

SHOULD WE SUBSIDIZE WORK? WELFARE REFORM, THE EARNED INCOME TAX CREDIT AND OPTIMAL TRANSFERS*

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Abstract

During the 1990s, US income-transfer and tax policies shifted towards trying to encourage work among low-income families. Optimal tax theory, however, suggests that work subsidies are usually an inefficient way to raise the incomes of poor families unless the work effort of recipients has external benefits and/or taxpayer/voters prefer redistributing income to the working poor rather than the idle poor. This paper discusses the conditions under which work subsidies may be economically efficient and assesses empirical evidence that suggests that welfare reform and expansions of the EITC have increased work effort among low income families, but is inconclusive about whether the policy shift has enabled them to advance beyond entry-level jobs or benefited their children.

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Should we subsidize work? Welfare reform, the earned income tax credit and optimal transfers

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1 Introduction

This paper examines factors that should be considered in deciding whether income transfer programs should subsidize work effort of beneficiaries. If the goal of programs were simply to raise incomes of the poor, the most direct way to do so would be to pay benefits that vary inversely with economic status. In contrast, by their design, work subsidies, within a certain range, provide larger transfers to some poor families as their incomes increase. This paper briefly reviews the theory of optimal transfers and discusses conditions in which subsidies to work may be economically efficient. We then review evidence on the effects of subsidizing work effort of low-income families in the United States on work effort, incomes of the poor, and other considerations, including long-term human capital development of beneficiaries and the well-being of their children.

Kaplow (2006) reviews the literature on optimal transfers in detail and concludes that there is a substantial gap between the existing literature on optimal transfers and the design of transfer programs. Although the optimal transfer literature is highly abstract and its results are sensitive to various assumptions, much of the analysis that Kaplow reviews supports high marginal tax rates on the working poor rather than earnings subsidies. In contrast, the thrust of reforms in the United States in recent years, both welfare reform and the expansion of the earned income credit, has been to reduce work disincentives and, in some income ranges for some people, to provide a net positive inducement to work. As Kaplow notes, one possible rationale for this policy shift is a perception that there are large external benefits to work that the optimal tax literature does not capture. This paper explores in more detail what is known about these external benefits.

1.1 The theory of optimal transfers

In standard neo-classical economic theory, the wellbeing or utility of individual economic agents depends on the quantities of goods and services consumed and available non-work time in different time periods. (Non-work time includes all time not spent in working for pay, including “home production” activities, such as cooking and childcare.) Individuals allocate their time between work and non-work time and allocate their income from work among consumption goods in the present and future so as to maximize their utility. Under certain conditions (no externalities in production and consumption, perfect competition, and no distorting taxes), agents’ maximizing behavior leads to efficient outcomes in the sense that it is not possible to improve the welfare of one individual without reducing the welfare of someone else.

Free markets do not necessarily produce a socially attractive income distribution, however, so there is a role in the neo-classical system for income transfers from better off people (those with larger endowments of skills or inherited wealth) to those less fortunate. Re-distribution of resources necessarily entails some loss of economic efficiency because it is not feasible to impose taxes and transfers based on perfect measures of people's endowments. Instead, measures of economic wellbeing must be based on observed market outcomes such as income or consumption that do not consider non-work time. But income taxes and consumption taxes distort choices between market work and leisure (and income taxes also distort the choice between current and future consumption). An extensive economic literature has explored the design of optimal tax structures, given the need to finance public goods, the existence of a social welfare function that values a less unequal income distribution, and the inability to tax non-market production. (Atkinson and Stiglitz, 1976; Mirrlees, 1976; for a review and critique, see Slemrod, 1990). This literature has examined both the choice between income and consumption as a tax base and the optimal structure of marginal tax rates, given distributional objectives.

Transfer payments introduce economic distortions because they must be financed by taxes on labor and/or the return to saving. If transfer payments were universal and were financed by labor income taxes, everyone with earnings above the tax-paying threshold would face a positive marginal tax rate on an additional hour of work. Low-wage earners would receive net fiscal transfers, while high-wage earners would pay net positive taxes. Limiting transfers to low earners only, by reducing them as earnings rise, reduces their budgetary cost and thereby lowers marginal rates on high earners, but at the cost of subjecting beneficiaries to very high marginal rates as their benefits phase-out with higher earnings. The question for optimal tax design is to determine the marginal tax rate structure that minimizes the efficiency loss in terms of reduced work incentives and other distortions, for any given net transfer of resources to the poor.

1.2 Is there a reason to subsidize work?

Under certain conditions, the government should simply transfer income directly rather than subsidizing work because work subsidies induce some people to work more than they would prefer and must be financed by higher marginal tax rates on higher-income earners.¹ Assuming all feasible taxes are distorting, lump-sum transfers, financed by non-negative marginal tax rates on earnings throughout the income distribution, are the least cost way of helping low-income people.²

An exception to this conclusion may occur in cases where people do not vary their hours of work continuously (on the intensive margin), but can only choose between alternative occupations (including non-work), each with fixed work hours (on the extensive margin). Assuming a subsidy to low-skill people will not induce high-skill

¹ These conditions are that individuals maximize utility, there are no external benefits from working for pay, people can vary their hours of work continuously, and a social welfare function assigns higher utility to an additional dollar of income for low-income than for high-income people.

² Marginal tax rates need not increase monotonically throughout the earnings distribution; in fact, some of the literature concludes that the optimal tax structure could have declining marginal tax rates within some income ranges.

people to shift to low-skill occupations, it can be shown that a subsidy to low-skill work may be optimal, even within the general assumptions (diminishing marginal utility of income, utility depending only on goods and leisure) of optimal transfer theory (Diamond, 1980; Saez, 2002).

An alternative perspective to the optimal tax approach is that poverty alleviation is itself a public good for both moral and ethical reasons (taxpayers consider it unacceptable for people to go hungry in a rich nation) and because of perceived or actual external effects (e.g., reduced crime and social unrest). If transfers are seen as a public good that taxpaying voters collectively agree to provide, not the outcome of a process driven by an omniscient social planner, then policies consistent with the values of the donors may be seen to be efficient. In this sense, policies recently enacted in the United States that encourage low-income people to work, especially if they have children, fit into this public good framework. Subsidies to earnings reflect in part a reluctance of voters to pay taxes to provide benefits to people who do not work.

Beyond social norms and political preferences, there may be external benefits from encouraging labor market participation of low-income families. Work subsidies may reduce welfare dependency that keeps people trapped in poverty for multiple generations. The labor force experience may enable individuals to develop new skills and ultimately increase their income, beyond what they perceive is possible based on their current market wage. The example of a working parent in the house may generate a positive image for children and promote for them a work ethic and the motivation to perform better in school. But encouraging low-income people to work, especially single women with children, increases the need for non-parental childcare, with potentially positive or negative consequences. Ultimately, the case for or against subsidizing work must incorporate an assessment of these and other external effects of increasing labor force participation rates for the low-income population.

2 Recent changes in transfer programs for low-income families

The 1990s were marked by major shifts in transfer programs for low-income families. In 1996, traditional cash welfare, the Aid for Families with Dependent Children (AFDC) program, was repealed and replaced with Temporary Assistance for Needy Families. TANF continued payments to families with dependent children, but placed a 5-year time limit on payments to those not working. Even before this headline-grabbing welfare reform, Congress twice increased the earned income tax credit (EITC) (in 1990 and 1993), with the increases phased in over a number of years. The EITC is a refundable tax credit (meaning it can be claimed even if tax liability is otherwise zero) for low-income workers with children (with a much more limited credit available to childless workers). The credit is proportional to earnings through a phase-in range, remains fixed over a plateau range and then is phased out. The EITC is now the largest single Federal cash transfer program for low-income families. In addition, Congress enacted a child credit for the first time in 1997 and expanded it substantially in 2001. The child credit is now partially refundable to families with earnings above \$10,000.

Following welfare reform and expansion of the EITC, the tax and transfer system has offered considerable rewards for families moving from welfare to work. Immediately following these changes, a single mother with 2 children would see her post-tax, post-

transfer income rise by over 50% if she started working 20 hours a week at the minimum wage (Acs et al., 1998).³ This rise in income was largely due to the EITC and the monetization of near cash benefits such as food stamps. Further advancement was not rewarded, however, because the combined benefits from programs targeted at the working poor phased out rapidly. It was estimated that a single mother working full-time at the minimum wage would see very little change in her post-tax, post-transfer income even if her wage rate were to rise from \$5.15 to \$9 an hour (Acs et al., 1998). Similarly, Sammartino et al. (2002) illustrate how a typical married couple in one state could face a marginal tax rate of 86% as its income rose from 125 to 150% of the poverty level.

2.1 The shift to encourage work by low-income people, especially single women with children

2.1.1 Replacing AFDC with TANF.

At the federal level, the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) in 1996 marks the watershed moment in welfare reform. Although states began experimenting with their low-income cash assistance programs under waivers to federal program rules during the early 1990s,⁴ PRWORA made major changes to the government's approach for providing aid to low-income families. Most notably, it replaced the Aid to Families with Dependent Children (AFDC) program, an entitlement, with the Temporary Assistance for Needy Families (TANF) block grant. Under TANF, states are given a fixed annual amount of federal funds to provide cash aid and other services to their low-income families.

Although states have a considerable amount of flexibility in how they choose to spend their TANF dollars, certain key restrictions apply. A poor family can receive federal cash aid for a maximum of 5 years; states may shorten this time limit or use their own dollars to extend benefits beyond the federal limit.⁵ Also, hardship exemptions may be granted for up to 20% of a state's TANF caseload. In addition, families receiving TANF must meet work requirements. Work requirements and exemptions (for example based on the age of a family's youngest child) vary from state to state. However, if a family fails to meet its work requirements, it is subject to sanction and may lose part or all of its TANF benefits. States must enforce work requirements or face financial penalties.

Work requirements, sanctions, and lifetime limits on the receipt of aid make welfare a less attractive option for poor families under TANF than it was under AFDC. In addition to these "stick" provisions, many states have used their flexibility under

³ The calculation from the cited study by Acs et al. (1998) takes into account TANF benefits, the cash value of food stamps, earnings and net taxes (including federal and state income and payroll) and assumes the worker earns the federal minimum wage. The 50% figure is the approximate median for the 13 states for which this calculation was performed.

⁴ For a description of federal waivers and their relationship to welfare reform, see Greenberg and Savner (1996).

⁵ Some states (e.g. Florida) have a shorter time limit; others have created an intermittent time limit (60 months total but no more than 24 months in any single 60 month period, e.g. Massachusetts), and still others have committed to using state funds to extend assistance beyond 60 months if the family meets certain requirements (e.g. Michigan) (Rowe and Versteeg, 2005).

TANF for “carrots” to make work itself more attractive. For example, under AFDC, if a welfare family started working, their monthly welfare benefits phased out at 67 cents on the dollar after a small initial disregard (about \$120). In other words, prior to welfare reform, the marginal tax rates facing these families were staggeringly high. Many states have subsequently changed their disregards and benefit reduction rates to allow welfare families to keep more of what they earn in order to encourage work.⁶

2.1.2 Expansion of the earned income tax credit and enactment of the child credit.

The earned income credit was first available in tax year 1975. The credit rate was 10% on the first \$4000 of earnings up to a maximum credit of \$400 (\$1452 in 2005 dollars), was available for all taxpayers with qualifying children, and was refundable. The credit phased out at a rate of 10 cents per dollar for income in excess of \$4000. The 10% EITC offset most of the adverse work incentive of payroll taxes to finance Social Security and Medicare, which were then 11.7%.⁷

Subsequent legislation, especially tax laws enacted in 1990 and 1993, transformed the credit into a major earnings subsidy program for low-income workers with children. The credit rate and the amount of earnings to which it applied increased. A new, higher credit and higher earnings thresholds were made available for families with two or more children and a small credit was introduced for workers without children.

For tax year 2005, for taxpayers with two or more children, the EITC credit rate is 40% on earnings up to \$11,000 for a maximum credit of \$4400. The credit remains at \$4400 up to an income of \$14,370 (the plateau range). It then phases out at a rate of 21.06 cents per dollar between incomes of \$14,370 and \$35,263 (\$16,370 and \$37,263 for married couples). The credit for taxpayers with one child and no children has a similar structure, but with lower credit rates, phase-out rates, and income thresholds. The maximum credit is \$2662 for taxpayers with one qualifying child and \$399 for taxpayers with no children.

In 1997, Congress enacted a child credit of \$500 per child under the age of 17. The child credit was initially refundable only for taxpayers with 3 or more children. The Economic Growth and Tax Reconciliation Act of 2001 (EGGTRA) made the child credit refundable up to a maximum of 10% of earnings in excess of \$10,000. The \$10,000 threshold is indexed to changes in the price level after 2002. In 2005, the credit refund rate increased to 15%.

Federal budgetary costs of the EITC and the refundable portion of the child credit have increased dramatically compared with outlays on AFDC and TANF. In 1976, the EITC cost \$3.0 billion in 2005 dollars and there was no child credit, compared with AFDC outlays of \$16.4 billion. By 2005, the cost of the EITC had risen to \$39.5 billion and \$14.8 billion was spent on the refundable portion of the child credit, compared with outlays of \$17.3 billion for TANF. (Office of Management and Budget, 2006)

⁶ For example, Ziliak (2006) estimates that effective marginal tax rates on earnings in cash welfare (AFDC/TANF) fell 50% after welfare reform.

⁷ The first Ways and Means Committee Report that included the EITC stated: “it is appropriate to use the income tax system to offset the impact of the Social Security taxes on low-income persons in 1975 by adopting for this one year only a refundable income tax credit against earned income.” The Finance Committee report suggested the EITC would assist in encouraging people to obtain employment, reducing the unemployment rate and the welfare rolls. See Ventry (2001).

3 Evidence on effects of the policy shift

3.1 Welfare reform

3.1.1 Effects on labor force participation.

Welfare reform aimed to encourage work and aggregate data strongly suggest that it succeeded. During the early 1990s, the labor force participation rates of single mothers with children under age 18 (the majority of adult welfare clients) hovered around 67%. From 1994 forward, their labor force participation rates shot up by 10 percentage points to almost 80%, while labor force participation rates of married mothers and single women without children (groups unlikely to be influenced by welfare policies but subject to the same overall economic trends) showed virtually no change (Blank 2002). Similarly, Meyer and Rosenbaum (2001a,b) compare single mothers to single women without children and find that while the employment rate of women without children remained rather stable between 1984 and 1996, the employment rate for single mothers began growing during the early 1990s, a period coinciding with extensive state-level welfare reforms and expansions of the EITC.⁸ Moreover, the share of women on welfare with earnings quadrupled from 1990 to 1999 from 6 to 24% (Blank, 2002).

Numerous econometric studies support a conclusion that welfare reform contributed to this rise in labor force participation (Moffitt, 1999; Kaushal and Kaestner, 2001; O'Neill and Hill, 2001; and Schoeni and Blank, 2000). There is some dispute as to whether the effects of "welfare reform" were stronger during the state welfare waiver reform years than following federal reform, on which specific elements of welfare reform contributed to the observed changes in labor force behavior, and on the relative importance of welfare reform policies and the very favorable economic conditions that prevailed during the 1990s in explaining the rise in employment. Finally, studies that also take into account the EITC find that it plays a preeminent role in the rise in labor force participation among female-headed families (Grogger, 2003).

3.1.2 Effects on income of low-income families.

Assessing how welfare reform influenced family incomes is challenging. Three key groups must be considered: families receiving welfare, families that left welfare and families that chose not to enter welfare. The incomes of families on welfare probably have not changed much because the size of cash grants have in general not increased (in fact, the real value of the grants in many states continues to be eroded by inflation) and even with increased work effort among some recipients, the vast majority - about 70% - still have no earnings in a given month and 60% did not work at all in the prior calendar year (Loprest and Zedlewski, 2006).⁹ The incomes of families that left welfare are

⁸ Meyer and Rosenbaum (2001a, 2001b) find that the growth in employment among single mothers during the early and mid-1990's can be attributed to the EITC and that early welfare reforms account for a smaller portion of the change.

⁹ Here, the prior calendar year refers to 2001, and "any given month" refers to the calendar month in 2002 during which a welfare recipient was interviewed in the National Survey of America's Families.

slightly higher, on average, than they would have been had they remained on welfare, but this average masks two divergent trends. About one in five welfare leavers are “disconnected”- they neither work, nor live with someone who works, nor do they receive any public assistance (Loprest, 2001). Their incomes have fallen. About 60% of leavers do work, and their earnings combined with cash and near-cash transfers and tax credits are higher than they would have been if still relying on welfare. Nevertheless the bulk of these leavers (85%) still have incomes below twice the federal poverty line (Acs and Loprest, 2004). The final group, families that would have entered welfare under AFDC rules but have been formally or informally diverted from welfare since reform, is particularly hard to capture. One study of low-income single mothers finds they are much less likely to enter welfare since welfare reform, but are no more likely to see their incomes rise above 150% of the federal poverty line than their pre-reform counterparts (Acs et al., 2005).

These patterns lead one to expect that average incomes for single parent families have risen in the wake of welfare reform, but some families lost ground. That is precisely what national data show. Poverty rates for single mother families plummeted between 1992 and 2000, falling from 35.4 to 24.7% (Blank 2002). But while poverty fell, deep poverty, the share of families with incomes below 50% of the federal poverty line, increased (Zedlewski et al., 2002). Indeed, the incomes of the poorest 20% of single mother families actually declined by 8.2% between 1995 and 1999 while the incomes of the next 4 income quintiles all increased (Primus et al., 1999).¹⁰

3.2 Effects of the earned income tax credit

The earned income tax credit (EITC) has become the largest Federal cash transfer program for low-income families. It has considerable support from both sides of the political spectrum. Many academic studies have examined its effects on labor force participation and hours of work, reduction in poverty, and marriage incentives, and have assessed the trade-off between participation rates and compliance in choosing between the EITC and transfer programs on the spending side of the budget (Holt, 2006).

3.2.1. Effects on marginal tax rates/work incentives.

The earned income credit has two opposing effects on work incentives. It encourages higher labor force participation rates among workers with children, especially single parents, by raising the relative reward to working instead of staying home. At the margin, however, it reduces work incentives in the phase-out range by raising the marginal tax rate on additional hours of work by 21.06 percentage points for workers with two children and 15.98 percentage points for workers with one child. In the phase-out range, both the income effect (a net increase in after-tax income of the recipient) and

¹⁰ There is justifiable concern that income at the bottom of the distribution is measured quite poorly in survey data and that consumption rather than income better captures the wellbeing of families. Indeed, Meyer and Sullivan (2006) find that consumption in the bottom decile among single mother families has remained stable over the past decade despite declines in reported income. Their findings suggest that under-reporting of public transfer income accounts for the apparent decline in income at the bottom of the distribution.

the substitution effect (the withdrawal of the subsidy with additional work) reduce the incentive to work. For workers with earnings in the plateau range, the EITC has no substitution effect (it leaves marginal tax rates unchanged), but the adverse income effect still applies.

Research shows, however, that on balance the EITC has increased work effort among the target population. Several studies have shown that the EITC raised labor force participation rates, especially among single mothers with children, but decreased labor force participation for second earners (Meyer and Rosenbaum, 2001a, 2001b; Eissa and Liebman, 1996; Hotz et al., 2005). By raising the earnings of one working spouse, the EITC makes it possible for some married spouses to stay home; Eissa and Hoynes (2004) find that the EITC reduces work effort among married couples, with the decline in labor force participation for wives exceeding the increased hours worked by husbands. Overall, however, the increase in single mothers' labor force participation outweighs any decrease in participation of married women (Ellwood, 2001; Hotz and Scholz, 2003). While in theory the EITC reduces hours of work for earners in the phase-out range, research finds little evidence of this effect. (Ellwood and Liebman, 2001; Hoffman and Seidman, 2003; Hotz and Scholz, 2003; Keane and Moffitt, 1996; Meyer, 2002).

None of these studies address the issue raised by traditional optimal tax theory that increased labor force participation induced by subsidies is associated with a *loss* in economic efficiency. They do clearly point however, to a positive conclusion, that the EITC raises work effort among the target population. Saez (2002), however, finds that a positive earning subsidy can be consistent with optimal tax theory if there are discontinuities in the labor market (e.g., minimum hours requirements for holding a job) that make the labor supply elasticity on the *extensive* margin (to work or not work) much larger than the elasticity on the *intensive* margin (to work another hour). This conclusion is consistent with a social welfare function that assigns continuously lower weights to an additional dollar of net transfer incomes as incomes rise, but does require there be a net marginal social benefit of transferring income to the working poor. An intuitive explanation of this result is that the additional net income to the new labor market entrant from the earnings plus the work subsidy (in excess of the transfer at zero income) exceeds the value of foregone leisure because the recipient is initially working *less* than the amount she would choose if hours could be varied continuously. Saez concludes that the EITC for single parents is consistent with optimal transfer theory, based on the empirical evidence showing much larger effects on labor force participation than on hours worked.

3.2.2. Effects on incomes of low-income families.

The EITC is credited with raising the incomes of millions of families above the poverty line. Greenstein (2005) cites Census data that show that the EITC lifted 4.4 million people out of poverty in 2003, including 2.4 million children, and that it lifts more children out of poverty than any other program. Because it is only available to families with earnings, however, the EITC provides no benefit to families with no earnings.

3.2.3. Other effects: Marriage incentives and administrative issues.

The EITC provides both marriage penalties and bonuses. In the phase-in range, if a single parent with no earnings marries a childless worker with low earnings, their marriage raises their combined EITC by increasing the credit applied to the (previously) childless worker's earnings. In the phase-out range, however, the marriage of two low-earning workers (for example, a single parent and her partner who each earn \$11,000 in 2005) reduces the EITC to which they are entitled by raising their combined earnings and pushing them into the credit's phase-out range. Some researchers have found the total dollar value of marriage penalties in the EITC to be much higher than the dollar value of marriage bonuses (Hoffman and Seidman, 2003; Holtzblatt and Rebelein, 2000; Acs and Maag, 2005), but researchers have found no evidence that the EITC has significantly affected marriage decisions (Ellwood, 2001; Dickert-Conlin and Houser, 2002).¹¹

Because it can in most cases be claimed by self-reporting on a tax form, the EITC is less costly for beneficiaries to claim than benefits (such as food stamps) that require applicants to apply in person to a program office and requires less federal resources to administer. As a result, participation rates for eligible beneficiaries, although difficult to estimate, appear to be much higher than participation rates for similar programs on the benefit side (Scholz, 1994; Government Accountability Office, 2001). But one consequence of lower costs of compliance and administration is that EITC error rates appear to be higher than error rates in other transfer programs. The most recent detailed IRS audit study of EITC compliance estimated an over-claim rate of between 27 and 32% (Internal Revenue Service, 2002). The main source of over-claims is errors about whether a taxpayer can claim a qualifying child.

With few exceptions, the optimal tax literature has little to say about costs of compliance and administration, non-participation, and improper claims (whether due to error or fraud), but for transfer programs (and taxation generally), these are highly relevant considerations.¹² A difficult trade-off exists between the goals of high participation of eligible recipients and high compliance rates and how this trade-off is resolved affects the net efficiency cost of income transfers and their effectiveness in helping the target population.

4 Evaluating external effects of subsidizing work

4.1 Long-Term Effects on Human Capital of Participants

Most women who leave welfare for work take low-wage jobs. Loprest and Zedlewski (2006) find that in 2002, the median hourly wage for women who recently left welfare was \$7.75. Women from similar backgrounds as welfare recipients but who have never

¹¹ Prior to 2001, EITC benefits began to phase out at the same income level for both unmarried and married filers. In the Economic Growth and Tax Reconciliation Act of 2001, Congress reduced marriage penalties by raising the income level at which benefits phase out for married couples compared with singles by \$1000 beginning in tax year 2003 and by \$2000 beginning in tax year 2005.

¹² Slemrod (1990) notes that the optimal tax literature models a highly idealized world with no costs of compliance and administration and discusses modifications that would be required for a theory of optimal tax systems that would incorporate the technology of tax collection. Kaplow (1990) discusses how the presence of enforcement costs and evasion affects the optimal choice among levels of enforcement, tax rates, and the size of the public sector and considers the implications of different evasion rates on taxation of different commodities.

received welfare themselves make slightly more, about \$8.15 an hour (Loprest and Zedlewski, 2006). It is not surprising that women with relatively low educational attainment, little recent labor market experience, and logistical and family-related barriers to work would have low wage rates. Many analysts are also concerned that low-wage jobs are dead-end jobs with little hope for advancement.

Research on the earnings profiles of low-wage workers and welfare leavers suggests that over time, as these women stay committed to the labor market, their wages and annual earnings rise. Indeed, Gladden and Taber (2000) report that low skilled workers' wages increase by 4-6% with each full-time year of experience, similar to the growth experienced by workers at higher skill levels. Nevertheless, it is important to remember that even with 6% annual increases, it would take a decade for a worker starting at \$8 an hour to reach the median wage of \$14.15 in 2005 (http://www.bls.gov/oes/current/oes_nat.htm). Further, as wages rise, low-wage workers in low-income families will not enjoy commensurate increases in family income because any remaining transfer benefits and work supports (like assistance paying for child care) and their EITC benefits phase out rapidly in this income range.

4.2 Welfare reform and children

Public support for transfer programs is rooted in the desire to help children who are poor through no fault of their own. Proponents of welfare reform argued that the shift from welfare to work could ultimately benefit children because long-term poverty would be reduced and working parents would serve as positive role models. Critics pointed out that working low-income parents would be under a considerable amount of stress and this could actually harm children. Further, children with working parents would require alternative childcare, and poor quality childcare can be harmful to children's cognitive, emotional, and behavioral development.

Much of what we know about how children fared under welfare reforms comes from randomized welfare reform experiments conducted in the early 1990s under waivers to the AFDC program. The evidence is mixed. In general, welfare programs that increased both employment and family income show positive benefits for children ages 11 and under (Hamilton, 2002). If family income did not rise, on average, children's outcomes did not improve. In contrast, the outcomes for teenagers may have worsened as a result of welfare reform. Analysts speculate that teens may have been given increased responsibilities for caring for their younger siblings in order to facilitate parental work (Brooks et al., 2001).

Welfare reform's impact on child well-being is not restricted to its effects on parental work and earnings; it may also influence children's living arrangements. In addition to moving welfare recipients from welfare to work, PRWORA explicitly called for reducing the share of children being raised in single parent families. Research clearly demonstrates that children living with their two married biological parents fare better on a host of indicators than children in other living arrangements (McLanahan and Sandefur, 1994) and that these advantages are not simply due to differences in the characteristics of married parents and other families.

With a few exceptions, welfare reform policies do not explicitly target children's living arrangements;¹³ however, any policy such as a sanction or a time limit that makes it harder to stay on welfare may induce single mothers to seek out shared living arrangements. Again, the research findings are mixed and vary depending on whether researchers examine female headship or marriage, whether they are examining the waiver period (mid 1990s) or the TANF era, and whether they attempt to parcel out the effects of specific welfare policies or simply conduct a pre/post reform analysis. Basic trends, however, suggest that a smaller proportion of children are living with single mothers in the post-reform period than in the pre-reform period and that this decline is significantly larger among children in low-income families—the very families most likely to be influenced by welfare reform (Acs and Nelson, 2004; Primus et al., 1999). Such evidence, although consistent with the idea that welfare reform influenced living arrangements, is far from conclusive. Indeed, the economy, the EITC, and even incarceration rates likely influenced children's living arrangements during the 1990s. Also, it is important to note that while the share of children living with single mothers decreased significantly, the share living with married parents did not increase. Instead there was an increase in the share of children living in cohabiting families, and, on average, children in cohabiting families do not fare as well as children in married parent families and may fare no better than children in single parent families.¹⁴

4.3 Public opinion

There is no question that the AFDC program was widely disliked by the public at large. Clearly, the idea of providing cash assistance without any reciprocal obligation on the part of recipients was anathema to many. Critics like Charles Murray (1995) blamed welfare for encouraging dependence and non-marital childbearing. While the criticisms of the AFDC program were sometimes overblown, clearly the incentives were at odds with contemporary values. That is why candidate Bill Clinton's 1992 pledge to "end welfare as we know it" resonated with the public.

Generally, the public draws a distinction between the poor and welfare recipients. People support the idea of helping needy families, but less than half of all Americans believe that welfare recipients actually need help (Public Agenda http://www.publicagenda.org/issues/overview.cfm?issue_type=welfare). In lieu of an open ended entitlement to low-income families, most Americans favor providing aid by helping the poor find and keep jobs and improve their labor market skills: Americans support expanding job-training programs (94%), improving public schools in low-income areas (94%), increasing subsidies for day care (85%) and housing (75%), and more tax credits for low-income workers (80%).

4.4 Proposals for reform

¹³ Family caps attempt to influence the fertility decisions of welfare recipients. Generally, larger families are eligible for larger cash grants under TANF because larger families have more mouths to feed. Family cap policies keep a family's benefits from rising if they have another child while on welfare. Under TANF, over 20 states have opted to impose family caps (Rowe and Versteeg, 2005).

¹⁴ The relative well-being of children in single parent v. cohabiting families varies depending on the age, race, and sex of the child as well as whether the cohabiting family consists of the child's two unmarried parents or one parent and that parent's current partner who is unrelated to the child.

Most current reform efforts in the income transfer area focus on improving tax benefits. Reform proposals address a number of concerns with the current structure of tax benefits, including the impacts of high marginal tax rates in the phase-out range, marriage penalties and complexity in the EITC itself. In addition, there are multiple proposals to address the complex rules for determining eligibility for child benefits. These proposals do not appear motivated by the optimal tax literature, which generally supports high marginal tax rates in the phase-out range and does not address administrative complexity or the effects of tax policy on family structure.

4.4.1 Recent tax legislation.

Recent tax legislation has partially addressed concerns about marriage penalties, compliance, and complexity. EGTRA reduced the marriage penalty in the EITC by raising the income thresholds at which benefits phase out and eliminated a source of errors on tax returns by removing in some circumstances a “tie-breaker” test requiring the higher income of two otherwise qualifying taxpayers in the same household to claim a qualifying child. The Working Families Tax Relief Act of 2004 simplified child-related benefits by providing more uniform rules for qualifying for personal exemptions, the child credit, the EITC, and head of household filer status.

4.4.2. President’s advisory panel on tax reform.

The President’s Advisory Panel on Federal Tax Reform (2005) proposed further simplification by consolidating all child-related benefits into two provisions. Child related benefits that are unrelated to earnings – the standard deduction, personal exemptions, the non-refundable portion of the child tax credit, and head of household filing status – would be replaced by a single (non-refundable) family credit that would vary by marital status (married, unmarried with dependent children, or unmarried) and an additional credit for each dependent. Work-related benefits – the EITC and the refundable portion of the child credit – would be combined into a single work credit providing about the same maximum credit as the combined EITC and child credit. The Panel considered but rejected an alternative proposal to reduce the spike in marginal tax rates in the phase-out range by making the credit universal, because of concerns about additional burdens on other workers and an increase in the number of individuals who do not pay income tax.

4.4.3. Unified child credit.

Carasso et al. (2005) propose a somewhat different way of combining child tax benefits than the Tax Reform Panel. They too would replace personal exemptions with a larger child credit and make eligibility provisions similar for different child-related benefits. They would, however, retain the refundable, earnings-related portion of the child credit and retain a separate earnings supplement (formerly the EITC). They would increase the matching rate for the earnings supplement and phase-out the benefit at a slower rate, but

the positive subsidy would apply to less earnings and the phase out would begin at a lower income than in current law.

4.4.4 Universal unified child credit (UUCC).

An alternative approach would combine all child benefits into a single tax credit that phases in with earnings and phases down above an income threshold to a flat child credit instead of to zero (Cherry and Sawicky 2000). The UUCC would set the credit to provide the same benefit for taxpayers in the 28% bracket as the current credit and personal exemption; taxpayers in high brackets would see their net benefit decline. Because the earnings-based credit phases seamlessly into the flat child benefit instead of to zero, the required marginal tax rate in the phase-out range is lower. The lower marginal rate in the phase-out range also results in reduced marriage penalties. The proposal, however, does raise total subsidy costs and so would require somewhat higher marginal rates on workers with higher incomes. A similar proposal to combine the earned income and child credits and reduce marginal tax rates to improve work incentives and reduce marriage penalties has been advanced by Ellwood and Liebman (2001).

4.4.5. Common elements.

These proposals differ in details, but their common theme is to combine, make more uniform and simplify a group of tax benefits for low-earning families with children that have evolved in a haphazard fashion over time. They all aim to maintain basic benefits for low-income families and differential benefits for families with more children. Some proposals reduce marginal tax rates and marriage penalties, albeit at a cost of either reducing benefits for some classes of beneficiary or raising marginal tax rates (all else the same) for taxpayers with higher earnings. In contrast to recent writings on optimal taxation (Kaplow, 2006; Saez 2002), there seems to be a concern with lowering marginal tax rates in the phase-out range, possibly based on a not clearly stated premise that the tax/benefit system should not excessively discourage work effort for anyone.

5 Conclusions

One can interpret optimal tax theory to imply that earnings subsidies are an inefficient way of redistributing income, although if people are constrained from varying their work hours continuously and therefore have a relatively high elasticity of response on the extensive margin (between work and non-work) compared with the intensive margin (varying hours of work), there may be a rationale for a very limited earnings subsidy (Saez, 2002; Diamond, 1980). Alternatively, Kaplow (2006) notes that a positive earnings subsidy rate in one program such as the EITC, may be rationalized as an offset to high marginal rates in other programs, although it is unlikely that the current system of multiple uncoordinated programs yields an optimal rate structure.

The conclusion of the optimal tax literature that work subsidies are usually inefficient presumes that work has no value in itself, aside from any consumption goods it might finance. If workforce participation of transfer recipients has external benefits or

if taxpayer-voters prefer that transfer recipients work, then policies that encourage work effort of recipients may be efficient or, failing that, at least the best available option for transfer policy. Kaplow (2006) notes that external benefits to working could be readily incorporated into the optimal transfer framework, but concludes that modest external benefits should not radically alter the shape of the optimal tax rate schedule. Without a clear indication of the size of these benefits or their pattern, however, including specification of the population subgroups for which work creates external benefits and the relationship between the size of the benefit and the type and intensity of work, it is difficult to draw clear conclusions.

The design of income transfers in the United States has shifted towards encouraging work, especially by low-income mothers with children. Empirical evidence suggests strongly that both welfare reform and the expansion of the EITC have increased work effort among beneficiaries. Income, including both earnings and transfers, has increased for most recipients, but the poorest of the poor may have become worse off.

Evidence on external benefits from increased work effort of recipients is mixed. New entrants after welfare reform often stay committed to the labor market and have seen their earnings rise, but it will take many years of continued sustained increases for them to achieve middle-class living standards. The rise in incomes pursuant to welfare reforms has helped young children, but outcomes for teenagers may have worsened, perhaps due to increased care-giving responsibilities for younger siblings. Fewer children are living with single parents, but more are living with cohabitating families and these children generally fare worse than children living with married parents and are not clearly better off than those in lone parent households. It is not clear how big a role reform has played in these trends.

Polling data indicate that most Americans strongly favor programs that help the poor find jobs and improve their labor market skills, but many dislike welfare programs. Including work incentives in transfer programs may be necessary to maintain political support, whatever their net effects on long-term human capital development and the well-being of children in poor families.

Optimal tax theory does not address many of the concerns motivating recent and proposed policy reforms, including external benefits of labor force participation, administrative complexity, the trade-off between high participation rates for eligible recipients and non-compliance, and political acceptability. But it does have implications for the design of benefit structures that many policy analysts ignore. In particular, optimal tax considerations remind us that we cannot evaluate a single program such as the EITC or even all tax provisions by themselves, but must consider the simultaneous effect of all tax and spending programs on net income transfers and the shape of the effective marginal tax rate schedule. The optimal tax literature also suggests that relatively high marginal rates at the lower end of the income scale may be optimal and reminds us that policies that seek to flatten out marginal rate schedules by extending phase-outs to higher income ranges or by eliminating them altogether may have too high a cost in either lost revenue or reduced transfers. We agree with Kaplow that better understanding of the implications of optimal tax theory could lead to sounder policies, but also caution that the formal analysis in the optimal tax literature still omits many of the important administrative and political considerations that policymakers must address.

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