - | - | - |
| $\$ 20,000$ | - | - | - | - | - | - |
| $\$ 25,000$ | $(64)$ | $(64)$ | $(64)$ | $(64)$ | $(64)$ | $(64)$ |
| $\$ 30,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 35,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 40,000$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ | $(225)$ |
| $\$ 45,000$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ | $(83)$ |
| $\$ 50,000$ | - | - | - | - | - | - |
| $\$ 55,000$ | - | - | - | - | - | - |
| $\$ 60,000$ | - | - | - | - | - | - |
| $\$ 65,000$ | - | - | - | - | - | - |
| $\$ 70,000$ | - | - | - | - | - | - |
| $\$ 75,000$ | - | - | - | - | - | - |
| $\$ 80,000$ | - | - | - | - | - | - |

CUMULATIVE EFFECT

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | - | - | - | - | - |
| $\$ 20,000$ | - | - | - | - | - | 3 |
| $\$ 25,000$ | 360 | 203 | $(64)$ | $(61)$ | 64 | 189 |
| $\$ 30,000$ | $(266)$ | $(266)$ | $(266)$ | $(571)$ | $(463)$ | $(393)$ |
| $\$ 35,000$ | $(394)$ | $(394)$ | $(394)$ | $(242)$ | $(480)$ | $(522)$ |
| $\$ 40,000$ | $(394)$ | $(394)$ | $(367)$ | $(167)$ | $(98)$ | $(522)$ |
| $\$ 45,000$ | $(252)$ | $(252)$ | $(174)$ | 45 | 45 | $(113)$ |
| $\$ 50,000$ | $(169)$ | $(169)$ | $(42)$ | 127 | 127 | 127 |
| $\$ 55,000$ | $(169)$ | $(169)$ | 8 | 127 | 127 | 127 |
| $\$ 60,000$ | $(169)$ | $(169)$ | 58 | 127 | 127 | 127 |
| $\$ 65,000$ | $(169)$ | $(169)$ | 108 | 127 | 127 | 127 |
| $\$ 70,000$ | $(169)$ | $(169)$ | 127 | 127 | 127 | 127 |
| $\$ 75,000$ | $(169)$ | $(167)$ | 127 | 127 | 127 | 127 |
| $\$ 80,000$ | $(169)$ | $(142)$ | 127 | 127 | 127 | 127 |

CUMULATIVE EFFECT

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | :---: | :---: | :---: |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | - | - | - | - | 3 |
| $\$ 20,000$ | - | - | - | - | 27 | 128 |
| $\$ 25,000$ | 360 | 203 | $(64)$ | $(61)$ | 64 | 189 |
| $\$ 30,000$ | $(266)$ | $(266)$ | $(266)$ | $(571)$ | $(463)$ | $(393)$ |
| $\$ 35,000$ | $(394)$ | $(394)$ | $(394)$ | $(242)$ | $(480)$ | $(522)$ |
| $\$ 40,000$ | $(394)$ | $(394)$ | $(367)$ | $(167)$ | $(98)$ | $(522)$ |
| $\$ 45,000$ | $(252)$ | $(252)$ | $(174)$ | 45 | 45 | $(113)$ |
| $\$ 50,000$ | $(169)$ | $(169)$ | $(42)$ | 127 | 127 | 127 |
| $\$ 55,000$ | $(169)$ | $(169)$ | 8 | 127 | 127 | 127 |
| $\$ 60,000$ | $(169)$ | $(169)$ | 58 | 127 | 127 | 127 |
| $\$ 65,000$ | $(169)$ | $(169)$ | 108 | 127 | 127 | 127 |
| $\$ 70,000$ | $(169)$ | $(169)$ | 127 | 127 | 127 | 127 |
| $\$ 75,000$ | $(683)$ | $(680)$ | $(386)$ | $(386)$ | $(386)$ | $(386)$ |
| $\$ 80,000$ | $(1,209)$ | $(1,182)$ | $(913)$ | $(913)$ | $(913)$ | $(913)$ |

4. $\mathbf{2 8 \%}$ TO $\mathbf{2 5 \%}$ TAX RATE REDUCTION

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | - | - | - | - | - |
| $\$ 20,000$ | - | - | - | - | - | - |
| $\$ 25,000$ | - | - | - | - | - | - |
| $\$ 30,000$ | - | - | - | - | - | - |
| $\$ 35,000$ | - | - | - | - | - | - |
| $\$ 40,000$ | - | - | - | - | - | - |
| $\$ 45,000$ | - | - | - | - | - | - |
| $\$ 50,000$ | - | - | - | - | - | - |
| $\$ 55,000$ | - | - | - | - | - | - |
| $\$ 60,000$ | 110 | - | - | - | - | - |
| $\$ 65,000$ | 231 | 73 | - | - | - | - |
| $\$ 70,000$ | 353 | 182 | 12 | - | - | - |
| $\$ 75,000$ | 474 | 292 | 110 | - | - | 13 |
| $\$ 80,000$ | 596 | 401 | 207 | 12 | - | 74 |

5. DOUBLING OF CHILD CREDIT AND REFUNDABILITY

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | $(225)$ | $(450)$ | $(675)$ | $(750)$ | $(750)$ |
| $\$ 20,000$ | $(352)$ | $(300)$ | $(600)$ | $(900)$ | $(1,200)$ | $(1,500)$ |
| $\$ 25,000$ | $(376)$ | $(285)$ | $(35)$ | $(58)$ | $(433)$ | $(808)$ |
| $\$ 30,000$ | - | - | - | 241 | 394 | $(56)$ |
| $\$ 35,000$ | - | - | - | - | 241 | 319 |
| $\$ 40,000$ | - | - | - | - | - | 341 |
| $\$ 45,000$ | - | - | - | - | - | 91 |
| $\$ 50,000$ | - | - | - | - | - | - |
| $\$ 55,000$ | - | - | - | - | - | - |
| $\$ 60,000$ | - | - | - | - | - | - |
| $\$ 65,000$ | - | - | - | - | - | - |
| $\$ 70,000$ | - | - | - | - | - | - |
| $\$ 75,000$ | - | - | - | - | - | - |
| $\$ 80,000$ | $(170)$ | - | - | - | - | - |

6. *EARNED INCOME CREDIT BRACKET EXPANSION

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | $(402)$ | $(402)$ | $(402)$ | $(402)$ | $(402)$ | $(402)$ |
| $\$ 20,000$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ |
| $\$ 25,000$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ |
| $\$ 30,000$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ | $(577)$ |
| $\$ 35,000$ | - | - | - | - | - | - |
| $\$ 40,000$ | - | - | - | - | - | - |
| $\$ 45,000$ | - | - | - | - | - | - |
| $\$ 50,000$ | - | - | - | - | - | - |
| $\$ 55,000$ | - | - | - | - | - | - |
| $\$ 60,000$ | - | - | - | - | - | - |
| $\$ 65,000$ | - | - | - | - | - | - |
| $\$ 70,000$ | - | - | - | - | - | - |
| $\$ 75,000$ | - | - | - | - | - | - |
| $\$ 80,000$ | - | - | - | - | - | - |

CUMULATIVE EFFECT

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | - | - | - | - | 3 |
| $\$ 20,000$ | - | - | - | - | 27 | 128 |
| $\$ 25,000$ | 360 | 203 | $(64)$ | $(61)$ | 64 | 189 |
| $\$ 30,000$ | $(266)$ | $(266)$ | $(266)$ | $(571)$ | $(463)$ | $(393)$ |
| $\$ 35,000$ | $(394)$ | $(394)$ | $(394)$ | $(242)$ | $(480)$ | $(522)$ |
| $\$ 40,000$ | $(394)$ | $(394)$ | $(367)$ | $(167)$ | $(98)$ | $(522)$ |
| $\$ 45,000$ | $(252)$ | $(252)$ | $(174)$ | 45 | 45 | $(113)$ |
| $\$ 50,000$ | $(169)$ | $(169)$ | $(42)$ | 127 | 127 | 127 |
| $\$ 55,000$ | $(169)$ | $(169)$ | 8 | 127 | 127 | 127 |
| $\$ 60,000$ | $(60)$ | $(169)$ | 58 | 127 | 127 | 127 |
| $\$ 65,000$ | 62 | $(96)$ | 108 | 127 | 127 | 127 |
| $\$ 70,000$ | 183 | 13 | 139 | 127 | 127 | 127 |
| $\$ 75,000$ | $(209)$ | $(389)$ | $(277)$ | $(386)$ | $(386)$ | $(374)$ |
| $\$ 80,000$ | $(614)$ | $(781)$ | $(706)$ | $(901)$ | $(913)$ | $(839)$ |

CUMULATIVE EFFECT

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | - | $(225)$ | $(450)$ | $(675)$ | $(750)$ | $(748)$ |
| $\$ 20,000$ | $(352)$ | $(300)$ | $(600)$ | $(900)$ | $(1,173)$ | $(1,373)$ |
| $\$ 25,000$ | $(16)$ | $(83)$ | $(99)$ | $(119)$ | $(369)$ | $(619)$ |
| $\$ 30,000$ | $(266)$ | $(266)$ | $(266)$ | $(330)$ | $(69)$ | $(450)$ |
| $\$ 35,000$ | $(394)$ | $(394)$ | $(394)$ | $(242)$ | $(239)$ | $(203)$ |
| $\$ 40,000$ | $(394)$ | $(394)$ | $(367)$ | $(167)$ | $(98)$ | $(180)$ |
| $\$ 45,000$ | $(252)$ | $(252)$ | $(174)$ | 45 | 45 | $(22)$ |
| $\$ 50,000$ | $(169)$ | $(169)$ | $(42)$ | 127 | 127 | 127 |
| $\$ 55,000$ | $(169)$ | $(169)$ | 8 | 127 | 127 | 127 |
| $\$ 60,000$ | $(60)$ | $(169)$ | 58 | 127 | 127 | 127 |
| $\$ 65,000$ | 62 | $(96)$ | 108 | 127 | 127 | 127 |
| $\$ 70,000$ | 183 | 13 | 139 | 127 | 127 | 127 |
| $\$ 75,000$ | $(209)$ | $(389)$ | $(277)$ | $(386)$ | $(386)$ | $(374)$ |
| $\$ 80,000$ | $(784)$ | $(781)$ | $(706)$ | $(901)$ | $(913)$ | $(839)$ |

CUMULATIVE EFFECT

| Single | $0 \%$ | $10 \%$ | $20 \%$ | $30 \%$ | $40 \%$ | $50 \%$ |
| ---: | ---: | :---: | ---: | :---: | :---: | :---: |
| HOH | $100 \%$ | $90 \%$ | $80 \%$ | $70 \%$ | $60 \%$ | $50 \%$ |
| $\$ 0$ | - | - | - | - | - | - |
| $\$ 5,000$ | - | - | - | - | - | - |
| $\$ 10,000$ | - | - | - | - | - | - |
| $\$ 15,000$ | $(402)$ | $(627)$ | $(852)$ | $(1,077)$ | $(1,152)$ | $(1,150)$ |
| $\$ 20,000$ | $(930)$ | $(877)$ | $(1,177)$ | $(1,477)$ | $(1,750)$ | $(1,950)$ |
| $\$ 25,000$ | $(594)$ | $(660)$ | $(676)$ | $(696)$ | $(946)$ | $(1,196)$ |
| $\$ 30,000$ | $(844)$ | $(844)$ | $(844)$ | $(907)$ | $(646)$ | $(1,027)$ |
| $\$ 35,000$ | $(394)$ | $(394)$ | $(394)$ | $(242)$ | $(239)$ | $(203)$ |
| $\$ 40,000$ | $(394)$ | $(394)$ | $(367)$ | $(167)$ | $(98)$ | $(180)$ |
| $\$ 45,000$ | $(252)$ | $(252)$ | $(174)$ | 45 | 45 | $(22)$ |
| $\$ 50,000$ | $(169)$ | $(169)$ | $(42)$ | 127 | 127 | 127 |
| $\$ 55,000$ | $(169)$ | $(169)$ | 8 | 127 | 127 | 127 |
| $\$ 60,000$ | $(60)$ | $(169)$ | 58 | 127 | 127 | 127 |
| $\$ 65,000$ | 62 | $(96)$ | 108 | 127 | 127 | 127 |
| $\$ 70,000$ | 183 | 13 | 139 | 127 | 127 | 127 |
| $\$ 75,000$ | $(209)$ | $(389)$ | $(277)$ | $(386)$ | $(386)$ | $(374)$ |
| $\$ 80,000$ | $(784)$ | $(781)$ | $(706)$ | $(901)$ | $(913)$ | $(839)$ |

Note: The second column of tables shows the cumulative impact of adding in each new tax provision's effects. The first column shows the individual impact of each provision on our hypothetical households-in other words, the difference between the current and the preceding cumulative tables. The percentages following the "Single" and " HOH " header rows are the respective shares of income each filer brings to a household of a certain income level. For example, at $\$ 40,000$, under the "80/20" column the single filer earns $\$ 32,000$ and the HOH earns $\$ 8,000$. Asterisks indicate provisions included in the marriage penalty reduction suite

Source: Authors' calculations.


[^0]:    ${ }^{1}$ For a brief history of marriage penalties, see Bull et al. (1999).
    ${ }^{2}$ Marriage penalties arising from welfare and income-conditioned programs, such as food stamps, housing subsidies, and health benefits, often fall heaviest upon heads of household. See Steuerle and Giannarelli (1996) for a detailed analysis.
    ${ }^{3}$ An actual distributional analysis of marriage penalties and subsidies is complicated because, in addition to the difficulty of observing marriages that dissolve or do not occur as the result of marriage penalties, a relevant question is how large these penalties are for potential marriages.

[^1]:    ${ }^{4}$ The difference in tax years, assumptions, measures of penalties, couple types, and particulars of legislation simulated make it difficult to compare results.

[^2]:    ${ }^{5}$ Note that these same credits also phase in at lower incomes and continue to phase in as income increases. Once the maximum value of the credit is reached, additional income earned by the household will trigger the phaseout, and the credit's value will begin to decline.
    ${ }^{6}$ These figures are for pre-2001 tax law extended out to 2010, with the amounts expressed in real 2001 dollars.

[^3]:    ${ }^{7}$ For the higher tax brackets, this 60 percent ratio does not hold.

[^4]:    ${ }^{8}$ As currently legislated, the provisions of the 2001 tax bill are due to sunset after 2010, and the nation will revert to prior 2001 tax law. However, since the public is likely to view reversion to old law as an increase in taxes on households, political pressure to extend the 2001 legislation will be substantial.
    ${ }^{9}$ These amounts for each filer are the sum of personal exemptions plus the filer's standard deduction. The personal exemption is worth $\$ 2,900$ per person in 2010. A single filer claims one, an HOH with two children claims three, and a married couple with two children claims four. Standard deduction values appear in table 1.

[^5]:    ${ }^{10}$ For simplicity, the following example uses rounded numbers. A married couple with two children claiming its personal exemptions, the standard deduction, the EITC, and the child credit, first pays tax net of credits at around $\$ 36,000$ of AGI. The point at which the family is first assessed income tax (after subtracting out deductions and exemptions) gross of credits is about $\$ 21,000$ of AGI. Thus, the new 10 percent bracket first applies when family earnings exceed this level. The 10 percent rate applies to the first $\$ 0$ to $\$ 12,000$ of taxable income, which for this family represents about $\$ 21,000$ to $\$ 33,000$ of adjusted gross income. The 15 percent rate takes effect when the family's AGI exceeds $\$ 33,000$, corresponding to $\$ 12,001$ of taxable income. Again, note that the family's eligibility for the EITC and child credit would continue to offset any positive tax liability until about $\$ 36,000$ of AGI. For a more detailed discussion about the point of tax entry for various families and filer types, see Burman, Maag, and Rohaly (2002).
    ${ }^{11}$ Based on tax returns, a rule of thumb is that the average household will itemize when 19 percent of AGI is greater than the value of its standard deduction-for a single worker, this scenario happens around $\$ 24,000$.

[^6]:    ${ }^{12}$ Data suggest, however, that about a quarter of tax filers earning $\$ 50,000$ or more continue to take the standard deduction.
    ${ }^{13}$ The 10 percent bracket is not automatically indexed for inflation as are the other brackets. The 10 percent brackets for each filer status shrink owing to inflation until 2008. In that year, the single filer bracket width increases by $\$ 1,000$ nominal, while the joint bracket width is increased by $\$ 2,000$ nominal. The HOH bracket width does not increase, however. After 2008, all the bracket

[^7]:    ${ }^{16}$ See Cherry and Sawicky (2001) and Steuerle (2000a, b, 2001).

[^8]:    ${ }^{17}$ This is the HOH's first point of tax entry, after one takes into account her standard deduction, personal exemptions for herself and her children, the child credit, and the EITC.

[^9]:    Source: Authors' calculations. See table 4 for results for other hypothetical households.

[^10]:    Note: The "secondary earner" was a head of household with two children, prior to marriage. Her earnings are $0 \%, 10 \%, 20 \%, 30 \%, 40 \%$, and $50 \%$ of household income in each example. The Primary Earner earns the balance, and was a single filer without children, prior to marriage.
    Source: Authors' calculations.

