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**FRC Report No. 258**
**February 2013**

Georgia State University | ANDREW YOUNG SCHOOL OF POLICY STUDIES

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## Acknowledgments

We would like to thank Carolyn Bordeaux, David Sjoquist and Sally Wallace for thoughtful comments on previous drafts of this manuscript, without implicating them for any remaining errors. We also thank Arthur Turner for his outstanding work in preparing this manuscript for publication.

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## Abstract

The purpose of this report is to identify the incentives created by the tax-benefit system facing low-income families in Georgia, for a variety of family structures and sizes. We also examine how these incentives change as family earnings increase. The eligibility criteria and the phase out of benefits from a variety of programs appear to be uncoordinated and, from the point of view of good public policy, create perverse incentives. We examine these incentives because they may influence important household decisions such as the level of education and training, labor supply, fertility, and marital status.

# I. Introduction

Means-tested public assistance programs provide cash assistance and in-kind benefits (childcare, healthcare, housing, nutrition, to name just a few) to low-income families thereby helping them to achieve a higher standard of living than would otherwise be possible if they relied solely on earnings from the labor market. In the short-run, these programs alleviate the economic consequences of poverty by providing greater access to food, healthcare, and housing. However, the phase in and phase out of benefits from means-tested programs as well as state and federal income tax schedules create complex incentives over a narrow range of income. These incentives may discourage behaviors that allow families to escape poverty and dependence on government programs.

According to economic theory, welfare reforms in the mid-1990s, specifically the substitution of Temporary Aid to Needy Families (TANF) for Aid to Families with Dependent Children (AFDC) and the expansion of the earned income tax credit (EITC), as well as the strong economy in the 1990s should show up in altered work behavior among low-skill, single women with children. Eissa and Liebman (1996), Blank et al. (1999), Ellwood (2000), Meyer and Rosenbaum (2001), Meyer (2002), and Grogger (2003) show a dramatic change in labor supply by low-skill, single parents and link these changes in altered work behavior to the changed incentives created by TANF and the 1993 expansion of the EITC. They find, however, that these labor supply effects are largely on the extensive margin (non-employment versus employment) rather than the intensive margin (number of hours worked in a year).

For purposes of this report, we use a simple spreadsheet calculator to quantify the incentives created by the tax-benefit system. The calculator uses household characteristics to determine the value of program benefits and the cost of taxes for a family residing in Fulton County, Georgia in calendar year 2011. More specifically, the tax-benefit calculator simulates the effects of a change in earnings on the benefits from the following public assistance programs: Child Tax Credit (CTC), Childcare and Parents Assistance Program (CAPS), EITC, Section 8 housing vouchers from the U.S. Department of Housing and Urban Development (HUD), Supplemental Nutrition Assistance Program (SNAP), and Temporary

Aid to Needy Families (TANF).[1] These programs are briefly described in an Appendix to this report. In addition, the tax-benefit calculator simulates Georgia and federal income tax liabilities and the employee's share of the combined FICA payroll taxes (henceforth state and federal income taxes).[2]

The remainder of this report is organized as follows. In the next section, we examine the price and income effects created by the tax-benefit system for six household types: married with no, one, and two children and single with no, one, and two children. We also discuss the work incentives created by the tax-benefit system. Then, we discuss the incentives created by the tax-benefit system to invest in education and skills, to get married, and to have children. The final section concludes this report.

[1] Placing a monetary value on in-kind benefits is difficult. This is particularly true in the case of publically provided health insurance. Suppose, for example, that the government provides health insurance to a family which costs the government $5,000. It does not follow that the family places that much value on health insurance. If they were given $5,000 cash instead, they might spend the money quite differently. To avoid such difficulties, we do not include the effect of Medicaid/Peachcare in our simulations.

[2] The FICA payroll taxes consist of the old age, survivor, and disability insurance contributions (OASDI) and the Medicare contributions (HI).

## II. The Incentive Effects of Means−Tested Benefit Programs

Family structures in the United States are becoming increasingly diverse. Therefore, we analyze the incentives created by the tax-benefit system for the following six family structures:

1-3. A married couple with no, one, and two children; and

4-6. A single adult with no, one, and two children.

For each of the six scenarios examined in this report, we calculate the marginal benefit-tax rate (MTR) at each level of earnings between $0 and $50,000 in $1,000 increments. The MTR describes the effect of the tax-benefit system on the net wage. If, for example, the gross wage is $10 per hour and the MTR is −50 percent, then the net wage, after taxes and benefits, is $5 per hour. If, on the other hand, the MTR is +50 percent, then the net wage is $15 per hour. A negative (positive) MTR decreases (increases) the net wage thereby decreasing (increasing) net household income (henceforth NHI). Assuming the demand for leisure increases as income increases or in other words assuming leisure is a normal good, a positive (negative) MTR would increase (decrease) income which in turn increases (decreases) the demand for leisure thus decreasing (increasing) household labor supply. Not only does the MTR created by the tax-benefit system change NHI, it also changes the opportunity cost of leisure. A negative (positive) MTR decreases (increases) the opportunity cost of leisure which, in turn, decreases (increases) the incentive to work. In sum, the price and income effects created by the tax-benefit system have opposite effects on the incentives to work. Although the tax-benefit system creates incentives that may influence labor supply that does not mean that households are aware of these incentives or respond to these incentives as predicted by economic theory. To avoid potential confusion, we include the algebraic sign (+, −) of the MTR throughout the report.

For each of the six scenarios, detailed information on the MTR is provided in a table. In addition, there are two figures for each of the six scenarios illustrating the price and income effects created by the tax-benefit system. These figures provide convenient visual summaries of the complex incentives facing low-income households created by the tax-benefit system. We turn now to scenario 1, which describes the incentives facing a married couple with no children.

*Scenario 1: A Married Couple with No Children*

Figure 1(a) shows the MTR as earnings increase in $1,000 increments from $0 to $50,000, and Figure 1(b) shows the combined effect of the tax-benefit system on NHI relative to household earnings.[3] These two figures summarize the price and income effects created by the tax-benefit system for a married couple with no children.

Beginning with Figure 1(a), we see that the incentives facing this household change dramatically over the earnings range between $0 and $50,000. The most salient features of this figure are the cliffs, peaks, and plateaus created by the tax-benefit system. In the earnings range between $0 and $3,000, which is labeled A in Figure 1(a), the MTR is −64 percent, meaning that an additional $100 of earnings increases NHI by only $36. At $3,000 of earnings, the MTR is equal to −42.76 percent, meaning that an additional $100 of earnings increases NHI by approximately $57. Table 1 shows that this MTR is the result of the combined effect (arithmetic sum) of the phase out of SNAP benefits at a rate of −36 percent; the phase in of the EITC at a rate of 7.65 percent; the phase out of HUD benefits at a rate of −30 percent; and the employee's share of the combined FICA payroll taxes at a rate of −5.65 percent.

In the earnings range labeled B, between $4,000 and $12,000, the MTR varies between −22 and −31.54 percent, which is substantially smaller (in absolute value) than the MTR in the earnings range labeled A. Table 1 shows that the total MTR in the earnings range labeled B reflects the continuing phase out of SNAP benefits at a rate of −25.56 percent; the employee's share of the combined FICA payroll taxes of −5.65 percent; and the progressive state income tax rates, which vary between 0 and −1.89 percent.[4] By $7,000, the EITC is completely phased in for a married couple with no children.

[3] For purposes of the three simulations involving a married couple, we assume that there is only one wage earner in the household. If both adults in the household work, the combined FICA payroll tax rates would be 13.30 percent, which is somewhat more than double the 5.65 percent used in these simulations. For purposes of transparency and simplicity, we also assume that earnings are reduced by the employee share of the FICA payroll taxes. However, economists generally believe that employers take into account the full cost of hiring an employee. This implies that the employee's earnings are reduced by the amount of both the employee and employer shares of the FICA payroll taxes.

[4] The effective state income tax rate varies between 1.88 and 5.66 percent. However, the statutory marginal tax rates vary between 0 and 6 percent, in 1 percentage point increments. The alert reader may wonder what accounts for the wedge between the effective and statutory rates. Since FICA taxes are paid out of pre-tax income, the effective state tax rates are equal to $0.01\times(1 - 0.0565) = 0.00944$, $0.02\times(1 - 0.0565) = 0.0188$,…, $0.06\times(1 - 0.0565) = 0.0566$. Similar calculations explain the wedge between the effective and statutory federal income tax rates.

**TABLE 1. MARGINAL TAX RATES FOR A MARRIED COUPLE WITH NO CHILDREN, BY TYPE OF PROGRAM AND TAX**

| Point | Earnings | Total | SNAP | TANF | EITC | FICA | CTC | Fed Tax | State Tax | HUD | CAPS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1,000 | -64.00 | -36.00 | 0.00 | 7.65 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| A | 2,000 | -64.00 | -36.00 | 0.00 | 7.65 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| | 3,000 | -42.76 | -25.56 | 0.00 | 7.65 | -5.65 | 0.00 | 0.00 | 0.00 | -19.20 | 0.00 |
| | 4,000 | -22.00 | -24.00 | 0.00 | 7.65 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 5,000 | -22.00 | -24.00 | 0.00 | 7.65 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6,000 | -22.50 | -24.00 | 0.00 | 7.15 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 7,000 | -29.65 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| B | 8,000 | -29.65 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 9,000 | -29.74 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -0.09 | 0.00 | 0.00 |
| | 10,000 | -30.63 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -0.98 | 0.00 | 0.00 |
| | 11,000 | -31.54 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -1.89 | 0.00 | 0.00 |
| | 12,000 | -31.54 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -1.89 | 0.00 | 0.00 |
| | 13,000 | -35.93 | -24.00 | 0.00 | -3.53 | -5.65 | 0.00 | 0.00 | -2.75 | 0.00 | 0.00 |
| | 14,000 | -40.13 | -24.00 | 0.00 | -7.65 | -5.65 | 0.00 | 0.00 | -2.83 | 0.00 | 0.00 |
| C | 15,000 | -40.88 | -24.00 | 0.00 | -7.65 | -5.65 | 0.00 | 0.00 | -3.58 | 0.00 | 0.00 |
| | 16,000 | -41.07 | -24.00 | 0.00 | -7.65 | -5.65 | 0.00 | 0.00 | -3.77 | 0.00 | 0.00 |
| | 17,000 | -41.71 | -24.00 | 0.00 | -7.65 | -5.65 | 0.00 | 0.00 | -4.41 | 0.00 | 0.00 |
| | 18,000 | -42.02 | -24.00 | 0.00 | -7.65 | -5.65 | 0.00 | 0.00 | -4.72 | 0.00 | 0.00 |
| D | 19,000 | -73.51 | -59.52 | 0.00 | -3.63 | -5.65 | 0.00 | 0.00 | -4.72 | 0.00 | 0.00 |
| | 20,000 | -10.84 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -5.19 | 0.00 | 0.00 |
| | 21,000 | -19.45 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -8.14 | -5.66 | 0.00 | 0.00 |
| | 22,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 23,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 24,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 25,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 26,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 27,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 28,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| E | 29,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 30,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 31,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 32,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 33,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 34,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 35,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 36,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 37,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 38,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 39,000 | -24.73 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -13.42 | -5.66 | 0.00 | 0.00 |
| | 40,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 41,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 42,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 43,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| F | 44,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 45,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 46,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 47,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 48,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 49,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 50,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |

**FIGURE 1A. MARGINAL TAX RATES FOR A MARRIED COUPLE WITH NO CHILDREN, BY EARNINGS**

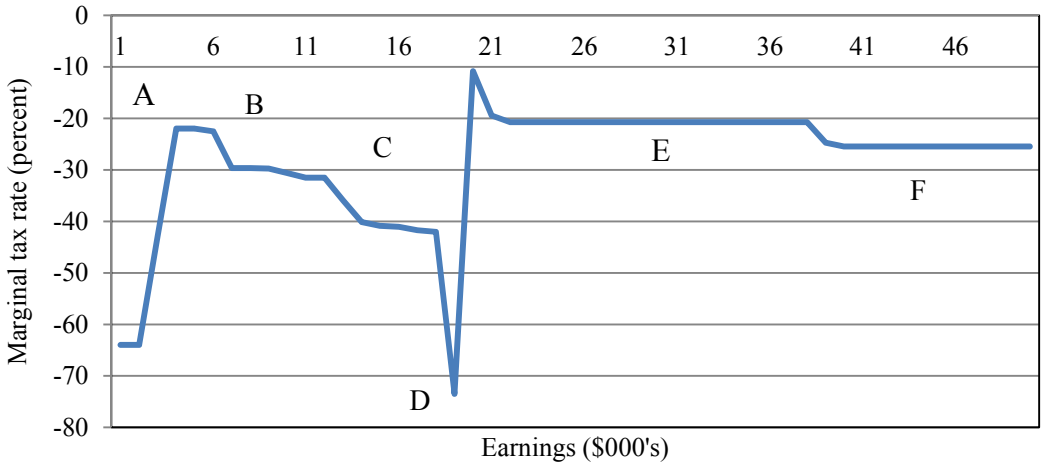
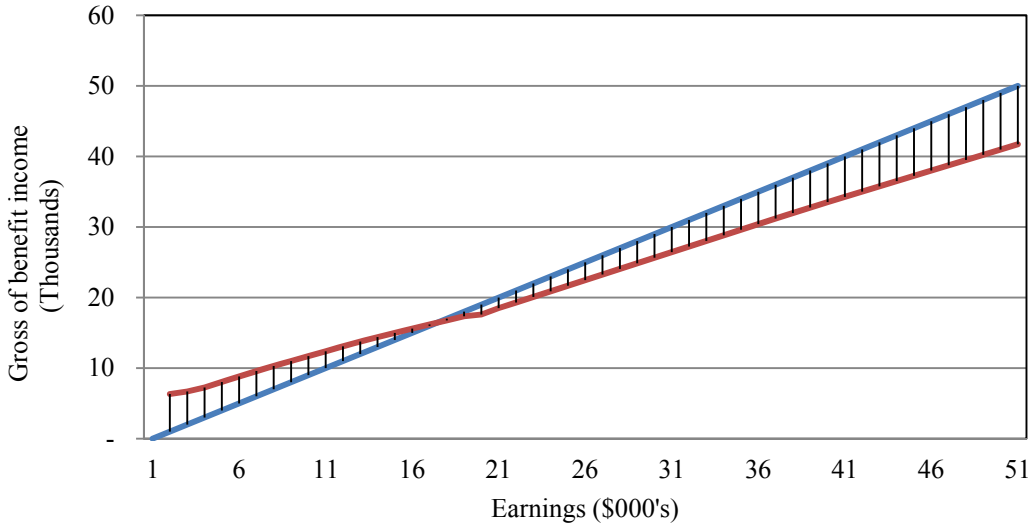



**FIGURE 1B. NET HOUSEHOLD INCOME FOR A MARRIED COUPLE WITH NO CHILDREN, BY EARNINGS**



In the range labeled C in Figure 1(a), which corresponds to the earnings range between $13,000 and $18,000, the total MTR varies between −35.93 and −42.02 percent. The phase out of SNAP benefits and the employee's share of the FICA payroll taxes are the same as in the previous earnings range. The change in the total MTR in this earnings range is due to the phase out of the EITC and the gradual increase in the progressive state income tax rate. EITC benefits are phased out at a rate of −7.65 percent; and the state income tax increases (in absolute value) from an effective rate of −2.75 to −4.72 percent in this earnings range.

At $19,000 of earnings, labeled point D in Figure 1(a), there is an MTR cliff equal to −73.51 percent, when averaged over $1,000. This cliff is primarily due to the sudden phase out of SNAP benefits. Meanwhile, the employee's share of the combined FICA payroll taxes is −5.65 percent; and the effective state income tax rate is −4.72 percent. An MTR of approximately −74 percent may have an adverse effect on labor supply, because an additional $100 of earnings increases NHI by only $26. In this case, the wage earner may decide that it is not worthwhile to increase their labor supply for an additional $26 of earnings.

In the range of earnings labeled E, between $20,000 and $38,000, the MTR ranges between −10.84 and −20.75 percent. This reflects the effective federal and state income tax rates of −9.44 and −5.66 percent, respectively, as well as the employee's share of the combined FICA payroll tax rates of −5.65 percent. Finally, in the range of earnings labeled F in Figure 1(a), between $39,000 and $50,000, the MTR is −25.46 percent due to the employee's share of the FICA payroll taxes of −5.65 percent, the maximum (in absolute value) effective state income tax rate of −5.66 percent, and the effective federal income tax rate of −14.15 percent.

Figure 1(b) shows the relationship between NHI and gross household earnings. The blue line emerging from the origin at a 45 degree angle represents gross household earnings and the red line represents NHI. Between $0 and $17,000, the red line lies above the blue line, indicating that NHI exceeds gross household earnings because the value of the benefits from means-tested public assistance programs exceed the loss in earnings due to state and federal income taxes. At approximately $17,000 of earnings, NHI falls below gross household earnings, because state and federal income taxes begin to exceed the value of the benefits from means-tested public assistance programs.

In summary, Figure 1(a) clearly shows that state and federal income taxes and the phase out of means-tested benefit programs create a complex pattern of incentives over a relatively narrow earnings range between $5,000 and $20,000. In particular, there is an MTR cliff at $19,000 due to the abrupt phase out of SNAP benefits. These MTR cliffs may influence labor supply decisions, assuming of course that households are aware of and respond to the incentives created by them.

*Scenario 2: A Married Couple, with a 9 Year Old Child*

Now we turn to the incentives facing a married couple with one child. Figure 2(a) shows the MTR facing such a family as earnings increase in $1,000 increments from $0 to $50,000. Figure 2(b) shows the combined effect of the tax-benefit system on NHI relative to gross household earnings. Table 2 provides detailed information on the contribution of each program and tax to the total MTR.

In Figure 2(a), there are three MTR cliffs, one peak, and three plateaus. At $3,000 of earnings, labeled A in Figure 2(a), the total MTR is equal to −127.21 percent, meaning that for an additional $100 of earning, NHI decreases by $27.21. This is primarily due to the dollar-for-dollar, phase out of TANF benefits as well as the phase out of SNAP benefits at a rate of −25.56 percent, the credit range of the EITC equal to 34 percent, the employee's share of the combined FICA payroll taxes of −5.65 percent, and the phase out of HUD benefits at a rate of −30 percent.

The MTR cliff at $24,000, labeled point D, is primarily due to the complete phase out of SNAP benefits, and the cliff at $29,000, labeled point F, is due to the complete phase out of benefits from CAPS at −51.76 percent, when averaged over $1,000. The MTR peak at $27,000, labeled point G, is equal to +63.27 percent, meaning that an additional $100 of earnings increases NHI by approximately $163. This peak is due to the net effect of crossing the eligibility threshold for the CTC, the phase out of the EITC, the employee's share of the combined FICA payroll taxes, the effective state income tax rate, and the effective federal income tax rate.

As previously discussed, the price effect of a positive MTR, holding all other things constant, increases the opportunity cost of leisure thereby increasing the incentive to work.

**TABLE 2. MARGINAL TAX RATES FOR A MARRIED COUPLE WITH ONE 9 YEAR CHILD, BY TYPE OF PROGRAM AND TAX**

| Point | Earnings | Total | SNAP | TANF | EITC | FICA | CTC | Fed Tax | State Tax | HUD | CAPS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1,000 | -23.25 | -36.00 | 0.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | -15.60 | 0.00 |
| | 2,000 | -64.85 | -36.00 | -27.20 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| A | 3,000 | -127.21 | -25.56 | -100.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| | 4,000 | -108.15 | -24.00 | -100.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | -12.50 | 0.00 |
| | 5,000 | -95.65 | -24.00 | -100.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6,000 | -4.45 | -24.00 | -8.80 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| B | 7,000 | 4.35 | -24.00 | 0.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8,000 | 4.35 | -24.00 | 0.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 9,000 | 3.35 | -24.00 | 0.00 | 33.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 10,000 | -29.65 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 11,000 | -29.65 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12,000 | -29.65 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 13,000 | -30.52 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -0.87 | 0.00 | 0.00 |
| | 14,000 | -31.40 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -1.75 | 0.00 | 0.00 |
| | 15,000 | -31.54 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -1.89 | 0.00 | 0.00 |
| C | 16,000 | -32.23 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.58 | 0.00 | 0.00 |
| | 17,000 | -32.48 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.83 | 0.00 | 0.00 |
| | 18,000 | -33.06 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -3.41 | 0.00 | 0.00 |
| | 19,000 | -33.42 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -3.77 | 0.00 | 0.00 |
| | 20,000 | -33.89 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -4.24 | 0.00 | 0.00 |
| | 21,000 | -34.37 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -4.72 | 0.00 | 0.00 |
| | 22,000 | -43.16 | -24.00 | 0.00 | -8.79 | -5.65 | 0.00 | 0.00 | -4.72 | 0.00 | 0.00 |
| | 23,000 | -50.65 | -24.00 | 0.00 | -15.98 | -5.65 | 0.00 | 0.00 | -5.02 | 0.00 | 0.00 |
| D | 24,000 | -157.61 | -130.32 | 0.00 | -15.98 | -5.65 | 0.00 | 0.00 | -5.66 | 0.00 | 0.00 |
| | 25,000 | -36.17 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -8.88 | -5.66 | 0.00 | 0.00 |
| E | 26,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 27,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 28,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| F | 29,000 | -88.49 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | -51.76 |
| | 30,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| G | 31,000 | 63.27 | 0.00 | 0.00 | -15.98 | -5.65 | 100.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 32,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 33,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 34,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 35,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| H | 36,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 37,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 38,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 39,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 40,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 41,000 | -29.32 | 0.00 | 0.00 | -8.57 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 42,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 43,000 | -25.10 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -13.79 | -5.66 | 0.00 | 0.00 |
| | 44,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 45,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| I | 46,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 47,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 48,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 49,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 50,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |

**FIGURE 2A. MARGINAL TAX RATES FOR A MARRIED COUPLE WITH ONE CHILD, BY EARNINGS**

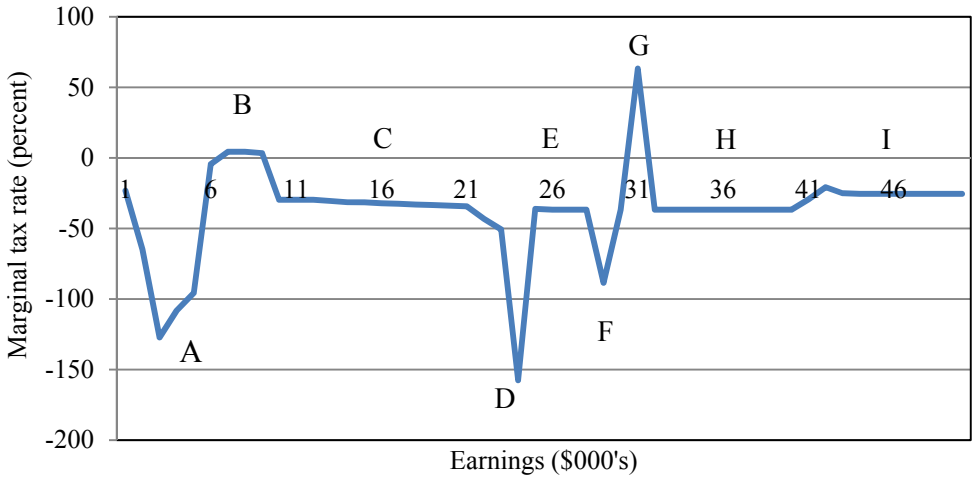
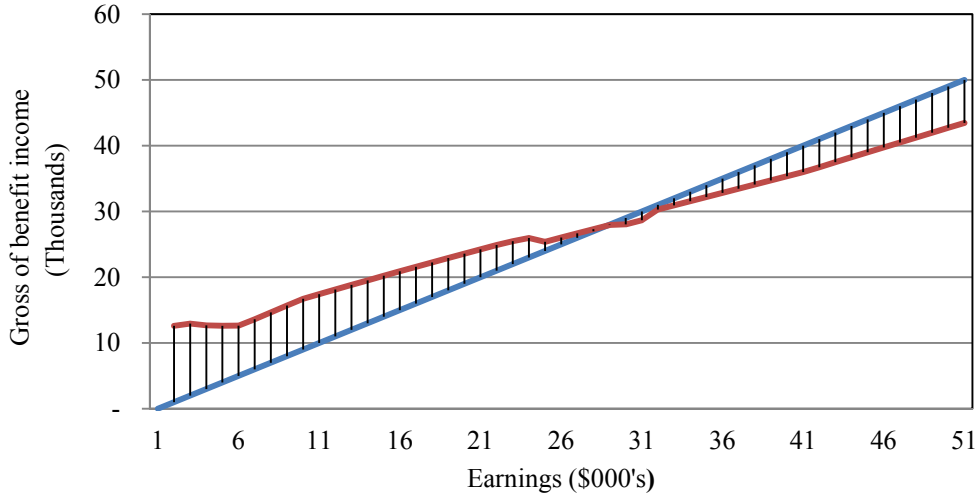



**FIGURE 2B. NET HOUSEHOLD INCOME OF A MARRIED COUPLE WITH ONE CHILD, BY EARNINGS**



When a positive MTR results from a tax credit administered through the federal income tax, as in this case, it also creates an incentive for taxpayers just below the eligibility threshold for the tax credit to overstate their taxable income. To make matters more concrete consider the following example. Suppose that a family is $500 below the CTC eligibility threshold of $27,000 for a married couple with one child. By overstating their federal taxable income by $500, they would appear to be eligible for the CTC, which would increase their household income by $1,000 per child. Meanwhile, their combined state and federal income tax liability would only increase by $183.65. The effect of overstating their taxable income by $500 would increase NHI by $816.35 (= $1,000 − $183.65). This increase in NHI may be sufficient to induce some households to overstate their taxable income despite the risk of detection by the Internal Revenue Service and the requirement to pay the unreported tax as well as the associated penalty and interest.[5]

In the earnings range between $10,000 and $23,000, labeled C in Figure 2(a), the MTR varies between −29.65 and −50.65 percent. This is due to the continuing phase out of SNAP benefits at −24 percent, the employee's share of the combined FICA payroll taxes at −5.65 percent, and the effective Georgia income tax rate which varies between 0 and −5.02 percent. In addition, at approximately $22,000, the EITC begins to be phased out at a rate of −15.98. At $24,000, which is labeled D, the MTR is −157.61 percent. This is due to the complete phase out of SNAP benefits at a rate of −130.32, the phase out of EITC benefits at a rate of −15.98 percent, the FICA rate of −5.65, and the effective Georgia and federal income tax rates of −5.66 and −9.44 percent, respectively.

As previously noted, there are earnings ranges where the MTR is nearly constant, which we refer to as plateaus. More specifically, between $6,000 and $9,000, labeled B in Figure 2(a), the MTR is approximately 4.35 percent. The MTR is positive because EITC benefits are being phased in at a rate of $0.40 per dollar of earnings. Finally, between $44,000 and $50,000, which is labeled I, the MTR is −25.46 percent. This is due to the employee's share of the FICA payroll taxes as well as the effective Georgia and federal income tax rates, which are equal to −5.65, −14.15, and −5.66 percent, respectively.

[5] Using data from the 1985 and 1988 Taxpayer Compliance Measurement Program, Joulfaian and Rider (1998) report evidence of a modest effect of the high marginal tax rates induced by the phase out of the EITC on underreported income by the self-employed. They find no evidence of underreporting by those receiving wages and salaries which are subject to third-party reporting of income and tax withholding by their employer.

Turning to Figure 2(b), NHI is greater than gross household earnings from $0 to approximately $30,000, after which NHI falls below gross household earnings. In summary, the tax-benefit system creates a complex pattern of incentives between $20,000 and $35,000. In this earnings range, a married couple with one child faces an MTR that switches back and forth from −33.89, to −157 percent, to −36.73, to −88.49 percent, to +63 percent, and back to −36.73.

*Scenario 3: A Married Couple, with Two Children Ages 6 and 9 Years Old*

Figure 3(a), which illustrates the more detailed information provided in Table 3, shows the incentives created by the tax-benefit system facing a married couple with two children. In this Figure, there are three cliffs, one peak, and four plateaus.

First, there is an MTR cliff labeled A in Figure 3(a), which corresponds to the earnings range between $1,000 and $6,000. For example, at $3,000 of earnings, the MTR is −119.19 percent, meaning that an additional $100 of earnings reduces NHI by $19.19. This MTR is the result of the combined effect of the dollar-for-dollar, phase out of TANF benefits, the phase out of SNAP benefits at −27.54 percent, the phase in of EITC benefits at rate of 40 percent, the employee's share of the combined FICA payroll taxes at a rate of −5.65 percent, and the phase out of HUD benefits at a rate of −30 percent.

At $29,000 of earnings, labeled point D, the MTR is −226.49 percent, when averaged over a $1,000. Here, an additional $100 of household earnings reduces NHI by $126.49. Clearly, there is no incentive to increase earnings by working longer hours or by accepting even a small increase in one's hourly wage rate. As shown in Table 3, this cliff is due to the abrupt phase out of SNAP benefits, the phase out of EITC benefits at a rate of −21.06, the employee's share of the combined FICA payroll taxes as well as the effective federal and Georgia income tax rates of −5.65, −9.44, and −5.66, respectively.

At point F, corresponding to $34,000 of earnings, there is another MTR cliff of −145 percent. The total MTR is due to the continuing phase out of the EITC at −21.06 percent, the combined effect of the employee's share of the FICA payroll taxes as well as the federal and Georgia income tax rates, and the complete phase out of CAPS. At $45,000 of earnings, labeled point H, there is an MTR peak equal to +158.19 percent, when averaged over a $1,000, meaning that an additional $100 of earnings increases NHI by $258. This is due to

**TABLE 3. MARGINAL TAX RATE FOR A MARRIED COUPLE WITH TWO CHILDREN AGES 6 AND 9, BY TYPE OF PROGRAM AND TAX**

| Point | Earnings | Total | SNAP | TANF | EITC | FICA | CTC | Fed Tax | State Tax | HUD | CAPS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1,000 | -2.85 | -36.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | -1.20 | 0.00 |
| | 2,000 | -31.65 | -36.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| | 3,000 | -119.19 | -27.54 | -96.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| | 4,000 | -119.65 | -24.00 | -100.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| | 5,000 | -105.55 | -24.00 | -100.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | -15.90 | 0.00 |
| | 6,000 | -89.65 | -24.00 | -100.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| B | 7,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 9,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 10,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 11,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| C | 13,000 | -6.05 | -24.00 | 0.00 | 23.60 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 14,000 | -29.65 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 15,000 | -29.65 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 16,000 | -30.35 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -0.70 | 0.00 | 0.00 |
| | 17,000 | -31.23 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -1.58 | 0.00 | 0.00 |
| | 18,000 | -31.54 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -1.89 | 0.00 | 0.00 |
| | 19,000 | -32.06 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.41 | 0.00 | 0.00 |
| | 20,000 | -32.48 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.83 | 0.00 | 0.00 |
| | 21,000 | -32.89 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -3.24 | 0.00 | 0.00 |
| | 22,000 | -45.01 | -24.00 | 0.00 | -11.58 | -5.65 | 0.00 | 0.00 | -3.77 | 0.00 | 0.00 |
| | 23,000 | -54.78 | -24.00 | 0.00 | -21.06 | -5.65 | 0.00 | 0.00 | -4.07 | 0.00 | 0.00 |
| | 24,000 | -55.43 | -24.00 | 0.00 | -21.06 | -5.65 | 0.00 | 0.00 | -4.72 | 0.00 | 0.00 |
| | 25,000 | -55.43 | -24.00 | 0.00 | -21.06 | -5.65 | 0.00 | 0.00 | -4.72 | 0.00 | 0.00 |
| | 26,000 | -55.56 | -24.00 | 0.00 | -21.06 | -5.65 | 0.00 | 0.00 | -4.85 | 0.00 | 0.00 |
| | 27,000 | -56.37 | -24.00 | 0.00 | -21.06 | -5.65 | 0.00 | 0.00 | -5.66 | 0.00 | 0.00 |
| | 28,000 | -56.55 | -24.00 | 0.00 | -21.06 | -5.65 | 0.00 | -0.18 | -5.66 | 0.00 | 0.00 |
| D | 29,000 | -226.49 | -184.68 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| E | 30,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 31,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 32,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 33,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| F | 34,000 | -145.34 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | -103.53 |
| G | 35,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 36,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 37,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 38,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 39,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 40,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 41,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 42,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 43,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 44,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| H | 45,000 | 158.19 | 0.00 | 0.00 | -21.06 | -5.65 | 200.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| I | 46,000 | -28.39 | 0.00 | 0.00 | -7.64 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 47,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 48,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 49,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 50,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |

**FIGURE 3A. MARGINAL TAX RATES FOR A MARRIED COUPLE WITH 2 CHILDREN, BY EARNINGS**

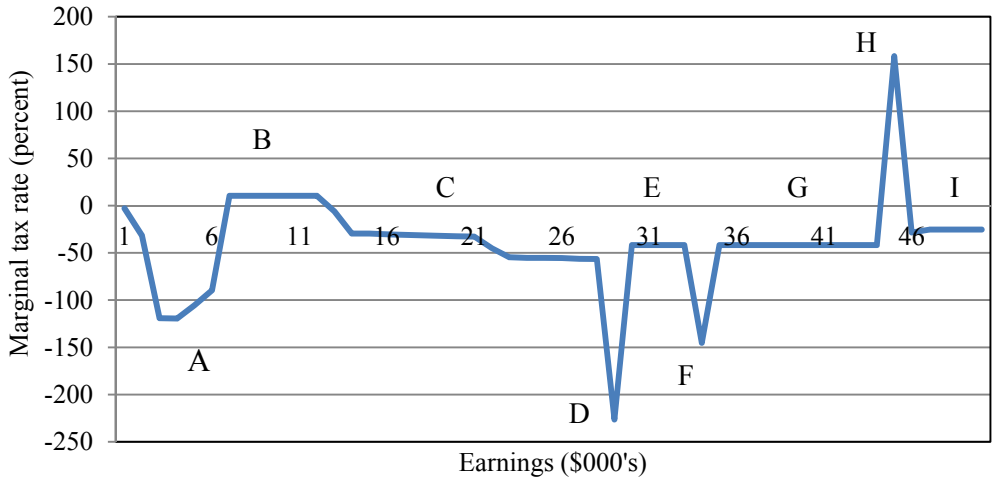
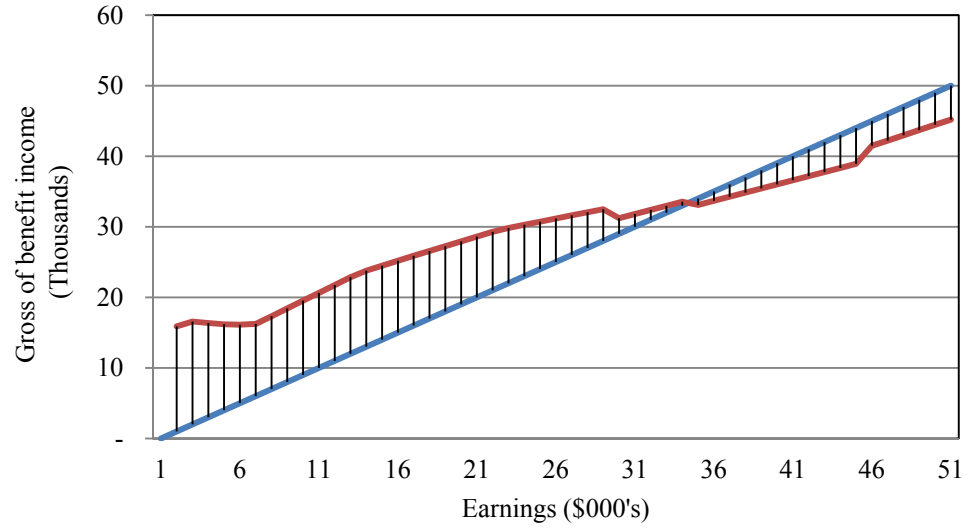



**FIGURE 3B. NET HOUSEHOLD INCOME OF A MARRIED COUPLE WITH TWO CHILDREN, BY EARNINGS**



the sudden eligibility for the CTC, which is equal to $1,000 per child or $2,000 for this family. In addition, the EITC continues to be phased out at a rate of −21.06 percent as well as the combined effects of the employee's share of the FICA payroll taxes as well as the federal and Georgia income tax rates. Again, the price effect of a positive MTR creates incentives to increase labor supply by working longer hours or accepting a second job. It also creates incentives for households just below the CTC eligibility threshold to overstate their federal taxable income in order to receive a $2,000 tax refund.

There are three plateaus in Figure 3(a) of 10.35 percent between $7,000 and $12,000 and −41.81 percent in the earnings ranges between $30,000 − $33,000 and $35,000 − $41,000. These plateaus are labeled B, E, and G, respectively. Starting with the range labeled B, the MTR is 10.35 percent, meaning that an additional $100 of household earnings increases NHI by $110.35. This MTR is due to the phase out of SNAP benefits at −24 percent, the phase in of EITC benefits at a rate of 40 percent, and the employee's share of the combined FICA payroll taxes of −5.65. The plateaus labeled E and G are due to the phase out of EITC benefits at a rate of −21.06 percent, the employee's share of the combined FICA payroll taxes of -5.65 percent, and the federal and state income tax rates of −9.44 and −5.66 percent, respectively.

In the range of earnings labeled C, corresponding to the earnings range between $13,000 and $28,000, the MTR varies between −6.05 and −56.55 percent. This is due to the continuing phase out of SNAP benefits at −24 percent, the employee's share of the combined FICA payroll taxes at −5.65 percent, and the effective Georgia income tax rates which vary between −0.70 and −5.66 percent in this earnings range. Finally, between $46,000 and $50,000, labeled I, the MTR varies between −28.39 and −25.46 percent. This is due to the complete phase out of the EITC at $47,000, the employee's share of the combined FICA payroll taxes, the maximum (in absolute value) effective Georgia income tax rate of −5.66 percent, and the effective federal income tax rate which varies between −9.44 to −14.15 percent in this earnings range.

Turning to Figure 3(b), NHI is greater than gross household earnings from $0 to approximately $35,000 after which NHI is less than gross household earnings.

In summary, the tax-benefit system creates a complex pattern of incentives between $20,000 and $50,000. The MTR switches back and forth between −32.48 percent, increases

sharply to −226.49 percent at $29,000, declines to −41.81 percent, increases sharply again to −145.64 percent, declines to −41.81 percent, abruptly increases to +158.19 at $45,000, and declines to −25.46.

*Scenario 4: A Single Adult with No Children*

Figure 4(a) illustrates the incentives facing a single person with no children. The MTR ranges between −64 and −36.66 percent in the earnings range labeled A between $0 and $3,000. As Table 5 shows, SNAP benefits are being phased out at a rate of −36 percent, EITC benefits are being phased in at a rate of 7.65 percent, the employee's share of the combined FICA payroll taxes is −5.65 percent, and HUD benefits are being phased out at rate of −30 percent.

Between $4,000 and $5,000 of earnings, labeled B, the MTR is −22 percent. As reported in Table 5, SNAP benefits are being phased out at a rate of −24 percent, EITC benefits are being phased in at a rate of 7.65 percent, and the employee's share of the combined FICA payroll taxes is −5.65. At $6,000 of earnings, the MTR increases (in absolute value) slightly because of the −0.66 percent state tax rate.

In the range labeled C, corresponding to $7,000 and $10,000, the MTR increases (in absolute value) from −31.45 to −33.17 percent. Referring to Table 4, we see that this increase (in absolute value) in the MTR is due to the progressive Georgia income tax which increases (in absolute value) from an effective rate of −1.80 to −3.52 percent. In addition, SNAP benefits continue to be phased out at a rate of −24 percent, and the employee's share of the combined FICA payroll taxes remains −5.65 percent. At $11,000, or point D, the federal income tax begins at an effective rate of −8.79 percent and the effective state income tax rate increases (in absolute value) to −5.90 percent. At $12,000 of earnings, there is an MTR cliff of −44 percent due to the continuing phase out of SNAP benefits and the employee's share of the combined FICA payroll taxes; meanwhile, the effective federal income tax rate is −9.44 percent and the effective Georgia income tax rate increases (in absolute value) to −4.72 percent.

In the range labeled E, the total MTR begins at −26.71 percent, increases (in absolute value) to −28.40 percent, and then decreases (in absolute value) to −24.37 percent. The effective federal income tax rate remains constant at −9.44 percent and effective state income

**TABLE 4. MARGINAL TAX RATES FOR A SINGLE PERSON WITH NO CHILDREN, BY TYPE OF PROGRAM AND TAX**

| Period | Earnings | MTR | SNAP | TANF | EITC | FICA | CTC | Fed Tax | State Tax | HUD | CAPS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1,000 | -64.00 | -36.00 | 0.00 | 7.65 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| A | 2,000 | -64.00 | -36.00 | 0.00 | 7.65 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| | 3,000 | -36.66 | -25.56 | 0.00 | 7.65 | -5.65 | 0.00 | 0.00 | 0.00 | -13.10 | 0.00 |
| | 4,000 | -22.00 | -24.00 | 0.00 | 7.65 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| B | 5,000 | -22.00 | -24.00 | 0.00 | 7.65 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6,000 | -23.16 | -24.00 | 0.00 | 7.15 | -5.65 | 0.00 | 0.00 | -0.66 | 0.00 | 0.00 |
| | 7,000 | -31.45 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -1.80 | 0.00 | 0.00 |
| C | 8,000 | -31.84 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.19 | 0.00 | 0.00 |
| | 9,000 | -32.48 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.83 | 0.00 | 0.00 |
| | 10,000 | -33.17 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -3.52 | 0.00 | 0.00 |
| D | 11,000 | -42.34 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | -8.79 | -3.90 | 0.00 | 0.00 |
| | 12,000 | -43.80 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -4.72 | 0.00 | 0.00 |
| | 13,000 | -26.71 | -3.12 | 0.00 | -3.53 | -5.65 | 0.00 | -9.44 | -4.98 | 0.00 | 0.00 |
| | 14,000 | -28.40 | 0.00 | 0.00 | -7.65 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 15,000 | -28.40 | 0.00 | 0.00 | -7.65 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| E | 16,000 | -28.40 | 0.00 | 0.00 | -7.65 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 17,000 | -28.40 | 0.00 | 0.00 | -7.65 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 18,000 | -28.40 | 0.00 | 0.00 | -7.65 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 19,000 | -24.37 | 0.00 | 0.00 | -3.63 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 20,000 | -25.10 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -13.79 | -5.66 | 0.00 | 0.00 |
| | 21,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 22,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 23,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 24,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 25,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 26,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 27,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 28,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 29,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 30,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 31,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 32,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| F | 33,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 34,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 35,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 36,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 37,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 38,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 39,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 40,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 41,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 42,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 43,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 44,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 45,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 46,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 47,000 | -28.91 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -17.60 | -5.66 | 0.00 | 0.00 |
| G | 48,000 | -34.90 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -23.59 | -5.66 | 0.00 | 0.00 |
| | 49,000 | -34.90 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -23.59 | -5.66 | 0.00 | 0.00 |
| | 50,000 | -34.90 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -23.59 | -5.66 | 0.00 | 0.00 |

**FIGURE 4A. MARGINAL TAX RATES OF A SINGLE ADULT WITH NO CHILDREN, BY EARNINGS**

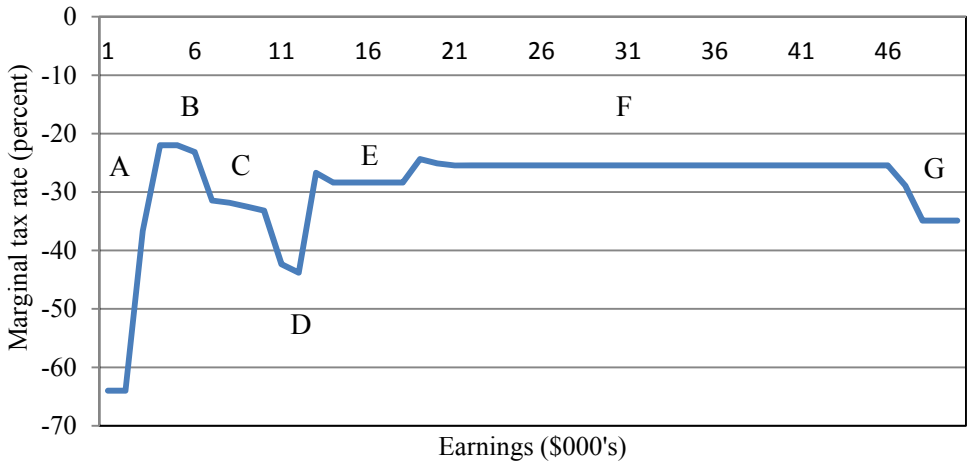



**FIGURE 4B. NET HOUSEHOLD INCOME OF A SINGLE ADULT WITH NO CHILDREN, BY EARNINGS**

tax increases (in absolute value) to −5.66 percent. At $13,000 the SNAP benefits are fully phased out and EITC benefits begin to phase out at a rate of −3.53 percent. EITC benefits are completely phased out at $19,000. In the earnings range between $20,000 and $46,000, labeled F, there is a long plateau at an MTR of −25.46 percent. In this range, the household is not eligible for any benefits and the federal income tax rate becomes −14.15 percent. Finally, in the range labeled G, the MTR is constant at −34.90 percent, because the employee's share of the combined FICA payroll taxes and effective Georgia income tax rates are constant at −5.65 and −5.66 percent, respectively, and the effective federal income tax rate becomes −23.59 percent.

*Scenario 5: A Single Adult, with a 9 Year Old Child*

The results for a single adult with one child are provided in Figure 5(a), which summarizes the detailed information provided in Table 5. Rather than carefully discussing the total MTR in each range of Figure 5(a), we focus on a few of the most salient features of this Figure. As is the case in each of the previous simulations, there is an MTR cliff in the range labeled A, where the MTR exceeds −100 percent, primarily due to the dollar-for-dollar, phase out of TANF benefits. Strikingly, in the narrow range of earnings between $19,000 and $25,000, the MTR switches back forth between −79.32 percent, then decreases (in absolute value) to −20.67 percent between $20,000 and $21,000 of earnings, and then rapidly decreases again to −88.49 percent at $23,000 of earnings. Then, at $24,000, which is labeled G in Figure 7(a), the total MTR is equal to +63.27 percent, meaning that an additional $100 of earnings results in approximately $163.27 increase in NHI. The MTR cliff at point D is primarily due to the abrupt phase out of SNAP benefits, and the MTR cliff at point F is due to the abrupt phase out of CAPS. The MTR peak at point G is due to the sudden eligibility for the CTC.

**TABLE 5. MARGINAL TAX RATES FOR A SINGLE ADULT WITH A 9 YEAR OLD CHILD, BY TYPE OF PROGRAM AND TAX**

| Period | Earnings | Total | SNAP | TANF | EITC | FICA | CTC | Fed Tax | State Tax | HUD | CAPS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1,000 | -23.25 | -36.00 | 0.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | -15.60 | 0.00 |
| | 2,000 | -92.45 | -36.00 | -54.80 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| A | 3,000 | -127.21 | -25.56 | -100.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| | 4,000 | -99.25 | -24.00 | -100.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | -3.60 | 0.00 |
| | 5,000 | -22.85 | -24.00 | -27.20 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6,000 | 4.35 | -24.00 | 0.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| B | 7,000 | 4.35 | -24.00 | 0.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8,000 | 4.35 | -24.00 | 0.00 | 34.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 9,000 | 2.86 | -24.00 | 0.00 | 33.00 | -5.65 | 0.00 | 0.00 | -0.49 | 0.00 | 0.00 |
| | 10,000 | -31.03 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -1.38 | 0.00 | 0.00 |
| | 11,000 | -31.54 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -1.89 | 0.00 | 0.00 |
| | 12,000 | -31.86 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.21 | 0.00 | 0.00 |
| | 13,000 | -32.48 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.83 | 0.00 | 0.00 |
| C | 14,000 | -32.69 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -3.04 | 0.00 | 0.00 |
| | 15,000 | -33.42 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -3.77 | 0.00 | 0.00 |
| | 16,000 | -33.52 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -3.87 | 0.00 | 0.00 |
| | 17,000 | -35.76 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | -1.40 | -4.72 | 0.00 | 0.00 |
| | 18,000 | -43.80 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -4.72 | 0.00 | 0.00 |
| D | 19,000 | -79.32 | -59.52 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -4.72 | 0.00 | 0.00 |
| | 20,000 | -20.67 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.59 | 0.00 | 0.00 |
| E | 21,000 | -20.75 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 22,000 | -29.54 | 0.00 | 0.00 | -8.79 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| F | 23,000 | -88.49 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | -51.76 |
| G | 24,000 | 63.27 | 0.00 | 0.00 | -15.98 | -5.65 | 100.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 25,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 26,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 27,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 28,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 29,000 | -36.73 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 30,000 | -38.00 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -10.71 | -5.66 | 0.00 | 0.00 |
| | 31,000 | -41.44 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 32,000 | -41.44 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| H | 33,000 | -41.44 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 34,000 | -41.44 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 35,000 | -41.44 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 36,000 | -41.44 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 37,000 | -41.44 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 38,000 | -41.44 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 39,000 | -41.44 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 40,000 | -41.44 | 0.00 | 0.00 | -15.98 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 41,000 | -34.03 | 0.00 | 0.00 | -8.57 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 42,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 43,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 44,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 45,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| I | 46,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 47,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 48,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 49,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 50,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |

**FIGURE 5A. NET HOUSEHOLD INCOME OF A SINGLE ADULT WITH ONE CHILD, BY EARNINGS**

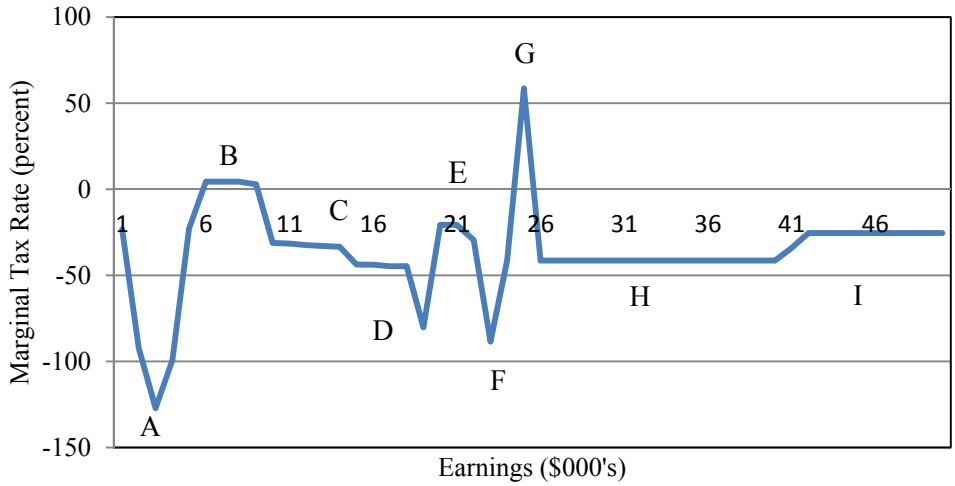
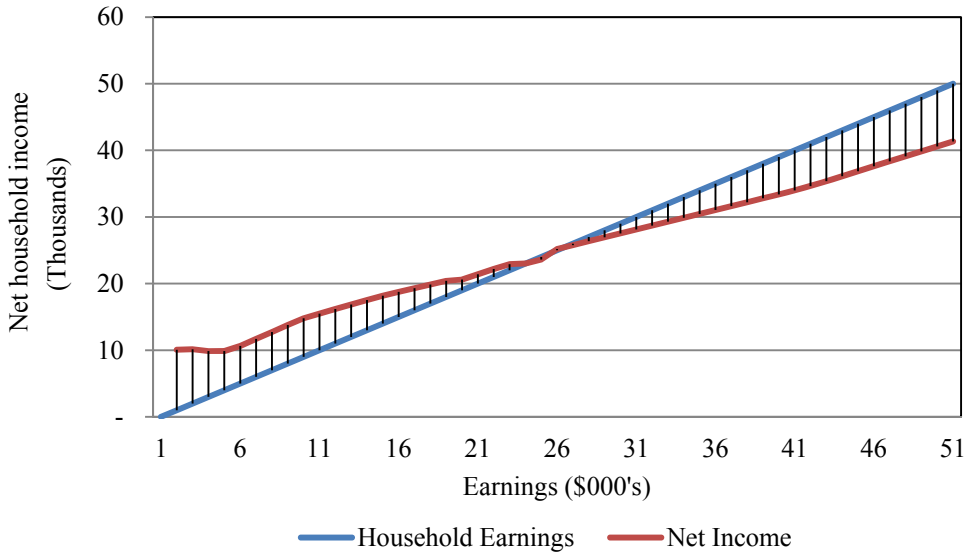



**FIGURE 5B. NET HOUSEHOLD INCOME OF A SINGLE ADULT WITH ONE CHILD, BY EARNINGS**



*Scenario 6: A Single Adult, with Two Children Ages 6 and 9 Years Old*

In the final scenario, we simulate the effects of the tax-benefit system on a family consisting of a single adult with two children ages 6 and 9 years old. We begin by briefly describing the incentives facing a single adult with two children. Figure 6(a), which summarizes the more detailed information provided in Table 9, shows that the incentives are very similar to that of a married couple with two children of similar ages. In particular, the pattern of incentives are particularly complex for earnings between $24,000 and $38,000, where there are two MTR cliffs at the points labeled D and F in Figure 9(a), and an MTR peak at point H, which correspond to earnings of $24,000, $29,000, and $37,000, respectively. For the sake of brevity, we focus on the incentives in this earnings range. The interested reader may consult Table 9 for further details.

At point D, the total MTR is equal to −172.13 percent, meaning that an additional $100 of earnings results in a $72 decrease in net household income. Table 6 shows that this MTR reflects the combined effects of the sudden phase out of SNAP benefits, the phase out of EITC benefits at a rate of −21.06 percent, the employee's share of the combined FICA payroll tax rates of −5.65 percent, the effective federal personal income tax rate of −9.44 percent, and the effective Georgia personal income tax rate of −5.66 percent.

At point F, the total MTR is −145.34 percent. This cliff is primarily due to the sudden phase out of CAPS as well as the continuing phase out of the EITC, the employee's share of the combined FICA payroll tax rates, and effective federal and Georgia personal income tax rates. Finally, the total MTR at point H is +153.48 percent, meaning that an additional $100 of earnings increases net household income by $253. This MTR peak is primarily due to the sudden eligibility for CTC as well as the continuing phase out of the EITC, the employee's share of the combined FICA payroll taxes, and the effective federal income tax rate of −14.15 percent, and the maximum effective Georgia income tax rate.

**TABLE 6. MARGINAL TAX RATES FOR A SINGLE ADULT WITH TWO CHILDREN, AGES 6 AND 9 YEARS OLD, BY TYPE OF PROGRAM AND TAX**

| Period | Earnings | Total | SNAP | TANF | EITC | FICA | CTC | Fed Tax | State Tax | HUD | CAPS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1,000 | -2.85 | -36.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | -1.20 | 0.00 |
| | 2,000 | -58.85 | -36.00 | -27.20 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| A | 3,000 | -121.21 | -25.56 | -100.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | -30.00 | 0.00 |
| | 4,000 | -116.55 | -24.00 | -100.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | -26.90 | 0.00 |
| | 5,000 | -89.65 | -24.00 | -100.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 6,000 | 1.55 | -24.00 | -8.80 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 7,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| B | 9,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 10,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 11,000 | 10.35 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 12,000 | 10.03 | -24.00 | 0.00 | 40.00 | -5.65 | 0.00 | 0.00 | -0.32 | 0.00 | 0.00 |
| | 13,000 | -7.26 | -24.00 | 0.00 | 23.60 | -5.65 | 0.00 | 0.00 | -1.21 | 0.00 | 0.00 |
| | 14,000 | -31.54 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -1.89 | 0.00 | 0.00 |
| | 15,000 | -31.69 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.04 | 0.00 | 0.00 |
| | 16,000 | -32.48 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.83 | 0.00 | 0.00 |
| | 17,000 | -32.52 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -2.87 | 0.00 | 0.00 |
| C | 18,000 | -33.42 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -3.77 | 0.00 | 0.00 |
| | 19,000 | -33.42 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -3.77 | 0.00 | 0.00 |
| | 20,000 | -34.29 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | 0.00 | -4.64 | 0.00 | 0.00 |
| | 21,000 | -36.50 | -24.00 | 0.00 | 0.00 | -5.65 | 0.00 | -2.14 | -4.72 | 0.00 | 0.00 |
| | 22,000 | -55.39 | -24.00 | 0.00 | -11.58 | -5.65 | 0.00 | -9.44 | -4.72 | 0.00 | 0.00 |
| | 23,000 | -65.56 | -24.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.42 | 0.00 | 0.00 |
| D | 24,000 | -172.13 | -130.32 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 25,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| E | 26,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 27,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 28,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| F | 29,000 | -145.34 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | -103.53 |
| | 30,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 31,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| | 32,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.44 | -5.66 | 0.00 | 0.00 |
| G | 33,000 | -41.81 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -9.43 | -5.66 | 0.00 | 0.00 |
| | 34,000 | -43.45 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -11.08 | -5.66 | 0.00 | 0.00 |
| | 35,000 | -46.52 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 36,000 | -46.52 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| H | 37,000 | 153.48 | 0.00 | 0.00 | -21.06 | -5.65 | 200.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 38,000 | -46.52 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 39,000 | -46.52 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 40,000 | -46.52 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 41,000 | -46.52 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| I | 42,000 | -46.52 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 43,000 | -46.52 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 44,000 | -46.52 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 45,000 | -46.52 | 0.00 | 0.00 | -21.06 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 46,000 | -33.10 | 0.00 | 0.00 | -7.64 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 47,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 48,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| J | 49,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |
| | 50,000 | -25.46 | 0.00 | 0.00 | 0.00 | -5.65 | 0.00 | -14.15 | -5.66 | 0.00 | 0.00 |

**FIGURE 6A. MARGINAL TAX RATES OF A SINGLE ADULT WITH TWO CHILDREN, BY EARNINGS**

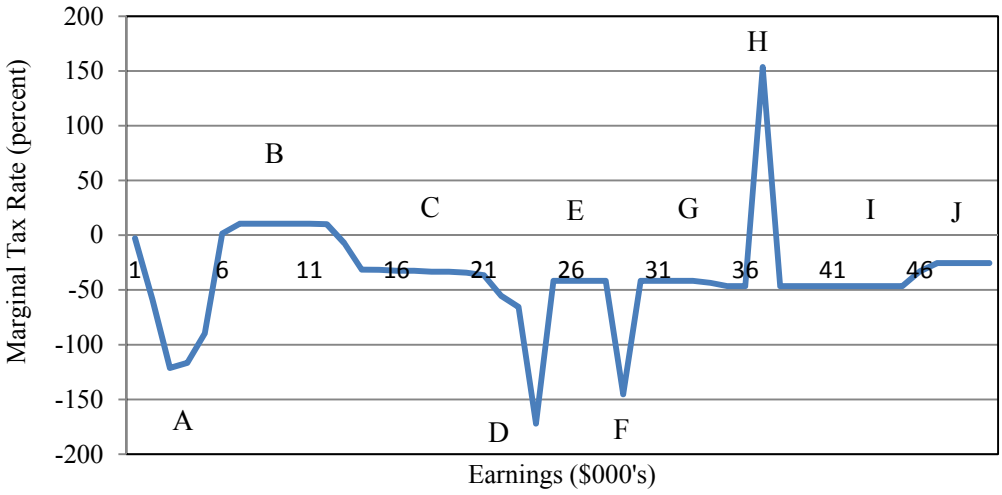
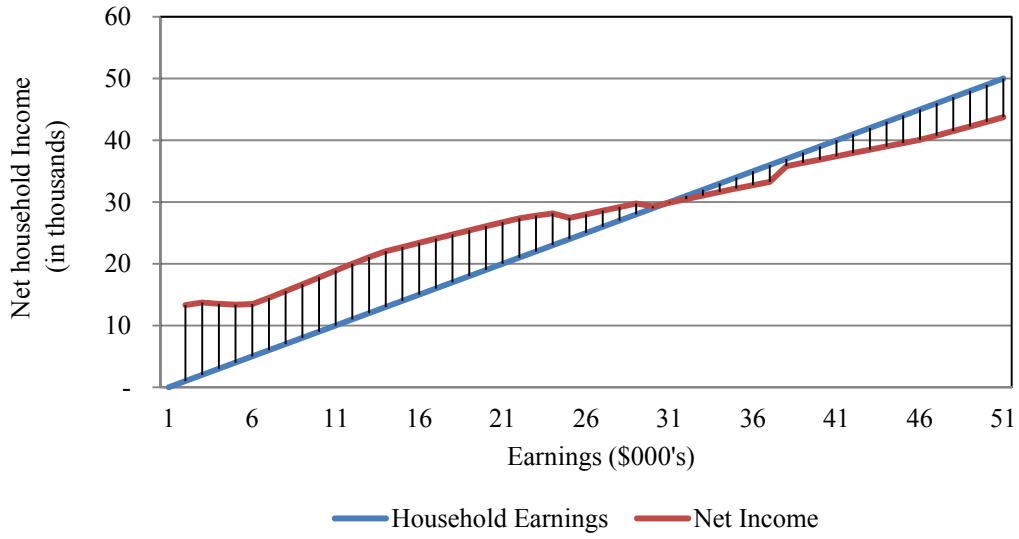



**FIGURE 6B. NET HOUSEHOLD INCOME OF A SINGLE ADULT WITH TWO CHILDREN, BY EARNINGS**



## III. Implications of Tax-Benefit System on Behavior

As this analysis points out, the current federal and state tax-benefit system creates price and income effects. The price effects are due to the phase in and phase outs of the benefits from the programs analyzed in this report. In some cases, the cost of earning an additional $100 of income is a loss of benefits double that amount (Figure 3a, section E). The income effects of these programs may influence household decisions regarding work (labor supply), investing in education and the acquisition of skills, and possibly even marriage and fertility. The incentives facing low-income households are discussed below.

*Incentives to Invest in Education and the Acquisition of Skills*

To understand the potential influence of the tax-benefit system on the decision to acquire education and skills, consider the following two scenarios. Suppose an adult with no children works full-time (approximately 2,080 hours per year) at $7.25 per hour, which is the Georgia minimum wage in 2011. In this case, her gross household earnings are $15,000 per year, and her NHI is $13,954 per year. Now consider a single adult working as a public school teacher earning $45,000 per year; her NHI is $35,881. The ratio of gross household earnings for these two single adults is 3 to 1 (= $45,000 ÷ $15,000); whereas, the ratio of their NHIs is 2.6 to 1 (= $35,881 ÷ 13,954). In other words, the tax-benefit system reduces the relative rewards from investing the time, money, and effort into becoming a public school teacher by approximately 13 percent.

We make similar calculations for the remaining 5 scenarios; the results of these calculations are reported in Table 7. In the case of a single adult with one child, the NHI from skilled labor is two times that from unskilled labor, and, in the case of a single adult with two children, the return to skilled labor is 1.7 times the return to unskilled labor. Turning to a married couple with no, one, and two children, the returns from skilled labor relative to unskilled labor, respectively, are 2.4, 1.9, and 1.7. The tax-benefit system reduces the return to skilled labor by 13 percent, 37 percent, and 47 percent, respectively, for a married couple with no, one, and two children.

As Table 7 shows, the tax-benefit system reduces the returns from skilled labor relative to unskilled labor as household size increases by adding children. Furthermore, the

**TABLE 7. THE EFFECT OF MARTIAL STATUS ON NET HOUSEHOLD INCOME, BY THE NUMBER OF CHILDREN**

| | ----------Marital Status-------- | |
|---|---|---|
| **Number of children** | **Single** | **Married** |
| No children | 2.6 | 2.4 |
| One child | 2.0 | 1.9 |
| Two children | 1.7 | 1.7 |

returns from skills are smaller for a married couple, with a given number of children, than for a single adult. While there are certainly non-pecuniary reasons for acquiring the necessary skills and credentials to become a public school teacher, which are not reflected in these calculations, the tax-benefit system erodes the pecuniary rewards from making the necessary sacrifices to acquire the education and skills required to escape poverty.

*Incentives to Marry*

Now, we turn to the question of whether the tax-benefit system promotes marriage. Figure 8(a) illustrates the difference between the NHI for a married couple with one child and a single adult with one child, at each level of earnings between $0 and $50,000 in $1,000 increments. Table 8 provides the numerical data for this comparison. The average difference in their NHIs is $1,578, the minimum difference is −$116, which occurs at $29,000 of earnings, and the maximum difference is $2,813, which occurs between $2,000 and $3,000 of earnings. Generally speaking, there is no marriage penalty, except between $29,000 and $30,000; however, the tax-benefit system provides very little pecuniary incentive for a single adult with a child to marry or for a married couple with a child to remain married.

Figure 8(b) provides similar information for a married couple with two children and a single adult with two children. Table 8 provides the numerical data for this comparison, as well. The average difference in the NHI of a married couple with two children and that of a single adult with two children is $1,530. The minimum difference is −$958, which occurs at $37,000. The difference remains negative to $44,000. The maximum difference is $3,298, which occurs at $24,000.

Based on the evidence reported in Figures 8(a) and 8(b), the tax-benefit system does not provide strong pecuniary incentives to marry or to remain married, and, in fact, some earnings ranges penalize marriage. While there is evidence that a stable marriage is good for children; people should not stay in abusive marriages merely because the economic

**TABLE 8. CHANGE IN NET HOUSEHOLD INCOME FROM MARRIAGE, BY THE NUMBER OF CHILDREN AND EARNINGS**

| | ---------Change in Net Household Income--------- | | |
|---|---|---|---|
| **Earnings** | **No Children** | **One Child** | **Two Children** |
| 1,000 | 2,065 | 2,537 | 2,553 |
| 2,000 | 2,065 | 2,813 | 2,825 |
| 3,000 | 2,004 | 2,813 | 2,846 |
| 4,000 | 2,004 | 2,724 | 2,815 |
| 5,000 | 2,004 | 1,996 | 2,656 |
| 6,000 | 2,010 | 1,908 | 1,744 |
| 7,000 | 2,029 | 1,908 | 1,744 |
| 8,000 | 2,050 | 1,908 | 1,744 |
| 9,000 | 2,078 | 1,913 | 1,744 |
| 10,000 | 2,104 | 1,927 | 1,744 |
| 11,000 | 2,211 | 1,945 | 1,744 |
| 12,000 | 2,334 | 1,968 | 1,747 |
| 13,000 | 2,241 | 1,988 | 1,759 |
| 14,000 | 2,124 | 2,001 | 1,778 |
| 15,000 | 1,999 | 2,019 | 1,799 |
| 16,000 | 1,873 | 2,032 | 1,819 |
| 17,000 | 1,739 | 2,065 | 1,833 |
| 18,000 | 1,603 | 2,173 | 1,851 |
| 19,000 | 1,112 | 2,631 | 1,865 |
| 20,000 | 1,255 | 2,499 | 1,883 |
| 21,000 | 1,314 | 2,363 | 1,919 |
| 22,000 | 1,362 | 2,226 | 2,023 |
| 23,000 | 1,409 | 2,605 | 2,131 |
| 24,000 | 1,456 | 397 | 3,298 |
| 25,000 | 1,504 | 402 | 3,162 |
| 26,000 | 1,551 | 402 | 3,024 |
| 27,000 | 1,598 | 401 | 2,878 |
| 28,000 | 1,645 | 402 | 2,731 |
| 29,000 | 1,692 | -116 | 1,919 |
| 30,000 | 1,739 | -103 | 1,919 |
| 31,000 | 1,787 | 944 | 1,919 |
| 32,000 | 1,833 | 991 | 1,920 |
| 33,000 | 1,881 | 1,038 | 1,920 |
| 34,000 | 1,928 | 1,086 | 900 |
| 35,000 | 1,975 | 1,133 | 947 |
| 36,000 | 2,022 | 1,179 | 995 |
| 37,000 | 2,069 | 1,227 | -958 |
| 38,000 | 2,117 | 1,274 | -911 |
| 39,000 | 2,124 | 1,322 | -864 |
| 40,000 | 2,124 | 1,368 | -816 |
| 41,000 | 2,124 | 1,416 | -769 |
| 42,000 | 2,124 | 1,463 | -722 |
| 43,000 | 2,124 | 1,467 | -675 |
| 44,000 | 2,124 | 1,466 | -628 |
| 45,000 | 2,124 | 1,466 | 1,420 |
| 46,000 | 2,124 | 1,467 | 1,467 |
| 47,000 | 2,158 | 1,466 | 1,466 |
| 48,000 | 2,253 | 1,467 | 1,467 |
| 49,000 | 2,347 | 1,467 | 1,467 |
| 50,000 | 2,441 | 1,466 | 1,466 |

**FIGURE 8A. COMPARISON OF NET HOUSEHOLD INCOME OF A MARRIED COUPLE WITH ONE CHILD WITH THAT OF A SINGLE ADULT WITH ONE CHILD**

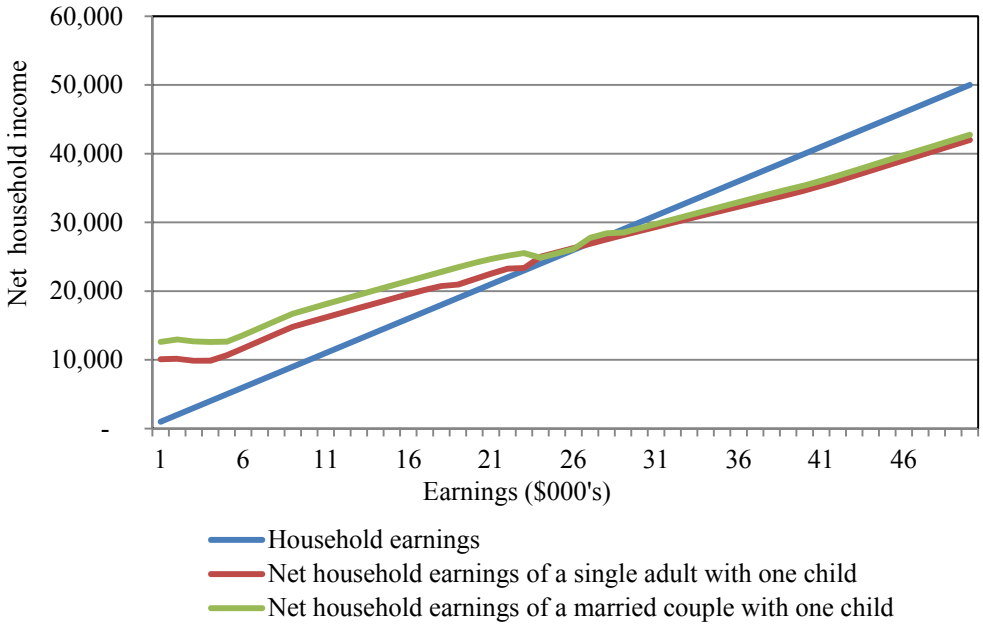
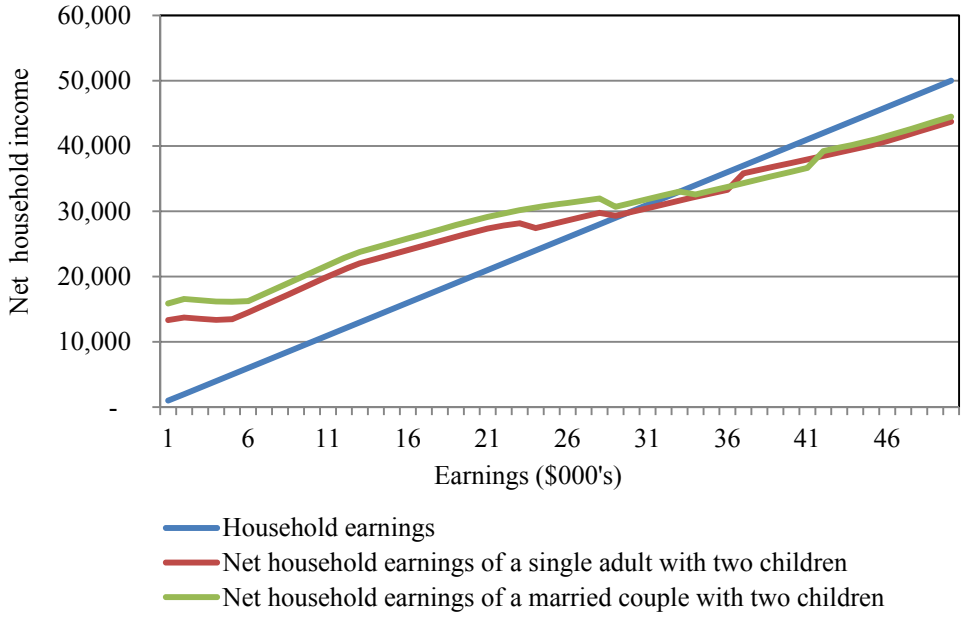



**FIGURE 8B. COMPARISON OF NET HOUSEHOLD INCOME OF A MARRIED COUPLE, WITH TWO CHILDREN WITH THAT OF A SINGLE ADULT WITH TWO CHILDREN**



incentives from social programs are so large that they override concerns about one's health and safety.

*Fertility Incentives*

In Figure 9(a), with details provided in Table 9(a), we compare the NHIs of a married couple with no, one, and two children by combining the information on NHI from Figures 1(b), 2(b), and 3(b). The NHI of a married couple with two children exceeds that of a married couple with one child throughout the earnings range from $0 to $50,000, and, the NHI of a married couple with one child, in turn, exceeds that of a married couple with no children, throughout this earnings range. The average difference in NHI between a married couple with one child and a married couple with no children is $3,640, the minimum difference is $1,684, which occurs at $41,000 of earnings, and the maximum difference is $6,282, which occurs at $1,000 of earnings. Similarly, the average difference in NHI between a married couple with two children and a married couple with one child is $2,810, the minimum difference is − $72, which occurs at $44,000 of earnings, and the maximum difference is $5,343, which occurs at $24,000 of earnings. As shown in Table 9(a), the tax-benefit system provides a greater transfer for the first child than it does for the second child.

Finally, we compare the NHIs of a single adult with no, one, and two children. Accordingly, Figure 9(b), with details provided in Table 9(b), combines the NHIs from Figures 4(b), 5(b), and 6(b), respectively. The average difference in NHIs for a single adult with one child and one with no children is $3,982; the maximum difference is $5,810 which occurs at $12,000 of earnings; and the minimum difference is $2,392 which occurs between $41,000 and $45,000. Comparing a household with two children and that with one child, the average difference is $2,859; the minimum difference is $981, which occurs at $36,000 of earnings; and the maximum difference is $5,119 at $19,000. Comparing the cases of a married couple and a single adult, the tax-benefit system provides upwards of $5,000 in additional benefits for a second child which may be pronatal.

**TABLE 9A. COMPARISON OF NET HOUSEHOLD INCOME FOR A MARRIED COUPLE, WITH NO, ONE, AND TWO CHILDREN**

| | --------Net Household Income--------- | | | Marginal Benefit of | Marginal Benefit of |
|---|---|---|---|---|---|
| Earnings | No Children | 1 Child | 2 Children | First Child | Second Child |
| 1,000 | 6,323 | 12,605 | 15,880 | 6,282 | 3,275 |
| 2,000 | 6,683 | 12,956 | 16,563 | 6,274 | 3,607 |
| 3,000 | 7,255 | 12,684 | 16,372 | 5,429 | 3,687 |
| 4,000 | 8,035 | 12,603 | 16,175 | 4,568 | 3,572 |
| 5,000 | 8,815 | 12,646 | 16,120 | 3,831 | 3,473 |
| 6,000 | 9,590 | 13,602 | 16,223 | 4,012 | 2,621 |
| 7,000 | 10,294 | 14,645 | 17,327 | 4,352 | 2,681 |
| 8,000 | 10,997 | 15,689 | 18,430 | 4,692 | 2,741 |
| 9,000 | 11,700 | 16,722 | 19,534 | 5,023 | 2,811 |
| 10,000 | 12,394 | 17,426 | 20,637 | 5,032 | 3,211 |
| 11,000 | 13,078 | 18,129 | 21,741 | 5,051 | 3,611 |
| 12,000 | 13,763 | 18,833 | 22,844 | 5,070 | 4,011 |
| 13,000 | 14,403 | 19,528 | 23,784 | 5,124 | 4,256 |
| 14,000 | 15,002 | 20,214 | 24,487 | 5,211 | 4,273 |
| 15,000 | 15,593 | 20,898 | 25,191 | 5,305 | 4,292 |
| 16,000 | 16,183 | 21,576 | 25,887 | 5,393 | 4,311 |
| 17,000 | 16,765 | 22,251 | 26,575 | 5,486 | 4,324 |
| 18,000 | 17,345 | 22,921 | 27,259 | 5,575 | 4,339 |
| 19,000 | 17,610 | 23,586 | 27,939 | 5,976 | 4,353 |
| 20,000 | 18,502 | 24,247 | 28,614 | 5,746 | 4,367 |
| 21,000 | 19,307 | 24,904 | 29,285 | 5,596 | 4,381 |
| 22,000 | 20,100 | 25,472 | 29,835 | 5,372 | 4,363 |
| 23,000 | 20,892 | 25,966 | 30,287 | 5,073 | 4,322 |
| 24,000 | 21,685 | 25,390 | 30,733 | 3,705 | 5,343 |
| 25,000 | 22,478 | 26,028 | 31,179 | 3,550 | 5,151 |
| 26,000 | 23,270 | 26,661 | 31,623 | 3,391 | 4,962 |
| 27,000 | 24,063 | 27,293 | 32,059 | 3,231 | 4,766 |
| 28,000 | 24,855 | 27,926 | 32,494 | 3,071 | 4,568 |
| 29,000 | 25,648 | 28,041 | 31,229 | 2,394 | 3,188 |
| 30,000 | 26,440 | 28,674 | 31,811 | 2,234 | 3,137 |
| 31,000 | 27,233 | 30,307 | 32,393 | 3,074 | 2,086 |
| 32,000 | 28,025 | 30,939 | 32,975 | 2,914 | 2,035 |
| 33,000 | 28,818 | 31,572 | 33,557 | 2,754 | 1,985 |
| 34,000 | 29,610 | 32,205 | 33,103 | 2,595 | 898 |
| 35,000 | 30,403 | 32,838 | 33,685 | 2,435 | 848 |
| 36,000 | 31,195 | 33,470 | 34,267 | 2,275 | 797 |
| 37,000 | 31,988 | 34,103 | 34,849 | 2,115 | 746 |
| 38,000 | 32,781 | 34,736 | 35,431 | 1,955 | 695 |
| 39,000 | 33,533 | 35,369 | 36,013 | 1,835 | 644 |
| 40,000 | 34,279 | 36,001 | 36,595 | 1,723 | 594 |
| 41,000 | 35,024 | 36,708 | 37,177 | 1,684 | 469 |
| 42,000 | 35,769 | 37,501 | 37,759 | 1,731 | 258 |
| 43,000 | 36,515 | 38,250 | 38,341 | 1,735 | 91 |
| 44,000 | 37,260 | 38,995 | 38,923 | 1,735 | -72 |
| 45,000 | 38,005 | 39,740 | 41,505 | 1,735 | 1,764 |
| 46,000 | 38,751 | 40,486 | 42,221 | 1,735 | 1,735 |
| 47,000 | 39,496 | 41,231 | 42,966 | 1,735 | 1,735 |
| 48,000 | 40,242 | 41,977 | 43,712 | 1,735 | 1,735 |
| 49,000 | 40,987 | 42,722 | 44,457 | 1,735 | 1,735 |
| 50,000 | 41,732 | 43,467 | 45,202 | 1,735 | 1,735 |

**TABLE 9B. COMPARISON OF NET HOUSEHOLD INCOME OF A SINGLE ADULT, WITH NO, ONE, AND TWO CHILDREN**

| | ----------Net Household Income---------- | | | Marginal Benefit of | Marginal Benefit of |
|---|---|---|---|---|---|
| Earnings | No Children | 1 Child | 2 Children | First Child | Second Child |
| 1,000 | 4,258 | 10,068 | 13,327 | 5,810 | 3,259 |
| 2,000 | 4,618 | 10,143 | 13,738 | 5,525 | 3,595 |
| 3,000 | 5,251 | 9,871 | 13,526 | 4,620 | 3,655 |
| 4,000 | 6,031 | 9,879 | 13,360 | 3,848 | 3,481 |
| 5,000 | 6,811 | 10,650 | 13,464 | 3,839 | 2,814 |
| 6,000 | 7,580 | 11,694 | 14,479 | 4,114 | 2,785 |
| 7,000 | 8,265 | 12,737 | 15,583 | 4,472 | 2,846 |
| 8,000 | 8,947 | 13,781 | 16,686 | 4,834 | 2,905 |
| 9,000 | 9,622 | 14,809 | 17,790 | 5,187 | 2,981 |
| 10,000 | 10,290 | 15,499 | 18,893 | 5,209 | 3,394 |
| 11,000 | 10,867 | 16,184 | 19,997 | 5,317 | 3,813 |
| 12,000 | 11,429 | 16,865 | 21,097 | 5,436 | 4,232 |
| 13,000 | 12,162 | 17,540 | 22,025 | 5,378 | 4,485 |
| 14,000 | 12,878 | 18,213 | 22,709 | 5,335 | 4,496 |
| 15,000 | 13,594 | 18,879 | 23,392 | 5,285 | 4,513 |
| 16,000 | 14,310 | 19,544 | 24,068 | 5,234 | 4,524 |
| 17,000 | 15,026 | 20,186 | 24,742 | 5,160 | 4,556 |
| 18,000 | 15,742 | 20,748 | 25,408 | 5,006 | 4,660 |
| 19,000 | 16,498 | 20,955 | 26,074 | 4,457 | 5,119 |
| 20,000 | 17,247 | 21,748 | 26,731 | 4,501 | 4,983 |
| 21,000 | 17,993 | 22,541 | 27,366 | 4,548 | 4,825 |
| 22,000 | 18,738 | 23,246 | 27,812 | 4,508 | 4,566 |
| 23,000 | 19,483 | 23,361 | 28,156 | 3,878 | 4,795 |
| 24,000 | 20,229 | 24,993 | 27,435 | 4,764 | 2,442 |
| 25,000 | 20,974 | 25,626 | 28,017 | 4,652 | 2,391 |
| 26,000 | 21,719 | 26,259 | 28,599 | 4,540 | 2,340 |
| 27,000 | 22,465 | 26,892 | 29,181 | 4,427 | 2,289 |
| 28,000 | 23,210 | 27,524 | 29,763 | 4,314 | 2,239 |
| 29,000 | 23,956 | 28,157 | 29,310 | 4,201 | 1,153 |
| 30,000 | 24,701 | 28,777 | 29,892 | 4,076 | 1,115 |
| 31,000 | 25,446 | 29,363 | 30,474 | 3,917 | 1,111 |
| 32,000 | 26,192 | 29,948 | 31,055 | 3,756 | 1,107 |
| 33,000 | 26,937 | 30,534 | 31,637 | 3,597 | 1,103 |
| 34,000 | 27,682 | 31,119 | 32,203 | 3,437 | 1,084 |
| 35,000 | 28,428 | 31,705 | 32,738 | 3,277 | 1,033 |
| 36,000 | 29,173 | 32,291 | 33,272 | 3,118 | 981 |
| 37,000 | 29,919 | 32,876 | 35,807 | 2,957 | 2,931 |
| 38,000 | 30,664 | 33,462 | 36,342 | 2,798 | 2,880 |
| 39,000 | 31,409 | 34,047 | 36,877 | 2,638 | 2,830 |
| 40,000 | 32,155 | 34,633 | 37,411 | 2,478 | 2,778 |
| 41,000 | 32,900 | 35,292 | 37,946 | 2,392 | 2,654 |
| 42,000 | 33,645 | 36,038 | 38,481 | 2,393 | 2,443 |
| 43,000 | 34,391 | 36,783 | 39,016 | 2,392 | 2,233 |
| 44,000 | 35,136 | 37,529 | 39,551 | 2,393 | 2,022 |
| 45,000 | 35,881 | 38,274 | 40,085 | 2,393 | 1,811 |
| 46,000 | 36,627 | 39,019 | 40,754 | 2,392 | 1,735 |
| 47,000 | 37,338 | 39,765 | 41,500 | 2,427 | 1,735 |
| 48,000 | 37,989 | 40,510 | 42,245 | 2,521 | 1,735 |
| 49,000 | 38,640 | 41,255 | 42,990 | 2,615 | 1,735 |
| 50,000 | 39,291 | 42,001 | 43,736 | 2,710 | 1,735 |

**FIGURE 9A. NET HOUSEHOLD INCOMES OF A MARRIED COUPLE WITH NO, ONE, OR TWO CHILDREN**

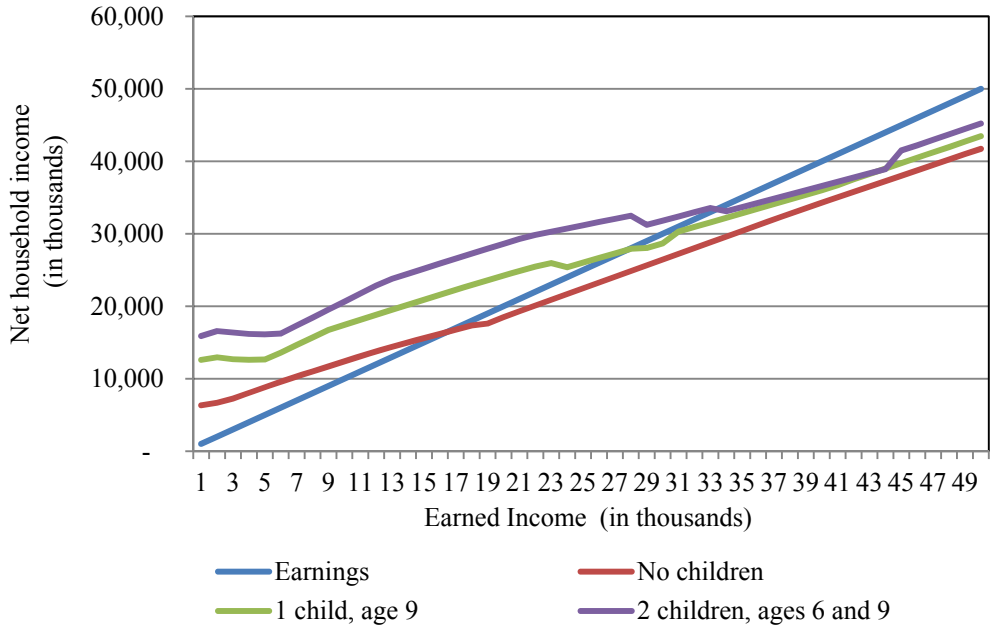
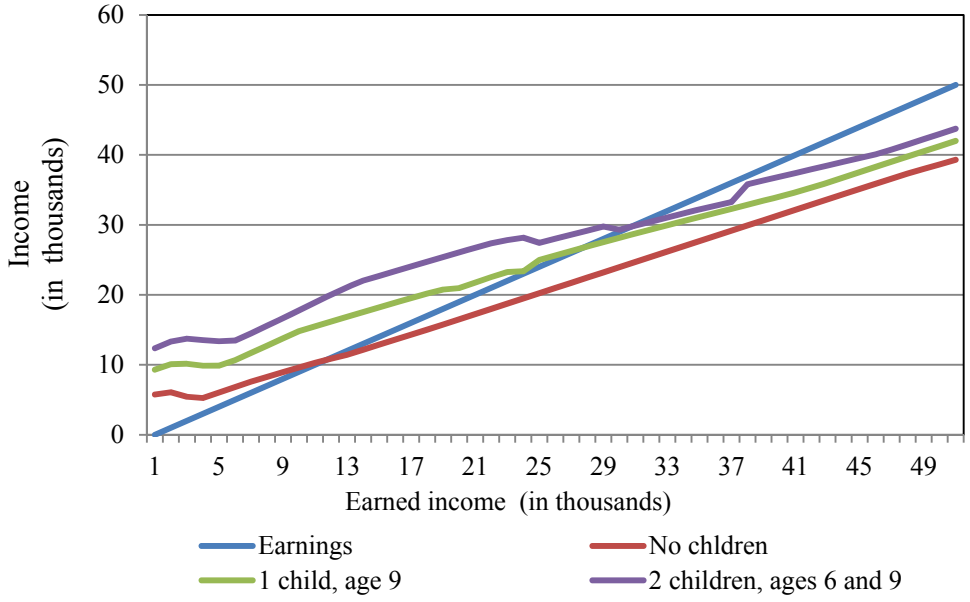



**FIGURE 9B. NET HOUSEHOLD INCOMES OF A SINGLE MOTHER WITH NO, ONE, AND TWO CHILDREN**



## IV. Conclusion

In this report, we examine the incentives created by the tax-benefit system facing low-income families in Fulton County, Georgia in calendar year 2011. In particular, we examine two sorts of incentives: the price and income effects created by the tax-benefit system. We use a simple spreadsheet calculator to simulate the tax-benefit system for a variety of family structures and sizes. At least in some earnings ranges, the tax-benefit system discourages low-income people from investing in education and training, discourages labor supply, encourages fertility, and provides little incentive to marry or to remain so. To the extent that households are aware of and respond to such incentives, the tax-benefit system creates poverty traps rather than promoting behaviors that enable families to escape poverty. In designing an effective social safety net, there are many difficult issues that must be addressed. Perhaps foremost among these questions is whether a social safety net should merely alleviate the harshest consequences of poverty by providing income support and in-kind benefits or should the system promote behaviors that increase the ability of families to escape poverty and dependence on government programs.

## References

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# Appendix

## Description of Income Tax Credits and Means-Tested Benefit Programs

*Earned Income Tax Credit* (EITC) is a means-tested benefit program that provides a tax credit to working individuals earning low to moderate income. In order to qualify for EITC benefits, earned income must be less than the following under specified conditions:

| Income If Single | Income If Married | Number of Qualified Children | Maximum Credit Received |
|---|---|---|---|
| $43,998 | $49,078 | 3 | $5,751 |
| $40,964 | $46,044 | 2 | $5,112 |
| $36,052 | $41,132 | 1 | $3,094 |
| $13,660 | $18,740 | 0 | $464 |

IRS (March 30, 2012). EITC, Earned Income Tax Credit, Questions and Answers .Retrieved June 11, 2012 from web site: http://www.irs.gov/individuals/article/0,,id=150513,00.html

*Childcare and Parent Services* (CAPS) is a program that assists low-income families by providing in-kind benefits to subsidize the expense of childcare. CAPS is provided in all counties of Georgia by the Department of Family and Children Services. Enrolled families must meet the income requirements listed in the Table below, and pay a fee depending on their income and household size.

Each parent in the household must also participate in one or more of the following activities:

1. Minimum of thirty hours a week of employment.
2. Minimum of twenty-four hours a week of enrollment at a technical or vocational school.
3. Minimum of twenty-four hours a week of combined employment and enrollment at a technical or vocational school for up to one year.
4. Full time enrollment at a middle school, high school, or GED courses if parent is under twenty-one years old.

Georgia Department of Human Services: Division of Family and Children Services (June 15, 2012) Retrieved June 28, 2012 from website: http://dfcs.dhs.georgia.gov/caps-activity-requirements

Income limits:

| Household Size | Gross Annual Income Limit | Household Size | Gross Annual Income limit |
|---|---|---|---|
| 2 | $22,400 | 7 | $51,200 |
| 3 | $28,160 | 8 | $56,960 |
| 4 | $33,920 | 9 | $62,720 |
| 5 | $39,680 | 10 | $68,480 |
| 6 | $45,400 | | |

Georgia Department of Human Services: Division of Family and Children Services (June 15, 2012). Retrieved July 20, 2012 from website: http://dfcs.dhs.georgia.gov/caps-income-requirements

*Child Tax Credit* (CTC) is a government issued tax return to those claiming a child as a dependent. The maximum amount of credit for each child is $1,000. In order to receive the maximum amount, gross income must be equal to or less than the income limits. If gross income exceeds the limits, the tax credit is reduced by five percent of the exceeding amount.

| Minimum Qualifying Income | | | Income Limits | |
|---|---|---|---|---|
| Status | 1 Child | 2 Children | Married Couple Filing Taxes Jointly | $110,000 |
| Single | $25,000 | $37,000 | Single Head of Household | $75,000 |
| Married | $27,000 | $42,000 | | |

IRS (February 10, 2011) *Ten Facts About Child Tax Credit*. Retrieved on June 28, 2012 from website: http://www.irs.gov/news room/article/0,,id=106182,00.html.

*HUD: Section 8 Housing Assistance* is provided by the federal government to help low-income families afford a home. Vouchers are allotted to public housing agencies (PHAs) and are then distributed to qualified families. The family may rent a home that meets PHA qualifications. The landlord receives the allotted voucher directly from the PHA and the remainder is paid by the family. To qualify for Section 8 vouchers the family must earn less than 50 percent of the local area median income, which is $68,300.

U.S. Department of Housing and Urban Development (2012) Retrieved July 20, 2012 from website: http://portal.hud.gov/hudportal/ HUD?src=/topics/housing_choice_voucher_program_section_8

*Supplemental Nutrition Assistance Program* (SNAP) or food stamps is a monthly benefit to help low-income families obtain food. SNAP benefits cannot be used to buy alcoholic beverages, cigarettes or tobacco, household supplies such as soap and paper products, medicines, vitamins, pet foods, or any non-food items.

Eligible households are those whose income is less than or equal to the poverty level, or are living in a temporary crisis. The amount granted to each household is the difference between the maximum monthly benefit (below) and 30% of monthly income.

| Household Size | Monthly Benefit | Household Size | Monthly Benefit |
|---|---|---|---|
| 1 | $200 | 8 | $1,202 |
| 2 | $367 | 9 | $1,352 |
| 3 | $526 | 10 | $1,502 |
| 4 | $668 | 11 | $1,652 |
| 5 | $793 | 12 | $1,802 |
| 6 | $952 | 13 | $1,952 |
| 7 | $1,052 | | |

Georgia Department of Human Services: Division of Family and Children Services (2012). Retrieved June 28, 2012 from website: http://dfcs.dhs.georgia.gov/sites/dfcs.dhs.georgia.gov/files/imported/ DHR-DFCS/DHR-DFCS_Food_Stamps/English.pdf

*Temporary Assistance for Needy Families* (TANF) provides low-income families with cash assistance for up to 48 months. To qualify for TANF benefits, the family must contain a dependable child and must prove absence or disablement of one or both parents. Adult beneficiaries of TANF are required to work or participate in weekly work activities, have less than $1,000 in resources such as bank accounts, stocks, or bonds, and make less than the listed income limits.

| Family Size | Monthly Income | Maximum Monthly Benefit |
|---|---|---|
| 2 | $659 | $235 |
| 3 | $784 | $280 |
| 4 | $925 | $330 |
| 5 | $1,060 | $378 |
| 6 | $1,149 | $410 |
| 7 | $1,243 | $672 |
| 8 | $1,319 | $713 |
| 9 | $1,389 | $751 |
| 10 | $1,487 | $804 |
| 11 | $1,591 | $860 |
| 12 | $1,635 | $884 |
| 13 | $1,679 | $908 |

Georgia Department of Human Services (2012) Eligibility Requirements for TANF. Retrieved on June 20, 2012 from Georgia Department of Human Services Division of Family and Children Services website http://dfcs.dhr.georgia.gov/portal/site/DHS-DFCS/menuitem.5d32235bb09bde9a50c8798dd03036a0/?vgnextoid=2bea2b48d9a4 ff00VgnVCM100000bf01010aRCRD.

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***Georgia's Revenue and Expenditure Portfolio in Brief, 1989-2009***. **(Carolyn Bourdeaux, Sungman Jun, and Nicholas Warner)**. This brief uses Census data to examine how Georgia ranks in terms of spending and revenue by functions and objects and examines how Georgia's portfolio has changed over time compared to national peers. FRC Brief 249 (August 2012)

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**Publisher(s):** Fiscal Research Center of the Andrew Young School of Policy Studies

**Author(s):** Chelsea Coleman; Kendon Darlington; Mark Rider; Morgan Sinclair

**Date Published:** 2013-02-11



**Subject(s):** Community and Economic Development; Government Reform