

THE EFFECT OF WELFARE ON WORK AND MARRIAGE: A VIEW FROM THE STATES

Mickey Hepner and W. Robert Reed

Over the past 20 years, the U.S transfer system has seen a substantial shift in responsibility from the federal government to state governments. States have been given increased flexibility in setting parameters for income assistance, childcare assistance, and health care programs, among others. Despite this increased responsibility, state policymakers are often only dimly aware of the consequences of their decisions for work and family structure incentives.

This study examines the impact of state-determined tax and transfer parameters on work and family structure incentives for welfare recipients. While our work focuses on tax and transfer programs in place during July 1999 in the state of Oklahoma, we believe that the general results of our analysis are applicable elsewhere. In particular, we demonstrate how state-determined programs often have large work and family structure disincentives. While one could imagine that these disincentives represent strategic tradeoffs made in pursuit of other goals, our experience suggests that this is rarely the case: Policymakers are frequently unaware of the existence of these tradeoffs. It is our hope that this study will stimulate a greater appreciation of the potential consequences that state-determined programs have for the work and family structure decisions of public assistance recipients.

Cato Journal, Vol. 24, No. 3 (Fall 2004). Copyright © Cato Institute. All rights reserved.

Mickey Hepner is Assistant Professor of Economics at the University of Central Oklahoma, and W. Robert Reed is Professor of Economics at the University of Oklahoma. The authors thank Tom Daxon, former Director of the Oklahoma Office of State Finance (OSF), and Howard Hendrick, former Director of the Oklahoma Department of Human Services, for making themselves and their staffs available to answer questions and provide feedback on this research; Alison Fraser, Jauna Head, and Sherri Fair of OSF for initiating this study; Greg Acs, Linda Giannarelli, Bob Lerman, and seminar participants at the Urban Institute for valuable feedback on this research; and especially Ken Finegold of the Urban Institute for helpful comments on an earlier version of this study. The OSF financially supported this research.

A major obstacle in identifying the incentives and disincentives of state-determined programs lies in the fact that incentive effects can vary widely by program participation and family characteristics. We follow the previous literature in working through a small set of common scenarios meant to represent typical experiences of welfare recipients. However, this study also includes an Excel spreadsheet program that makes available to interested readers the complete set of permutations for program participation and family characteristics. This spreadsheet may be downloaded from the Web site: <http://faculty-staff.ou.edu/R/William.R.Reed-1/Papers/index.html>. Once downloaded, a user-friendly interface allows the reader to experiment with alternative combinations of program participation and family characteristics. In addition to allowing the reader to investigate scenarios that may be of special interest, it also allows one to check our claim that the incentive effects we identify are robust for a wide variety of program participation and family characteristic scenarios. We believe this represents a valuable innovation to the existing literature.

A further complication lies in accounting for the complicated interactions between programs. Our study is unique in that it is

- the most extensive study of tax and transfer programs
- the only study to include childcare subsidies
- the only study other than Acs et al. (1998) to calculate realistic childcare expense schedules based on market rates
- the only study to incorporate changes that occurred after both PRWORA¹ and SCHIP²

¹PRWORA stands for the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. This legislation abolished the Aid to Families with Dependent Children (AFDC) program and replaced it with Temporary Assistance for Needy Families (TANF). Under TANF, states receive a fixed federal grant with increased flexibility to expend the funds, along with enhanced ability to determine eligibility requirements, implement financial work incentives, and impose sanctions (U.S. House of Representatives 1998). The passage of PRWORA also changed the federal role in childcare subsidy programs. Before PRWORA, there were four major federal programs designed to provide childcare services to low-income families. Each program established its own rules for eligibility, time limits, and work requirements. PRWORA, however, incorporated all federal childcare assistance programs into the Child Care and Development Fund (CCDF), which provides funds to all 50 states plus the District of Columbia to help finance their state childcare programs. With the CCDF, states have increased discretion over the structure of their childcare assistance programs. Consequently, there is a wide disparity among the states, although all states assist some low-income families (Long et al. 1998).

²SCHIP stands for the State Children's Health Insurance Program. This program allows states to use federal funds to finance expansions of health care coverage to low-income children. Under SCHIP, states have the discretion to either expand Medicaid eligibility for low-income children, to establish a non-Medicaid health care program for low-income

- the only study to examine the incentive effects of welfare on both work and marriage.

This study first examines the impact of tax and transfer programs on work incentives, and then examines the impact on family structure incentives.

Work Incentives for a Female-Headed Household with Two Children

We begin by illustrating the work incentives for a representative family: a single mother with two preschool children, ages 1 and 3, living in Oklahoma in July of 1999. We assume that she participates in the following set of transfer programs as long as she is eligible: Temporary Assistance to Needy Families (TANF), Food Stamps, Medicaid, Earned Income Tax Credit (EITC), and Oklahoma's Day-care Subsidy Program. Each of these programs enjoys wide participation among public assistance recipients.³

Relationship between Earned Income and Total Resources

Table 1 shows this mother's total resources (i.e., the dollar value of her income and benefits net of taxes, work, and daycare expenses) for alternative wage and hours-of-work possibilities.⁴ Column 1 shows her total monthly income and benefits assuming that she does not work. Column 2 reports total income and benefits assuming that she

children who do not qualify for Medicaid, or to implement a program that combines these two options (The Centers for Medicare and Medicaid Services 2000). Of the 50 states plus the District of Columbia, 17 have expanded their Medicaid programs, 16 have opted to create a new health care program, and 18 have chosen to implement a combination of new and expanded programs (The Centers for Medicare and Medicaid Services 2002).

³U.S. House of Representatives (1998: 409) discusses participation in multiple means-tested programs. They cite unpublished data from the U.S. Census Bureau that shows that in 1995, 4.5 million households included an individual who received cash welfare assistance. Of those households, 82.6 percent included an individual who received Food Stamps, and 97.5 percent included an individual who received Medicaid. According to the Internal Revenue Service (2000), more than 15 million individuals received the EITC in 1999. Finally, every state currently offers some form of a childcare subsidy for low-income families (Long et al. 1998).

⁴Our analysis values Food Stamps benefits at their cash equivalent values. Medicaid benefits are valued at the Medicaid capitation rates. This is the commonly employed approach in the literature for valuing in-kind benefits, including Wilson and Cline (1994), Dickert, Houser, and Scholz (1994), Giannarelli and Steuerle (1995), Hoynes (1997), Dickert-Conlin and Houser (1998), and Acs et al. (1998). Additional details concerning our calculations are discussed in an extended version of this study that may be downloaded from the Web site: <http://faculty-staff.ou.edu/R/William.R.Reed-1/Papers/index.html>.

TABLE 1
INCOME AND BENEFIT CALCULATIONS FOR A FEMALE-HEADED HOUSEHOLD WITH TWO CHILDREN AND PARTICIPATION IN TANF, FOOD STAMPS, MEDICAID, EITC, AND DAYCARE SUBSIDY PROGRAM^a

	Mother's Hourly Wage					
	NW ^b	\$5.15-PT ^c	\$5.15	\$6	\$7	\$8
Monthly Work Income	0	446	893	1,040	1,213	1,387
Taxes						
Federal income taxes	0	0	0	0	0	26
State income taxes	0	1	5	8	13	19
FICA taxes	0	34	68	80	93	106
Expenses						
Total childcare costs	0	390	779	779	779	779
Childcare copay	0	0	32	68	107	150
Work expenses	0	34	67	67	67	67
Income after Taxes, Childcare Copay, and Work Expenses	0	378	720	818	934	1,019
TANF	292	129	0	0	0	0
Food Stamps	329	311	223	186	141	98
Medicaid	207	207	121	121	121	121
EITC	0	179	318	318	281	245
Total Resources	828	1,204	1,381	1,442	1,476	1,482
Effective Marginal Tax Rates (MTRs) (%)	16	60	59	80	97	93

EFFECT OF WELFARE ON WORK AND MARRIAGE

	\$9	\$10	\$11	\$12	\$13	\$14	\$15
Monthly Work Income	1,560	1,733	1,907	2,080	2,253	2,427	2,600
Taxes							
Federal income taxes	52	78	103	130	155	182	208
State income taxes	28	37	47	58	69	81	92
FICA taxes	119	133	146	159	172	186	199
Expenses							
Total childcare costs	779	779	779	779	779	779	779
Childcare copay	176	192	209	779	779	779	779
Work expenses	67	67	67	67	67	67	67
Income after Taxes, Childcare Copay, and Work Expenses	1,118	1,227	1,334	887	1,011	1,133	1,255
TANF	0	0	0	0	0	0	0
Food Stamps	48	11	0	0	0	0	0
Medicaid	121	121	121	121	0	0	0
EITC	208	171	135	98	62	26	0
Total Resources	1,495	1,529	1,590	1,106	1,073	1,158	1,255
Effective Marginal Tax Rates (MTRs) (%)	80	65	379	119	51	44	29

^aThis table calculates work incentives for a representative family consisting of a single mother with two children, ages 1 and 3. Except for NW and \$5.15-PT, all income categories assume the mother works 40 hours per week.

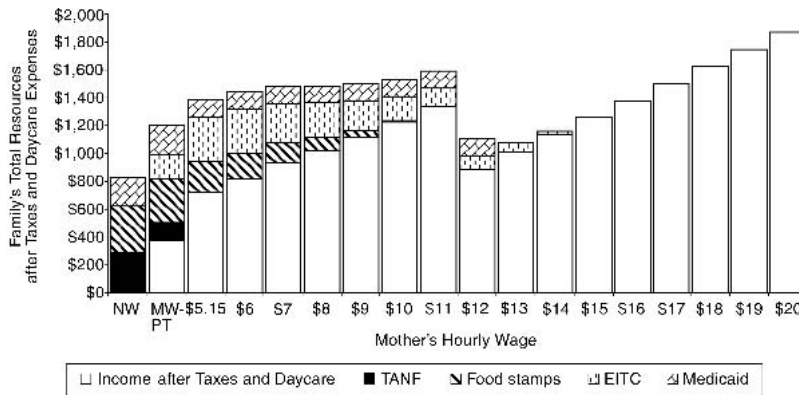
^bNW stands for mother does not work.

^c\$5.15-PT stands for mother works 20 hours per week (part-time) earning \$5.15/hour.

works 20 hours a week at a minimum-wage job (\$5.15/hour). Column 3 assumes she works full time (40 hours per week) at a minimum wage job. Subsequent columns show the impacts of working full time at increasingly higher wage rates.

Figure 1 illustrates the complex, nonlinear relationship between the mother's earned income and her corresponding total resources. The first column bar represents total income and benefits when the mother does not work. In this case, she receives monthly total resources valued at \$828, with \$292 coming from TANF, \$329 from Food Stamps, and \$207 from Medicaid. She pays no taxes and has no work expenses given her zero hours of work.

FIGURE 1
TOTAL INCOME AND BENEFITS FOR A FEMALE-HEADED
HOUSEHOLD WITH TWO CHILDREN AND PARTICIPATION IN
TANF, FOOD STAMPS, MEDICAID, EITC, AND DAYCARE
SUBSIDY PROGRAM



When she increases her work effort to 20 hours per week at a minimum wage job, she earns \$446 in income. She also begins to earn benefits of \$179 from the EITC. Out of this sum she must pay non-daycare related work expenses (estimated at \$34), FICA (\$34), and state taxes (\$1).⁵ In addition, her TANF income decreases \$163,

⁵This study assumes that non-childcare related work expenses total \$34 monthly for part-time work and \$67 for full-time work. These figures were obtained from a phone conversation one of the authors had with an analyst at the Bureau of Labor Statistics. These figures are within the range of estimates used with other studies that included work expenses: Giannarelli and Steurle (1995) \$23 for part-time work and \$35.33 for full-time work, and Hoynes (1997) \$43.33 for part-time work and \$86.67 for full-time work.

and her Food Stamp benefits drop \$18, respectively (Medicaid stays the same), yielding her total monthly income and benefits of \$1,204.

Note that by working part-time, the mother incurs monthly childcare expenses for her two children of \$390.⁶ However, Oklahoma's childcare subsidy pays these costs in full, and thus these expenses do not affect her income and benefits. Had the subsidy left some of her childcare expenses unpaid, we would have counted her copay as an additional work expense. In this way, the childcare subsidy enters the income and benefit calculation only indirectly, by reducing her work expenses.

As the mother increases her labor supply from 20 hours to 40 hours per week at the minimum wage, she earns an additional \$446, as well as further EITC benefits of \$139. However, this time she sees a much smaller increase in total monthly income and benefits. Monthly total resources increase from \$1,204 per month when working 20 hours per week, to only \$1,381 per month when working twice that much. The smaller increase is largely due to the decrease in transfer program benefits. Food Stamps decline from \$311 to \$223. Medicaid decreases from \$207 to \$121 as the parent loses eligibility for Medicaid benefits. TANF goes to 0. In addition, her taxes go up, along with her non-daycare related work expenses (now estimated to be \$67). She also starts to pay a monthly daycare copay of \$32.

Moving further right in Figure 1, we see the effect of wage increases on the mother's income and benefits, assuming she works 40 hours per week. There is relatively little reward for achieving wage gains beyond the minimum wage. Remarkably, the welfare recipient would have to earn \$15/hour (approximately \$30,000 a year assuming full-time, full-year work) before she was able to attain the same level of total resources she receives when she is working part-time (20 hours per week) at the minimum wage (\$5.15/ hour).

A striking characteristic of Figure 1 is the substantial drop in income and benefits that occurs after the mother's hourly wage increases from \$11 to \$12 dollars. This income "notch" is primarily due to Oklahoma's childcare subsidy program. We will have more to say about childcare subsidies below.

⁶Like Acs et al. (1998), we assume that childcare is purchased in discrete quantities as either part-time or full-time care. We do this because (1) a survey of state daycare centers that we conducted indicates that most facilities allow for only part-time and full-time weekly pay plans, and (2) it enables us to more accurately replicate the payment plan employed by Oklahoma's daycare subsidy program. In addition, this modeling of childcare costs allows us to make appropriate distinctions between increased earnings from working more hours as opposed to increased earnings from working at a higher wage rate.

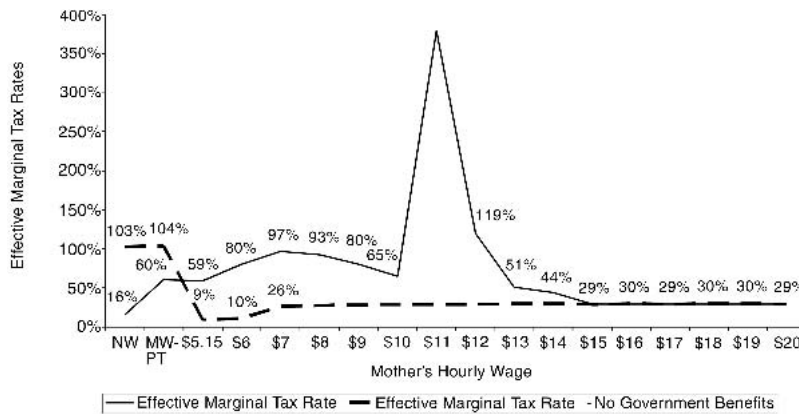
Public Assistance and Marginal Tax Rates

Figure 2 converts the total income and benefit schedule to a marginal tax rate schedule. Marginal tax rates (MTR) are calculated as

$$(1) \text{ MTR} = 1 - (\Delta \text{ in total resources})/(\Delta \text{ in earned income}).$$

Changes in total resources and earned income are calculated for adjacent columns, moving from left to right.

FIGURE 2
EFFECTIVE MARGINAL TAX RATES FOR A FEMALE-HEADED HOUSEHOLD WITH TWO CHILDREN AND PARTICIPATION IN TANF, FOOD STAMPS, MEDICAID, EITC, AND DAYCARE SUBSIDY PROGRAM



The practical value of the MTR schedule is that it allows one to gauge the impact of the combined tax and transfer programs on the returns to becoming progressively more engaged in the labor market. We can imagine participation in the labor market as a series of steps: The first step consists of moving from not working at all to working part-time (20 hours per week) at the minimum wage. The next step consists of working part-time at the minimum wage to full-time at the minimum wage. Subsequent steps consist of moving from lower-paying jobs to jobs requiring greater skills and responsibilities, with correspondingly higher wages. The MTR schedule allows us to assess the rewards to the mother of progressing on to the “next step.”

Figure 2 illustrates the combined effect of the respective tax and transfer programs (TANF, Food Stamps, Medicaid, EITC, and Child-care Subsidy Program). For a mother of two children (ages 1 and 3)

in daycare, these programs serve to facilitate initial entry into the labor market. The MTR associated with moving from not working at all to working part-time at the minimum wage is 16 percent. In other words, for every dollar of earned income over this range, the mother is able to retain an average of 84 cents after taxes and work expenses. Consequently, this represents the true net return to working. As we shall demonstrate below, the major reason for why the MTR is so low is due to the childcare subsidy program.

Additional steps are generally less rewarding. The MTR associated with moving from working part-time to working full-time at the minimum wage is 60 percent. In other words, over this range, an hour of work generates a post-tax, post-working expenses reward of \$2.06.⁷ Making the next step to a job paying \$6.00/hour rather than \$5.15/hour results in a virtually identical MTR (59 percent).

Figure 2 illustrates an interesting policy tradeoff produced by this set of tax and transfer programs. As noted above, once the mother progresses to the point of working full-time at a wage of \$6.00, she has little financial incentive to seek more rewarding employment. The MTR associated with moving from a \$6/hour to a \$7/hour job is 80 percent. It is 97 percent to subsequently move to an \$8/hour job, and 93 percent to move to a \$9/hour job. To put this in dollar terms, the total *monthly* net benefits from working full-time and moving to jobs paying progressively higher wages of \$7/hour, \$8/hour, and \$9/hour are \$34.66, \$5.20, and \$12.13, respectively. This highlights the fact that structuring transfer programs to encourage initial entry into the labor market has a cost in terms of reducing the reward from seeking higher-paying (higher-skilled) employment once the worker finds employment. This cost can arise quickly at jobs that are located relatively low on the wage distribution scale.

As a point of comparison, it is interesting to compare the incentives and disincentives of public assistance with the case of “no government benefits.” The dashed line in Figure 2 shows what the mother’s MTR would look like if she did not receive transfer program benefits. In this case, we calculate that her MTR going from no work to part-time work at the minimum wage would be 103 percent. Similarly, we calculate a MTR of 104 percent as she goes from part-time to full-time work. These high MTR’s reflect the impact of childcare expenses, assuming that the mother places her two children in a licensed daycare facility. Once she is working full-time, further increases in

⁷Calculated as the difference in monthly total resources (=\$1,382-\$1,204) divided by 86.67 hours per month.

income achieved through higher wages have a much lower MTR, as increases in income are not consumed by increased childcare costs. For the specific set of program participation/family characteristics in Figure 2, it is clear that public assistance not only allows this mother to enjoy overall greater resources, but also provides greater incentives for her to participate in the labor market up to the point where she is working full-time at the minimum wage.⁸

The Effect of Layering State Programs on Federal Programs

In order to isolate the work incentive effects of the state-determined programs, in this section we investigate the impact of adding state-determined programs upon a base set of federally determined programs. The representative family unit continues to be a female-headed household in Oklahoma with two children, ages 1 and 3, where both children attend paid daycare when the mother works. It is assumed that this mother participates in five transfer programs: EITC, Food Stamps, TANF, Medicaid, and the childcare subsidy program. The first two programs are wholly determined at the federal level, with no state discretion in setting benefit parameters. As a hypothetical starting point, Panel A of Figure 3 reports the effective MTRs as the mother progressively steps into greater participation in the labor market, assuming that the only programs she participates in are the federally determined EITC and Food Stamps.

We note that the combination of assuming that both children attend paid childcare when the mother works and that the mother does not receive childcare subsidies, implies that virtually all of her after-tax earned income up through working a full-time job at the minimum wage is dedicated to childcare expenses. Nevertheless, with Food Stamps and EITC benefits, she is able to obtain total resources of \$329 per month when she does not work, \$497 per month when she works part-time at the minimum wage, and \$620 per month when she works full-time at the minimum wage. With just the federal programs in place, the MTRs associated with initial entry into the labor market are substantial. The step from not working to working part-time at the minimum wage has a corresponding MTR of 62 percent. The step from working part-time to full-time at the minimum wage has a MTR of 72 percent. The MTR drops to 13 percent when the mother

⁸These results change little when the children are older or when the mother forgoes placing the children in paid childcare. However, one result that does change concerns the relative work incentives of public assistance versus no public assistance. If the mother does not place her children in paid childcare, then public assistance *increases* the financial barriers to participating in the labor market, and it does so substantially.

switches from a full-time job paying \$5.15/hour to one paying \$6/hour. This drop occurs because childcare expenses are not affected and EITC and Food Stamps benefits remain virtually the same. However, additional moves to higher paying employment result in substantially greater MTRs as EITC and Food Stamps benefits begin to be reduced.

Panels B, C, and D of Figure 3 illustrate the incentive effects of adding the state-determined programs (TANF, Medicaid, and the childcare subsidy program). Looking first at Panels B and C, we see that the addition of TANF and Medicaid do not affect the MTR associated with the first step into the labor market; it remains at 62 percent. In Oklahoma, the earnings from a part-time minimum wage job lie below the countable income threshold, so that TANF and Medicaid benefits are not reduced in this range. However, once the mother moves beyond this earnings threshold, the effect of adding the state-determined programs is to increase MTRs across the board. At first, the increased MTRs are due to reductions in TANF and Food Stamps. (TANF interacts with Food Stamps to cause the latter's benefits to be reduced more rapidly because TANF benefits count as income in calculating Food Stamps benefits.) Only at higher earnings levels does Medicaid contribute to the larger MTRs (the two notches at \$8/hour and \$12/hour in Panel C are due to Medicaid).

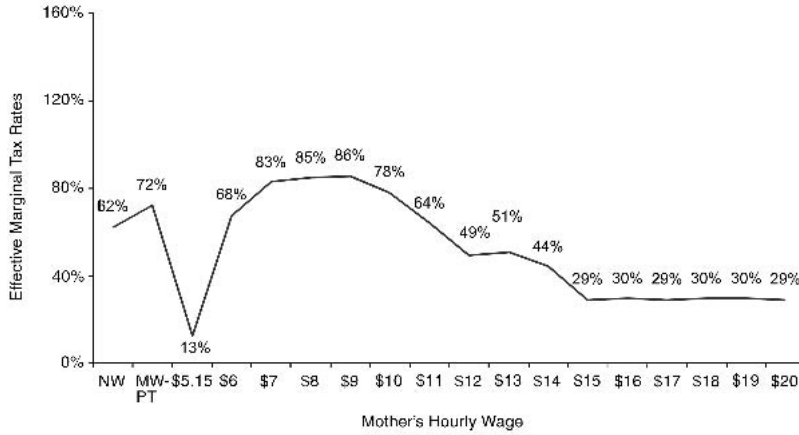
Panel D illustrates the important role that childcare subsidies can play. In Oklahoma, the childcare subsidy program serves to decrease, sometimes substantially, the MTRs at the early steps of labor market participation. For example, adding the childcare subsidy program lowers the MTR associated with moving from not working to working 20 hours/week at the minimum wage from 62 percent to 16 percent. Essentially, the childcare subsidy program serves to reduce the expenses the mother must incur as she increases her work effort, thereby reducing the MTR. Subsequent steps also see lowered MTRs. Of course, these reductions come at a cost. The cost is realized when the mother moves from full-time employment at a job paying \$11/hour to one paying \$12/hour. The associated MTR is 379 percent.

The reason for this huge notch is that the mother's copay schedule sees fairly small increments as her earnings increase, but a very large increase when she crosses that earnings threshold.⁹ Thus, Oklahoma has made the implicit decision to use the childcare subsidy program to lower MTRs at earlier stages of engagement in the labor market,

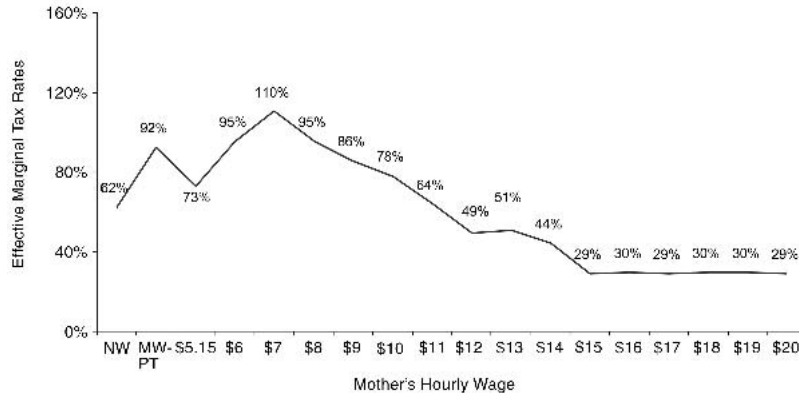
⁹The following schedule reports the mother's copay schedule in this scenario as her earnings progressively increase: NW: 0; MW-PT: 0; \$5.15: 32; \$6: 68; \$7: 107; \$8: 150; \$9: 176; \$10: 192; \$11: 209; \$12: 779.

FIGURE 3
 WORK INCENTIVE EFFECTS OF LAYERING STATE AND FEDERAL
 PROGRAMS (CHILDREN IN PAID CHILDCARE)

A. EITC AND FOOD STAMPS (WHOLLY DETERMINED AT THE FEDERAL LEVEL)



B. EITC, FOOD STAMPS + TANF



choosing to pay for that reduction by concentrating the cost at a relatively late stage of labor market engagement. The consequences of having such a steep MTR notch are not well known.

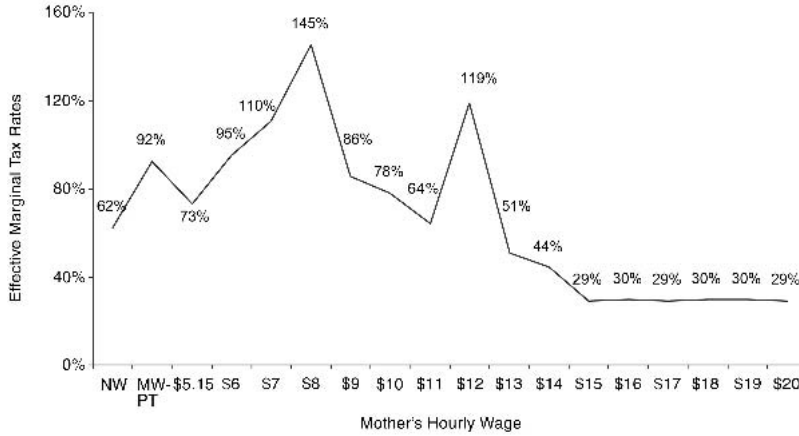
Implications for Policy Reforms

In sum, the schedule of parameters incorporated in the major state-determined programs (TANF, Medicaid, and childcare

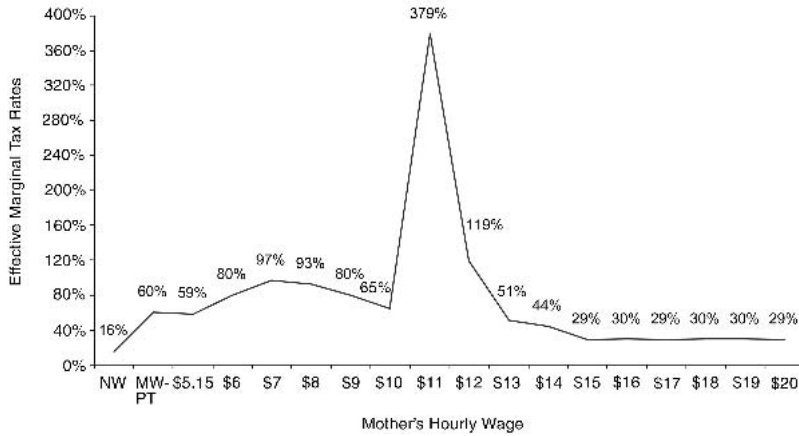
EFFECT OF WELFARE ON WORK AND MARRIAGE

FIGURE 3 (cont.)

C. EITC, FOOD STAMPS, TANF + MEDICAID



D. EITC, FOOD STAMPS, TANF, MEDICAID + CHILDCARE SUBSIDY



subsidies) has important consequences for the work incentives of welfare recipients. While this is certainly well known in general, the preceding analysis has demonstrated with specific examples how important these effects can be. What may not be well known—or as well known—is that the configuration of state-determined programs contains tradeoffs that may not be fully appreciated by policymakers.

For example, the preceding analysis indicates that Oklahoma has implicitly decided to subsidize initial participation in the labor market at the cost of reducing financial rewards from further labor market

advancement. However, this outcome was not the result of a strategic decision by Oklahoma policymakers. Many policymakers were unaware that the programs they were overseeing were forcing these tradeoffs. Analyses such as the preceding can be very helpful in pointing out these tradeoffs and in identifying alternative policy options.

One possible alternative policy option would be to restructure state parameters to raise the MTRs associated with initial labor market participation. The corresponding program savings could be used to lower the MTRs associated with further labor market advancement. If this change were coupled with strict work requirements that force recipients to participate in the labor market, the program could encourage greater human capital acquisition on the part of welfare recipients without decreasing their initial labor market participation.

There is a further benefit of this approach: Suppose TANF were restructured so that TANF benefits were reduced dollar for dollar with earned income, so that by the time the recipient was working part-time at the minimum wage she would have exited from TANF. The program savings could be used to reduce the reduction rate (expand the coverage) in Medicaid benefits. This would lower the MTR associated with subsequent labor market participation. However, it would also reduce the amount of time that the recipient was on TANF, allowing her to save her five-year TANF eligibility (as mandated by PRWORA) for future use, if necessary.

The Effect of Tax and Transfer Programs on Family Structure

Poverty rates are often linked to rates of female-headship. In turn, welfare is often listed as a possible explanatory variable for the increased trend in female-headship over time. In this section, we examine the impact of government tax and transfer programs on the incentives to form alternative family structures.

We consider the total resources available for a family unit consisting of a woman with two children ages 1 and 3, and a male who works full-time at a wage rate of \$8/hour. The male is assumed to be the father of the two children. The subsequent analysis compares total resources for the family unit as a function of the couple's relationship. The goal is to measure the extent to which public assistance creates incentives for couples to choose one type of relationship over another.

Tax and transfer programs implicitly differentiate three different categories of relationships when calculating benefits. The first category is marriage ("Married"). The second category is the state of

being unmarried and living together, where the cohabitation is reported (“Unmarried-Cohabitation Reported”). The third category combines two different relationship states: (1) the state of being unmarried and living apart, and (2) the state of being unmarried and living together—but the cohabitation is unreported. These two relationship states are not distinguished by tax and transfer programs for the purposes of calculating benefits. We presume that household expenses are generally higher for a couple living apart (maintaining two residences).¹⁰ Thus, in comparing the relative attractiveness of “living apart” and “unreported cohabitation” for this couple, our analysis assumes the latter relationship state (“Unmarried-Cohabitation Unreported”) as the third category in our comparison.

Tax and transfer programs behave differently with respect to how they treat these three categories. For example, the EITC includes the male’s income with the mother’s when calculating benefits if the couple is married. When the couple cohabits, is unmarried, and the male is the father of the children in the household, the EITC includes only the income of the highest earning parent. In contrast, the Food Stamp program includes the cohabitating male’s income whether they are married or not. The following analysis is designed to study the hypothetical scenario where a couple with two children is living together and chooses to adopt the relationship state that maximizes their total resources.¹¹ It is assumed throughout that the male works full-time at an \$8/hour job.

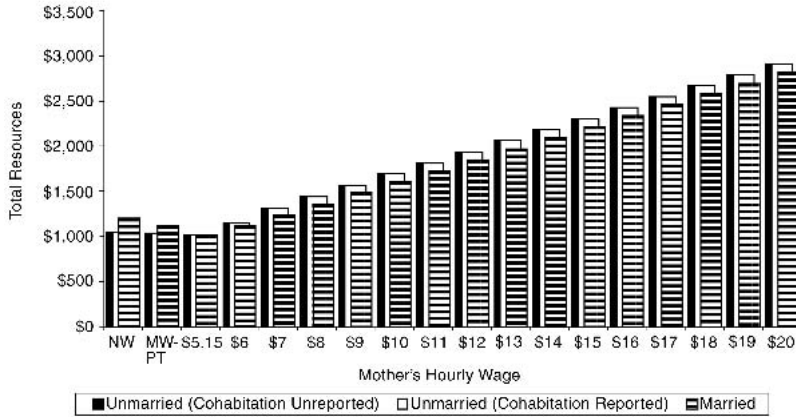
Figure 4 represents the total resources available to the family in each of the three relationship states for the case where the children are placed in paid childcare when the mother works. Panel A reports total resources given no public assistance. When the father works full-time at an \$8/hour job and the mother does not work at all, the income tax system generates a financial reward in favor of marriage: \$1,198 per month in total resources versus \$1,050 per month for the other two states. As the mother enters the workforce, family resources initially decrease for all three relationship states because work expenses (overwhelmingly childcare costs) are greater than earned income net of taxes. Family resources increase once the mother’s

¹⁰This does not necessarily have to be the case. For example, the male could live with his parents and have his household expenses paid for by others, in which case living apart could actually be cheaper.

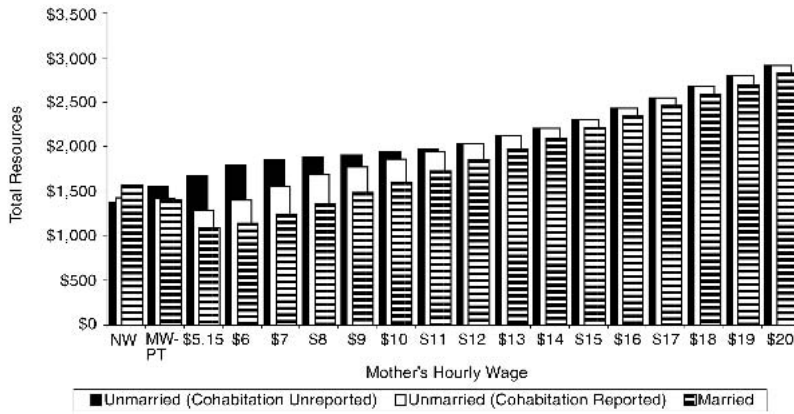
¹¹This study focuses on the total “size of the pie” available to the family unit, and not how “the pie is divided.” Distributional issues within the family unit may also affect the relative attractiveness of the respective relationship states. These issues lie beyond the purview of this study.

FIGURE 4
 MARRIAGE INCENTIVE EFFECTS OF LAYERING STATE AND
 FEDERAL PROGRAMS (CHILDREN IN PAID CHILDCARE)

A. NO PUBLIC ASSISTANCE



B. EITC + FOOD STAMPS

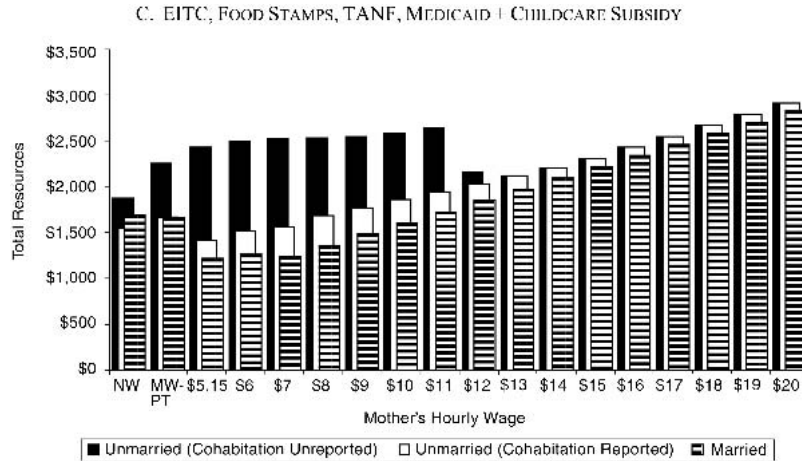


earnings surpass the full-time employment/minimum-wage level. However, the greater participation in the labor market reduces the relative attractiveness of marriage, eventually producing a financial penalty for being married (the well known two-earners' "marriage penalty").

Panel B shows the combined effects of the two federally determined programs (EITC and Food Stamps) on the resources associated with the respective relationship states. The two programs have different

EFFECT OF WELFARE ON WORK AND MARRIAGE

FIGURE 4 (cont.)



effects. The main effect of the EITC is to decrease the relative attractiveness of “Married” relative to “Unmarried-Cohabitation Reported” when the mother is working full-time at a low wage. This arises because the EITC counts both the mother’s and the male’s income if the couple is married. In contrast, only one parent’s income is counted if the couple is unmarried. As the mother enters the labor force, her earnings decrease the amount of EITC benefits the family receives when married, while increasing their EITC benefits when unmarried.

In contrast, the primary effect of the Food Stamp program is to make the state of “Unmarried-Cohabitation Unreported” much more attractive than “Unmarried-Cohabitation Reported.” As discussed previously, Food Stamps always count the unmarried, cohabitating male’s income. In Oklahoma cohabitation is self-reported. This creates an incentive for couples to not report the fact that they are living together.¹² Once the mother is working part-time at the minimum wage, “Unmarried-Cohabitation Unreported” becomes the relationship state with the greatest financial rewards; and remains so for some time as her wage increases.

Panel C of Figure 4 shows the effects of adding the state-determined

¹²The extent to which this occurs is not known, though anecdotal evidence from state caseworkers suggests that it is not infrequent in Oklahoma. In any case, one expects the prevalence of reporting failure to be positively related to its rewards, which is the subject of this analysis.

transfer programs (TANF, Medicaid, and the childcare subsidy) on top of the tax and federally determined transfer programs. The main impact of these programs with respect to family structure is to enhance the state of “Unmarried-Cohabitation Unreported.” When all the tax and transfer programs are in place, the state of “Unmarried-Cohabitation Unreported” strictly dominates the other relationship states over a wide range of labor market opportunities for the mother—from not working to working full-time at a wage of \$12/hour.

The size of the financial advantage in favor of “Unmarried-Cohabitation Unreported” can be substantial. For example, when the mother works full-time at the minimum wage and the couple is married, the family’s total resources are \$1,213 per month. When the couple is unmarried and the cohabitation is reported, total resources are \$1,413 per month. However, when the couple is unmarried and the cohabitation is unreported, total resources are \$2,431 per month—approximately twice the total resources when married. While each of the state-determined programs contributes to this situation, the childcare subsidy program is the largest contributor.

What does this analysis reveal about the impact of public assistance on family structure? Obviously, to the extent that state transfer programs count the income of the unmarried, cohabitating, adult male toward benefits, they create an incentive to not report that cohabitation. The incentive can be very large when the mother is working full-time (it exists even when the mother is not working).

One can think of the three relationship states representing progressively increasing degrees of participation of the adult male in the family. On the one end, there is marriage, with the adult male involved in a legal relationship with the mother and children. On the other end, there is living together illicitly, in violation of welfare eligibility requirements, where the adult male has no legal responsibilities to the mother and children. If the active participation of the father in the family unit is considered to be a positive influence on the well-being of the children, then public assistance may adversely impact the family by encouraging the latter relationship state. This adverse impact is magnified to the extent that public assistance also encourages the state of being unmarried and living separately.¹³

¹³These incentive effects can be thought of as substitution effects. There is a corresponding income effect that may also work in the same direction. If marriage is an inferior good for the woman, then to the degree public assistance increases the total resources of the mother in all three relationship states, it reduces her incentive to marry.

Two considerations restrict the force of the preceding arguments. First, the frequency of the relationship state “Unmarried-Cohabitation Unreported” is not well known. If couples are not willing to misrepresent their cohabitation status and state agencies are able to effectively monitor this circumstance—and thus prevent its occurrence—then this relationship option may not be frequently chosen despite its financial attractiveness.

Second, the financial advantage of “Unmarried-Cohabitation Unreported” is not nearly so great when the mother does not place her children in paid childcare. Figure 5 repeats the analysis of Figure 4, though only the beginning (“No Public Assistance” [Panel A]) and final (“EITC, Food Stamps, TANF + Medicaid” [Panel B]) transfer program combinations are presented. The relationship option “Unmarried-Cohabitation Unreported” is still financially dominant, but not nearly as dominating as when the children are placed in paid childcare.

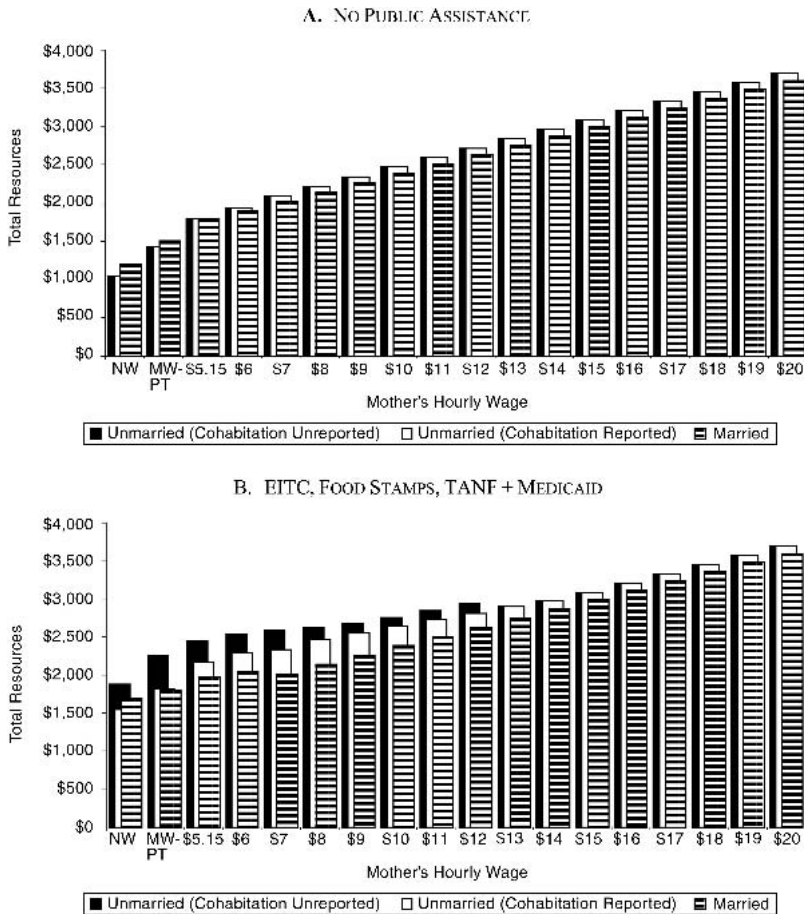
As in the case of work incentives, however, the value of the preceding analysis is that it identifies tradeoffs that may not have been recognized before. Consider Panels C and B of Figures 4 and 5, respectively. Both panels represent the final total resource schedules given the respective packages of transfer programs. Note that the relative, financial attractiveness of “Marriage” declines relative to both “Unmarried-Cohabitation Reported” and “Unmarried-Cohabitation Unreported” when the mother goes from not working to working full-time. In other words, public assistance policies that encourage or require mothers to go to work decrease the relative attractiveness of marriage. Our experience suggests that most policymakers are oblivious of this consequence.

This analysis also suggests a way to fix this problem. The previous section on work incentives raised the possibility of increasing the benefit reduction rate of TANF to lower the MTR of subsequent work effort and expand Medicaid coverage. An alternative use of these program savings would be to allow public assistance recipients to maintain their level of benefits for a period of time after they got married.

Conclusion

This study provides a comprehensive examination of the work and marriage incentives of public assistance. It focuses on the consequences of state-determined programs. Such an approach allows state policymakers to understand the tradeoffs implicit in their current program parameters. It allows them to better identify alternative

FIGURE 5
 MARRIAGE INCENTIVE EFFECTS OF LAYERING STATE AND
 FEDERAL PROGRAMS (CHILDREN NOT IN PAID CHILDCARE)



arrangements that may be more consistent with policy goals. And it discovers linkages between work and marriage incentives that may be otherwise difficult to discern.

In the case of Oklahoma, we find that state-determined programs serve to lower the marginal tax rate associated with initial entry into the labor market, at the expense of increased MTRs later. The cost of this tradeoff is that it reduces the reward from seeking higher-paying (higher-skilled) employment once the worker finds employment. Knowledge of this tradeoff can direct the policymaker to alternatives.

For example, stricter work requirements could be substituted for low, entry-level MTRs and the resulting cost savings used to reduce subsequent MTRs.

With respect to family structure incentives, we show that state-determined programs discourage the involvement of the adult male in the family unit because they make the relationship option of unmarried, unreported cohabitation (and possibly unmarried, living apart) financially attractive relative to either marriage or unmarried, reported cohabitation. The size of the differentials can be quite large, with the former category achieving total family resources twice that of marriage.

Furthermore, we demonstrate how efforts to encourage the mother's labor market participation can produce unintended marriage disincentives, since the relative financial attractiveness of marriage is reduced when the mother works. One possible solution to this problem is to allow the mother to maintain transfer program benefits for a period of time after she marries. As discussed earlier, funding for this could be generated through cost savings realized by raising entry-level MTRs.

Over the past 20 years, states have been given substantial flexibility in setting parameters for income assistance, childcare assistance, and health care programs, among others. The complicated interactions between these programs, federally determined programs, and the linkages between labor market participation and family structure incentives make it difficult to identify the many incentive effects embedded in state-determined transfer programs.

This research can also be of benefit to federal policymakers. Policies such as increases in the minimum wage and expansions of the EITC need to be evaluated within the context of existing state policies to appreciate the benefits and costs. For example, high MTRs mean that increases in the minimum wage will produce relatively small benefits for public assistance recipients. Furthermore, expansions of the EITC may produce unintended marriage disincentives (cf. Figure 4.B). It is our hope that this research has demonstrated the value of studying these effects.

References

- Acs, G.; Coe, N.; Watson, K.; and Lerman, R. (1998) *Does Work Pay? An Analysis of the Work Incentives Under TANF*. Washington: The Urban Institute.
- The Centers for Medicare and Medicaid Services (2000) *The State Children's Health Insurance Program: Preliminary Highlights of Implementation and Expansion*. Washington: U.S. Department of Health and Human Services.

- _____ (2002) *SCHIP Plan Activity Map*. Washington: U.S. Department of Health and Human Services.
- Dickert, S.; Houser, S.; and Scholz, J. K. (1994) "Taxes and the Poor: A Microsimulation Study of Implicit and Explicit Taxes." *National Tax Journal* 47 (3): 621–38.
- Dickert-Conlin, S., and Houser, S. (1998) "Taxes and Transfers: A New Look at the Marriage Penalty." *National Tax Journal* 51 (2): 175–217.
- Giannarelli, L., and Steuerle, E. (1995) "The True Tax Rates Faced by Welfare Recipients." *Proceedings of the 85th Annual Conference on Taxation*. Washington: National Tax Association.
- Hoynes, H. W. (1997) "Work, Welfare, and Family Structure: What Have We Learned?" In A. Auerbach (ed.) *Fiscal Policy: Lessons from Economic Research*, 101–46. Cambridge, Mass.: MIT Press.
- Internal Revenue Service (2000) *1999 IRS Data Book: Publication 55B*. Washington: U.S. Department of Treasury.
- Long, S.; Kirby, G.; Kurka, R.; and Waters, S. (1998) *Child Care Assistance Under Welfare Reform: Early Response by the States*. Washington: The Urban Institute.
- U.S. House of Representatives, Committee on Ways and Means (1998) *1998 Green Book: Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means*. Washington: Government Printing Office.
- Wilson, P., and Cline, P. (1994) "State Welfare Reform: Integrating Tax Credits and Income Transfers." *National Tax Journal* 47 (3): 655–76.