Philip K. Robins and Charles Michalopoulos

Using Financial Incentives to Encourage Welfare Recipients to Become Economically Self-Sufficient

I. Introduction

On August 22, 1996, President Clinton signed the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), which radically altered the structure of the welfare system in the United States. Among other things, the act replaced the Aid to Families with Dependent Children (AFDC) program, a federal entitlement, with the Temporary Assistance for Needy Families (TANF) program, a system of block grants to states.

One of the primary goals of TANF is to move welfare recipients into work and economic self-sufficiency. Although states were given much flexibility in how to achieve this goal, the federal government imposed some guidelines in the form of requirements that welfare recipients be participating in a work-related activity ("work participation requirements") and time limits on length of welfare receipt. The focus of this paper is on alternative financial incentive schemes that are being used or could be used to help states meet the work participation requirements specified by the federal legislation. In particular, the paper considers whether an earnings supplement conditioned on full-time work would encourage more people to work than the enhanced earnings disregards currently being used or tested by many states.

The remainder of the paper is organized as follows. Section II provides a background of the PRWORA legislation and describes methods that states have been using to encourage employment and economic self-sufficiency among the welfare population. The discussion focuses on various financial incentive schemes adopted by the states. Section III describes a financial incentive scheme currently not being used in the United States (but being used on an experimental basis in Canada) that conditions benefits on full-time employment. Section IV discusses how such a scheme might be implemented in the United States. Section V presents estimated effects of such a scheme based on results from a microsimulation model. Finally, Section VI summarizes the results and offers some concluding observations.

II. BACKGROUND

The federal PRWORA legislation stipulated that 25 percent of the caseload in a particular state had to be participating in work activities by fiscal year 1997. The minimum work

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participation requirement has been and will be increasing by 5 percent each year until fiscal year 2002, when it will reach 50 percent. States failing to meet the work participation requirements might not receive the full value of the federal TANF block grant. Since 1997, continued economic prosperity and substantial declines in welfare caseloads have left states with substantial TANF surpluses, and no state thus far has failed to meet the work participation requirements (U.S. Department of Health and Human Services 2000, pp. 41-3).²

The federal legislation defines an "allowable work activity" as unsubsidized employment, subsidized private sector or public sector employment, on-the-job training, job-search assistance for up to six weeks, community service programs, vocational education training for up to one year, and education for persons who have not yet completed high school. The legislation emphasizes work activities and places caps on the number of people who can be placed in educational activities. Reducing the caseload can also count toward the participation requirement.

States have considerable latitude in penalizing household heads who fail to comply with the work activity requirements. Benefits can be reduced or terminated, at state discretion. States can exempt certain people from the requirements, such as single parents of young children, but they must meet federal requirements for the percentage of their caseload participating in work activities.

The work requirement provisions of PRWORA make it crucial for states to find effective ways of moving welfare recipients into work. Many studies have shown that a significant portion of the caseload spends more than sixty months receiving benefits (the maximum time limit specified under PRWORA, although many states have opted for shorter time limits). Bane and Ellwood (1994), for example, estimate that the median length of total welfare receipt (not necessarily a continuous spell) is about fortyeight months. Pavetti (1995) estimates that 76 percent of the welfare caseload at any point in time (which is dominated by long-term recipients) will eventually receive welfare for at least sixty months. She finds that among those who received welfare for sixty months or more, 63 percent lacked a high school diploma (or GED) at the time they started collecting welfare, 39 percent had no work experience, 53 percent were under twenty-five years of age, 58 percent had never been married, and 52 percent had a child under the age of one year. Clearly, in the absence of effective actions by the states, many individuals are likely to be in financial despair when the time limit is reached.

The wide latitude given to states in implementing the 1996 legislation has led to many innovative welfare-to-work

programs throughout the country. To stimulate work by household heads, states have designed programs that provide both services and financial incentives (see, for example, U.S. General Accounting Office [1998]). Until now, most of the emphasis has been on services, particularly those, such as job-search assistance, aimed at preparing welfare recipients for immediate employment. Less attention has been paid to financial incentives, although most states have modified their benefit formulas to provide financial incentives to work. Prior to 1996 (and since 1982), a working welfare recipient lost one dollar of cash assistance for each dollar of earnings (after four months of earnings). That is, benefits were reduced on a dollar-for-dollar basis with earnings. Such a high "tax rate" provided a powerful disincentive to work. Beginning in the early 1990s, some states were granted waivers to the AFDC program rules, and several of these states introduced enhanced disregards that excluded a certain amount of earnings when calculating welfare benefits. Since PRWORA, establishment of enhanced disregards accelerated. According to Gallagher et al. (1998), between January 1992 and October 1997, forty-one states had adopted some form of enhanced disregard. Eleven of these states had established their enhanced disregard prior to August 1996. Since 1997, an additional six states have adopted enhanced disregards (U.S. Department of Health and Human Services 2000, pp. 201-3).³

Table 1 shows the earnings disregards being used by states under TANF as of January 2000. The disregards have two components: a flat component and a variable component. The flat component is a fixed dollar amount of exempt earnings. The variable component is a percentage of earnings above the flat disregard (either fixed or varying with the level of earnings, time spent on welfare, or caseload status). Prior to TANF (from 1981 to 1996), the AFDC program had a flat disregard of \$120 for the first twelve months of earnings and \$90 thereafter. The variable disregard was one-third of earnings above \$120 for the first four months of earnings and zero thereafter, thus creating a "tax" (or "benefit reduction") rate of 100 percent on earnings.⁴ After TANF, many states adopted very liberal (or enhanced) disregards. For example, Connecticut currently disregards all earnings up to the poverty level until families encounter the state welfare program's time limit, so that the effective benefit reduction rate is zero for all families with income below the poverty level. Other states, such as Nevada, disregard all earnings initially, but then phase in decreasing disregards over time. A substantial number of the states disregard between 20 and 50 percent of earnings and have a flat disregard of between \$100 and \$200 per month.

Table 1 Earnings-Disregard Policies for TANF Recipients January 2000

State	Flat Disregard ^a	Variable Disregard ^b
Alabama	0	100% for first three months, 20% thereafter
Alaska	\$150	33%, 25%, 20%, 15%, 10% for years one to five, zero thereafter
Arizona	\$90	30%
Arkansas ^c	0	68%
California	\$225	50%
Colorado	Same as pre-TANF ^d	Same as pre-TANF ^e
Connecticut	0	100% (up to poverty level)
Delaware	Same as pre-TANF ^d	Same as pre-TANF ^e
District of Columbia	\$100	50%
Florida	\$200	50%
Georgia	Same as pre-TANF ^d	Same as pre-TANF ^e
Hawaii ^f	\$250	48.8%
Idaho	0	40%
Illinois	0	67%
Indiana	Same as pre-TANF ^d	Same as pre-TANF ^e
Iowa ^g	0	60%
Kansas	\$90	40%
Kentucky	Zero for first two months, same as pre-TANF after two months ^d	100% for first two months, same as pre-TANF thereafter ^e
Louisiana	\$1,020 for first six months, \$120 thereafter	_
Maine	\$108	50%
Maryland	0	35%
Massachusetts	\$120	50%
Michigan	\$200	20%
Minnesota	0	38%
Mississippi	Zero for first six months if employed full-time within one month after first benefit or start of formal job-search activity, \$90 thereafter, \$90 otherwise	100% for first six months if employed full-time within one month after first benefit or start of formal job-search activity
Missouri	\$90	67% for first twelve months, zero thereafter
Montana	\$200 for first twenty-four months, \$100 thereafter	25% for first twenty-four months, zero thereafter
Nebraska	0	20%
Nevada	Zero for first twelve months, \$90 thereafter if monthly earnings less than \$450	100% for first three months, 50% for next nine months, 20% thereafter if monthly earnings exceed \$450
New Hampshire	0	50%
New Jersey	0	100% for first month, 50% thereafter
New Mexico	\$150	50%
New York	\$90	46%
North Carolina	0	100% for first three months, 27.5% thereafter
North Dakota	\$182 for first eight months, \$145 for next two months, \$108 for next two months if monthly earnings less than \$333.33, zero if earnings exceed \$333.33	Zero if monthly earnings less than \$333.33, 27% thereafter

Source: Adapted by authors from U.S. Department of Health and Human Services (2000, pp. 201-3).

Note: TANF is the Temporary Assistance for Needy Families program.

^aThe flat disregard is the initial amount of earnings that is disregarded when calculating benefits.

^bThe variable disregard is the percentage of earnings above the flat disregard that is disregarded when calculating benefits.

^cDisregard stipulated as 20 percent and 60 percent of remainder.

^dPre-TANF flat disregard is \$120 for first twelve months, \$90 thereafter.

^ePre-TANF variable disregard is one-third for first four months of earnings, zero thereafter.

^fDisregard stipulated as 20 percent, then \$200, then 36 percent of remainder.

gDisregard stipulated as 20 percent and 50 percent of remainder.

^hDisregards are the same as pre-TANF for families not subject to time limits. If earnings exceed poverty level, families are not eligible for benefits.

¹Formally, the variable disregard operates as "fill-the-gap budgeting," rather than as an earned income disregard.

^jWisconsin has no benefit formula. Benefits are zero for families with earnings.

Table 1
Earnings-Disregard Policies for TANF Recipients (continued)
January 2000

State	Flat Disregard ^a	Variable Disregard ^b		
Ohio	\$250	50%		
Oklahoma	\$120	50%		
Oregon	0	50%		
Pennsylvania	0	50%		
Rhode Island	\$170	50%		
South Carolina	Zero for first four months, \$100 thereafter	50% for first four months, zero thereafter		
South Dakota	\$90	20%		
Tennessee	\$150	0		
Texas	\$120	90% for first four months, zero thereafter		
Jtah	\$100	50%		
/ermont	\$150	25%		
√irginia ^h	0	Zero for income below poverty level, 100% otherwise ⁱ		
Washington	0	50%		
West Virginia	0%	Varies, averages 40%		
Wisconsin ^j	_	<u> </u>		
Wyoming	\$200 per spouse	0		

During the period in which states were incorporating financial incentives into their welfare benefit formulas, work effort among welfare recipients increased dramatically. From 1993 to 1997, employment among single mothers on welfare rose by 14 percentage points. According to Blank, Card, and Robins (2000), welfare mothers accounted for close to one-half of the rise in work by all single mothers over this period. As the authors explain, these rises are especially notable in view of the rapid decline in welfare use over the same period, which might have been expected to shift the pool of remaining welfare participants toward a more disadvantaged and less work-ready population. Even with this potential selection effect, however, work effort among welfare recipients rose.

Of course, the work effort of welfare recipients was probably affected by other changes that occurred during this period. One important change was a substantial expansion of the earned income tax credit (EITC). Blank, Card, and Robins show that while some of the rise in employment among welfare recipients is undoubtedly due to the expansion of the EITC, some of it is also probably due to the adoption of enhanced welfare disregards. A randomized experiment in Minnesota also shows that enhanced disregards encourage work (Miller et al. 2000).

Despite substantial increases in work effort among welfare recipients in recent years, most recipients remain out of work or are working too few hours to be economically

self-sufficient. In a study of welfare leavers in Michigan, Danziger (2000) finds that one reason why poverty has not declined as fast as welfare caseloads is that few former recipients are working full-time, full-year.⁵ Given the existence of time limits, it is crucial that recipients become employed full-time before exiting welfare.⁶

III. ENCOURAGING FULL-TIME WORK BY WELFARE RECIPIENTS: THE SSP PROGRAM

Few of the enhanced disregards being used by states are structured to encourage full-time work. The same may also be said for the EITC. The reason is that the financial rewards from working can be achieved at low levels of work effort as well as at high levels. For example, in 1999, the EITC for a family with two children increased with earnings at the rate of about 40 percent up to earnings of \$9,500 per year and was constant between earnings of \$9,500 and \$12,500. For incomes above \$12,500, the subsidy was phased out at the rate of about 21 percent, or until earnings reached \$30,850. Thus, a person receiving a wage of \$6 per hour would have received the maximum EITC subsidy of \$3,816 (more than \$300 per month) by working full-time (for example, forty hours per week). However, a substantial subsidy could also have been received

for part-time work, and the full subsidy can be received at part-time work if the person is earning much more than \$6 per hour. Similarly, welfare recipients in most states can benefit from enhanced disregards at less than full-time work as well as at full-time work.

The fact that full-time work is relatively infrequent among welfare recipients suggests a possible need for restructuring financial incentives to encourage more full-time work. A social experiment being conducted in the Canadian provinces of British Columbia and New Brunswick is testing a financial incentive program that rewards welfare recipients only if they work full-time. The program is called the Self-Sufficiency Project, or SSP. Under SSP, which began in late 1992, longterm, single-parent welfare recipients (those receiving benefits for at least a year)⁸ who take a full-time job within one year are eligible to receive an earnings supplement for up to three years. The SSP supplement is quite generous: in certain cases, it can double a person's earnings. For example, in New Brunswick, someone earning \$10,000 per year (say, working forty hours per week for fifty weeks at \$5 per hour) would receive supplementary payments totaling \$10,000 per year. 10 As long as the recipient continues to work full-time, the supplement can be received for up to three years. 11

The SSP supplement bears some resemblance to the negative income tax (NIT), which was proposed as an alternative to welfare more than thirty years ago. There are three main differences between SSP and the NIT, however. First, SSP only pays benefits if the recipient works full-time. Second, it is targeted to welfare recipients, whereas the NIT was envisioned as a universal program. Third, SSP is available only for a limited period (three years), whereas the NIT did not have a time limit. Because of these differences, SSP strongly encourages work, whereas the NIT was found to discourage work.

SSP has been remarkably successful during its early years of implementation. In the fifth quarter after the program began, full-time employment of the program group was more than double the full-time employment of the control group, 29 versus 14 percent (see Card and Robins [1998] and Michalopoulos et al. [2000]). SSP achieved this effect primarily by moving people from nonemployment to full-time employment, but a significant number of people also switched from part-time to full-time employment. Although SSP increased government transfer payments by about \$55 per month (net of taxes), each \$1 the government spent on additional transfer payments brought more than \$2 of increased earnings and led to more than \$3 of additional income for program group members. By way of contrast, the NIT generated less than \$1 of additional earnings for each \$1 of additional government transfer payments (Keeley et al. 1978). SSP also reduced

poverty (the fraction of the program group having family incomes below the low-income threshold) by 12 percentage points and increased spending on food, clothing, and shelter. ¹²

The early success of SSP in Canada raises the intriguing question of whether such a program would generate similar effects in the United States. Although the welfare systems in Canada and the United States are similar, differences make it difficult to draw comparisons. This has been especially true since PRWORA was enacted. As we indicated earlier, the U.S. system now imposes a time limit on welfare receipt, and there is a strong emphasis on placing recipients in work activities before the time limit is reached. The Canadian welfare system currently does not have time limits, although there is an emphasis on promoting economic self-sufficiency through work, as evidenced by the Canadian government's willingness to test SSP on a pilot basis.

In designing SSP, researchers at Manpower Demonstration Research Corporation used a microsimulation model to predict the impacts of alternative program models. As described in Greenberg et al. (1995) and Michalopoulos (1999), the model performed extremely well in predicting the eventual effects of the SSP program tested. Given its proven accurate predictive ability, we use the model in this paper to estimate the effects of an SSP-type financial incentive program in the United States. ¹³

IV. Implementing SSP in the United States

Because welfare reform efforts are already under way in the United States and because the EITC has been expanded significantly since 1994, the effects of an SSP financial incentive superimposed on the old AFDC system are not of particular policy relevance. Instead, it is of interest to examine what would have happened if states had coupled the nonfinancial components of their welfare-to-work programs with an SSP-type earnings supplement *instead of* with enhanced earnings disregards. ¹⁴

To answer this question, we use data from three welfare-to-work programs currently operating in the United States that are similar to TANF programs and are being evaluated using an experimental design. They are the Portland (Oregon) Job Opportunities and Basic Skills Training (PJOBS) Program being evaluated as part of the National Evaluation for Welfare-to-Work Strategies, the Florida Family Transition Program (FTP), and the Minnesota Family Investment Program (MFIP). The features of these three welfare-to-work programs are described in Table 2.

Table 2
Features of the Welfare-to-Work Programs in Three States

Program/ Study Period	Financial Incentives	Other Features	Employment Characteristics of Enrolled Families	
Minnesota (MFIP)/ 1994 to 1995	Benefits increased by 20% for workers and reduced by 62% with earnings	1. Mandatory employment-focused activities	1. 52% of long-term recipient full MFIP program group in urban counties employed in quarter seven ($N=676$)	
	2. Benefits may not exceed benefits for nonworkers	2. Direct child-care payments to providers	42% of long-term recipient MFIP financial incentives only program group in urban counties employed in quarter seven (N=681)	
		3. Food stamps cash-out	3. 38% of long-term recipient control group in urban counties employed in quarter seven $(N=687)$	
Florida (FTP)/ 1994 to mid-1998	1. Disregard of \$200 plus one-half of remaining earnings	1. Twenty-four-month time limit on benefits	1. 53% of program group employed in last quarter of year two $(N=1,405)$	
		2. Intensive case management	2. 45% of control group employed in last quarter of year two (N=1,410)	
		3. Enhanced employment and training services		
		4. Parental responsibility mandates		
Oregon (PJOBS)/ 1993 to mid-1996	Disregard of \$30 plus one-third of remaining earnings for first four months, no disregard after four months (pre-TANF rules)	1. Mandatory employment-focused activities that were strictly enforced	1. 46% of program group employed in last quarter of year two (N=3,529)	
	,	2. Integrated case management	2. 35% of control group employed in last quarter of year two (N=2,018)	
		3. Employment-focused		

Sources: Miller et al. (2000); Bloom et al. (2000); Scrivener et al. (1998).

Note: MFIP is the Minnesota Family Investment Program; FTP is the Family Transition Program; PJOBS is the Portland (Oregon) Job Opportunities and Basic Skills Training Program; TANF is Temporary Assistance for Needy Families.

Each program in Table 2 is similar to the TANF programs currently operating at the state level. In the table, a distinction is made between the financial incentive features of the programs and their other features. As the table indicates, over the study periods, two of the three programs (MFIP and FTP) had enhanced disregards. Furthermore, as indicated in Table 1, Oregon subsequently introduced a 50 percent variable disregard into its TANF program. All three programs use intensive case management and mandatory employment-focused services, as outlined in the TANF legislation. Florida has instituted a shorter intermediate time limit (twenty-four or

thirty-six months, depending on how job-ready a recipient is) than is required by the federal legislation. Minnesota has cashed out the food stamp program, and has turned food stamps, general assistance, and AFDC into one welfare program. Having one welfare program makes MFIP more similar to the Canadian Income Assistance program.

Follow-up survey data are available on program and control group members for each of these three programs. For PJOBS and FTP, the data are available for two years; for MFIP, they are available for three years. The microsimulation analysis uses follow-up data from the second follow-up year for all three

studies. By this time, members of the program group in each of the studies would have had some chance to respond to the TANF-like provisions they faced. Furthermore, the second follow-up year falls between 1995 and 1997 for all three studies; therefore, members of the program group probably had also responded to the expanded EITC. Using the survey data from each program and the microsimulation model, it is possible to estimate what additional effects, if any, an SSP-type program would have. In the case of Oregon and Minnesota, it is also possible to estimate how the SSP financial incentive would compare with the enhanced disregards adopted by those states in response to TANF. The post-TANF enhanced disregard currently in existence in Florida is identical to the financial incentive used in the FTP study.

If adopted in the United States, an SSP program could be operated as a separate program, as it is in Canada. Berlin (2000) suggests that if a separate program was not created, and SSP operated as part of the existing welfare system, it might make sense for the TANF time-limit clock to stop ticking for people working full-time. Thus, the time spent working full-time would not count against the sixty-month (or less) TANF time limit. Of course, an SSP program could also have a time limit (as it does in Canada), which would limit its cost. With a time limit, the spirit of the TANF legislation would be maintained, but in a separate context that uses financial incentives to encourage full-time work.

Two SSP financial incentive schemes are examined in this paper. All are patterned after the programs being tested in British Columbia and New Brunswick. To be included in the simulation, a welfare recipient must have been receiving AFDC at the end of the two-year follow-up period as well as in eleven of the twelve prior months. Once eligible, the welfare recipient qualifies for the earnings supplement if a full-time job of thirty or more hours per week paying at least the minimum wage is taken. In addition, the recipient cannot simultaneously receive welfare and the earnings supplement.

The SSP financial incentive operates by paying people who meet the full-time work requirement a supplement equal to one-half the difference between a "target" earnings level and actual earnings (see endnote 10 for the exact formula used). For the purposes of this paper, we examine the effects of programs using two target earnings levels: \$20,000 and \$30,000. ¹⁶ For the target earnings level of \$20,000, if the person works forty hours per week for fifty weeks per year and earns \$7 per hour (about the average wage in our samples), the annual SSP subsidy would be \$3,000, or roughly one-fifth of annual earnings of \$14,000. For the target earnings level of \$30,000, the SSP subsidy would be \$8,000, or roughly three-fifths of annual earnings.

Although these subsidy amounts seem substantial, it should be kept in mind that the recipient is required to give up AFDC (TANF) benefits in order to receive the subsidy. In Oregon, the average annual AFDC benefit was close to \$6,000 per year, which is substantially more than the SSP subsidy under the program with the lowest target earnings level (\$20,000) and about \$2,000 less than the SSP subsidy under the program with the highest target earnings level (\$30,000). Furthermore, people who work might also pay federal and state income taxes, which further reduce the government costs of the program. However, people who work qualify for the EITC and some people who would have left AFDC (TANF) without being offered the SSP financial incentive will receive subsidies.

The chart shows, for the three sites, the net weekly income by weekly work effort for a single mother of two earning \$8 per hour under SSP programs with a \$20,000 and \$30,000 target earnings level. For reference, net weekly income is also shown under the traditional AFDC earnings disregard (\$120 per month disregarded, taxed at the rate of 100 percent thereafter) and the post-TANF earnings disregards adopted by states (a 50 percent variable disregard in Oregon, the same \$200 flat and 50 percent variable disregards as those used in the experimental FTP program in Florida, and a 38 percent variable disregard in Minnesota that differed from the disregard used in the experimental MFIP program). ¹⁷

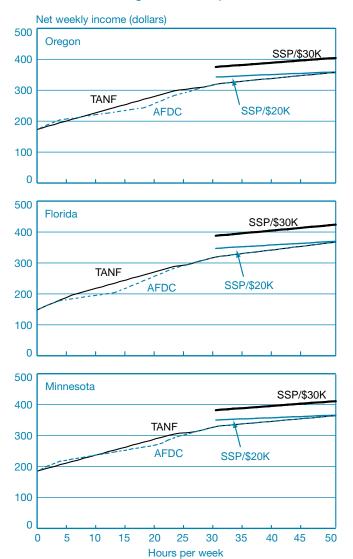
The three panels of the chart illustrate how the traditional AFDC earnings disregards provide little incentive for welfare recipients to work. As shown in the top panel, for example, net weekly income in Oregon is relatively constant, between four and eighteen hours of work per week for a mother of two who earns \$8 per hour. This is the range over which earnings have exceeded the AFDC flat disregard (\$120 per month) and are deducted dollar-for-dollar from the AFDC benefit.

The post-TANF enhanced earnings disregards adopted by the states improve the financial incentives to work parttime, but leave the financial incentives to work full-time pretty much unchanged. In contrast, SSP does not provide an incentive to work less than thirty hours per week but substantially increases the incentive to work thirty or more hours. This is especially true of the SSP program simulated with a \$30,000 target level.

For each of the SSP programs simulated, we report effects (or changes) that would occur as a result of the SSP program on annual labor force outcomes (full-time and part-time employment, hours of work, and earnings), welfare outcomes (receipt of AFDC, food stamps, and SSP), and various components of net income (AFDC, food stamps, EITC, SSP, and income taxes). For comparison, estimated effects on these outcomes of the TANF earnings disregards are also reported. It is important to note that these effects are *for the chosen sample*. Namely, these are effects for people

who were receiving AFDC for almost the entire second year of the follow-up period—that is, sample members who would be eligible for the SSP supplement at the end of the second year of follow-up according to how the program operates in Canada. In general, the effects of changes in

Budget Constraints under Alternative Financial Incentive Schemes: Single Mother with Two Children and Wage Rate of \$8 per Hour



Source: Robins, Michalopoulos, and Pan (2000).

Note: SSP is the Self-Sufficiency Project (a Canadian program); TANF is Temporary Assistance for Needy Families; AFDC is Aid to Families with Dependent Children.

TANF earnings disregards for the full welfare population will differ from their effects for the simulation samples because the full welfare population includes people who received welfare for shorter periods of time.

The characteristics of the three welfare-to-work samples are presented in Table 3. The first three columns show the average characteristics of all people who were randomly assigned to the program group in each site. The latter three columns show the characteristics of the samples used in the simulations. The simulation samples have fewer people than the program groups because they were limited to people who were receiving AFDC at the end of the second year of follow-up and had been receiving AFDC for eleven of the twelve months prior to the end of the second year. This sample has real-world relevance because an SSP-type financial incentive offered in the United States would most likely be offered only to those people still receiving TANF benefits at the time the SSP program would be introduced.

Almost all families in the program groups are headed by never-married women. In Oregon, about two-fifths were never married at the beginning of the follow-up period; in Florida, three fifths were never married; in Minnesota, about two-thirds were never married. The average mother was about thirty years old and more than two-thirds had children less than six years of age. In Oregon, about one-quarter were black; in Florida, more than half were black; and in Minnesota, about two-fifths were black. Roughly one-third of the sample lacked a high-school diploma or a GED and roughly one-third of the sample received AFDC as a child. At the start of the follow-up period, just over 10 percent of the samples worked, with only a small fraction working full-time.

In the year prior to the start of the welfare-to-work program, between one-fourth and two-fifths of the mothers were employed. Thus, many of these mothers had some sort of work experience. In Oregon and Florida, about half of the program group received AFDC or food stamps the full year, while in Minnesota more than three-quarters received AFDC or food stamps the full year. The Minnesota sample is somewhat more disadvantaged than the Oregon and Florida samples because it includes only long-term recipients from urban counties. These are sample members who had been on AFDC for at least twenty-four of the thirty-six months prior to random assignment, and it is the group that was most affected by the Minnesota program (Miller et al. 2000).

Each of the experimental welfare-to-work programs significantly increased employment (Bloom et al. 2000; Miller et al. 2000; Scrivener et al. 1998). ¹⁹ Table 4 shows selected effects of each of these programs, measured as differences

Table 3 Characteristics of Program Group Members in Three Welfare-to-Work Programs

	All Pr	ogram Group M	1embers	Program Group Members in Simulation Samples			
Characteristic	Oregon (1)	Florida (2)	Minnesota (3)	Oregon (4)	Florida (5)	Minnesota (6)	
Characteristic at baseline							
Percentage female	94.9	99.0	99.7	98.7	100.0	100.0	
Percentage married, living with spouse	2.7	0.7	0.3	1.3	0.0	0.0	
Percentage never married	42.7	57.9	69.9	53.2	69.2	68.9	
Age	31.6	28.9	29.0	32.6	29.3	29.8	
Percentage with child under age six	65.1	70.8	72.4	70.1	74.6	70.4	
Percentage black	27.4	56.2	39.2	38.2	73.8	44.6	
Percentage white	62.7	42.4	47.8	55.3	26.2	42.7	
Highest grade completed	11.2	11.1	11.5	11.0	11.0	11.5	
Percentage with high-school diploma or GED	67.2	57.9	65.8	55.8	49.2	65.3	
Percentage receiving AFDC as a child	24.7	19.8	37.9	31.3	31.7	39.9	
More than five years	13.9	13.9	25.1	14.9	21.7	27.8	
Less than five years	10.9	6.0	12.8	16.4	10.0	12.1	
Percentage employed	12.9	11.7	11.1	6.5	10.8	9.2	
Full-time (more than thirty hours per week)	1.7	4.8	3.5	1.3	6.2	2.8	
Part-time (less than thirty hours per week)	11.2	6.9	7.6	5.2	4.6	6.4	
Characteristic in year prior to baseline							
Percentage employed	39.9	42.1	30.1	23.4	27.7	27.8	
Months receiving AFDC	8.0	8.1	10.6	9.6	10.3	10.7	
Months receiving food stamps	8.5	9.2	10.4	10.0	11.1	10.5	
Months receiving either AFDC or food stamps	9.1	9.4	10.6	10.4	11.2	10.7	
Percentage receiving AFDC in every month	45.1	48.8	75.5	66.2	71.2	79.0	
Percentage receiving food stamps in every month	53.5	60.9	72.0	75.3	78.8	75.8	
Percentage receiving either AFDC or food stamps in every month	58.2	65.2	75.5	80.5	86.4	79.0	
Characteristic during follow-up period							
Percentage employed	65.3	75.6	66.1	26.0	48.5	61.6	
Full-time (more than thirty hours per week)	17.5	21.4	11.0	0.0	3.0	2.7	
Part-time (less than thirty hours per week)	47.8	54.2	55.1	26.0	45.5	58.9	
Total hours worked	652	818	607	51	252	442	
Earnings	\$4,882	\$4,740	\$4,714	\$295	\$1,135	\$3,015	
Average hourly wage	\$7.41	\$6.49	\$7.57	\$6.54	\$4.45	\$6.98	
Sample size	297	299	372	77	66	219	

Source: Manpower Demonstration Research Corporation calculations using baseline information forms and two-year client survey data from the Portland (Oregon) Job Opportunities and Basic Skills Training Program evaluation, two-year client survey data from the Florida Family Transition Program evaluation, thirty-six-month client survey data from the Minnesota Family Investment Program evaluation, and unemployment insurance earnings records and public assistance benefit records data from Oregon, Florida, and Minnesota.

Note: The simulation samples include program group members who were not living with a spouse or partner at the time of the follow-up interview and who received Aid to Families with Dependent Children (AFDC) in the twenty-fourth follow-up month and in at least eleven of the twelve months prior to that.

Table 4
Effects on Employment and Earnings in the Oregon, Florida, and Minnesota Studies

Outcome	Oregon (1)	Florida (2)	Minnesota (3)
Percentage ever employed			
Quarter 4	7.1***	4.5***	11.7***
Quarter 5	9.0***	4.3**	15.0***
Quarter 6	11.1***	5.9***	17.4***
Earnings			
Quarter 4	\$191***	\$90**	\$150**
Quarter 5	\$201***	\$104**	\$235***
Quarter 6	\$267***	\$150***	\$264***
Sample size ^a	5,547	2,815	1,363

Sources: The Oregon data are from Scrivener et al. (1998); the Florida data are from Bloom et al. (2000); the Minnesota data are from Miller et al. (2000).

Notes: The Minnesota data are for long-term recipients in urban counties. The Minnesota study defined long-time receipt as two years or more in the prior three years. Random assignment dates were: Oregon, February 1993-December 1994; Florida, May 1994-October 1996; Minnesota, April-December 1994.

Following the Oregon and Minnesota studies, Quarter 1 is defined as the calendar quarter in which random assignment falls. In the Florida study, Quarter 1 was defined as the quarter after the calendar quarter in which random assignment fell. Quarter 4 in the table therefore corresponds to Quarter 3 in Bloom et al. (2000).

Effects are measured as differences between outcomes for program and control groups. A two-tailed *t*-test was used to assess the statistical signifiance of differences between outcomes for program and control group members. Rounding may cause slight discrepancies in sums and differences.

^aSample sizes differ from those in Table 2. Sample sizes include program and control group members who responded or did not respond to the follow-up survey.

- *** Statistically significant at the 1 percent level.
- ** Statistically significant at the 5 percent level.

between outcomes for program and control group families. Because the welfare-to-work programs had already successfully increased employment, adding the SSP financial incentive may generate smaller increases in employment than if the SSP program was superimposed on the old AFDC system. A similar argument can be made for the EITC. In Canada, SSP was introduced in an environment without an EITC-type program. Hence, some of SSP's effects in Canada may have already occurred for the types of welfare recipients who responded to the EITC in the United States. When interpreting the effects of the SSP program in the United States, therefore, one should keep in mind that many of the people who would have

responded to SSP by finding full-time employment may already have responded to either the EITC or the welfare-to-work program.

Columns 4-6 of Table 3 indicate that the simulation samples (those who were on AFDC at the end of the second year of follow-up and were on AFDC for at least eleven of the twelve prior months) are somewhat more disadvantaged than the full program groups. They are less likely to have a high-school diploma (although not by very much in Minnesota), they are less likely to have worked in the year prior to random assignment, they are much less likely to have worked during the follow-up period, and their average wages are lower.

V. SIMULATION RESULTS

Estimated Effects of the TANF Earnings Disregards and SSP

Table 5 reports the simulated outcomes under the AFDC disregard in the three samples. ²⁰ These outcomes include effects of all features of the experimental welfare-to-work programs except for the enhanced disregards. About one-fifth of the Oregon sample is employed and about one-half of the Florida and Minnesota samples are employed. Most of the employment is part-time, with few sample members employed full-time. This, of course, partly reflects the fact that for many welfare recipients full-time employment would make them ineligible for benefits.

Table 6 reports estimated effects of the TANF earnings disregards and the two SSP programs for each of the three samples. The first column for each sample (columns 1, 4, and 7) shows the estimated effect of the TANF earnings disregard used in the state. Each effect is measured relative to the pre-TANF AFDC flat earnings disregard of \$120. The next two columns for each sample (columns 2-3, 5-6, and 8-9) show the estimated effects of the two SSP-type financial incentive programs.

In Oregon, column 1 illustrates strikingly how variable earnings disregards currently being used by many states may be quite successful in moving welfare recipients to work, yet at the same time might not succeed in moving recipients to economic self-sufficiency. The TANF earnings disregard currently used in Oregon is estimated to have increased employment considerably among long-term recipients (recall that the simulation selects program group members in the study who were still on AFDC in the last month of the second year of

follow-up and in at least eleven of twelve prior months). The 50 percent earnings disregard is estimated to have increased employment by just over 23 percentage points. All of this employment, however, is part-time.

Comparing columns 2 and 3 with column 1 provides an estimate of what would have happened if Oregon had instituted an SSP-type financial incentive instead of a 50 percent earnings disregard. Unlike the 50 percent earnings disregard, the SSP-type financial incentive programs increase full-time employment. Furthermore, for both SSP-type programs, they do so without any net increase in cash transfers from the government. An SSP program with target earnings of \$20,000 would increase the full-time employment rate by 5.2 percentage points, annual earnings by \$406, and net annual

Table 5
Annual Outcomes under the AFDC Disregard for the Simulation Samples

	Oregon (1)	Florida (2)	Minnesota (3)
Labor force outcomes			
Employment (percent)	22.1	45.5	51.6
Full-time employment (percent)	0.0	3.0	6.9
Part-time employment (percent)	22.1	42.4	44.8
Hours of work	51	227	379
Earnings (dollars)	299	1,027	2,725
Welfare outcomes (percent)			
AFDC receipt	100.0	95.5	99.1
Food stamp receipt	96.1	97.0	NA
SSP receipt	0.0	0.0	0.0
Income outcomes (dollars)			
AFDC	5,879	3,715	8,753
Food stamps	3,797	4,447	NA
EITC	97	388	858
SSP	0	0	0
Taxes	23	79	250
Net government assistance ^a	9,749	8,471	9,361
Net income ^b	10,048	9,498	12,085

Source: Manpower Demonstration Research Corporation simulation model, using data from the Oregon, Florida, and Minnesota welfare-to-work programs.

Note: AFDC is Aid to Families with Dependent Children; SSP is the Self-Sufficiency Project (a Canadian program); EITC is the earned income tax credit; TANF is Temporary Assistance for Needy Families.

income by \$261 (column 2). All of this occurs while net cash transfer payments from the government to recipients decrease by \$146. An SSP program with target earnings of \$30,000 would increase the full-time employment rate by 10.4 percentage points, annual earnings by \$884, and net annual income by \$946, without significantly increasing the amount of cash transfers to recipients by a statistically significant amount (column 3).

Despite their sizable effects on full-time employment, the SSP-type programs do not generate nearly as much employment (either full- or part-time) in Oregon as the TANF earnings disregard does. The SSP program with target earnings of \$30,000 would increase employment by 6.5 percentage points and the SSP program with target earnings of \$20,000 would increase employment by only 1.3 percentage points. Nonetheless, the SSP-type incentives are estimated to reduce AFDC and food stamp payments substantially. Such reductions are possible because many of those who are estimated to go from part-time to full-time work when offered an SSP supplement are people working very few hours and receiving practically their full welfare grant amount.

These results imply that an SSP program as generous as the ones tested in Canada would modestly increase employment and income among this group of persons in the Oregon welfare-to-work program at no additional cost to the government. Full-time employment would have increased by a somewhat greater amount. For the more generous SSP-type program, net family income would increase by almost three times the estimated increase generated by the TANF earnings disregard. It is important to emphasize that these effects are those *in addition* to the effects already generated by the expanded EITC. Without the EITC, the effects of SSP and the TANF disregard might have been substantially larger.

Thus, in the present welfare environment, if the policy objective is to increase full-time employment and income without any additional cost to the government, our results suggest that a moderately generous SSP program could be somewhat more effective than the enhanced disregard actually adopted by Oregon under its TANF program.

Simulation results for Florida's FTP program are presented in columns 4-6 of Table 5. Unlike Oregon's experimental welfare-to-work program, the FTP included an enhanced disregard (\$200 flat and 50 percent variable) as part of its program. The enhanced disregard in Florida's TANF program is identical to the enhanced disregard tested in the FTP program. The estimated effects of this enhanced disregard for the simulation sample are shown in column 4 of Table 5.²¹ Columns 5 and 6 show estimated effects of the two SSP-type programs.

^aNet government assistance is TANF + food stamps + EITC + SSP - taxes.

^bNet income is net government assistance + earnings.

Table 6
Simulated Annual Effects of SSP Financial Incentives on Participants in Three Welfare-to-Work Programs Incentives Introduced after Two Years for Families Still Receiving AFDC^a

	Oregon			Florida			Minnesota		
	Effect of	of Effect of SSP		Effect of	Effect of SSP		Effect of	Effect of SSP	
	TANF Disregard ^b (1)	\$20,000 Target (2)	\$30,000 Target (3)	TANF Disregard ^c (4)	\$20,000 Target (5)	\$30,000 Target (6)	TANF Disregard ^d (7)	\$20,000 Target (8)	\$30,000 Target (9)
Labor force outcomes									
Employment (percent)	23.4***	1.3	6.5**	0.0	0.0	1.5	12.3***	0.0	0.0
Full-time employment (percent)	0.0	5.2**	10.4***	0.0	15.2***	24.2***	-0.9	13.2***	23.7***
Part-time employment (percent)	23.4***	-3.9*	-3.9*	0.0	-15.2***	-22.7***	13.2***	-13.2***	-23.7***
Hours of work	47***	66**	144***	26*	126***	240***	87***	45***	144***
Earnings (dollars)	331***	406**	884***	112	595***	1,159***	565***	295***	929***
Welfare outcomes (percent)									
TANF receipt ^e	0.0	-5.2**	-10.4***	4.6*	-13.6***	-22.7***	0.5	-2.7**	-11.0***
Food stamp receipt	0.0	-5.2**	-9.1***	3.0	-12.1***	-24.2***	NA	NA	NA
SSP receipt	0.0	5.2**	10.4***	0.0	16.7***	25.8***	0.0	17.8***	28.8***
Income outcomes (dollars)									
TANF	-31	-260**	-536***	168***	-384***	-736***	52	-493***	-1,486***
Food stamps	-64***	-170**	-312***	33	-549***	-1,051***	e	e	e
EITC	109***	69*	79**	57**	242***	195***	371***	-25	-227***
SSP	0	277**	1,077***	0	1,046***	2,912***	0	806***	2,747***
Taxes	25***	62*	245***	9	70***	283***	14	96***	443***
Net government assistance ^f	-11	-146**	62	249**	286**	1,037***	409***	193***	591***
Net income ^g	320***	261**	946***	361***	881***	2,196***	974***	488***	1,520***

Source: Manpower Demonstration Research Corporation simulation model, using data from Oregon, Florida, and Minnesota welfare-to-work programs.

Note: SSP is the Self-Sufficiency Project (a Canadian program); AFDC is Aid to Families with Dependent Children; TANF is Temporary Assistance for Needy Families; EITC is the earned income tax credit.

^gNet income is net government assistance + earnings.

^aEffects are changes relative to outcomes under the welfare-to-work program with a flat earnings disregard of \$120 per month and a child support disregard of \$50 per month (the pre-TANF disregard).

^bOregon's TANF program has a 50 percent variable earnings disregard.

^cFlorida's TANF program has a \$200 flat disregard and a 50 percent variable disregard.

^dMinnesota's TANF program has a 38 percent variable disregard.

^eMinnesota's TANF benefit includes the cash value of food stamps.

^fNet government assistance is TANF + food stamps + EITC + SSP - taxes.

^{***} Statistically significant at the 1 percent level.

^{**} Statistically significant at the 5 percent level.

^{*} Statistically significant at the 10 percent level.

Column 4 shows that the simulation predicts no changes in employment from the FTP (TANF) earnings disregard. Hours of work are estimated to increase slightly, but the incentive does not induce anyone to start working, nor does it induce anyone to switch from part-time to full-time work. Furthermore, the FTP financial incentive is estimated to increase the welfare caseload. The FTP financial incentive does increase annual net income, but much of this increase (more than two-thirds) comes from an increase in government spending.

Both of the SSP programs would have substantially increased full-time employment, according to the simulation model. Under the less generous SSP program (target earnings of \$20,000), full-time employment would have risen by just over 15 percentage points. Under the more generous SSP program (target earnings of \$30,000), full-time employment would have risen by just over 24 percentage points. For the less generous SSP program, all of the increase in full-time employment is estimated to be the result of people switching from part-time to full-time work, with no net increase in overall employment. For the more generous SSP program, nearly all of the increase in full-time employment is estimated to be the result of people switching from part-time to full-time work, with only a 1.5 percentage point increase in overall employment. The SSP programs would have increased annual hours of work by between 126 and 240 hours and annual earnings by between \$595 and \$1,159. The less generous SSP program would have increased net family income by \$881, at a net cost to the government of \$286. The more generous SSP program would have increased net family income by more than \$2,000 (which represents more than a 20 percent increase), at a net cost to the government of just over \$1,000.

The less generous SSP program costs about the same as the enhanced disregard of the FTP program, although the sources of costs are different for the two strategies (the SSP induces greater decreases in welfare payments and more taxes, but adds EITC costs plus SSP supplementary payment costs). However, SSP more than doubles the effect on family income, primarily because it induces a substantial amount of full-time employment. Overall, then, the main difference between SSP and the enhanced disregard in the FTP is the greater full-time employment associated with the SSP program. Thus, our simulation model predicts that many of the people still in the FTP and working part-time because of the EITC and the nonfinancial components of the FTP would have been induced to work full-time under an SSP program that conditioned benefits on full-time employment.

Simulation results for Minnesota's MFIP program are given in columns 7-9 of Table 6. Column 7 presents the estimated effects of Minnesota's earnings disregard under TANF. As

indicated earlier, Minnesota implemented an enhanced disregard that was slightly different from the one used in the experimental MFIP programs. The earnings disregard currently used in the Minnesota TANF program is a 38 percent variable disregard with no flat disregard.

According to column 7, the simulation model predicts that the TANF earnings disregard increased part-time employment for our sample, but had virtually no effect on full-time employment. With the TANF financial incentive, overall employment is estimated to be 12.3 percentage points higher, annual hours of work eighty-seven hours higher, and annual earnings \$565 higher than if there had been no enhanced earnings disregard. The simulation model predicts that the TANF enhanced earnings disregard has virtually no effect on welfare receipt for our sample. Net government costs are about \$400 higher and net family income is close to \$1,000 higher because of the enhanced earnings disregard.

Similar to the Florida sample, the Minnesota simulations predict that the SSP programs would not increase employment, but would cause a substantial number of people to switch from part-time to full-time work (columns 8 and 9). Under the less generous SSP program (\$20,000 target), full-time employment would increase by just over 13 percentage points. Under the more generous SSP program (\$30,000 target), full-time employment would increase by almost 24 percentage points. For the less generous SSP program, net government assistance would rise by \$193 and net family income would increase by more than twice that amount. For the more generous SSP program, net government cost would increase by \$591 per person, while annual net family income would again rise by more than twice that amount.

Effects of the EITC

It is important to emphasize that all effects reported in this paper are *in addition* to changes already resulting from the EITC. To the extent that the EITC caused large employment gains, the effects of enhanced earnings disregards or of an SSP-type financial incentive may be reduced because those who are most apt to respond to financial incentives will already be working in response to the EITC.

Table 7 shows the effects on labor force outcomes, welfare outcomes, and family income of taking away the EITC from the study samples. The table shows that much of the employment observed in the study samples was indeed generated by the EITC. If there had been no EITC, the employment rate would have been 12 percentage points lower in Oregon, 11 percentage

Table 7
Simulated Annual Effects of Taking Away the EITC

	Oregon		Flor	ida	Minnesota		
	Outcomes under AFDC Disregard ^a (1)	Effect of Taking Away EITC (2)	Outcomes under AFDC Disregard ^a (3)	Effect of Taking Away EITC (4)	Outcomes under AFDC Disregard ^a (5)	Effect of Taking Away EITC (6)	
Labor force outcomes							
Employment (percent)	22.1	-11.7***	45.5	-10.6***	51.6	-7.3***	
Full-time employment (percent)	0.0	0.0	3.0	-1.5	6.9	0.9	
Part-time employment (percent)	22.1	-11.7***	42.4	-9.1**	44.8	-8.2***	
Hours of work	51	-19***	227	-73***	379	-63***	
Earnings (dollars)	299	-97***	1,027	-349***	2,725	-346***	
Welfare outcomes (percent)							
AFDC receipt	100.0	0.0	95.5	3.0	87.2	1.8**	
Food stamp receipt	96.1	0.0	97.0	1.5	99.1	-0.9	
Income outcomes (dollars)							
AFDC	5,879	29*	3,715	165***	5,290	440***	
Food stamps	3,797	15***	4,447	79	3,463	-44***	
EITC	EITC 97 -97***		388	-388***	858	-858***	
Taxes	23	-7***	79	-27***	250	-2	
Net government assistance ^b	9,749	-46**	8,471	-118*	9,361	-460***	
Net income ^c	10,048	-143***	9,498	-467***	12,085	-806***	

Source: Manpower Demonstration Research Corporation simulation model, using data from the Portland (Oregon) Job Opportunities and Basic Skills Training (PJOBS) Program, Florida's Family Transition Program (FTP), and the Minnesota Family Investment Program (MFIP).

Note: EITC is the earned income tax credit; AFDC is Aid to Families with Dependent Children; SSP is the Self-Sufficiency Project (a Canadian program).

Outcomes for Florida and Minnesota samples are simulated outcomes. See text for details of the simulation.

points lower in Florida, and 7 percentage points lower in Minnesota. In Oregon, the reduction represents over half of the observed employment in the sample. According to the simulations, very few persons in the study samples were combining welfare and full-time work before the EITC was taken away. Thus, taking away the EITC results in mostly a reduction in part-time employment. It is important to note that these estimated effects of the EITC are conditional on receiving welfare benefits. It is quite possible that the EITC has induced many persons to work full-time and leave welfare, but our simulations do not capture this effect because our samples only consist of persons on welfare.

VI. SUMMARY AND CONCLUSIONS

Since the enactment of the Personal Responsibility and Work Opportunity Reconciliation Act in 1996, most states have included financial incentives in their overall welfare-to-work programs. These financial incentives have taken the form of enhanced disregards that allow recipients to keep more of their welfare benefits as earnings increase. Prior to PRWORA, under the Aid to Families with Dependent Children program, benefits after the first year of earnings were reduced dollar-for-dollar with earnings. This meant that recipients faced a 100 percent "tax rate" on their earnings, which can impose a significant

 $^{^{}a}Outcomes\ are\ for\ an\ AFDC\ program\ with\ a\ flat\ earnings\ disregard\ of\ \$120\ per\ month\ and\ a\ child\ support\ disregard\ of\ \$50\ per\ month.$

^bNet government assistance is AFDC + food stamps + EITC + SSP - taxes.

^{&#}x27;Net income is net government assistance + earnings.

^{***} Statistically significant at the 1 percent level.

^{**} Statistically significant at the 5 percent level.

^{*} Statistically significant at the 10 percent level.

disincentive to work. Given the existence of time limits under PRWORA and the importance of moving welfare recipients into the workforce, most states have reduced this 100 percent tax rate through enhanced disregards. The intent of the enhanced disregards is to provide a work incentive and to ease the transition from welfare to work.

One of the problems with enhanced disregards is that they often provide only an incentive to work part-time. Faced with a sudden loss in welfare benefits when the time limit is reached, many recipients may find that part-time earnings are not enough to allow them to be economically self-sufficient. Although these families will still be eligible for the earned income tax credit, the tax credit also provides only limited incentives to work full-time.

This paper has presented results from a simulation model to examine whether an alternative form of financial incentive could increase full-time employment among long-term welfare recipients. The alternative financial incentive scheme considered is based on the Self-Sufficiency Project, an experimental program being tested in two provinces in Canada. SSP provides a direct incentive to work full-time because it conditions benefits on full-time work. The program

is being evaluated using a random assignment design, and the results thus far indicate that it is generating sizable increases in full-time employment, at little additional transfer cost to the Canadian government. Because the welfare-to-work programs under Temporary Assistance for Needy Families in the United States are different from the welfare-to-work programs in Canada, and because Canada does not have an EITC, it is not clear what additional effects an SSP-type program might have in the United States. This paper has used microsimulation analysis to predict what the effects might be if an SSP-type program was adopted in the United States.

Our results indicate that an SSP-type program in the United States—in place of the enhanced disregards currently being used—could have significantly greater effects on full-time employment for long-term welfare recipients at modest additional cost to the government. Perhaps the most attractive feature of SSP is its ability to achieve gains in family income that are as much as three times the increase in government cost. Such a high "efficiency ratio" is rarely seen in financial incentive programs. Thus, an SSP-type program in the United States may be an attractive way to ease the transition from welfare to work under a system of time-limited welfare benefits.

ENDNOTES

- 1. These are the rates for all families. The legislation stipulates much higher rates for two-parent families. In fiscal year 1999, for example, the two-parent family participation requirement was 90 percent.
- 2. Several states have failed to meet the two-parent participation rate requirement, however.
- 3. Enhanced earnings disregards are not a new policy. From 1967 until 1981, the federal AFDC program provided modest financial incentives for welfare recipients to work, in the form of a 33 percent earnings disregard. Some of the earnings disregards introduced since the early 1990s are similar to the pre-1982 disregard.
- 4. From 1967 to 1981, the AFDC program had a flat disregard of \$30 and a variable disregard of one-third throughout the duration of a welfare spell.
- 5. Danziger's research is summarized in Joint Center for Poverty Research (2000).
- 6. We emphasize the importance of full-time work purely from the standpoint of economic self-sufficiency. We realize that full-time work among single parents may have drawbacks (such as adversely affecting child development) and that a case may be made against encouraging full-time work for single parents.
- 7. The welfare system in Canada is called Income Assistance. Canada has no food stamp program, so cash benefits in Canada generally are higher than they are in the United States.
- 8. The restriction to long-term recipients is intended to minimize "entry effects" (people applying for welfare in order to receive the supplement) and "windfall effects" (benefits accruing to recipients who would have left welfare and worked full-time anyway in the absence of the earnings supplement). As indicated in Card, Robins, and Lin (1998), this provision substantially limited entry and windfall effects.
- 9. Full-time work under SSP is defined as thirty or more hours per week.
- 10. Formally, the SSP subsidy is given by $.5(E^* E)$, where E^* is "target" earnings (\$30,000 in New Brunswick and \$37,000 in British Columbia, both in Canadian dollars, when the SSP began) and E is actual earnings. The subsidy is available only to people working thirty hours per week or more, and has been adjusted upward slightly for inflation since 1992.

- 11. Because the benefits are targeted to long-term welfare recipients, there is some horizontal inequity because similar workers not on welfare have lower income. However, horizontal inequities exist for any program in which some recipients mix welfare and work.
- 12. A companion experiment, conducted on a group of new applicants for welfare in British Columbia, did not lead to any net increase in government cash transfer payments and had similar effects on employment, income, and poverty (see Michalopoulos, Robins, and Card [1999]).
- 13. For a detailed discussion of the microsimulation model, see Robins, Michalopoulos, and Pan (2000). The model incorporates the notion of welfare stigma and utilizes the economic framework developed by Moffitt (1983).
- 14. Perhaps an equally interesting question concerns the effects of an SSP-type earnings supplement program *in addition* to enhanced earnings disregards. The effects of such a policy are presented in Robins, Michalopoulos, and Pan (2000).
- 15. TANF costs would be reduced in the short run as persons shifted from TANF to the SSP. Of course, these reduced welfare costs would be offset by SSP costs. For the SSP program in Canada, the cost of the SSP slightly exceeded the reduced welfare cost for long-term recipients, but was about the same as the reduced welfare cost for new applicants (net of the additional income taxes resulting from the additional full-time work). Part of the additional SSP cost was "windfall," resulting from SSP benefits being paid to persons who would have left welfare and worked full-time anyway in the absence of the SSP-type financial incentive.
- 16. Recall that in the actual SSP programs being tested in Canada, the target earnings levels (in Canadian dollars) are \$37,000 in British Columbia and \$30,000 in New Brunswick. At an exchange rate of .75 U.S. dollars per Canadian dollar, these target earnings levels in U.S. dollars are \$27,750 and \$22,500, respectively.
- 17. Minnesota's TANF variable earnings disregard was 36 percent until October 1999, when it increased to 38 percent. The simulations presented in this paper were performed using the 38 percent disregard.
- 18. Although the effects are presented as changes in annual outcomes, the simulation model is based on weekly decisions concerning these outcomes. Hence, it is implicitly assumed that all predicted weekly changes occur for each week during the year. Although this is a

ENDNOTES (CONTINUED)

reasonable assumption given the nature of the SSP earnings supplement offer, a more comprehensive simulation model would incorporate decisions on how many weeks to work as well as how many hours to work per week. The simulations are based on an underlying economic model that assumes welfare recipients choose how much to work and whether to receive welfare in order to maximize their economic well-being. Receiving welfare is assumed to be stigmatizing. The welfare recipient is assumed to weigh the benefits of the additional income from SSP with the reduced time in activities outside of work (such as child-rearing and leisure-time activities). The parameters of the underlying economic model are taken from Moffitt (1983) and are updated to the present time. For full details on the mechanics of the simulation model and how all outcomes are calculated, see Robins, Michalopoulos, and Pan (2000).

19. Changes in employment over time for members of the program group do not necessarily represent effects of the welfare-to-work program because other changes are also occurring that affect employment. For one to measure effects validly, behavior of a randomly selected control group must also be tracked and compared with the behavior of the program group. Such an "experimental" approach to measuring program effects is being used in each of the welfare-to-work programs examined in this paper.

- 20. Because the Oregon experimental program used the AFDC disregard, these are actual mean outcomes for the Oregon sample.
- 21. These results do not represent experimental effects of the financial incentive component of Florida's FTP program. Such a program was never tested experimentally. Instead, the numbers represent the simulated effects of the FTP's enhanced earnings disregard for the simulation sample of long-term welfare recipients. Furthermore, the numbers were derived from *taking away* the financial incentive from the simulation sample. To the extent that the sample of long-term recipients would have been different if there had not been a financial incentive as part of the FTP program, the effects of offering the financial incentive will differ from the effects of taking away the financial incentive from people who were long-term recipients when the financial incentive was offered.
- 22. In results not shown here but reported in Robins, Michalopoulos, and Pan (2000), we found that the MFIP experimental earnings disregard reduced full-time employment and increased part-time employment.

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