Providing Federal Assistance for Low-Income Families through the Tax System: A Primer

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Abstract

The federal income tax system has been used in a number of ways to promote favored forms of consumption and investment and to help selected groups of taxpayers. Since the mid-1980s, Congress has increasingly used the federal tax code to support social programs. This trend is likely to continue. We document provisions of the tax code that are aimed at low-income families including their history and recent changes. We also provide a review of literature surrounding the effect of these provisions. Finally, we discuss important differences in spending and tax programs. Understanding tax programs targeted toward low-income families is particularly important at a time when spending programs are being scaled back.

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PROVIDING FEDERAL ASSISTANCE FOR LOW-INCOME FAMILIES THROUGH THE TAX SYSTEM: A PRIMER

I. INTRODUCTION

The federal income tax system has always been more than just a means of collecting revenues to support federal spending programs. Legislators have used the income tax system to promote favored forms of consumption and investment and to help selected groups of taxpayers. In addition, since the mid-1980s, Congress has increasingly used the federal tax code to support social program goals (Toder 1998). This support has included a greatly expanded role for the tax code in providing income support for low-income families, including those who do not pay federal income tax. Congress expanded the earned income tax credit (EITC) in 1986, 1990, and 1993; enacted a new, partially refundable child credit in 1997; and enacted further increases in both the child credit and the EITC in The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA). ¹

Government Budget Rules and the Push toward Tax Expenditures

Tax incentives are popular because they represent a way of increasing federal support for social policy, while seeming to cut taxes rather than increase spending. Compared with direct outlay programs with similar goals, tax incentives better meet the need of politicians to expand programs while appearing to restrain the size of government. That is, the incentives show up as tax cuts rather than spending increases, even if they have the same economic effect. Consequently, they often appear more politically attractive than spending programs designed to achieve the same ends.

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^{1.} For a more complete discussion of EGTRRA, see Burman, Maag, and Rohaly (2002).

Federal budget rules established in the 1990s encouraged the growth of tax expenditures. The rules established under the Gramm–Rudman–Hollings Act were an initial attempt by Congress to force spending discipline by setting specific dollar targets for federal deficits. While those rules were ultimately unsuccessful, they did pave the way for the Budget Enforcement Act of 1990 (BEA). BEA, which was extended in 1993 and 1997, constrained discretionary spending by setting specific dollar limits (spending caps) for different categories of outlays. It also required that tax increases or spending cuts elsewhere in the budget offset any increase in mandatory spending (which includes most programs that provide income support to low-income families).

The discretionary outlay ceilings and pay-as-you-go requirement effectively curtailed both new spending initiatives and significant increases in existing spending programs. The budget discipline imposed by BEA broke down, however, once the federal budget was no longer in deficit, and the act is set to expire after 2002. It is not clear if Congress will impose new rules to limit further spending increases. But the reemergence of deficits in the wake of the recent economic decline, the drop in stock prices, the continued automatic growth of retirement and health programs, and the increase in spending on defense and homeland security in response to the September 11 terrorist attacks all suggest a need for new attempts to impose budget discipline. If the current administration continues to resist tax increases, and to oppose the deferral of tax cuts recently enacted but not yet implemented, new social spending initiatives will again be severely squeezed. If tax "cuts" remain on the table, this fiscal pressure may lead to yet more social spending through the tax system.

Growth in Social Tax Expenditures

Some analysts refer to tax incentives as "tax expenditures," recognizing that tax provisions often supplant direct spending programs in advancing federal policy goals.² The Office of Management and Budget (OMB) defines "tax expenditures" as "revenue

losses due to preferential provisions of the Federal tax laws, such as special exclusions, exemptions, deductions, credits, deferrals, or tax rates." In spite of the terminology, some proposals that the agencies call "tax expenditures" do not have an obvious spending program counterpart, although they do provide preferential treatment relative to a comprehensive income tax. Nevertheless, many other programs could be designed equally well as explicit outlays.

The OMB and the Congressional Joint Committee on Taxation (JCT) publish an annual list of "tax expenditures" and their associated costs. Although not equivalent to the normal budget estimates for federal expenditures, estimates of expenditures through the tax system provide some measure of the level of federal support for selected activities and selected categories of recipients.

A simple comparison of tax expenditures in 1981 and in 2001 illustrates that, while the overall growth in tax expenditures relative to GDP has not been very large—especially because of the tax reforms of 1982, 1984, and 1986—the composition of tax expenditures has shifted (see figure 1). Business tax expenditures—those intended to promote specific industries or certain business activities—have declined relative to social tax expenditures—provisions intended to promote education, health, housing, retirement saving, and income security for low-income families. In 2001, social tax expenditures accounted for about 80 percent of the cost of all tax expenditures, up from less than 60 percent in 1980.

Social tax expenditures increased in the 1990s, owing both to new tax legislation and economic and demographic changes. The Omnibus Budget Reconciliation Acts of 1990 and 1993 expanded some existing social expenditures and added new ones. The most significant change was a major expansion of the EITC in both the 1990 and 1993 acts.

^{2.} The term "tax expenditures" and the concept of a tax expenditure budget was originally developed by Stanley Surrey, who was assistant secretary for Tax Policy at the U.S. Treasury Department in the 1960s. See Surrey (1973) and Surrey and McDaniel (1985).

The Taxpayer Relief Act of 1997 continued the trend toward expanding social tax expenditures by introducing new tax credits for postsecondary education expenses; broadening incentives for saving for higher education; expanding eligibility for tax-advantaged individual retirement accounts (IRAs); providing a new, partially refundable child credit; and expanded incentives for business to invest in economically depressed areas and to employ disadvantaged workers.

In EGTRRA, enacted in 2001, Congress and the administration added and extended various tax incentives to further social policy objectives. Most of the estimated 10-year revenue loss stems from the bill's marginal tax rate cuts and the elimination of the federal estate and gift tax. EGTRRA, however, also contains numerous provisions targeted to particular families or activities. These new and expanded tax expenditures include an increase in the child tax credit. In 2001, the credit increased from \$500 to \$600, and it will increase to \$1,000 by 2010. The credit also extends partial refundability of the credit to all families with qualified children and earnings above \$10,000. Unlike many other tax provisions, however, the \$1,000 credit is not indexed for inflation, so its real value will erode over time. Other increases include an increase in the EITC for some married couples, an increase in the dependent care credit, expanded tax benefits for educational savings accounts and college tuition, and expanded deductions for retirement saving and pensions.

Support for Low-Income Families

Most social tax expenditures dollars go to middle-class families, including the four largest tax expenditure items: exclusion of pension contributions and earnings (\$140 billion), exclusion of employer-paid health insurance premiums (\$107 billion), deduction of mortgage interest on owner-occupied homes (\$65 billion), and deduction of state and local income taxes (\$46 billion). While "middle-class" tax expenditures remain the

^{3.} Expenditure amounts are "outlays equivalent" estimates for 2001. (U.S. Office of Management and Budget 2002)

largest social tax expenditures in dollar cost, many more tax expenditure dollars today go toward income support for lower-income families than in past decades.

At the same time that tax expenditures for low-income families have increased, direct federal spending for transfer programs serving those families has been scaled back. The EITC is now the largest single source of cash assistance to low-income working families, with families claiming \$31 billion of credits in 2000 (Internal Revenue Service 2001). This figure exceeds total federal spending in fiscal year 2000 on the Food Stamp Program (\$18 billion) as well as on Temporary Assistance for Needy Families (TANF) and other family support programs (\$21 billion). Total spending for Supplemental Security Income (SSI), which mostly provides benefits to nonworking elderly and disabled people equaled that of the EITC. Other tax provisions not directly targeted to low-income families provide additional subsidies to low-income families. Of the more than \$19 billion claimed in child tax credits in 2000, families with adjusted gross income of \$30,000 or less claimed \$4.2 billion. Families at this income level claimed another \$1.5 billion of the \$2.7 billion in dependent care credits.

Tax subsidies reduce or eliminate federal income tax liabilities for low-income families. Many low-income families actually receive a refund in excess of their income tax liability. One rationale for such assistance might be to offset the burdens of other taxes that low-income families pay, such as payroll taxes; excise taxes; or state and local sales, property, and income taxes. But such assistance could also be part of a broader program to provide a basic social safety net and reduce or eliminate poverty. Even if a particular benefit had no policy rationale, policymakers might wish to use the income tax as a convenient administrative way to deliver cash benefits to low-income families.

II. ISSUES IN DESIGNING TAX INCENTIVES

Issues in the design of tax incentives are often the same as those for direct spending programs, for example, determining how to administer the subsidy and defining who is eligible and what conditions apply to its receipt. Other considerations, such as whether the tax subsidy remains constant for all recipients or increases for those with higher tax

liability, are particular to tax incentives. Certain issues for spending programs, such as whether benefits are paid as cash or in-kind, do not apply to tax-based incentives.

Employer or Employee Subsidies

Tax subsidy checks can be written to businesses or individuals. A general principle of economic incidence is that whether subsidies are paid to buyers or sellers in a market transaction are irrelevant. Theoretically, the extent to which a subsidy lowers prices to buyers, or increases prices received by sellers, depends on the relative price sensitivity of buyers and sellers, not on who receives the actual check. However, real distinctions often exist in practice. Costs of administration, ease of enforcement, and ability to make distinctions among classes of beneficiaries may differ depending on who receives the subsidy.

Wage subsidies are a prime example. The federal government provides tax credits for low-income workers both directly and indirectly through employers. Direct subsidies through the EITC are tied to total family earnings, and the credit is reduced if the combined income of the family exceeds certain threshold amounts. It is not feasible in practice to limit employer-based subsidies according to family income or even total earnings. Instead, limits are placed on employer-based credits—such as the Work Opportunity Credit—by restricting the recipients to members of certain "at-risk" groups.⁴

Universal or Limited Eligibility

The federal budget distinguishes between discretionary spending and entitlement spending. Congress controls the amount to be spent in discretionary programs by providing budget authority through the annual appropriations process. Entitlement programs, in contrast, provide payments to everyone who qualifies according to the criteria specified in the law. Thus, Congress cannot directly set a dollar limit on the cost

^{4.} For a more complete discussion on employer and employee subsidies, see Steuerle (2002).

of these programs, although it can indirectly impose such limits by establishing rules for eligibility.

Most tax expenditures are, by their nature, entitlements; everyone who meets the eligibility criteria can apply for and receive the subsidy. But tax expenditures can resemble discretionary spending programs if Congress sets explicit limits on their use and empowers a federal or state agency to ration access. For example, the annual investment eligible for low-income housing tax credits is subject to caps allocated by state housing agencies to qualifying projects. Many entitlements are permanent or mandatory and do not require annual appropriations. The same usually applies to tax expenditures, although they can also be made temporary, subject to periodic renewal over time.

Income Conditioned

Eligibility for most tax expenditures is not conditioned on income, although in recent years, income caps have increasingly been used to limit the cost of tax subsidies. For example, child tax credits, education tax credits, and tax preferences for retirement and education saving are all subject to some type of income limit. Although these income limits are generally high, Congress frequently chooses not to index them for inflation. Thus, over time, more families become subject to the limits.

Phasing out tax credits at a set income can create high implicit marginal tax rates in the income range over which the benefits phase out. These high marginal rates can discourage work and savings. The combination of regular tax rates and the implicit tax created by lost credits can result in much higher tax rates for people in the phaseout range than for families with the highest incomes (Joint Economic Committee 2001). For example, tax benefits from programs intended exclusively for lower-income families, such as the EITC, phase out rapidly once adjusted gross income exceeds certain threshold amounts. Phaseouts based on income allow total budgetary costs to remain much lower than if the same program provided universal benefits. Because making benefits universal raises budgetary costs, paying for them requires higher tax rates across the board, which can create adverse effects for taxpayers with incomes above the phaseout range.

While limiting tax benefits to low-income families results in high effective marginal tax rates over the income phaseout range, the phase-in of refundable tax credits can have the opposite effect. The recent modifications to the child tax credit provide a good example. The child credit is now refundable up to 10 percent of earnings in excess of \$10,000. Starting in 2005, the refundable credit will be 15 percent of earnings in excess of \$10,000. The \$10,000 threshold is indexed for inflation starting in 2002. This phase-in reduces marginal tax rates for families in the child credit phase-in range by 10 percentage points (and by 15 percentage points beginning in 2010). Because many of these families are in the phaseout range of the EITC, the expanded child credit reduces the work disincentives these families would otherwise face (Sammartino, Steuerle, and Carasso 2001). Making other currently nonrefundable credits (such as the dependent care credit) refundable could similarly reduce marginal tax rates if the refund phases in with earnings.

Work Requirement

In recent years, there has been a trend toward tying benefit receipt to work requirements. Temporary Assistance for Needy Families (TANF), the federal welfare program, requires most beneficiaries to work after receiving benefits for two years. Furthermore, to receive their full TANF block grant, states must meet a minimum work participation rate of 50 percent of all families in the program, with higher participation rates required for two-parent families.

Tax subsidies generally do not have an explicit work requirement. Rather, they are tied to specific activities or spending, such as pension contributions, health insurance premiums, and charitable contributions. The exceptions are benefits intended to offset costs associated with working, such as the dependent care credit, and subsidies targeted to lower-income families. The largest tax benefit for low-income families, the EITC, is only available to families with earnings. The phase-in of the credit with earnings is a rough way of imposing a work requirement. Similarly, eligibility for refundable child credits requires earnings in excess of the \$10,000 threshold.

Higher Benefits for Families with Children

Larger families generally have greater needs than smaller families; therefore, most people argue that, all else equal, they have less ability to pay and should be subject either to lower taxes or higher tax subsidies. The Census Department's official poverty statistics reflect this viewpoint; the poverty threshold increases with family size. Exempting poverty-level income from tax can be achieved by providing exemptions that vary with the numbers of adults and dependent children in a family.⁵

Some tax benefits are only available to families with children, for example the child tax credit, and, in large part, the EITC.⁶ The amount of the child credit is the same for each child, and there is no limit on the number of eligible children in a family. From the EITC's inception in 1975 up until 1993, only working families with children could claim the credit. Even though a credit for single workers now exists, it is much smaller than the credit available for families with children. The EITC is higher for families with two or more children than for families with one child. However, the credit does not increase for families with more than two children.

A second issue regarding the treatment of families with children concerns the treatment of child care costs. In general, the income tax base excludes the value of services performed within the home (in part, because taxing these services is infeasible), but taxes the income from paid employment. This feature of the income tax discourages paid work effort and in general favors one-earner couples (who have the time for more household production) over two-earner couples with the same earnings. While one cannot fully eliminate this bias in the tax system, some people favor providing more equal treatment of one-earner and two-earner couples by permitting the latter to deduct the cost

^{5.} Some people challenge this perspective, arguing that the decision to have children is a voluntary choice by families, so that having more children to support makes a family no more deserving of favorable tax treatment than having more cars to maintain. While the analogy between children and household durable goods is persuasive to some, others would reject it on philosophical grounds, both religious and secular. We cannot resolve this issue in this paper, but our analysis is consistent with the broadly held view that the costs of supporting children should be counted in assessing a family's well-being.

^{6.} For an extensive, historical survey of tax expenditure and regular federal spending programs that target families with children, see Clark, Berkowitz King, Spiro, and Steuerle (2001).

of paid child care, a major additional expense of two-earner families. Instead, the tax code allows a tax credit—usually at a 20 percent rate.⁷ A credit tends to favor child care outside the home when the credit rate exceeds the taxpayer's marginal tax rate; care of children at home is favored when the credit rate is below the taxpayer's marginal tax rate.

General Support or Support of Particular Activities

In addition to tax-based preferences for families based on income and family size, public policies also aim to promote certain forms of consumption and to assist more narrowly defined groups. For example, tax incentives help low-income families pay for basic needs, such as housing, health care, and child care, and promote employment of certain categories of persons, such as former welfare recipients. Provisions designed to assist low-income families and families with children include the child and dependent care credit, the tax exclusion for employer-provided child care, the work opportunity credit, the welfare-to-work credit, and the low-income housing credit. In addition to these provisions, there have been proposals to provide refundable tax credits for health care and tax credits for elementary and secondary school tuition.

Credits or Deductions and Exemptions

An issue for tax-based subsidies is whether the subsidy should be in the form of a credit that directly offsets tax payments or a deduction or exemption that reduces the amount of income subject to tax. Credits provide the same dollar benefit to all families (up to the limit of the family's tax liability unless the credit is refundable). Deductions provide a higher subsidy rate to higher-income families in higher tax brackets. This "upside down" subsidy feature is peculiar to the tax system.

Deductions can be thought of as ways to adjust income to reflect differences in families' ability to pay. For example, if a family with \$30,000 of income and \$10,000 of

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⁷ Taxpayers can claim expenses of up to \$2,400 per child, for a maximum of two children until 2003, when eligible expenses rise to \$3,000 per child, for a maximum of two children.

medical expenses is thought to have equal ability to pay tax as a family with \$20,000 of income and no medical expenses, then a deduction for the medical expense would establish tax parity between them. Similarly, personal exemptions adjust family income for differences in family size, while the deduction for state and local income taxes adjusts family income for the costs of living in higher tax jurisdictions (although no adjustment is made for state and local sales or property taxes). However, the tax code is inconsistent in its of use one or the other type of subsidy. For example, taxpayers can claim both a tax credit and an additional exemption for each child. The trend in recent years has been to increase the use of tax credits rather than exemptions or deductions as a way of providing tax-based assistance.

Refundable or Nonrefundable Credits

While tax credits generally are more valuable to low-income families than exclusions or deductions, unless the credits are refundable they are of little value to many low-income families. Refundability means that when the amount of the credit exceeds tax liability, the difference is refunded to the family. Benefits from credits such as education credits or the dependent care credit are limited to the amount of a family's positive tax liability and thus provide little help to families with minimal or no income tax liability.

Prior to EGTRRA, the earned income tax credit was the only refundable credit that affected many households. The child tax credit, introduced in 1997, was partially refundable, but very few taxpayers qualified for the refundable component. With the changes enacted in 2001, many more families will be eligible for refundable child credits.

While not yet prevalent, the use of refundable credits may grow. Many states now offer a refundable EITC or similar credits. In its final budget, the Clinton administration proposed making the dependent care credit partially refundable and proposed new refundable credits for long-term care expenses and contributions to retirement savings accounts. The Bush administration has proposed refundable tax credits for health insurance purchases and offsetting costs associated with attending different schools if a student is assigned to a failing school. These new credits, which would apply to people

who currently do not file income tax returns, would create several administrative challenges.

Advance Payment

Even when refundable, tax subsidies do not always provide timely income support to low-income families. Unless families can receive subsidy payments over the course of the year prior to the filing of their tax return, the refundability provides only future relief. Evidence suggests, however, that even if available, families often choose not to receive advance payments. The EITC is available in advance, but few eligible recipients choose to receive advance payments. Families may choose not to receive advance payments because they are unaware that the option exists or are reluctant to involve their employer (General Accounting Office 1992). Some families prefer to receive the payment as a lump sum rather than staggered over the course of the year, using it as a way to save, although at a very unfavorable interest rate of zero. Families also choose not to receive advance payments, because the amount to which they are entitled is uncertain until the end of the year. Many likely fear that overestimation on their part, or a change in circumstances, will leave them with a larger tax bill at the end of the year. To overcome this problem in the area of health credits, President' Bush's budget for fiscal year 2003 proposes to base refundable health credits on the previous year's income.

III. TAX PROVISIONS OF SPECIAL BENEFIT TO LOW-INCOME FAMILIES

The federal income tax code contains provisions that remove low-income families and individuals from income tax rolls, provide additional assistance for families with children, and raise after-tax wages of workers in low-income households. Some of these provisions affect married couples and single individuals differently. In addition, among the many tax provisions that subsidize selected activities or assist selected groups of people, some benefit low-income families and families with children more than others.

The provisions discussed in this section all lower tax burdens for low-income families. How effectively these provisions meet this goal depends on how extensively people use them. The general provisions—that is, those that depend only on income and family structure—are intended to provide benefits to a broad group of people. In some cases, they provide a much larger benefit to families with children than to childless families and larger benefits to higher-income families than to low-income families. In addition, some of these provisions may affect people's choices about family formation and labor supply—effects that may or may not have been the original goal of the tax policy.

In describing these provisions, we do not distinguish between those that the OMB and JCT call tax expenditures and those that are considered part of the normal tax structure. Instead, we survey all provisions that benefit low-income families, whether or not most tax experts would consider them adjustments to reflect differences in ability to pay in the context of a progressive income tax or special benefits for particular types of low-income families. Our purpose is to list and quantify all the provisions that help low-income people and explain how they have caused overall burdens on low-income families to change over time. Ultimately, the effect of the tax system on low-income families depends on the combination of both the normal tax structure and tax expenditures. Looking at tax expenditures alone would distort the analysis if, for example, tax expenditures increased, but only because deductions appeared to become more valuable when rates under the normal structure also increased. Overall, the increase in marginal rates would lead to higher taxes.

General Provisions of the Tax Code

We define general provisions of the tax code as those that apply to all taxpayers with the same annual earnings and total income, marital status, and number of dependents. We consider five general provisions—personal exemptions, the standard deduction, head of household filing status, the child tax credit, and the EITC. In contrast to these broader provisions, targeted provisions apply only to specific activities of taxpayers—such as

expenses for paid child care or housing—or to narrower groups of individuals—such as former welfare recipients.

Personal Exemptions

Taxpayers may claim personal exemptions for themselves, their spouse, and dependent children who are either under the age of 19 or students under the age of 24. Taxpayers can claim a child as a dependent if they provide more than half of the child's financial support. For tax year 2002, each personal exemption will lower taxable income by \$3,000. The exemption amount is indexed to changes in the consumer price level. In 2002, a married couple with no children claiming personal exemptions alone would pay no personal income tax on the first \$6,000 of income. A married couple with four children would pay no personal income tax on the first \$12,000 of income. The exemption phases out for high-income taxpayers. It also cannot be claimed by taxpayers owing alternative minimum tax (AMT).⁸

Personal exemptions reduce taxable income to account for differences in a family's ability to pay taxes based on the size of the family. They help to offset the higher expenses incurred by larger families. Because the provision only reduces taxable income—and does not actually provide a subsidy for larger families—families must have income in order to benefit. The tax benefits resulting from the personal exemption depends on a family's marginal tax rate. An exemption is more valuable for high-income families than for low-income families. For a person in the 10 percent tax bracket, each personal exemption of \$3,000 reduces taxes by \$300. Someone in the 35 percent tax bracket sees a reduction of \$1,050.

History. The personal exemption, introduced in 1939 at \$1,000 per taxpayer, was lowered to \$500 in 1944, the year the standard deduction was introduced. Beginning in 1948, tax bills gradually increased the personal exemption, but the exemption rose less than the consumer price index (CPI) and much less than per capita personal income. The

8 For discussion of the AMT, see Burman, Gale, and Rohaly (2002 [[not in refereces]]).

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exemption did not return to its initial nominal level of \$1,000 until 1979, where it remained through 1984. The Economic Recovery Tax Act of 1981 indexed the personal exemption for inflation, but the law delayed the start of indexing until 1985. The 1986 Tax Reform Act nearly doubled the personal exemption to \$2,000 and retained indexing. Despite that increase, the real value of the exemption today is about two-thirds of its 1948 value. Accordingly, it offsets a much smaller percentage of personal income than it did in the late 1940s.

Standard Deduction

Taxpayers may claim itemized deductions for a number of expenses, including home mortgage interest expenses, charitable contributions, state and local income and property taxes, medical expenses in excess of 7.5 percent of income, and miscellaneous expenses (such as job-related costs) in excess of 2 percent of income. Taxpayers may elect to claim a standard deduction instead of itemizing. In 2002, single taxpayers' standard deduction is \$4,700; married couples filing jointly can deduct \$7,850. As with the personal exemption, these amounts are indexed for inflation. In 2000, the most recent year for which year-end data are available, 64 percent of taxpayers took the standard deduction instead of itemizing their deductions.

The standard deduction and personal exemptions combined exempt a flat amount of income from tax. For single taxpayers, the combined exclusion from the standard deduction and the personal exemption is \$7,700. For a married couple with no dependent children, the combined exclusion is \$13,850. For a married couple with two children, the amount is \$19,850.

Similar to the personal exemption, the standard deduction reduces taxable income for most taxpayers. For people who have no income—or who have income below the thresholds exempted through personal exemptions—the standard deduction provides no benefit. Similarly, only people with sufficient income can take full advantage of the deduction, and people facing higher marginal tax rates can reap greater benefits. However, most high-income taxpayers choose to itemize deductions, and thus get no

benefit from the standard deductions. The benefit of the standard deduction equals the amount by which it exceeds deductions that would be itemized divided by the average tax rate on such deductions. Although marginal tax rates increase with income, so do deductions such as mortgage interest, state and local income taxes, and charity. Thus, most high-income taxpayers receive little or no benefit from the standard deductions.

History. The standard deduction was introduced into the income tax code in 1944. The combination of the exemption and standard deduction created a tax-free income level for individuals and families that has varied over time. The deduction has taken several forms over the years: a percentage of income, a zero percent tax bracket amount, and a lump-sum amount that depends on filing status. Between 1944 and 1969, the deduction was 10 percent of adjusted gross income (AGI), up to a maximum of \$1,000. During the 1970s, the standard deduction changed to two lump-sum amounts—one for single filers and a larger amount for married couples filing jointly (heads of household with children received the same deduction as single filers). The Tax Reform Act of 1986 increased the standard deduction amounts starting in 1988 to \$5,000 for joint returns and \$3,000 for single tax filers. It also established a new deduction for heads of households. The amount—\$4,400—was more than that for single filers, but less than that for joint returns. The deduction increased by 33 percent for married couples, 18 percent for singles, and 73 percent for heads of household. As with the personal exemption, the standard deduction was indexed to CPI beginning in 1985.

Increases in the standard deduction, combined with cutbacks in allowable itemized deductions, raised the fraction of taxpayers claiming the standard deduction from 55 percent in 1986 to 71 percent by 1990. Since 1990, real incomes have risen, lowering the value of the standard deduction relative to income. Meanwhile, home ownership, housing values, and state and local income taxes have, on average, increased. Together, these changes have increased itemized deductions relative to the standard deduction. Consequently, by 2000, the share of taxpayers using the standard deduction had declined to 64 percent. Still, the overwhelming majority of lower-income taxpayers claimed the standard deduction. In 2000, more than 90 percent of tax filers with AGI of less than \$30,000 chose to take the standard deduction rather than itemizing. Because

state taxes can be itemized, people who live in states with higher income taxes are more likely to itemize than people who live in states with lower income taxes.

Head of Household Status

Head of household status provides an additional tax benefit for single-parent families with children. Compared with single filers, taxpayers filing as heads of household receive a larger standard deduction and have a larger share of their income taxed in lower rate brackets. The 2002 standard deduction is \$6,900 for a head of household, compared with \$4,700 for a single taxpayer. The first \$10,000 of taxable income of a head of household filer is taxed in the lowest bracket (10 percent), compared with the first \$6,000 of income of a single filer. The starting points for the remaining tax brackets are correspondingly higher for head of household filers than for single filers (although not as high as for married couples). The standard deductions and personal exemptions together exempt the first \$12,900 of income of a single parent with one dependent child and the first \$15,900 of income of a single parent with two dependent children.

History. The option to elect head of household filing status was first introduced in 1951, when separate schedules for single and married taxpayers were also introduced. The number of taxpayers choosing to file as a head of household has gone up rapidly in recent years, reflecting the increasing number of single-parent families. In 1975, 7.7 million heads of household returns were filed—about 8 percent of the 93.9 million total returns filed. By 1999, the number of heads of household returns had grown to 17.8 million—about 14 percent of the 127.1 million total returns filed in that year. Most head of household filers tend to have moderate or low incomes. Approximately 65 percent of heads of household returns reported AGI under \$25,000, while about 85 percent reported AGI under \$40,000.

Earned Income Tax Credit

Low-income working taxpayers qualify for the EITC. The credit rises with earnings up to a maximum amount, then phases out as earnings or adjusted gross income (whichever is higher) increase beyond designated thresholds. The credit is refundable, meaning that taxpayers are refunded any portion of the credit that exceeds their positive tax liability.

The credit amount varies depending on the number of qualifying children (see figure 2). For taxpayers with two or more qualifying children in 2002, the EITC equals 40 percent of the first \$10,350 of earnings, for a maximum credit of \$4,140. The credit phases out at a rate of 21.6 cents per dollar of AGI in excess of \$13,520, and it completely phases out when AGI reaches \$33,178. For taxpayers with one qualifying child, the credit rate is 35 percent and the maximum EITC is \$2,506. The credit completely phases out when AGI reaches \$29,201. Taxpayers with no children can receive a much smaller EITC, with a maximum credit of \$376. The credit phases out completely when AGI reaches \$11,060. The income thresholds are indexed for inflation.

Prior to the 2001 tax law, the EITC was the same for single and married taxpayers with the same total wages, AGI, and number of qualifying children. As a result, the combined EITC of two single workers could change dramatically if they decided to marry. For example, if a childless worker with \$4,000 of wages married a worker with two children and \$5,000 of wages, their combined EITC would increase substantially (assuming they did not have much other income). This increase would occur because, as a married couple, the 40 percent subsidy rate would apply to their combined wages of \$9,000, instead of to only the \$5,000 of wages of the worker with children. In contrast, if the same two workers each had \$10,000 of wages, marrying would reduce their combined EITC, because their total income would fall in the phaseout range, thereby reducing the EITC available to the worker with two children EGTRRA reduced marriage penalties for many EITC couples by increasing the start and end points of the income phaseout ranges for married couples by \$3,000. This change is not fully phased in until 2008.

The criteria for a child to qualify for the EITC are different than those qualifying a child for a dependent personal exemption. For the EITC, a qualifying child must be the filer's son, daughter, adopted child, grandchild, stepchild, or foster child and be under age 19, a full-time student under age 24, or permanently and totally disabled. The child must live with the filer in the United States for more than half of the year, or in the case of a

foster child, the whole year. ⁹ If a child meets the conditions to be a qualifying child of more than one person, only the person who had the highest modified AGI may treat that child as a qualifying child. In 2001, this test was relaxed somewhat; the mother of the child may claim the EITC if she meets the eligibility criteria, even if another eligible taxpayer has higher income. In contrast, eligibility for the personal exemption is based on who supports the child rather than who the child lives with.

History. The EITC, introduced in 1975 under the Ford administration, was designed to offset the effects of the payroll tax on after-tax income and work incentives facing low-income families with children. The credit was initially set at 10 percent of the first \$4,000 of household income, resulting in a maximum credit of \$400. The credit then phased out at a 10 percent rate, so that it fully phased out by \$8,000. A "plateau," or an income range over which the household receives the maximum credit before it phases out, was introduced in 1979.

Because the maximum earnings eligible for a matching credit and the beginning of the phaseout range were not indexed to inflation, the EITC's value eroded significantly in the early 1980s. The 1986 Tax Reform Act increased the credit and indexed the income thresholds to inflation.

Congress again expanded the EITC in the early 1990s. The Omnibus Budget Reconciliation Acts of 1990 and 1993 (OBRA-90 and OBRA-93) increased the credit rate, introduced a larger EITC (with a higher credit rate and more earnings eligible for the matching credit) for families with two or more children, and introduced a small EITC for childless workers. Each of these increases was phased in over three years. Consequently, the credit rates increased every year from 1990 to 1995.

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^{9.} Before tax year 2000, a foster child was any child the taxpayer cared for as his or her own. In 2000, the child must also meet additional relationship criteria. The additional criteria are that the child must be (1) the filer's brother, sister, stepbrother, or stepsister; (2) a descendent (such as a child, including an adopted child) of the filer's brother, sister, stepbrother, or stepsister; or (3) a child placed with the filer by an authorized placement agency.

Participation in the program has reached approximately 20 million households, most of them families with children. In 2000, 19.3 million tax filers claimed \$31.2 billion in EITC. More households with children receive EITC benefits than households without children, in part because households with qualifying children can have much higher incomes. In 1999, 18 percent of EITC recipients had no qualifying children, 40 percent had one qualifying child, and 42 percent had two or more qualifying children. Claimants received an average of \$1,652. Politically, the EITC has gained extraordinary bipartisan popularity; both Ronald Reagan and Bill Clinton lauded the program and urged its expansion.

Yet there have been continuing concerns about high noncompliance rates among EITC recipients. The IRS has published studies of compliance based on audits of stratified random samples of EITC recipients in tax years 1994, 1997, and 1999. The most recent estimates an overclaim rate of between 27 and 32 percent, net of amounts recovered from enforcement activities. Errors in claiming a qualifying child have been the leading source of overclaims of the EITC, according to several studies. ¹⁰ The difference in the definition of a qualifying child for different tax benefits contributes to taxpayer confusion. In many cases, however, children wrongly claimed for EITC purposes also could not be claimed for purposes of the child credit or dependent exemption. Income-reporting errors were also a major source of overclaims.

Child Tax Credit

In 2002, taxpayers with dependent children under the age of 17 can claim a child credit equal to \$600 per child. The credit amount is scheduled to increase to \$700 in 2005, \$800 in 2009, and \$1,000 in 2010. If the provisions of EGTRRA are allowed to expire as scheduled after 2010, the credit amount will then revert back to \$500. The credit phases

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^{10.} Using 1994 data, a study finds that of the \$4.4 billion in excess EITC that was claimed, 58.6 percent of the error was a result of an EITC qualifying child being claimed in error where no other errors were detected. An additional 10.7 percent of the total was associated with erroneous child claims on returns that also had income and/or filing status errors (McCubbin 2000). More recent research continues to find that claiming an EITC qualifying child in error is the leading source of over-claims among EITC claimants (Internal Revenue Service 2002).

out at a rate of \$50 per \$1,000 of AGI for married couples with AGI over \$110,000 and for heads of household with AGI over \$75,000. The AGI thresholds are not indexed for inflation. As a result, an increasing number of families will see their credit reduced or eliminated.

The child credit is partially refundable for families with earnings of \$10,000 or more. Families can receive a refund of any remaining credit not used to reduce positive tax liability. The refundable amount is currently limited to 10 percent of earnings in excess of \$10,000 and will increase to 15 percent of earnings in excess of \$10,000 starting in 2005. The \$10,000 threshold is indexed for inflation starting in 2002.

History. Congress introduced the child credit in the Taxpayer Relief Act of 1997. The credit amount was \$400 in 1998 and \$500 in subsequent years. The credit was initially refundable in a very limited way—only families with three or more children could receive a refunded credit, and even then the refund could only go up to the amount that the family's share of the payroll tax (7.65 percent of the household's earnings) exceeded its EITC.¹¹

Prior to the expanded refundability introduced in 2001, very few low-income households were able to take advantage of the child credit. In 1999, only about 700,000 households received a refundable child credit. An estimated 26 million families with children received no benefit from the credit, mostly because they had no income tax liability and did not qualify for a refundable credit.

Targeted Tax Provisions

In addition to general provisions of the tax code that exempt a base amount of income or provide credits against tax, the tax code provides special subsidies that benefit lower-income households. These subsidies include tax preferences designed to offset the cost of

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^{11.} Politicians and some academic experts promoted a child credit for years before its enactment. For an analysis of an earlier version of the child credit proposal, see Steuerle and Juffras (1991).

dependent and child care for working families, tax benefits for employment of low-wage workers, and tax benefits for low-income housing.¹²

Dependent Care Credit

Families can claim a tax credit for the expenses of child care or care for other dependents if such expenses are necessary for the taxpayer to work, or if he or she attends school full time. The amount of qualified expenses is limited to \$3,000 per child up to a maximum of \$6,000 for two or more children. Qualified expenses cannot exceed the taxpayer's earnings, or in the case of a married couple, the earnings of the spouse with the lower earnings. The credit is 35 percent of qualified expenses for taxpayers with AGI of \$15,000 or less, but declines to 20 percent of expenses for taxpayers with AGI above \$43,000. Prior to EGTRRA, maximum allowable expenses were limited to \$2,400 for one child and \$4,800 for two or more children, and the maximum credit was 30 percent of allowable expenses. The credit percentage declined if income exceeded \$10,000. Families with incomes of \$28,000 or more were eligible for a credit equal to 20 percent of child care expenses.

Because the credit is not refundable, families who do not owe income taxes receive no benefit. Theoretically, a low-income family with two children could receive a credit worth up to \$2,100 by excluding the full \$6,000 allowed and receiving the maximum credit of 35 percent. However, a family with income of \$15,000 is not likely to pay \$6,000 for child care. Moreover, a recent study points out that the percentage of qualified expenses actually claimed is rarely much greater than the minimum 20 percent (Ellwood and Liebman 2000). The percentage is so low because the combination of the standard deduction, personal exemptions, and the child credit (which does not depend on child care expenses) means that anyone qualifying for a larger percentage dependent care credit is not likely to have any income tax liability.

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^{12.} For an overview and larger context, see Steuerle (1990).

^{13.} The percentage of allowable expenses declines by 1 percentage point for each \$2,000 (or fraction thereof) by which the taxpayer's adjusted gross income exceeds \$15,000. The percentage is not reduced below 20 percent.

Exclusion for Employer-Provided Child Care

Taxpayers can exclude up to \$5,000 for child and dependent care expenses from their taxable earnings if that care is provided directly by their employers or obtained through other providers under a qualified plan established by their employer. The amount of excluded expenses cannot exceed a taxpayer's earnings or, for married couples, the earnings of the lower-earning spouse.

The exclusion for employer-provided child care primarily benefits higher-income families. Generally, a low-income family will receive a greater benefit if it takes the dependent care credit instead of the exclusion. Even if low-income families were able to exclude the maximum amount of expenses (\$5,000), assuming they were in the 15 percent tax bracket, the benefit would be worth only \$750. Depending upon the family's income, the dependent care credit could be worth up to \$1,050 for one child and \$2,100 for two or more children. Families who face higher marginal tax rates receive a greater benefit from the exclusion than the dependent care credit. For example, a family in the 27 percent tax bracket would receive a benefit of \$1,350 by excluding \$5,000 of child care expenses from their income.

A study using data from the National Child Care Survey (NCCS) looks at the use and incidence of the exclusion for employer-provided childcare (Gentry and Hagy 1996). Each year, the NCCS surveys 4,397 families who had at least one child under the age of 13 between October 1989 and April 1990. The survey results include information on access to and participation in employee benefit plans that allow an exclusion for dependent care expenses, labor force participation, and child care expenses. The study found only a small percentage of families used these accounts (1.6 percent of surveyed families with children under the age of 13); almost two-thirds of these people had incomes above \$50,000.

Work Opportunity Credit and Welfare-to-Work Credit

The work opportunity credit provides an incentive for employers to hire people who might otherwise have difficulty finding work. Employers can claim a credit of 25 percent

of wages for workers employed 120 to 400 hours and 40 percent of wages for workers employed over 400 hours. The maximum credit is \$2,400 per worker.

The groups eligible for the work opportunity credit are TANF recipients, veterans, ex-felons, high-risk youths, participants in state-sponsored vocational rehabilitation programs, summer youth program participants, food stamp recipients, and Supplemental Security Income recipients.

Employers can also claim the welfare-to-work credit for eligible wages paid to long-term welfare recipients. The credit is 35 percent of the first \$10,000 of wages in the first year of employment and 50 percent of the first \$10,000 of wages in the second year of employment—for a maximum credit of \$8,500 per worker over two years.

Three groups of long-term welfare recipients qualify for the credit: (1) members of families that have received TANF for at least 18 consecutive months; (2) members of families that have received TANF for a total of 18 months after August 5, 1997, provided the person is hired within two years of reaching the 18-month total; and (3) members of families ineligible for TANF because of any federal or state time limit.

Wage credits raise a number of issues. They can only affect behavior if employers know that the credit exists. Many employers still do not know about the credit. A 1998 study of 500 employers conducted by the Economic and Social Research Institute investigated whether employers were familiar with the federal Work Opportunity Tax Credit and if they had used the credit. Most employers (65 percent) said they were not familiar with the credit; 23 percent indicated that they were familiar with the credit but had not used it; and 12 percent said they had used the credit. It is possible that some survey respondents were not aware that their companies had used the credit. Still, awareness was surprisingly low. Moreover, having knowledge about the credit does not necessarily mean it will affect behavior. More than half of the respondents who were familiar with the credit said it was not likely to influence their hiring decisions (Regenstein, Meyer, and Dickemper Hicks 1998).

Another study on credits available before the work opportunity credit suggests that targeted wage subsidies could actually hurt disadvantaged workers' employment opportunities. The study divided individuals seeking jobs eligible for the targeted jobs tax credit, the predecessor to the work opportunity credit, or the WIN/welfare tax credit into three groups. Individuals in the first group were given certificates establishing their eligibility for the credit and were encouraged to use the voucher to convince employers to hire them. Individuals in the second group were given vouchers that qualified employers to receive a direct cash subsidy applied to their wages. Individuals in the third group—the control group—were not given a voucher or told they were eligible for a credit. Results of the study showed that the first two groups were significantly less likely to find employment than the control group. The author theorized that the vouchers actually had a stigmatizing effect on prospective employees, signalling that they were worse employees. If this hypothesis is correct, the credit is unlikely to raise employment or wages (Burtless 1985).

Another criticism of targeted tax credits for employers is that they provide a windfall to some employers. Rather than hiring eligible people in response to the credit, employers hire people and then find out whether they are eligible. This typically happens in large firms that hire large numbers of low-wage employees. After deciding to hire an individual, a management assistance company screens the individual to see if he or she qualifies for the tax credit. If the individual does, the employer takes advantage of the credit (Lorenz 1995).

Low-Income Housing Credit

The low-income housing credit is the largest federal program to fund the development and rehabilitation of housing for low-income households. By subsidizing private businesses, the credit encourages more private-sector involvement than programs that rely on government to build and maintain public housing. It also provides a role for the states by allowing them to select among projects that meet the subsidy criteria. Presumably, states will choose to give credits to those projects that appear most beneficial—a goal that, arguably, is better accomplished at the local, rather than federal,

level. Some analysts, however, criticize the low-income housing credit for being a costly mechanism to deliver affordable housing to low-income families and failing to increase the overall stock of available low-income housing.

The low-income housing credit provides an incentive to build new housing units, the most expensive source of supply. Although little empirical work has been done in this area, we have some data on use of the credits. Between 1992 and 1994, 73 percent of the credits supported new construction; the remaining 27 percent supported rehabilitation projects. While this almost certainly improves the quality of available housing, it probably does not increase the total supply of low-income housing significantly, but simply replaces older housing that would have been available. Most likely, owing to the relatively high costs of new construction, the resulting value of the housing produced is worth far less to low-income tenants eligible to occupy it than the housing they could afford to rent with a cash supplement of the same cost. Investing in low-income housing is also seen as a risky venture, further raising the costs of the credit. The GAO estimates that the costs of raising funds for these projects consume 27 percent of the equity invested (Burman 1992, 1999, and U.S. General Accounting Office 1997). In addition, the GAO found that some states could improve their monitoring of low-income housing projects that benefit from the tax credit and that the IRS needs additional information to adequately monitor the program.

IV. ECONOMIC EFFECTS OF TAX BENEFITS FOR LOW-INCOME FAMILIES

Tax subsidies for lower-income families raise a number of economic issues. The first is their effectiveness—do the benefits reach the target population? A second issue is their effect on individual behaviors—what incentives do they create for work and family formation?

Effect on Federal Tax Burdens

We first consider what has happened to federal tax burdens among low-income families over the past three decades. We compare federal income tax burdens and combined federal income and payroll tax burdens for representative families at different income levels. ¹⁴

Effects on Income Tax Burdens, 1970–2001

Income tax rates have declined for families with income at the poverty level—both for families with children and families without children (see figure 3 and table 1). The declines have been much bigger for families with children than for families without children—largely because of the refundable EITC. For example, between 1970 and 2000, the average income tax rate at the poverty level income declined from 5.6 percent to 0 for a married couple with no children, while it fell from 3.5 percent to –15.3 percent for a married couple with two children. Note in 2000 that the tax rate for a married couple with two children at the poverty level was lower (subsidy rate is higher) than for a married couple with four children. The four-child family receives a lower EITC because its higher poverty-level income is in the EITC phaseout range, while the amount of credit to be phased out is the same for both two- and four-person families.

In 2001, EGTRRA cut taxes more for married couples with income at the poverty level than for singles reporting income at the poverty level. Married couples with two children with income at the poverty level under the new law get back about 30 percent of pretax income in refundable tax benefits; single parents with one child get refunds of slightly more than 20 percent. This larger tax cut for married families reflects the standard deduction increases, the doubling of the 15 percent bracket width for married filers relative to single filers, and the increase in the EITC's start of the phaseout range for married couples.

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^{14.} In the tables and charts, we calculate tax rates and the ratio of taxes paid to pretax income for families and individuals with income only from earnings who claim the standard deduction. We define pretax income as cash earnings plus the employer contribution to payroll taxes.

Trends are similar for families at 200 percent of the poverty level (see figure 4 and table 2). Over the past 30 years, singles and couples with no children have received modest tax cuts, though couples with no children got significant tax cuts from the 2001 law: their tax rate declines from 6 percent to 3.5 percent. After the 2001 act, income tax rates are negative for couples with children at 200 percent of the poverty level as a result of the expanded, refundable child credit.

Effects on Combined Income and Payroll Tax Burdens, 1970-2001

Payroll taxes raised most families' tax burdens in the 1970s and 1980s (see figures 4 and 6 and table 3). At both the poverty level and 200 percent of the poverty level, combined tax rates for taxpayers without children rose between 1980 and 1990; for taxpayers with children, combined rates went up between 1980 and 1985, but they fell between 1985 and 1990.

Between 1970 and 2000, there was little change in combined rates for singles and couples without children. The combined rate for couples without children at the poverty level, however, dropped from 14 percent to 12 percent as a result of EGTRRA. The 2001 legislation also reduced the combined rate for couples without children at 200 percent of the poverty level—from just over 20 percent to just under 18 percent. But the combined rates for couples with children dropped even more. After the new law, single parents with one child at the poverty level had a combined rate of –7 percent—that is, they receive a net refund equal to 7 percent of income. Married couples with two children have a combined rate of –15 percent. So, for these families, tax credits more than offset both federal income and payroll taxes.

Income Tax Rates for Singles and Married Couples

We also compare tax rates for singles and married couples at the poverty level and 200 percent of the poverty level over the past 30 years, and before and after the new tax law (tables 1 and 2). For families with no children, the tax law made married couples at the poverty level relatively better off than single tax filers at the poverty level. In 2000, a

single filer with no children had an effective tax rate of 1.6 percent, while a married couple with no children had a rate of 0. By 2010, singles with children will have a combined rate of 0.7 percent, while married couples with no children will get 2.3 percent of their income back through refundable credits.

For families with one child, the law in 2000, just before EGTRRA, treated singles at the poverty level better than married couples at the poverty level; singles would have received refunds of 18 percent of income, while married couples with one child would have gotten back 15 percent of their income. This outcome reflects the current marriage penalty created by the EITC. The situation reverses under 2001 law. Singles receive refunds of 21 percent of their income, while married couples get back 26 percent.

Similar results hold for families at 200 percent of the poverty threshold. For families with no children, the single taxpayers had an effective tax rate of 8 percent in 2000, while married couples had a rate of 6 percent. In 2010, singles will pay 7 percent, and married couples will pay 3.5 percent. But for families with children, rates for singles are lower than rates for married couples. This difference reflects the benefits from filing as head of household.

A word of warning is in order. The above comparisons of tax rates between single and married couples at equal multiples of the poverty level *differ from typical marriage penalty calculations* because they compare taxpayers with different levels of income. They also depend on poverty levels, measures that are widely disputed. Under current standards, the poverty level for a married couple is less than twice that for a single taxpayer with the same number of children. Thus, the comparisons in tables 1 and 2 show results for single people whose per capita income is significantly higher than that for the corresponding married couple; thus, it is not surprising that their tax rates are usually higher according to these types of measures.

Marriage penalties typically are calculated by comparing the tax liability of a married couple with the couple's combined tax liabilities if they could file as single

individuals. ¹⁵ Calculating marriage penalties for the sample poverty level families requires that we make assumptions about each spouse's earnings and about which spouse could claim the children if single filing were permitted. The analysis calculates the marriage penalties for sample households whose combined income, once married, would equal the household poverty level and 200 percent of the poverty level, respectively. For these calculations, we assume that the higher-earning spouse had twice the earnings of the lower-earning spouse and that the higher earner would claim the children (see figures 7 and 8 and table 4). This example is only one of many that could have been presented. In general, a more even split of income raises marriage penalties (or lowers marriage bonuses), and a less even split reduces marriage penalties (or raises marriage bonuses).

Under the 2-to-1 income split, a married couple with no children with income at the poverty level would pay no tax under 2000 law, while the couple would get back \$427 (due to the EITC) if each earner could file a separate return. Thus, the marriage penalty for this sample couple is \$427. Married couples with two children receive less from the EITC than if they had filed as single individuals (with the credit going to the higher-earning spouse); thus, they face a marriage penalty of \$1,354. EGTRRA reduces the marriage penalty to \$162 for the childless couple and converts the marriage penalty into a marriage bonus of \$1,023 for the sample two-child couple with poverty-level income.

The sample couples (with the higher-earning spouse making twice as much as the lower-earnings spouse) also face marriage penalties under 2000 law if their income is twice the poverty level. Again, EGTRRA reduces marriage penalties, though some penalties remain. Note, however, that the cost of marriage would often be greater when the number of children is split across adults, especially when such a split would mean both adults would be eligible for an EITC.

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¹⁵ For a rigorous examination of marriage penalties and the philosophical and practical reasons they arise, see Steuerle (1999).

Antipoverty Effectiveness

Tax Entry Thresholds Relative to Poverty Thresholds

Income tax entry thresholds have risen as a percentage of the poverty level over the past 30 years (see figure 9 and table 5). For families with children, the tax entry threshold is now more than twice the poverty level income. In comparison, in 1985 the threshold was only slightly above the poverty level for singles with one child (1.06 percent of the poverty threshold), below the poverty level for couples with two children (0.87 percent of the threshold), and even further below the poverty level for couples with four children (0.73 of the threshold).

For families without children, tax entry thresholds have increased more modestly. For singles with no children, the tax entry threshold is still below the poverty level after 2001 law (0.96 percent of the poverty level).

Number of People and Percent of the Population Lifted out of Poverty

The EITC has played an important role in lifting eligible families out of poverty. A recent study finds that the EITC lifted 4.6 million people in working families out of poverty, including 2.4 million children. This reduction in child poverty is larger than that brought about by any other single government program or category of programs (Greenstein and Shapiro 1998).

Distribution and Target Efficiency of Benefits

We next explore the distribution of benefits from tax-based subsidies, comparing the results with the distribution of direct federal cash or near cash assistance. We limit our analysis to families with a head who is less than 65 years old, using data from the March 1999 Current Population Survey (CPS), which reports 1998 incomes. We tabulate incomes and taxes using the Transfer Income Microsimulation Model (TRIM3) developed by the Urban Institute, which adjusts transfer payments reported on the

Current Population Survey for underreporting, but does not attempt to match control totals for tax benefits such as the EITC and child tax credits. We model tax and transfer program law in 1998, making note of significant changes that occurred since then or those slated to occur in the near future.

We begin by calculating a measure of pretax, pretransfer income that is the sum of earnings, including Social Security and Medicare payroll tax contributions made by employers on behalf of their employees, business income, rents, interest, and dividends. Adding in benefits from TANF, food stamps, SSI, Social Security, unemployment insurance, worker's compensation, and the veterans program gives us a measure of pretax, posttransfer income. Subtracting federal income and payroll taxes and adding in any tax credit refunds yields posttax, posttransfer income.

We compare each measure of income for families at different percentages of the poverty threshold, as measured relative to their pretax, pretransfer income. Using poverty ratios rather than total income provides a measure of income that roughly controls for family size—the poverty threshold increases as family size increases in recognition of economies of scale that exist for larger families. In 1998, the federal poverty threshold for a family of three with two children was \$13,133; the threshold for a family of four with two children was \$16,530.

Figure 10 shows the distribution of pretax, pretransfer income relative to poverty thresholds for families with children. By this measure of income, 16 percent of families with children had incomes below the poverty level in 1998, and about half of families had incomes of less than 300 percent of the poverty level.

Targeted Tax Benefits Are Not a Replacement for the Expenditure Safety Net

Figure 11 shows the effect of federal transfers and taxes on average family income for different married couples with no children. For the lowest-income families, for instance, transfers almost triple family income for married couples without children and more than quadruple average income for single parents, while taxes have almost no effect. Taxes have a much larger effect for families in the range of 50 to 100 percent of the poverty

level because of EITC refunds. Refundable child tax credits under current law would boost incomes even further. In the 100 to 200 percent range, transfers provide a small boost to average incomes, while taxes raise income for single parents but reduce income for married couples.

In general, tax benefits cannot replace the expenditure safety net for very low-income families and individuals for several reasons: (1) Tax preferences do not help low-income families with little or no income tax liability unless the benefits are refundable. (2) existing refundable tax credits are conditioned on earnings and thus provide little help to those who cannot or do not work. (3) The annual retrospective accounting period for tax benefits (either by law or by circumstance) does not help those in need of current, and sometimes temporary, assistance.

These results should not be surprising. Low-income families only benefit from tax provisions that provide refundable benefits. Benefits from credits such as the child tax credit, which was not refundable for most families under prior law, are limited to the amount of a family's positive tax liability and, thus, are of limited value to low-income families. ¹⁶ The same is true for deductions and exclusions, which provide greater benefits for taxpayers facing higher marginal tax rates.

Figure 12 compares the distribution of benefits from the EITC, child credit, dependent care credit, and dependent exemptions for married couples with children. The dependent exemption is converted to its credit equivalent at the family's marginal tax rate. The figures illustrate the higher concentration of benefits from the EITC for families at 50 to 200 percent of the poverty level, relative to other tax provisions. More than 45 percent of EITC payments to married-couple families go to those families with pretax, pretransfer income below the poverty level, while 45 percent goes to families with incomes between 100 percent and 200 percent of the poverty level. Almost none of the benefits go to families with incomes below poverty. In contrast, some 80 percent of

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^{16.} Low-income families could benefit, however, from nonrefundable wage credits provided to their employers.

benefits from TANF and food stamps go to families with pretax, pretransfer income below the poverty level (figure 13).

So far, the analysis has only measured income in a single year. The picture can change when income is measured over a longer period. For example, a 1996 study uses a panel of tax return data to compare the distribution of dependent care tax credits according to two measures of ability to pay—a lifetime and a single year snapshot measure (Altshuler and Schwartz 1996). ¹⁷ The authors, who imputed lifetime income based on the person's demographic characteristics, found that the benefits of the child care tax credit are distributed progressively and became more progressive as a result of 1991 reforms to the credit. According to only a snapshot of income, taxpayers in the lowest income deciles receive very little tax relief, either because they do not have dependent children at home or they do not have enough tax liability to claim the credit against. Only a household where both parents are working can take the credit. For this reason, households that may not claim the credit in a particular year will likely be able to use it in future years. For example, households where a parent stays home with a very young child, then goes to work and purchases care, will eventually use the credit. Because these subsequent years typically yield higher earnings, many taxpayers in the lowest lifetime-income deciles ultimately receive some benefit, because their incomes increase enough for them to have liability and to benefit from the credit. According to the analysis using imputed earnings, the percentage of credit claimed by those in the lowest three deciles is approximately 25 percent, compared with less than 8 percent for the analysis using an earnings snapshot.

Notably, the study uses data from 1979 to 1988 for their analysis. Since then, changes to the child and dependent care credits have ultimately made the credit less useful to low-income families. First, neither the benefit nor the income at which the credit phases out has been indexed to inflation, leading to a decline in the real value of the credit and the relative income at which people receive the maximum credit. Second, the

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^{17.} Previously, Dunbar and Nordhauser (1991) came to the same conclusion, but only investigated annual incomes.

child tax credit was implemented in 1997 and increased in 1998. For most low-income families with children, a majority of their tax liability will be offset by this credit.

Marginal Tax Rates

Targeting benefits to low-income families can impose very high effective marginal rates on those in the income ranges at which benefits phase out. This is true for both taxes and transfers. If benefits from multiple programs tend to phase out near the same income levels, effective marginal rates can be especially high. High marginal rates can present a serious work barrier.

We use the results from the simulation model to look at how posttax, posttransfer income changes as wages increase for two "typical" families—a single parent with two children and a married couple with two children. Our calculations include TANF benefits, food stamps, and federal income taxes. For the single-parent family, we also show child care costs. The married-parent family does not purchase child care, because our simulations assume that only one parent works in these households. We also assume that both households are in Pennsylvania, an average benefit state. We calculate an incremental tax rate (1 – [(incremental change in net income)/(change in earnings in moving from one earnings level to another)]). This calculation serves as our average marginal rate. Because individuals typically cannot control their incomes down to the dollar, this rate more accurately captures the choices they will face when deciding whether to increase income.

We begin by assuming that a person has earnings equal to 50 percent of the poverty level. For the single-parent family, this level is equivalent to working a little more than half-time at the minimum wage (1,300 hours per year). For the two-parent family, the wage is equivalent to working approximately 30 hours per week at the minimum wage.

At income equal to 50 percent of the poverty level (the base), the single-parent family receives benefits from food stamps (\$3,900), TANF (\$4,400), and the EITC (\$2,600). As wages increase to the poverty level, benefits from TANF stop, and benefits

from food stamps decrease. At this point, the EITC increases notably, but not enough to compensate for losses in the transfer programs. At the same time, payroll taxes increase. After all these components are considered, the family keeps 32 cents of every dollar in additional earnings. Moving to 125 percent of the poverty level brings a decrease in the EITC, but other tax credits begin to phase in. Because under 1998 law the child tax credit and the dependent care credit were both nonrefundable for families with two children, the maximum benefit can only equal tax liability. Our family does not have a positive income tax liability until their income reaches 125 percent of the poverty level. At that point, the family keeps only 42 cents for every dollar of earnings increases owing to the phaseout of the benefits (see table 6).

At 150 percent of the poverty level (equivalent to full-time work at \$9.47 per hour), the family loses its remaining food stamp benefits, and its EITC continues to decrease. The total benefits loss equals \$3,765, while earnings increase only \$3,535. Here, the additional increase in income does not improve the family's total income. In fact, its cumulative income is actually lower than when the family's income was at 125 percent of the poverty level—\$20,382 versus \$20,612.

Until the family's income reaches 225 percent of the poverty level, increases in the child care credit and the child tax credit compensate for increases in federal income tax liability. Overall, benefits are still decreasing with the phaseout of the EITC, leading to an incremental tax rate of 34 percent. This rate persists until the family's income reaches 225 percent of the poverty level, at which point the dependent care credit reaches its minimum. The family now faces an incremental tax rate of 28 percent, a rate that will stand until their marginal tax rate increases, but not until income levels beyond those shown in the table.

The typical married couple we chose faces similar circumstances. The family faces a very high incremental tax rate—86 percent—when its income increases from 125 percent of the poverty level to 150 percent of the poverty level.

Labor Supply

Recent expansions in the EITC have prompted greater interest in the incentive effects of the credit. EITC recipients face differing work and family formation incentives, depending on their income and their potential partner's income. Most research suggests that, on balance, the pro-work incentives are more important for single mothers, who receive most of the EITC benefits.

In theory, the EITC's effect on labor supply is ambiguous. The credit provides a higher wage rate for workers with earnings in the credit phase-in range, thereby providing an incentive for them to enter the labor force. However, it increases the effective marginal tax rate (reducing after-tax earnings) for workers with income in the phaseout range. The credit may also encourage workers to put in fewer hours than they would if the EITC were not available. With the EITC, some families can receive a higher income with fewer hours of work. In addition, the labor supply effect may differ based on family composition.

Several studies examining the labor supply effects for single mothers have concluded that the EITC increases work. Generally, these findings are based on comparisons between single mothers and single childless women. Between the mid-1980s and 1996, a period when the EITC increased several times, the number of single mothers who started working, relative to the number of childless women who started working, increased dramatically.

A 1996 study by Eissa and Liebman used data through 1990 to estimate the effect of the EITC and other provisions of the Tax Reform Act of 1986. The study concluded that single mothers' annual employment increased 2.8 percentage points as a result of tax changes. More dramatic changes were found among single mothers with less than a high school education. For this group, tax changes increased labor by an estimated 6.1 percentage points.

Meyer and Rosenbaum expanded on this work in a 2000 study. Using Current Population Survey data from 1985 to 1997 and spanning tax years 1984 to 1996, they

founnd similar results. The larger time frame encompassed the dramatic EITC expansions that occurred after 1990. The authors used structural models to determine which variables influence the work decision and employed quasi-experimental methods to compare results for single mothers and single childless women. The models include substantial detail on eligibility, benefits, and interactions between state and federal income taxes, Aid to Families with Dependent Children (AFDC), food stamps, and Medicaid as well as training and child care programs. They found that expansions in the EITC significantly increase the labor supply of single mothers. Additionally, they found that more than half the increase in employment rates can be attributed to the EITC—a larger effect than all other factors combined. Over the 1992–96 period, when many states were instituting large changes in welfare policy, the authors found that the EITC counted for just below half the increase in employment rates.

To test these findings, Meyer and Rosenbaum compared changes in labor supply for single mothers to the timing of policies that may have boosted their employment rates. Between 1984 and 1996, the annual employment of all single mothers increased about 9 percentage points. Several policies—including the EITC expansions, expanded eligibility for Medicaid, expanded availability of child care subsidies, and changes in benefit levels and earnings disregards for AFDC—may have influenced women's labor supply decisions. The EITC, the analysis concluded, probably caused at least part of the increased labor supply. Particularly large increases in labor supply occurred for women with two or more children in 1991, the year these households' EITC expanded substantially. In addition, states where the cost of living is low, and where an additional dollar of EITC would thus be more meaningful than in other states, saw a particularly marked increase in the labor supply of single mothers.

Married couples presumably make joint labor supply decisions. Unlike single mothers for whom the EITC provides an incentive to work, married couples may actually face work disincentives. A 1998 study by Eissa and Hoynes used CPS data from 1984 to 1996 to explore this possibility. The analysis compared changes in labor supply between eligible and ineligible groups to estimate the effects of the EITC on labor supply. The authors focused their estimates on married couples with fewer than 12 years of education,

60 percent of whom are eligible for the EITC. They take advantage of cross-time variation in the EITC to make their estimates.

Contrary to the findings relating to single mothers, Eissa and Hoynes find that the EITC expansions between 1984 and 1996 resulted in slight increases in labor supply for married men, but larger decreases in labor supply for married women. The estimates show that the labor supply of married women decreased a full percentage point. For married women in the phaseout portion of the EITC, the results were even more dramatic. In this range, married women decreased their labor supply by 2 percentage points and worked up to 20 percent fewer hours. Overall, the estimates show that the family labor supply declined and that pretax earnings fell.

Because the credit is based on wages rather than hours worked, the EITC has been criticized for not promoting only full-time work (Robins, Michalopoulos, and Pan 2000). These researchers employ microsimulation models to show that a subsidy on full-time work, similar to that found in Canada, would increase full-time work, a goal integral to economic self-sufficiency, without substantially increasing program costs. Such a program, even if deemed desirable, would be very difficult to administer.

A limited set of studies, as summarized in a 1996 study by Gentry and Hagy, examines the effects of subsidizing child care on a mother's decision to work and on child care expenditures. These studies conclude that child care costs both influence a woman's decision to work and affect child care expenditures. As the after-tax costs of child care increase, the hours a mother works decrease. Average estimates of elasticities of employment range from -0.20 to -0.74, meaning that a 1 percent increase in the price of child care results in a decreased probability that a mother will work of somewhere between 0.20 percent and 0.74 percent. At the same time, women are more likely to rely on market-based child care as the cost of that care decreases. Here, elasticities tied to using market care range from -0.34 to -1.86. As the cost of care increases 1 percent, the probability that a person will use market-based child care rather than family-based child care, such as an unpaid grandparent, decreases somewhere between 0.34 percent and 1.86 percent. The data used for each of these studies were from 1980 and 1984.

Family Formation

The EITC results in a marriage bonus for some people and a penalty for others. A parent with no earnings will receive a bonus if he or she marries a person with sufficiently low earnings to qualify for the EITC, while a parent with some earnings may lose the EITC by marrying if the two spouses' combined incomes push the couple out of the EITC eligibility range. Several studies have addressed the EITC in the context of family formation. We summarize a few of the most recent ones.

Dickert-Conlin and Houser (1999) using SIPP panel data from 1990 to 1993, representing tax years 1989 to 1995, examine cross-time and cross-sectional variations in the EITC and how the credit affects a woman's choice to be head of households. Using regressions, the authors control for individual fixed effects, women's wages, wages of potential partners, welfare benefits, and the EITC. The analysis finds that a \$100 increase in the EITC increases the probability of female headship for white women by 0.1 percent. It finds the opposite effect for black women. Here, the same increase in EITC leads to a decrease in female headship by 1.4 percent. The estimate for black women is not robust.

In a 2000 study, Ellwood examines both married couples and single mothers and the effect of the EITC and other transfer policies on labor supply and marriage decisions. The study uses difference in difference estimators to track the changes in labor supply of different subgroups over time. This isolates the various work and marriage decisions faced by people in different groups over time. Significantly, the study looks at the marriage versus nonmarried cohabitation decision.

Similar to other researchers' findings, Ellwood finds that the EITC had a strong positive effect on work for single parents and a modest negative effect on work for married mothers. The study also finds that the decision to marry or cohabitate has not changed dramatically, although a small amount of evidence points toward increases in cohabitation.

V. CHOOSING BETWEEN DIRECT AND TAX-BASED INCOME SUPPORT

In many cases, it is possible to design tax expenditures that replicate spending programs in all features—except that tax refunds or reductions in tax liability, instead of payments from a program agency, supply the benefits. ¹⁸ For example, the child credit could alternatively take the form of a child allowance paid by Health and Human Services or another program agency. However, one important difference between most tax subsidies and direct programs is that the tax benefit an individual receives is limited to the tax otherwise due. In contrast, benefits from direct spending programs typically do not depend on the tax payments made by an individual or family.

Only in the case of refundable credits is the tax benefit not limited to taxes otherwise payable. And only the EITC and a portion of the child credit are currently refundable. In all cases, making a credit refundable is the key to benefiting the lowest-income families. A child credit would equal a universal child allowance paid by HHS only if it were fully refundable and did not phase out for higher-income taxpayers. Even refundable credits, however, differ from direct spending in some ways. The following sections describe how direct and income-based support differ.

Accounting Period

Lump-Sum versus Periodic Payment

The tax system uses an annual accounting period, while benefit programs for low-income families often determine eligibility or make payments on a monthly or quarterly basis. The lump-sum payment of tax benefits means that low-income families may have to wait until the end of the year to collect benefits, although their needs for assistance may be immediate. They are likely to have difficulty obtaining loans secured by expected future tax benefits.

18. For examples of tax expenditures that replicate spending programs almost exactly, see Toder (2000).

Of course, most people receiving a tax cut need not wait until the end of the year to obtain the cash benefits. The benefit from a tax cut can be realized much sooner through changes in withholding schedules or estimated tax payments. For low-income families receiving refundable benefits, mechanisms can be designed to pay benefits throughout the year. For example, in the case of the EITC, low-income workers can sign up with their employers to receive advanced payments—in effect, negative withholding—in anticipation of receiving a credit during the tax filing season. As noted earlier, however, the take-up rate on the advance payment option under the EITC has been very low, possibly because low-income families cannot assume the risk of having to pay the money back if they do not qualify for the credit.

Some analysts believe the lump-sum aspect of the EITC is a good thing. A onetime lump-sum benefit at year's end allows low-income families to purchase household durable goods or pay down debts. Thus, it effectively raises families' saving rates relative to what they might have saved if the money had been paid to them in monthly installments throughout the year (Smeeding, Ross Phillips, and O'Connor 2000). Alternatively, families with limited resources should not be forced to go without daily necessities on the theory that this might in the end raise their saving rate. Finally, the worry about not receiving the credits immediately is mainly a first-year problem. If one is regularly eligible for the credit, then it is available at the beginning of every year after the first year of eligibility has been established.

Income or Asset Test

Because taxpayers must report income on tax forms, it is relatively easy to impose income tests on benefits received through the tax code. Many benefit programs, however, impose asset tests. Asset tests may better measure the long run well-being of low-income families, especially when income is measured over short periods to determine benefit eligibility. Many nonpoor families experience temporary drops in income due to unemployment or other factors. In these situations, asset tests can help determine whether a family is genuinely poor or merely suffering a short-term income drop. However, asset reporting is not required under the federal individual income tax. As a result, spending

programs may be more convenient when asset tests are needed to measure payment eligibility. Of course, the value of asset tests depends on whether they can be enforced, a criterion that is questionable for many types of assets.

Cash or In-Kind Transfers

The income tax system, as noted, is useful for providing cash transfers. Many other programs, such as TANF, food stamps, housing vouchers, and others provide cash or near-cash benefits. (Food stamps are similar to receiving cash assistance, because the individual can choose to reduce expenditures on food and free up money for other goods.) Although these programs might ensure that families get needed benefits, they can create inefficiencies if the benefits provided do not match up with recipients' actual needs.

Participation Rates

Another important distinction between tax subsidies and direct transfers is the take-up rate, a measure of how many qualified people participate. Estimates place EITC participation rates somewhere between 80 and 86 percent in 1990 (Scholz 1994). This rate swamps estimated participation rates for transfer programs. Urban Institute estimates 1998 TANF participation at 55 percent. For working families, tax subsidies may provide benefits to a larger group of eligible people, because they are easier to claim than benefits that require recipients to appear at a benefits office, possibly during working hours.

Cost of Compliance

Several factors might explain differences in participation rates. Outlay programs are generally enforced more stringently than tax benefits. People must apply for benefits and meet all eligibility requirements before they can receive assistance. In contrast, people can claim tax credits on their tax returns, and their eligibility for those credits may only be reviewed well after they have received those benefits, if at all. In addition, using the tax system avoids the stigma associated with applying for public assistance. The flip side

to a program being easier to comply with is that often it is also easier for noncompliant families to receive benefits.

Costs of Administration

Because tax benefits for low-income families generally entail less scrutiny than benefit programs, they tend to be less costly to administer. For example, Holtzblatt found that the food stamp program cost about \$4 billion to administer in 1998, almost 19 percent of the program's benefits. In contrast, the entire IRS 1998 budget was just \$7.3 billion for collecting taxes from 122 million individual taxpayers and 5 million corporations (Sammartino and Toder 2002).

Nonetheless, public concern about rising noncompliance in low-income tax benefit programs (see next section) is likely to lead the IRS to increase expenditures on enforcing these programs—despite the relatively low potential revenue yield compared with enforcement activities aimed at higher-income taxpayers. In recent years, the IRS has received a special \$145 million per year appropriation to administer the EITC (still only a small fraction of the cost of administering food stamps) and has increased its scrutiny of EITC recipients and delayed or frozen many refunds. More resources have also been spent on educating taxpayers and tax preparers about the EITC's eligibility requirements, especially on the rules defining a qualifying child.

Error Rates

The downside of easier access to tax subsidies is that the error rates may be higher. The most recent study of EITC compliance found that between 27 and 32 percent of EITC claims in 1999, net of amounts recovered through enforcement, entailed erroneous payments (Internal Revenue Service 2002). The largest source of errors concerned family status, including whether the child claimed was a qualifying child for EITC purposes and, where more than one person lived in a household with a qualifying child, whether the right individual claimed the credit. The estimate of erroneous payments does not account for offsetting payments that were not made to people who could have legitimately

claimed the credit, either because the wrong household member claimed the credit or because an eligible individual simply failed to apply.

Information Gathering

In some cases, the IRS may be a better administrator than other agencies. For benefits based merely on income, the IRS already has this information on filers' annual tax returns, and it can verify income reporting against employers' wage and earnings statements. In addition, because filing taxes is more ano nymous than meeting with a benefits counselor, people receiving tax benefits may face less stigma than people receiving transfer benefits. Recipients of the EITC, for example, feel less stigmatized than recipients of cash assistance. If non-income-related information is needed, an agency familiar with the required data may be more able to gather information from potential participants.

VI. CONCLUSIONS

This paper describes the use of the tax system to help low-income families and families with children. In recent years, tax benefits for low-income families have increased and partly replaced direct spending programs. The EITC has become the largest single program exclusively benefiting low-income families. A new partially refundable child credit has been enacted and subsequently increased, with its refundable feature made available to a much larger number of families with positive earnings but no tax liability.

Expanded tax benefits for low-income families have been associated with a long-term decline in the effective income tax rates on these families over the past three decades. For the most part, however, combined income and payroll tax rates have remained stable, because increases in payroll taxes have offset declines in income taxes. But in recent years, and especially with the 2001 tax cuts, combined income and payroll tax rates have also dropped. Tax cuts have been much more pronounced for individuals and couples with children than for families without children. The latter have benefited only slightly from the expansion of the EITC and, of course, not at all from the new child

credit. The result is a widening gap in the tax treatment of families with and without children.

Tax entry thresholds have increased relative to the poverty level in recent years. While families at the poverty level used to pay positive income taxes, the tax entry threshold is now just under the poverty level for single individuals, slightly above the poverty level for childless couples, and more than twice the poverty level for families with children.

In general, low-income single heads of household with children pay much lower rates than married couples with children with the same relative income because of marriage penalties in the EITC and because of the benefits provided by the head of household rate schedule. In 2001, however, EGTRRA significantly improved the relative position of married couples both with and without children by raising the standard deduction and the width of the 15 percent bracket for married couples, and reducing the marriage penalty in the EITC.

Tax benefits, nevertheless, still reach a significantly different population than low-income cash transfer programs, such as food stamps and TANF. Because existing refundable credits only go to taxpayers with positive earnings, they do not reach the poorest of the poor. Cash transfer programs still provide the bulk of assistance to the very lowest-income families and cannot be cut further without significantly fraying the social safety net. Tax benefits are much more important for low-income working families.

Tax benefits for low-income families can significantly affect work effort and family-formation decisions. Providing wage subsidies and subsidies for child care encourages more labor force participation. But high marginal tax rates in the income ranges at which benefits phase out can discourage additional work effort. Together, the removal of income-conditioned benefits, the phasing out of tax benefits, and the higher explicit income and payroll taxes associated with higher earnings can make effective tax rates on earnings extremely high for workers with incomes just above the poverty level. The 2001 tax reforms, by introducing a refundable tax credit that phases in as other

benefits phase out, reduced these marginal tax rates somewhat for families with incomes just above the poverty level.

Empirical research suggests that the EITC has increased labor force participation rates among single mothers and thus helped more people leave the welfare rolls. But some researchers find that the reduction in hours worked for individuals with income in the phaseout range, especially for married second earners, offsets the benefits of higher labor force participation among single recipients. Some evidence suggests that the marriage penalty in the EITC has increased cohabitation at the expense of marriage, but the effects on marital status appear small.

Targeted tax incentives aimed at low-income families appear to be less effective than the EITC. Empirical research suggests that the work opportunity credit—an incentive for employers to hire workers in disadvantaged groups—has little effect on employment of these workers and often serves as a windfall to employers who receive tax benefits for workers they would have hired without the credit. Similarly, empirical evidence suggests that the low-income housing credit may not significantly increase the available supply of low-income housing and that many of the benefits may be wasted in higher project and financing costs.

The specific design of low-income programs determines how they affect income distribution, labor supply, family formation, and consumption and investment in specified activities (for more narrowly targeted incentives). Whatever the design features, however, benefits for low-income families and for families with children can be conveyed either as tax subsidies or direct spending programs. In some cases, tax subsidies can be designed to replicate spending programs.

To replicate spending programs, however, tax benefits for low-income families need to be refundable—that is, available in amounts that exceed tax payments otherwise due. There are important issues in choosing between refundable credits and spending programs. In general, tax benefits are easier to administer as annual payments than as more frequent payments, and they are easier to tie to income than to other measures of well being, such as assets. Refundable tax benefits cost less to administer than spending

programs and promote higher participation rates, because beneficiaries go through fewer hurdles to receive benefits. The lower costs of compliance and administration, however, appear to come at the cost of higher levels of estimated noncompliance for the EITC than for spending programs aimed at the low-income population.

Choosing between tax and spending programs thus involves making difficult choices between the conflicting goals of maximizing participation by eligible recipients and minimizing claims by those not eligible for benefits. Tax incentives are relatively better subsidy instruments for working families, who experience fairly high costs of dealing with program bureaucracies, than for individuals without earnings, who have lower costs of applying for benefits and no connection to the tax system through withheld earnings.

In the future, we can expect the trend toward increased use of the tax system for supporting low-income families to continue. Increased spending on defense and homeland security is likely to squeeze available funds for domestic social programs. The strong political aversion to explicit tax increases, and the preference for apparent tax cuts (even if they are disguised spending), appears undiminished. Thus, it is important to understand both the positive benefits and limitations of using the tax system to help low-income families.

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TABLE 1. Income Tax Rates at Poverty Level by Family Type, 1970–2001 (Income Tax as a Percentage of Pretax Income)

	Ye	ear				2000 I	Levels
Family Type	1970	1980	1985	1990	1995	2000 Law	2001 Law
Single, No Children	8.3%	3.0%	4.1%	3.1%	1.5%	1.6%	0.7%
Single, One Child	5.9%	-5.1%	-1.4%	-9.6%	-18.5%	-18.4%	-21.2%
Single, Two Children	4.0%	-3.3%	0.8%	-8.4%	-22.0%	-26.0%	-28.7%
Married, No Children	5.6%	0.3%	2.3%	0.0%	0.0%	0.0%	-2.3%
Married, One Child	4.0%	-5.5%	-0.7%	-8.4%	-14.7%	-14.5%	-25.7%
Married, Two Children	3.5%	-0.8%	3.0%	-4.9%	-13.6%	-15.3%	-29.7%
Married, Four Children	2.4%	1.9%	3.5%	-1.5%	-5.8%	-7.1%	-21.2%

TABLE 2. Income Tax Rates at 200 Percent of Poverty Level Income, by Family Type, 1970–2001 (Income Tax as a Percentage of Pretax Income)

		Yea	ır			2000 I	Levels
Family Type	1970	1980	1985	1990	1995	2000 Law	2001 Law
Single, No Children	11.9%	9.8%	9.0%	8.5%	8.3%	8.3%	6.8%
Single, One Child	10.4%	9.7%	9.2%	5.9%	4.4%	2.6%	-0.1%
Single, Two Children	9.4%	9.7%	9.3%	6.7%	4.8%	0.7%	-2.6%
Married, No Children	9.6%	7.6%	7.3%	6.3%	5.9%	6.1%	3.5%
Married, One Child	8.8%	7.9%	7.7%	6.3%	5.9%	4.3%	-3.0%
Married, Two Children	8.9%	8.9%	8.5%	6.8%	6.4%	3.9%	-1.6%
Married, Four Children	8.5%	9.7%	9.5%	6.9%	6.5%	2.6%	-1.3%

TABLE 3. Combined Income and Payroll Tax Rates by Family Type, 1970–2001 at Various Incomes (Income Plus Payroll Tax as a Percentage of Pretax Income)

Families at Poverty Level	income
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			Year			2000]	Levels
Family Type	1970	1980	1985	1990	1995	2000 Law	2001 Law
Single, No Children	17.4%	14.6%	17.3%	17.3%	15.7%	15.8%	14.9%
Single, One Child	15.1%	6.4%	11.8%	4.6%	-4.3%	-4.2%	-7.0%
Single, Two Children	13.2%	8.2%	13.9%	5.8%	-7.8%	-11.8%	-14.5%
Married, No Children	14.8%	11.8%	15.4%	14.2%	14.2%	14.2%	11.9%
Married, One Child	13.2%	6.0%	12.4%	5.8%	-0.5%	-0.3%	-11.5%
Married, Two Children	12.7%	10.7%	16.2%	9.3%	0.6%	-1.1%	-15.5%
Married, Four Children	11.5%	13.5%	16.6%	12.7%	8.4%	7.1%	-7.0%

Families at 200% of Poverty Level Income

			Year			2000	Levels
Family Type	1970	1980	1985	1990	1995	2000 Law	2001 Law
Single, No Children	21.0%	21.4%	22.2%	22.7%	22.5%	22.5%	21.1%
Single, One Child	19.5%	21.3%	22.3%	20.1%	18.6%	16.8%	14.1%
Single, Two Children	18.6%	21.3%	22.4%	20.9%	19.0%	14.9%	11.7%
Married, No Children	18.8%	19.1%	20.4%	20.5%	20.2%	20.3%	17.7%
Married, One Child	18.0%	19.4%	20.8%	20.5%	20.1%	18.6%	11.2%
Married, Two Children	18.0%	20.4%	21.7%	21.0%	20.6%	18.1%	12.6%
Married, Four Children	17.7%	21.3%	22.7%	21.1%	20.7%	16.8%	12.9%
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TABLE 4. Effect of Marital Status on Tax Liability, 1970–2000 (2000\$)

Couples with Combined Income at the Household Poverty Level Annual Income Tax Liability

				2000 Levels			
Family Type	1970	1980	1985	1990	1995	2000 Law	2001 Law
No Children							
Married couple filing jointly	153	16	174	0	0	0	-289
Married couple, single filing	156	53	153	80	61	-427	-451
Marriage penalty (+) or bonus (-)	-3	-37	21	-80	-61	427	162
Two Children							
Married couple filing jointly	146	-73	351	-701	-2267	-2883	-5578
Married couple, single filing	157	-463	-240	-953	-3422	-4237	-4555
Marriage penalty (+) or bonus (-)	-11	390	591	252	1155	1354	-1023

Couples with Combined Income at Twice the Household Poverty Level

Annual Income Tax Liability

			Year			2000 I	Levels
Family Type	1970	1980	1985	1990	1995	2000 Law	2001 Law
No Children							
Married couple filing jointly	522	887	1,120	1,194	1,306	1,517	866
Married couple, single filing	538	718	979	1,035	1,142	1,093	782
Marriage penalty (+) or bonus (-)	-16	169	141	159	164	424	84
Two Children							
Married couple filing jointly	730	1,572	1,991	1,930	2133	1,456	-607
Married couple, single filing	722	1,245	1,664	1,062	185	-1,033	-2,136
Marriage penalty (+) or bonus (-)	8	327	327	868	1,948	2,489	1,529

Note: Marriage penalty (+) or bonus (-) 8 321 321 8 Note: Marriage penalty calculations assume that primary earner claims children.

TABLE 5. Income Tax Entry Thresholds by Family Type, 1970–2001

(In dollars)

		Year			2000 I	Levels
1970	1980	1985	1990	1995	2000 Law	2001 Law
694	3,300	3,430	5,300	7,357	8,275	8,580
1,389	6,948	7,865	13,415	17,788	21,590	23,855
2,083	7,510	8,369	14,645	20,955	27,145	29,870
1,389	5,400	5,620	9,550	11,700	12,950	14,790
2,083	8,125	8,940	15,064	19,458	23,380	30,815
2,778	8,687	9,435	16,295	22,424	28,684	36,607
4,167	9,810	10,423	18,755	24,554	37,486	50,255
	694 1,389 2,083 1,389 2,083 2,778	694 3,300 1,389 6,948 2,083 7,510 1,389 5,400 2,083 8,125 2,778 8,687	1970 1980 1985 694 3,300 3,430 1,389 6,948 7,865 2,083 7,510 8,369 1,389 5,400 5,620 2,083 8,125 8,940 2,778 8,687 9,435	1970 1980 1985 1990 694 3,300 3,430 5,300 1,389 6,948 7,865 13,415 2,083 7,510 8,369 14,645 1,389 5,400 5,620 9,550 2,083 8,125 8,940 15,064 2,778 8,687 9,435 16,295	1970 1980 1985 1990 1995 694 3,300 3,430 5,300 7,357 1,389 6,948 7,865 13,415 17,788 2,083 7,510 8,369 14,645 20,955 1,389 5,400 5,620 9,550 11,700 2,083 8,125 8,940 15,064 19,458 2,778 8,687 9,435 16,295 22,424	1970 1980 1985 1990 1995 2000 Law 694 3,300 3,430 5,300 7,357 8,275 1,389 6,948 7,865 13,415 17,788 21,590 2,083 7,510 8,369 14,645 20,955 27,145 1,389 5,400 5,620 9,550 11,700 12,950 2,083 8,125 8,940 15,064 19,458 23,380 2,778 8,687 9,435 16,295 22,424 28,684

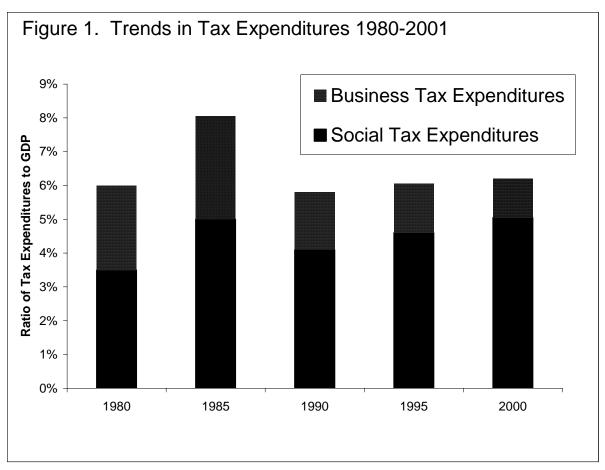
(As Multiple of Poverty Level Income)

			Year			2000 I	Levels
Family Type	1970	1980	1985	1990	1995	2000 Law	2001 Law
Single, No Children	0.344	0.770	0.613	0.779	0.928	0.924	0.958
Single, One Child	0.520	1.224	1.061	1.489	1.693	1.819	2.010
Single, Two Children	0.667	1.132	0.966	1.391	1.707	1.957	2.153
Married, No Children	0.535	0.979	0.781	1.091	1.146	1.123	1.283
Married, One Child	0.668	1.226	1.033	1.432	1.586	1.687	2.223
Married, Two Children	0.706	1.040	0.865	1.229	1.451	1.643	2.096
Married, Four Children	0.804	0.891	0.726	1.074	1.206	1.629	2.184
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TABLE 6. Marginal Tax Rates--Single-Parent Family, Two Dependents in Pennsylvania, by Percent of Poverty Level

	Percent of Poverty Level									
	50%	100%	125%	150%	175%	200%	225%	250%	275%	300%
Earnings	\$6,567	\$13,133	\$16,416	\$19,700	\$22,983	\$26,266	\$29,549	\$32,833	\$36,116	\$39,399
+ Employer's SS Tax	502	1,005	1,256	1,507	1,758	2,009	2,261	2,512	2,763	3,014
= Total Earnings	\$7,069	\$14,138	\$17,672	\$21,207	\$24,741	\$28,275	\$31,810	\$35,345	\$38,879	\$42,413
Cash and in-kind transfers										
+ TANF	4,380	0	0	0	0	0	0	0	0	0
+ Food Stamps	3,876	3,444	2,571	0	0	0	0	0	0	0
Total Transfers	\$8,256	\$3,444	\$2,571	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Taxes										
+ Federal EITC ('98 rules)	2,627	3,572	2,881	2,189	1,498	806	115	0	0	0
+ Federal Child Tax Credit ('98 rules)	0	0	0	0	398	800	800	800	800	800
+ Child and Dependent Care Credit	0	0	310	803	897	987	960	960	960	960
- Federal Income Tax	0	0	310	803	1,295	1,787	2,280	2,772	3,265	3,757
- SS Tax - Employee	502	1,005	1,256	1,507	1,758	2,009	2,261	2,512	2,763	3,014
- SS Tax - Employer	502	1,005	1,256	1,507	1,758	2,009	2,261	2,512	2,763	3,014
Total fed income and payroll tax	\$1,622	\$1,562	\$369	-\$825	-\$2,018	-\$3,212	-\$4,927	-\$6,036	-\$7,031	-\$8,025
= Cumulative Net Income	\$16,948	\$19,144	\$20,612	\$20,382	\$22,723	\$25,063	\$26,883	\$29,309	\$31,848	\$34,388
Change in Earnings		7,069	3,534	3,535	3,534	3,534	3,535	3,535	3,534	3,534
Sum of Benefit Losses, Tax Increases Incremental Tax Rate		4,872 69%	2,066 58%	3,765 107%	1,193 34%	1,194 34%	1,715 49%	1,109 31%	995 28%	994 28%

Notes: Excludes value of Medicaid, housing subsidies, and state taxes. Assume \$3900 in child care costs for families with income under 200 percent of poverty, \$4800 for other families.



Source: United States Office of Managament and Budget, Analytical Perspectives, Budget of the United States Government Fiscal Year 2001. and Toder, Eric (1999). "The Changing Composition of Tax Incentives 1980-99", The Urban Institute, Washington, DC.

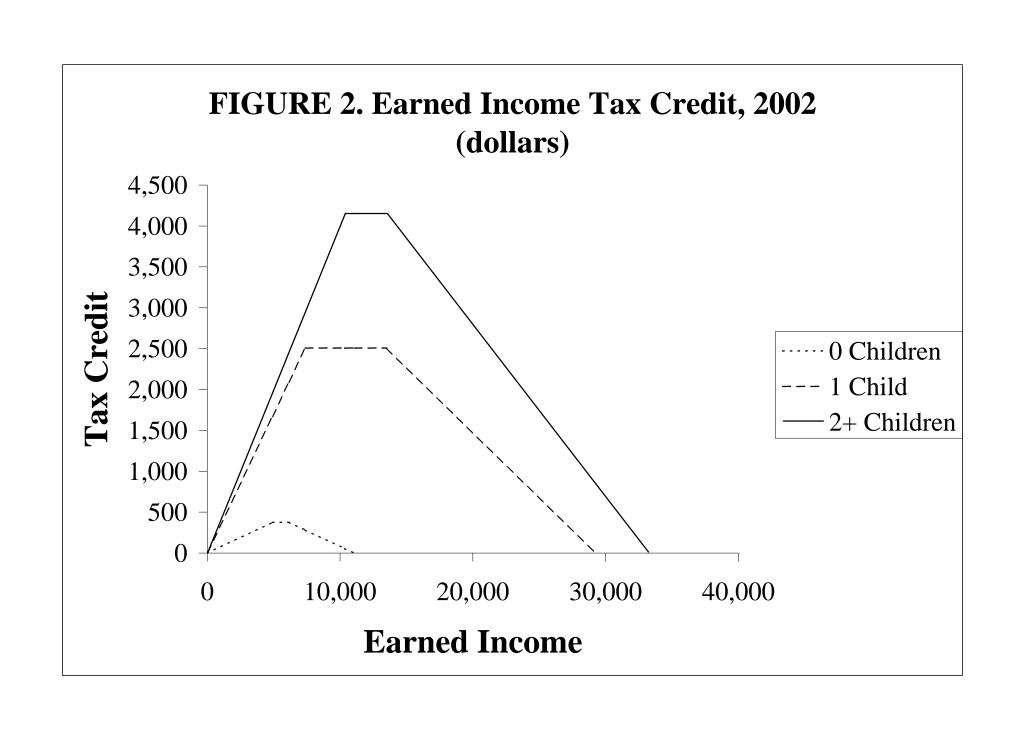


FIGURE 3. Income Tax Rates 1970–2001, 100 Percent of Poverty Level

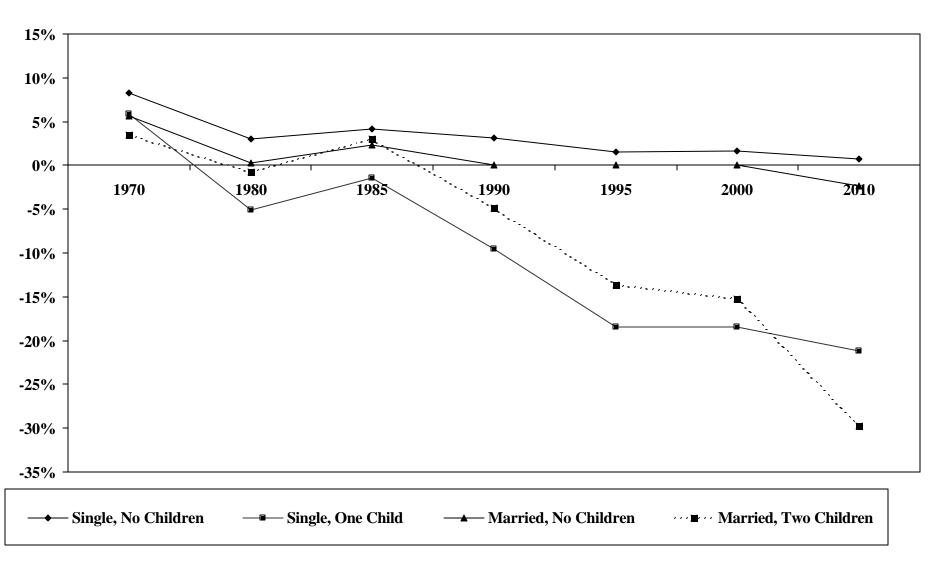


FIGURE 4. Income Tax Rates 1970–2001, 200 Percent of Poverty Level

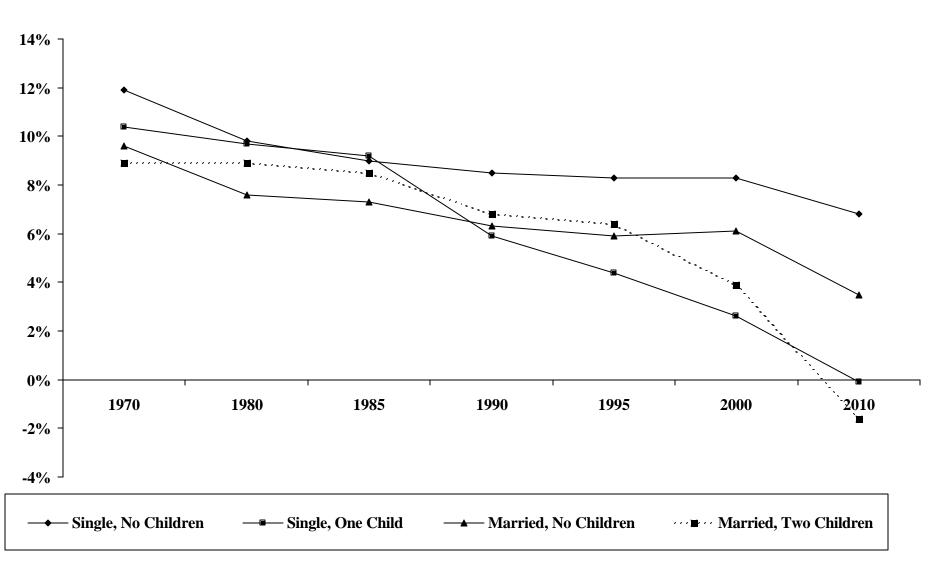


FIGURE 5. Trends in Combined Income and Payroll Tax Rates for Sample Families at Poverty Level

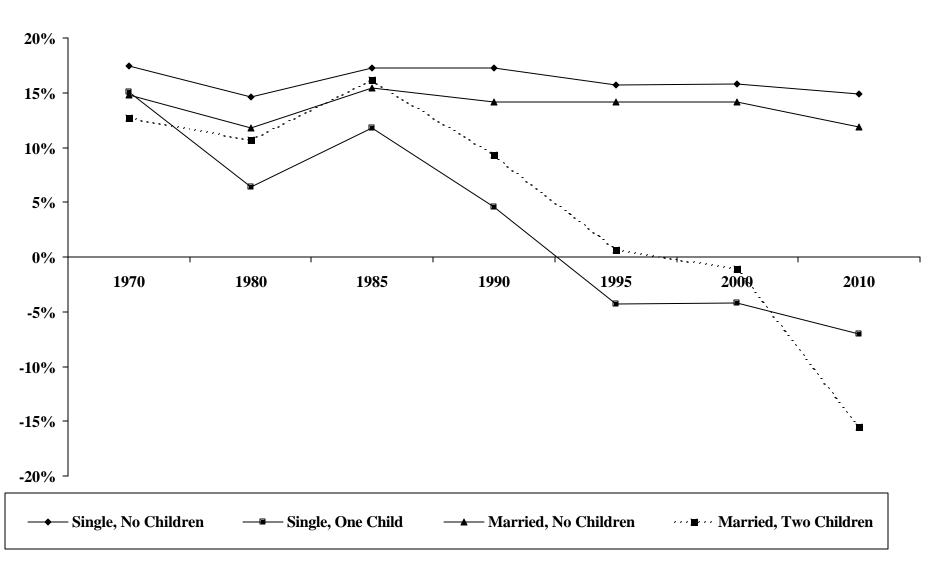


FIGURE 6. Trends in Combined Income and Payroll Tax Rates for Sample Families at 200 Percent of Poverty Level

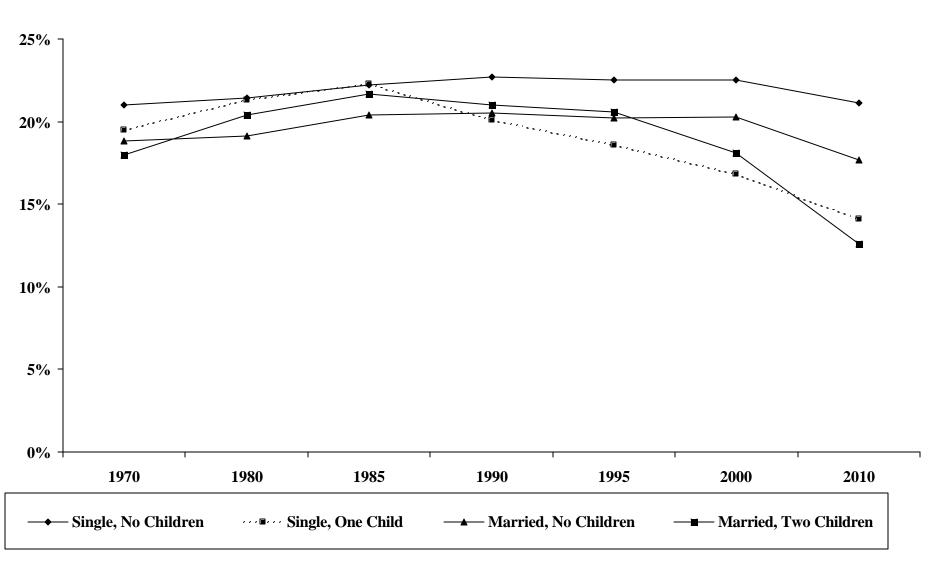


FIGURE 7. Effects of EGTRRA on Single Individuals and Married Couples at Poverty Level

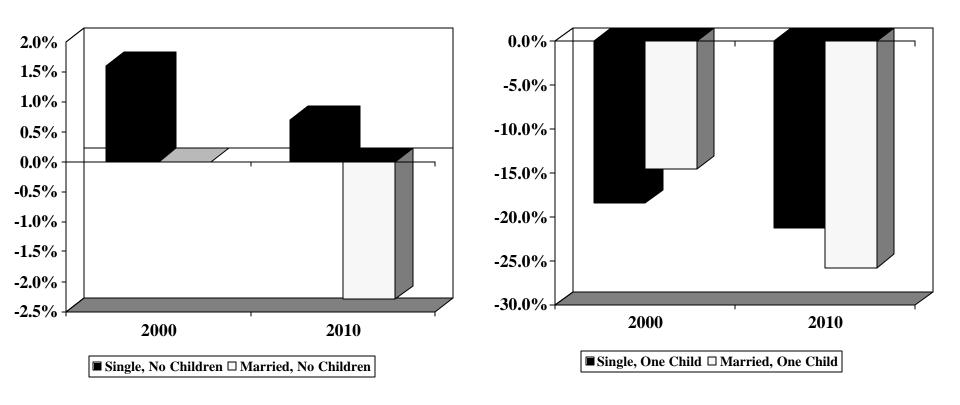


FIGURE 8. Effects of EGTRRA on Single Individuals and Married Couples at 200 Percent of Poverty Level

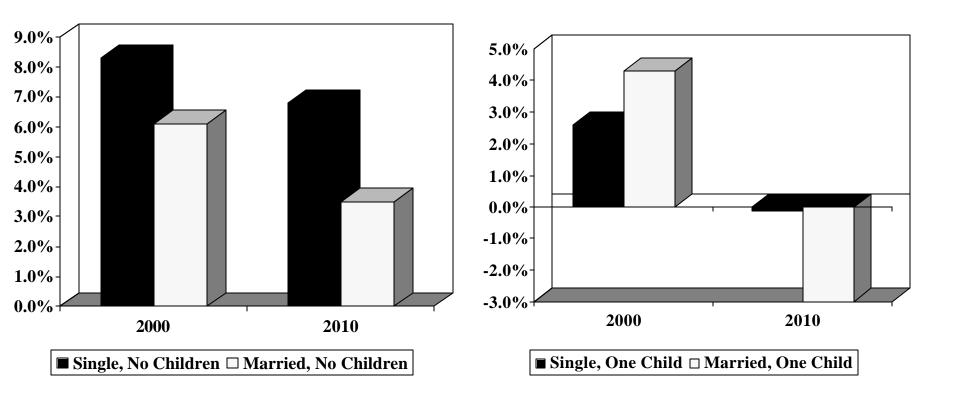


FIGURE 9. Tax Entry Threshold as Multiple of Poverty Level Income

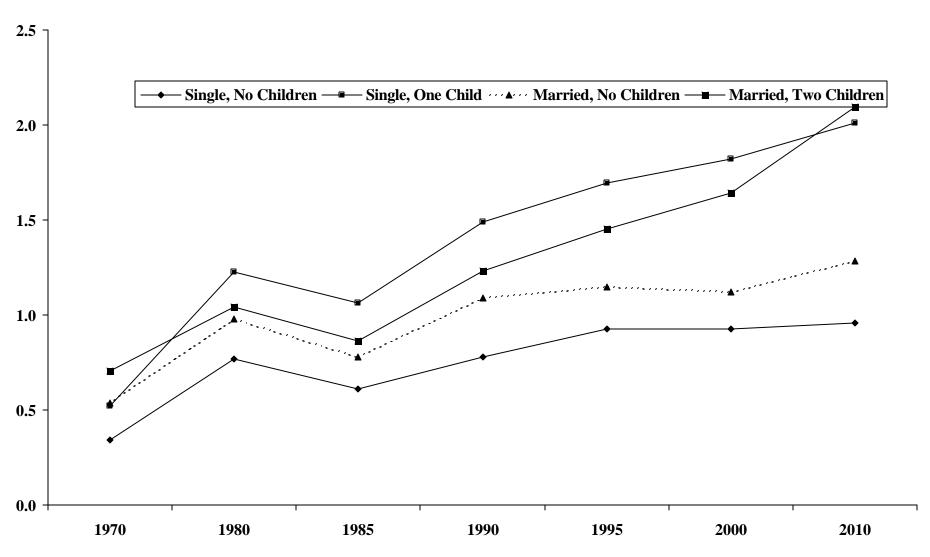
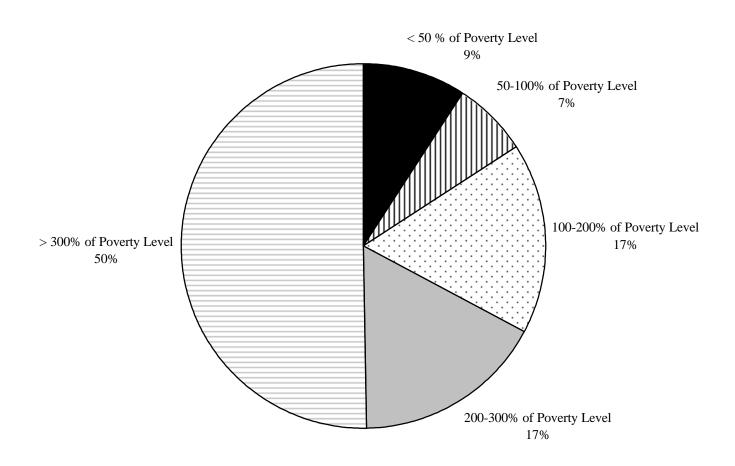
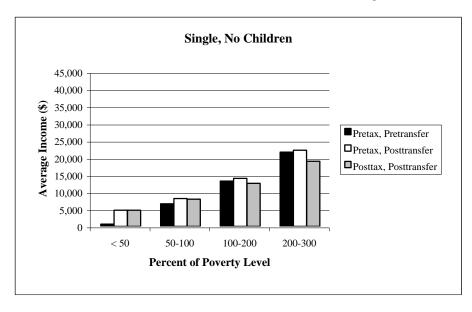


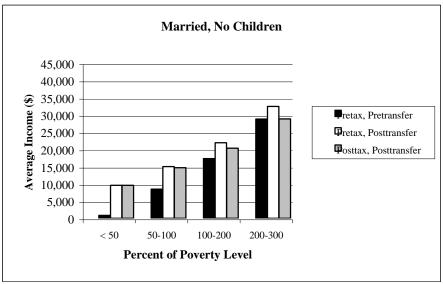
FIGURE 10. Share of Families with Children at Various Income Levels

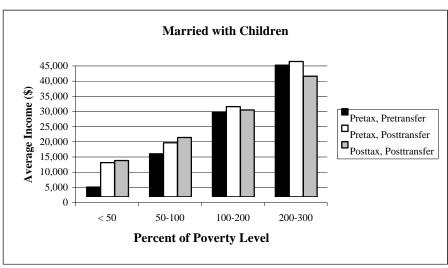


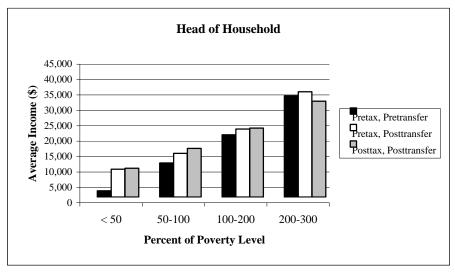
Source: The Urban Institute's Transfer Income Model (TRIM3), 2002.

FIGURE 11. The Effect of Taxes and Transfers on Average Income, Various Families



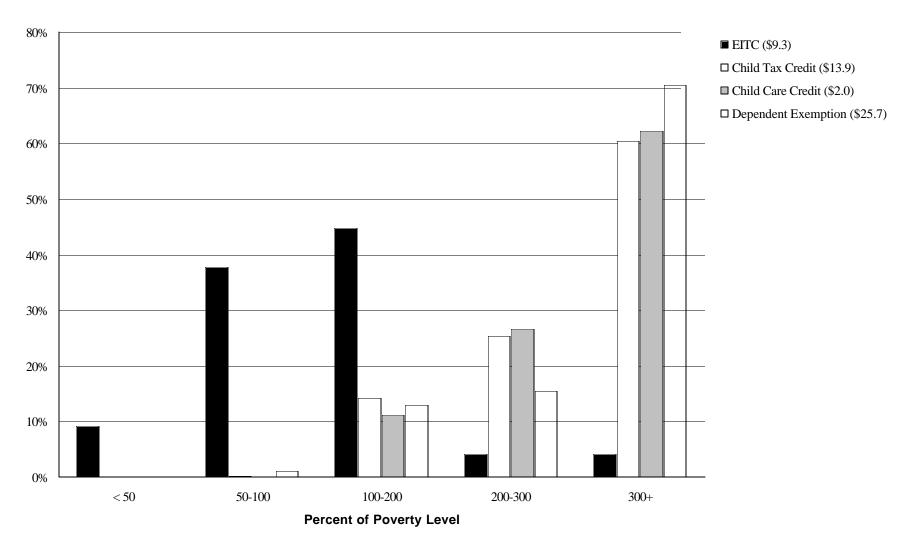






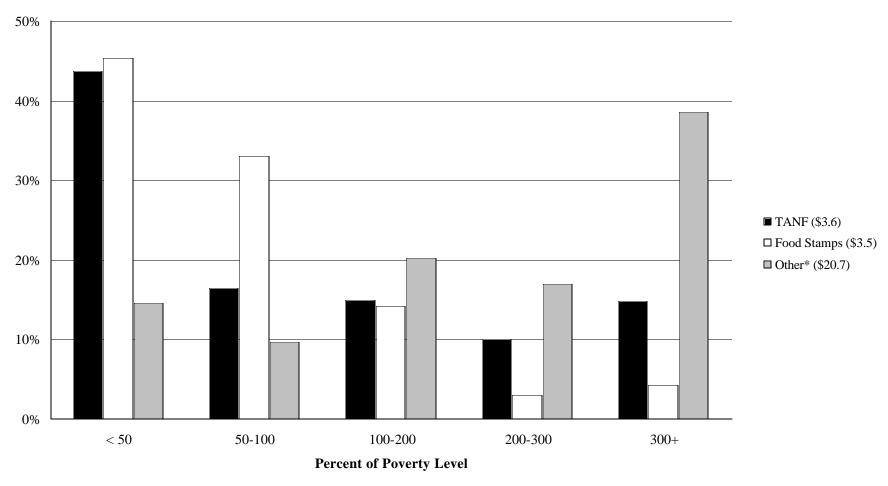
Source: The Urban Institute, Transfer Income Model (TRIM3), 2002.

FIGURE 12. Share of Tax Benefits Going to Married Families with Children at Various Income Levels



Source: The Urban Institute, Transfer Income Model (TRIM3), 2002

FIGURE 13. Share of Transfer Benefits Going to Married Families with Children at Various Income Levels



Source: The Urban Institute, Transfer Income Model (TRIM3), 2002.

^{*} Other includes Social Security, SSI< Veteran's Benefits, Worker's Compensation, and Unemployment Compensation.