### University of Miami Scholarly Repository

**Economics Articles and Papers** 

Economics

4-1-2008

# Are Two Carrots Better Than One? The Effects of Adding Employment Services to Financial Incentive Programs for Welfare Recipients

Philip K. Robins University of Miami, probins@miami.edu

Charles Michalopoulos

Kelly Foley

#### **Recommended** Citation

Are Two Carrots Better Than One? The Effects of Adding Employment Services to Financial Incentive Programs for Welfare Recipients. By Philip K. Robins, Charles Michalopoulos, and Kelly Foley. Vol. 61, No. 3 (April 2008), pp. 410-423.

This Article is brought to you for free and open access by the Economics at Scholarly Repository. It has been accepted for inclusion in Economics Articles and Papers by an authorized administrator of Scholarly Repository. For more information, please contact jrenaud@miami.edu.

## ARE TWO CARROTS BETTER THAN ONE? THE EFFECTS OF ADDING EMPLOYMENT SERVICES TO FINANCIAL INCENTIVE PROGRAMS FOR WELFARE RECIPIENTS

#### PHILIP K. ROBINS, CHARLES MICHALOPOULOS, and KELLY FOLEY\*

The Self-Sufficiency Project (SSP) was a social experiment conducted in two Canadian provinces during the 1990s that tested a generous financial incentive program for welfare recipients. A little-known subsidiary experiment, called SSP Plus, had a three-way design that tested the incremental effect of adding employment services to the generous financial incentive program. Employment services are viewed by many welfare analysts as an important component of an overall strategy for helping welfare recipients escape poverty and achieve stable employment. This paper presents the results of the SSP Plus experiment. Adding employment services encouraged more people to take up the earnings supplement, and it appeared to have long-term effects on full-time employment and welfare receipt. This might be because the services improved the jobs people obtained. Compared to program participants who lacked the added services, SSP Plus members had higher earnings and wage rates, and also appear to have held more sustainable jobs.

In recent years, policy-makers have been using financial incentives to encourage low-income individuals to work and become economically self-sufficient. In the United States, the largest financial incentive program is the Earned Income Tax Credit, which provided an earnings subsidy of up to about \$4,000 per year to nearly 20 million low-income individuals who worked in 2000 (Hotz and Scholz 2003). Other countries also use financial incentives to encourage low-income individuals to work (for a discussion of European programs, see Ochel 2001).

Programs targeted to low-income families on welfare also provide financial incentives in addition to other provisions aimed at encouraging work, generally in the form of "earnings disregards" that allow recipients to keep part of their welfare check when they work (Robins and Michalopoulos 2001). The distinguishing feature of financial incentive programs is that they represent the "carrot"

Industrial and Labor Relations Review, Vol. 61, No. 3 (April 2008). © by Cornell University. 0019-7939/00/6103 \$01.00

<sup>\*</sup>Philip K. Robins, the corresponding author, is Professor of Economics, University of Miami; Charles Michalopoulos is Senior Fellow at MDRC; and Kelly Foley is Ph.D. Candidate, Department of Economics, University of British Columbia. The research reported in this paper was performed under the sponsorship and support of Human Resources Development Canada. The authors thank John Greenwood of the Social Research and Demonstration Corporation and Gordon Berlin of MDRC for their continued encouragement and support.

The Self-Sufficiency Project was a social experiment funded by the Canadian federal government. The authors are bound by contract not to distribute the SSP data to other individuals. The data are currently the property of Statistics Canada, which is in the process of determining policies regarding availability of these data to other researchers. The authors will make available the programs used to generate final results. For further elaboration on SSP data issues, contact Douglas Tattrie at the Social Research and Demonstration Corporation (SRDC) at dtattrie@srdc.org.

approach to encouraging work (sometimes termed "making work pay"), in contrast to the "stick" approach, which conditions benefit receipt on fulfilling work obligations.

Perhaps the most dramatic test of financial incentives for low-income families in the past two decades is the Self-Sufficiency Project, or SSP. SSP offered a generous monthly earnings supplement for up to three years to single-parent families in British Columbia and New Brunswick, Canada, who had been on Income Assistance (IA, or welfare) for at least a year. The supplement was equal to one-half of the difference between a "target" earnings level (initially \$37,000 in British Columbia and \$30,000 in New Brunswick, in Canadian dollars) and an individual's earnings. To qualify for the earnings supplement, single parents had to leave IA, work full time (defined as working an average of at least 30) hours a week in a month), and take up the supplement within a year of when it was first offered. Because the income individuals could receive if they worked full time was much larger under SSP than under IA, the program provided a strong financial incentive to leave welfare and work full time.

SSP was studied by randomly assigning IA recipients either to a group receiving the incentive offer or to a control group. Results from the experiment indicate that SSP's financial incentive offer more than doubled full-time employment during its peak years. Results from this experiment have been reported in Card and Robins (1998), Michalopoulos, Robins, and Card (2005), Card and Robins (2005), and Card and Hyslop (2005). The final reports covering the entire follow-up period of SSP are Michalopoulos et al. (2002) and Ford et al. (2003).

While SSP had large effects on full-time employment during its peak years, these effects gradually disappeared toward the end of the program period. The absence of long-term effects has been attributed to two factors. First, in order to qualify for the supplement, program group members tended to take low-wage jobs that were inherently unstable. Second, the jobs exhibited no wage growth (see Michalopoulos et al. 2002), so that when the supplement period ended, program group members were no different from members of the control group in their earnings potential and hence exhibited similar employment behavior. Apparently, the added work experience obtained during the program period did not translate into higher wages and greater long-term employment for program group members.

The designers of SSP recognized that welfare recipients with prolonged spells of dependence on IA might face formidable barriers to finding and sustaining full-time employment. While a generous income supplement might help overcome many of these barriers, additional resources might be necessary to successfully encourage and sustain work effort. This notion was confirmed during the early stage of the SSP evaluation, when 43% of those who did not initiate supplement payments cited the inability to find a full-time job as their primary reason for not taking up the supplement offer (Lin et al. 1998). Therefore, the designers of SSP decided to test a variant of SSP called SSP Plus in which job-search and other related employment services were made available to a smaller number of program group members in New Brunswick. These employment services were in addition to any that were generally available to the control group through the community or other public agencies.

To study whether SSP Plus services would enhance the effects of the financial incentive, from November 1994 through March 1995, 892 single parents who were receiving IA and who had received IA for at least 11 of the prior 12 months in New Brunswick were randomly assigned in approximately equal numbers to three groups: (1) an SSP Regular group that was offered the SSP earnings supplement (296 families), (2) an SSP Plus group that was offered the earnings supplement plus voluntary employment services (293 families), and (3) a control group that was offered neither (303 families). The comparison of outcomes between the SSP Plus and SSP Regular groups provides an estimate of the incremental effect of the employment services. Although the design did not enable the identification of the effect of employment services without financial incentives, a great deal is known about the effects of employment services alone from dozens of

411

random assignment studies conducted over the past two decades. For example, Bloom and Michalopoulos (2001) discussed more than a dozen random assignment studies of mandatory welfare-to-work programs, and Bloom et al. (2005) discussed attempts to use services to encourage employment retention and advancement.

Previous academic publications on SSP have focused on results of the main SSP experiment rather than SSP Plus (although Zabel, Schwartz, and Donald [2006] presented results from SSP Plus that do not rely on the randomized design). In this paper, we present the results of the SSP Plus experiment. We report participation findings and examine the effects of SSP Plus on several outcomes, including full-time employment, earnings, and welfare receipt. We discuss the timing, as well as the level of the effects. We also examine the effects on family income and poverty. Our focus is on the incremental effects of SSP Plus (relative to the effects of the SSP Regular program).

#### Data

Data for the SSP evaluation were obtained from a baseline survey, three follow-up surveys conducted approximately 18, 36, and 54 months after the baseline survey, and administrative welfare and SSP program data. This paper analyzes data covering the full 54-month follow-up period of the SSP Plus experiment and uses the sample that completed the 54-month survey. Because of modest sample attrition in survey responses, the data do not include all families for the full 54 months. About 86% of the baseline sample, or 765 members, completed the 54month interview. Of those, 256 were in the SSP Plus group, 258 were in the SSP Regular group, and 251 were in the control group.<sup>1</sup>

The surveys collected detailed information on a wide variety of economic and demographic characteristics of the families. Employment and earnings histories are available for the entire 54-month period. Income Assistance histories are available for an additional year.

To help gauge the effects of SSP Plus, detailed information was collected on participation in employment services for both program groups (SSP Plus and SSP Regular) and for the control group. SSP Plus provided a specific set of services that was intended to surpass those available in the community. These included an employment plan, a résumé service, a job club, job coaching, job leads, a self-esteem workshop, and other workshops covering specific employment-related issues such as job loss or job upgrading (for further details, see Quets et al. 1999). It is important to note that SSP Plus program group members were not required to use these services. Rather, they were encouraged by program staff to use them as a benefit in addition to the financial supplement. Unlike the supplement, which could only be received if program group members worked full time within one year of random assignment, SSP Plus program group members were eligible for the services immediately following random assignment. If SSP Plus group members did not take up the supplement, they could continue to receive services for up to one year.

The added services component in SSP Plus was designed to stimulate greater program take-up and full-time employment than would occur with just the financial supplement alone. It was also hoped that the added services would lead to more sustainable jobs and would help people find new jobs if they became unemployed.

#### Service and Supplement Receipt

SSP program staff actively encouraged the use of the services provided by SSP Plus. Despite the voluntary nature of the services option, virtually all SSP Plus program group

<sup>&</sup>lt;sup>1</sup>Appendix A of Michalopoulos et al. (2003) compared effects on IA receipt and SSP supplement receipt taken from administrative records for the full sample and survey respondents for the full SSP program group and the control group. Differences in effects between survey respondents and non-respondents were not statistically significant. Likewise, differences in baseline characteristics between the two groups were generally small. A similar analysis of the potential bias from

survey non-response was not conducted for the SSP Plus sample.

		Outcome Levels	SSP Plus vs. Regular SSP		
Outcome	SSP Plus Program Group	SSP Regular Program Group	Control Group	Incremental Effect of SSP Plus	Standard Error
Ever Since Random Assignment (%)					
Received Services					
Took Part in Job-Search Program Such as Job Club or Job-Search Workshop	50.9	37.8	35.0	13.1***	(4.3)
Took Part in Life-Skills Program Such as Money Management or Parenting	12.4	12.0	11.7	0.3	(2.9)
<b>Received Counseling for Personal Problems</b>	37.0	39,4	36.5	-2.4	(4.4)
Participated in Work-Related Training or Education	23.5	25.6	25.0	-2.1	(3.7)
Participated in NB Works	9.6	10.7	9.9	-1.1	(2.7)
Took Courses toward Completion of High School Diploma, College Diploma, or University Degree		20.9	23.4	1.8	(3.6)
Received Supplement					
Received at Least One Supplement Payment	53.1	36.8	0.0	$16.3^{***}$	(3.6)

Table 1. Service and Supplement Receipt and the Incremental Effect of SSP Plus.

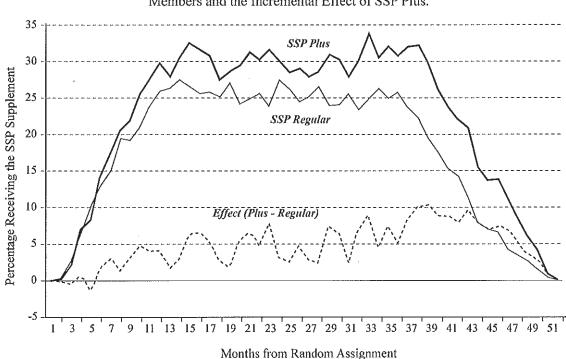
*Note:* Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

\*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level.

members completed an employment plan and more than half used the résumé service, received job coaching, and received job leads. About a quarter of the SSP Plus program group attended a job club (Quets et al. 1999; Lei and Michalopoulos 2001). Services were available both before and after full-time jobs and supplement take-up were obtained. For example, employment plans, résumé services, and job clubs were used more frequently before supplement take-up, while job coaching and job leads were used more frequently after supplement take-up.

An important consideration in assessing the added effects of the services in SSP Plus is whether SSP Plus program group members actually received greater services than SSP Regular program group members (and control group members). As shown in Table 1, over half of SSP Plus program group members received some type of job-search service (job clubs or job-search workshops), which is 13.1 percentage points higher than the rate of use of these services by SSP Regular program group members and is statistically significant.<sup>2</sup> There were no statistically significant differences between the two groups in the use of other services, such as life skills management, counseling for personal problems, work-related training or education, the New Brunswick Works program, or general education. Thus, it appears that the bulk of the additional service participation by SSP

<sup>&</sup>lt;sup>2</sup>All effects reported in this paper are regression-adjusted for 16 baseline characteristics. That is, estimates of SSP Regular and SSP Plus are the estimated coefficients that include indicators of membership in one of the two program groups and a series of baseline characteristics. Estimates of the added effects of SSP Plus services are the difference in the coefficients on the program group indicators. Baseline characteristics included in the regressions are monthly earnings and IA payments in the year before random assignment, age and age squared, and dummy variables for being female, having less than a high school education, working at baseline, responding affirmatively to a survey question about liking to go to work, expecting to be married in a year, and expecting to be working in a year. Dummy variables for missing covariates were also included in the regressions. Adjusting for the effects of covariates increases the precision of the estimated effects and controls for any differences in observable characteristics that may have occurred between groups prior to random assignment.



*Figure 1.* Receipt of Supplement by SSP Plus and Regular SSP Program Group Members and the Incremental Effect of SSP Plus.

Plus program group members was focused on finding jobs and not on enhancing human capital through increased education and training.

As Table 1 indicates, the higher level of job-search activities in the SSP Plus program group was accompanied by an increase in program take-up of similar magnitude. More than half of the SSP Plus program group received at least one supplement payment, compared to just over a third of SSP Regular program group members.

Figure 1 shows the percentage of SSP Plus and Regular program group members who received the supplement in each month after random assignment. The monthly supplement receipt rates are always lower than the take-up rates reported in Table 1 because there was movement into and out of jobs over time (during the months between jobs, takers did not receive a supplement). Initially, for both Plus and Regular program group members, supplement receipt rose as more and more individuals established eligibility. Supplement receipt peaked at the end of the one-year take-up period and then remained fairly constant for both groups for about two years. After that, supplement receipt fell as the three-year period of eligibility ended for an increasing number of individuals. The point of main relevance to this paper is that in almost every month, supplement receipt was statistically significantly higher among SSP Plus program group members than among SSP Regular program group members. Over time, there was a slight upward drift in the effect on supplement receipt, averaging about 2 percentage points in the first year, 5 percentage points in the next two years, and 7 percentage points in the final year.

#### Effects

#### **Cumulative Effects**

Although the analysis has established that program take-up was higher among SSP Plus program group members, it remains to be seen whether the higher take-up reduced welfare receipt and translated into greater

415

Independent Variable	Control Group Mean	Effect of SSP Regular	Standard Error	Incremental Effect of SSP Plus	Standard Error
Number of Months of Full-Time					
Employment	10.1	$6.1^{***}$	1.3	1.3	1.3
Earnings (Canadian \$)	14,821	3,628**	1,610	3,206**	1,615
Number of Months Receiving					
Income Assistance	38.0	5.5***	1.4	-2.7*	1.4

*Table 2.* Control Group Means, Cumulative Effects of SSP Regular, and Incremental Effects of SSP Plus on Employment, Earnings, and Income Assistance, Months 1 to 52.

*Notes:* Effects of SSP Regular are relative to the control group. Incremental effects of SSP Plus are relative to SSP Regular.

\*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level.

full-time employment. One way to assess the overall effect of SSP Plus is to examine cumulative effects on employment, earnings, and IA. These are shown in Table 2 for the entire period covered by the follow-up surveys (months 1 to 52).

The financial incentive (represented by the cumulative outcomes of the SSP Regular program when compared to the control group) clearly increased employment and earnings and reduced IA receipt. On average, the supplement alone induced program group members to work more than six additional months of full-time employment during this period, when compared to the control group (a 60% difference). Program group members also had \$3,628 higher earnings (a 24% difference) and 5+months' less Income Assistance receipt (a 14% difference) than control group members. For program group members who were also offered additional services, full-time employment was not statistically significantly higher than for members of the SSP Regular program group, but earnings were \$3,206 (17%) higher, and IA receipt was almost three months (8%) lower.

#### **Effects over Time**

Although, as Table 2 demonstrated, the addition of SSP Plus services led to higher earnings and reduced IA receipt over the entire 54-month period following random assignment, such cumulative measures can mask substantial variation within the follow-up. The next question we address is whether and how these effects varied over time. Naturally, effects are expected to be largest during the three years that individuals are eligible for SSP supplement payments. But if the earnings supplement offer or the additional services have potential for longerterm effects, the effects must persist past this three-year period.

Results presented earlier for SSP supplement receipt show that the effects of both the earnings supplement and the added services were greatest near the end of the first year of the program and diminished thereafter. One might expect the effect on full-time employment to follow a similar pattern. As Figure 2 shows, the full-time employment rate increased over time for all three groups, from below 10% to over 30%. In contrast to the statistically significant incremental effect of services on supplement receipt, SSP Plus had close to a zero incremental effect on the full-time employment rate throughout the first 36 months that was almost never statistically significant. But after month 36, the incremental effect of SSP Plus on full-time employment became statistically significant in most months, averaging close to 7 percentage points from months 36 to 52.

What can explain the lack of an incremental effect on full-time employment in the first three years when there was a statistically significant differential effect on supplement receipt? One possibility is that some members of the SSP Plus program group were induced by the availability of the services to take up the supplement offer but then quickly stopped working full time. Possibly they went to work to secure access to the supplement in later

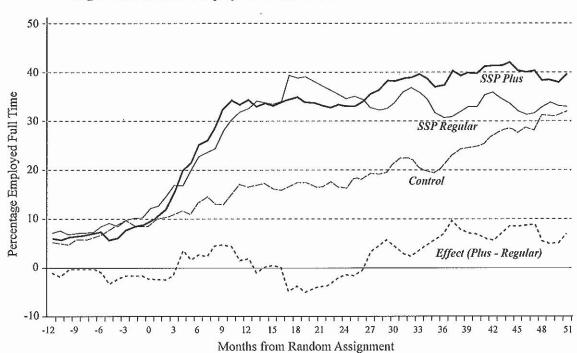


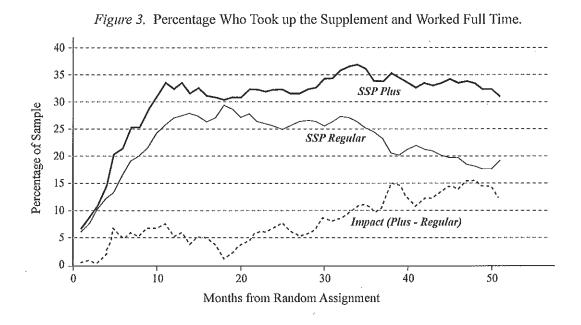
Figure 2. Full-Time Employment Rates and the Incremental Effect of SSP Plus.

months and then either voluntarily left those jobs to pursue other opportunities or were laid off or fired from those jobs because they were not really job-ready when they initially took up the supplement. In either case, the SSP Plus services might have helped these individuals regain full-time employment later on.

To investigate the possibility that initial full-time employment was short-lived for some SSP Plus members, in Figure 3 we show the percentage of the SSP Plus and Regular SSP participants who ever took up the supplement and worked full time, by month. To maintain the advantages of random assignment, the proportions are expressed as a percentage of all sample members, not just of those who took up the supplement. For example, in month 20, just under 30% of the Regular SSP sample both took up the supplement and were working full time. For both the SSP Plus and Regular groups, the percentage increased during the first year as individuals began leaving IA for full-time work. The higher take-up rate among the SSP Plus group is shown by the higher proportion

of that group that took up the supplement and worked full time near the end of the first year and first part of the second year. In the middle of the second year, however, rates for the two groups converged. This is consistent with takers quitting or losing their full-time jobs. The idea that SSP Plus takers were more likely to leave employment quickly is supported by the fact that more than half of supplement takers in the SSP Plus group initially stayed employed full time for eight months or less, compared with only 35% for regular SSP supplement takers (results not shown in the figure or tables). After the middle of the second year, the two lines diverge again. In fact, the steady full-time employment rate among SSP Plus takers is quite remarkable and might be a testament to the effectiveness of the post-employment services in helping people keep their jobs or find new jobs. By contrast, takers in the Regular SSP group gradually stopped working full time, and this trend became particularly strong when individuals began losing eligibility for the supplement in month 36.

As noted above, one possible explanation



for short-lived employment spells among SSP Plus supplement takers is that SSP Plus services encouraged some people to work who were not yet job-ready. While it is impossible to determine directly whether SSP Plus "dug deeper" in this way, as noted by Michalopoulos et al. (2000), it is possible to infer the characteristics of the people who took up the supplement offer because of SSP Plus services by making use of a feature of the random assignment experiment: the characteristics of members of the SSP Regular group who took up the supplement offer are the same, on average, as the characteristics of members of the SSP Plus group who would have taken up the supplement offer in the absence of SSP Plus services. Differences between supplement takers in the Regular SSP and SSP Plus groups must therefore be due to the characteristics of the people who were motivated by the services to go to work.

Under this assumption, the average characteristics of takers in the SSP Plus group, takers in the Regular SSP group, and those who took up the supplement because of SSP Plus services are given by

(1) 
$$\overline{x}_{Pl} = p_{Rl} \overline{x}_{Rl} + (1 - p_{Rl}) \overline{x}_{El},$$

where  $\overline{x}_{Et}$  represents the average characteristics of those who took up the supplement because of SSP Plus services,  $\bar{x}_{p_l}$  is the average characteristics of those who took up the supplement in the SSP Plus group,  $\bar{x}_{p_l}$  is the average characteristics of those who took up the supplement in the Regular SSP group, and  $p_{p_l}$  is the ratio of the number of takers in the Regular SSP group to the number of takers in the SSP Plus group. Manipulating this equation provides an expression for the average characteristics of the extra supplement takers:

$$\frac{x_{p_t} - \dot{p}_{Rt} x_{Rt}}{1 - \dot{p}_{Rt}} = \overline{x}_{Et}$$

Table 3 shows the baseline characteristics of supplement takers in the SSP Plus group and in the Regular SSP group, and also shows the implied characteristics of those who took up the supplement offer because of SSP Plus services. The final column shows the p-value of the hypothesis that the extra supplement takers had the same characteristics as the takers in the Regular SSP group. For the most part, we found little difference between the inferred characteristics of the extra takers and of the regular SSP supplement takers, which is not surprising given the small number of supplement takers. Where there are statisti-

	5	Supplement Takers				
Independent Variable	SSP Plus	Regular SSP	Extra Takers in SSP Plus Group (Inferred)	P-Value of Difference between Extra Takers and Reg SSP Takers		
Months Employed in the Prior Year	2.8 (3.9)	3.5 (4.7)	1.1 (7.1)	0.043		
Years Employed Prior to Random Assignment	7.1 (5.9)	8.8 (7.2)	3.2 (10.0)	0.001		
Less Than High School Education	29.4 (45.7)	36.8 (48.5)	12.2 (101.9)	0.139		
Physical Condition Limited Activity	16.9 (37.6)	23.2 (42.4)	2.4 (76.9)	0.105		
Emotional Problem Limited Activity	4.4 (20.6)	5.3 (22.4)	2.4 (44.4)	0.699		
Illness Limited Activity	4.4 (20.7)	6.3 (24.5)	0.0 (38.7)	0.340		
Had the Blues	16.9 (37.6)	12.6 (33.4)	26.8 (97.9)	0.365		
Couldn't Take a Job in Prior Four Weeks Because of:						
Family Problem	11.1 (31.5)	5.3 (22.4)	25.0 (92.1)	0.181		
Attending School	10.4 (30.6)	3.2 (17.6)	27.5 (94.5)	0.106		
Child Care Problems	8.1 (27.5)	4.2 (20.2)	17.5 (79.3)	0.296		
Transportation Problems	5.9 (23.7)	2.1 (14.4)	15.0 (72.3)	0.263		
Any of the Above	31.1 (46.5)	17.9 (38.5)	62.5 (127.4)	0.030		
Has a Child under Age 6	59.6 (49.3)	49.5 (50.3)	82.9 (114.6)	0.073		
Sample Size	136	95	41			

*Table 3.* Inferred Characteristics of Individuals Who Took up the Supplement Because of SSP Plus Services.

cally significant differences, however, they do indicate that the extra takers were less job-ready. In particular, compared to the regular SSP supplement takers, the extra takers worked fewer months in the year prior to random assignment, had fewer years of work experience prior to random assignment, were more likely to report a circumstance that had recently prevented them from taking a job, and were more likely to have a preschool-age child. Among the non-statistically significant results, two interesting ones are that fewer of the extra takers than of the regular SSP supplement takers had less than a high school education and fewer had an emotional problem or illness that limited their activity. These results are consistent with the notion that the SSP Plus services helped otherwise able-bodied individuals overcome barriers to employment.

Because the interviewing process ended in month 54, employment data are not available after this period to determine whether the long-run effects of SSP Plus continued. However, data on IA receipt are available for one additional year for the analysis sample. While effects on IA receipt are not the same as effects on full-time employment, they are related, and effects on IA receipt are one indication of the ability of the program group members to become economically self-sufficient.

Table 4 presents the yearly effects of SSP Regular and the incremental effects of SSP Plus on full-time employment and IA receipt. For the most part the effects are mirror images of each other, with positive effects on full-time employment translating into similar negative effects on IA receipt. As this table shows, the effect of SSP Regular on both full-time employment and IA receipt disappeared by the end of the supplement period. However, the incremental effect of SSP Plus seems to have persisted through the supplement receipt period. In the second quarter of the 6th year, about two and a half years after eligibility for the SSP supplement and services ended, the incremental effect of SSP Plus on IA receipt was close to 8 percentage points and was statistically significant at the 10% level. Moreover, the table generally indicates a rising trend in the incremental effects of SSP Plus on full-time employment and IA receipt, although the incremental effects seem to have declined a bit toward the end of the data period.

Another way to gauge whether the services provided by the SSP Plus program are having a lasting effect is to examine the effect of the program on wage rates. If SSP Plus group members find higher-wage jobs, there might be a greater inducement to keep these jobs; moreover, higher-wage jobs may be more inherently stable. Table 5 shows the effects of SSP Regular and the incremental effect of SSP Plus on the distribution of wages in month 52. As indicated in this table, it appears that SSP Plus program group members were more likely than SSP Regular program group members to take jobs paying wages that exceeded the minimum wage by \$2 or more. This is additional evidence, albeit rough, that the services provided in the SSP Plus program helped recipients find higherpaying jobs.

#### **Effects on Household Income and Poverty**

One of the objectives of financial incentive programs for welfare recipients is to raise family income and reduce the long-run incidence of poverty. Traditional welfare-towork programs often increase employment but do not increase family income because earnings from work are exchanged for welfare benefits. Under a financial incentive program like SSP, it is possible for both employment and income to increase. Therefore, it is of great interest to determine whether the supplement and the employment services provided by SSP had any long-lasting effects on income and poverty.

Table 6 presents effects of SSP Regular and incremental effects of SSP Plus services on average monthly income and poverty in the six months immediately prior to the 54-month follow-up survey. As this table indicates, SSP Regular apparently had no long-run effects on individual earnings, but the addition of SSP Plus services did, resulting in average monthly earnings that were about \$104 higher than those for the SSP Regular program participants. This is consistent with the positive incremental effects of SSP Plus on full-time employment during the latter months of the program. Although offset somewhat by reduced IA payments, additional income was also received from other transfers, such as federal and provincial tax credits. Overall, individual income in SSP Plus was \$119 per month higher (about \$1,428 per year) than in SSP Regular. This represents an increase in individual income of about 10% over SSP Regular (monthly income for SSP Regular program group members averaged about \$1,173 [\$1,242 – \$69, or \$14,076 per year] in the six months prior to the 54-month follow-up survey).

In the six months prior to the 54-month follow-up survey, very few families were still receiving the supplement. In theory, families were only eligible to receive supplements through the end of the fourth year after random assignment, or 48 months. A few received supplements in the six months prior to the 54-month interview because a few families were interviewed earlier than 54 months after random assignment and a few families received their first supplement payment after the twelfth month due to delays in verifying employment and completing the paperwork required to initiate supplement payments.

	SSP P	lus on Full-J	Cime Employ	SSP Plus on Full-Time Employment and Income Assistance Receipt.	me Assistanc	te Receipt.			
	Full	Full-Time Employment	ient			Income	Income Assistance Receipt	eceipt	
Control			Incremental		Control			Incremental	5
Group Mean	Effect of SSP Regular	Standard Error	Effect of SSP Plus	Standard Error	Group Mean	Effect of SSP Regular	Standard Error	Effect of SSP Plus	Standard Error
0.121	***060"0	0.024	0.013	0.024	606.0	-0.084***	0.020	-0.006	0.020
0.165	0.195***	0.032	-0.024	0.032	0.755	$-0.162^{***}$	0.034	-0.023	0.035
0.195	$0.146^{***}$	0.032	0.025	0.032	0.692	-0.135***	0.036	-0.053	0.036
0.257	0.070***	0.035	$0.074^{**}$	0.035	0.615	-0.062*	0.037	-0.110***	0.037
0.311	0.022	0.040	0.056	0.040	0.545	-0.028	0.038	-0.088**	0.038
]	]	]	]	[	0.476	-0.005	0.041	-0.077*	0.041

Table 4. Effects of SSP Regular and Incremental Effects of

Notes: Effects of SSP Regular are relative to the control group. Incremental effects of SSP Plus are relative to SSP Regular. In the latest year (Year 5 for fulltime employment and Year & for Income Assistance) the figures are for the first two quarters. \*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level.

Year 1 Year 2 Year 3 Year 4 Year 5 Year 6

Year

420

	<u> </u>					
	Hourly Wage Rate (% in Each Category)					
Wage Status	Control Group Mean	Effect of SSP Regular	Standard Error of Effect	Incremental Effect of SSP Plus	Standard Error of Effect	
Not Working	0.490	0.052	0,043	-0.072*	0.043	
Wage Unreported in Survey	0.047	-0.023	0.015	-0.008	0.015	
Less Than the Minimum Wage	0.071	-0.001	0.023	-0.003	0.023	
Minimum Wage to \$1.99 above Minimum	0.207	-0.014	0.035	-0.011	0.035	
\$2 or More above the Minimum Wage	0.186	-0.018	0.034	$0.094^{***}$	0.035	

*Table 5.* Control Group Means, Effects of SSP Regular, and Incremental Effects of SSP Plus on the Distribution of Wages, Month 52.

Notes: Effects of SSP Regular are relative to the control group. Incremental effects of SSP Plus are relative to SSP Regular. In New Brunswick, the minimum wage was \$5.50 (Canadian \$) in month 52 for all sample members. \*Statistically significant at the .10 level; \*\*at the .05 level; \*\*at the .01 level.

As indicated in the bottom panel of Table 6, the SSP program did not have an appreciable effect on the post-supplement period poverty rate for either program group (about 80% of SSP sample members had incomes below the poverty level at the end of the experiment). In fact, there appears to have been an unexpected increase in the poverty gap (the difference between the poverty level and actual income) for SSP Regular program group members. Among SSP Regular program group members, after the supplement eligibility period ended, there was about a 10 percentage point increase in the proportion of families with incomes below 75% of the poverty level and a corresponding reduction in the proportion of families with incomes between 75% and 100% of the poverty level. Whether or not this was a temporary difference in income cannot be determined, because data covering later periods are not available. It is important to note, however, that this effect on poverty may be an artifact of the small SSP Plus sample. A similar effect was not detected in the New Brunswick sample of the larger SSP study that included about 4,800 individuals randomly assigned to SSP or a control group.

The services provided by the SSP Plus program apparently offset the reduction in income experienced by SSP Regular program group members. At the end of the followup period, the SSP Plus program as a whole was neutral with respect to the incidence of poverty. Thus, the services provided by SSP Plus seem to have improved economic conditions somewhat for families with the very lowest incomes.

#### Conclusions

The central finding of this evaluation of Canada's innovative Self-Sufficiency Project of the 1990s is that adding employment services as part of a financial incentive program for welfare recipients appears to have had a number of positive effects. First, it encouraged more people to take up the offer of a financial incentive, which improved their families' financial status. Although the services had little immediate effect on full-time employment, they appear to have helped individuals maintain full-time employment, and they also seem to have led eventually to sizeable gains in full-time work. The longerterm effect on full-time work was accompanied by improved jobs for those who were offered employment services: compared to SSP participants who did not receive the services, those who did receive them enjoyed both higher earnings and higher wage rates, and the jobs they held appeared to be more sustainable. While the results of the SSP Plus experiment are intriguing, they rest on sample sizes too small to support definitive conclusions about the role of employment services in financial incentive programs for welfare recipients. More evidence is needed from additional tests of such an approach in different environments and, if possible, using larger sample sizes.

With this in mind, it should be noted

Independent Variable	Control Group Mean	Effect of SSP Regular	Standard Error of Effect	Incremental Effect of SSP Plus	Standara Error of Effect
Components of Individual Income (\$)				-25	
Earnings	500	-19	58	104*	58
SSP Supplement Payments		8*	5	7	5
Income Assistance Payments	413	-37	30	-54*	30
Other Transfer Payments	271	<b>→10</b>	20	44**	20
Other Nonwage Income	54	-11	12	17	12
Total Individual Income	1,242	69	52	$119^{**}$	51
Total Individual Income (after Taxes)	1,184	-65	45	108**	44
Total Family Income (after Taxes)	1,571	94	93	137	93
Incidence of Poverty (%)					
Income below Poverty Level	79.7	0.3	3.9	-0.8	3.9
Below 50% of Poverty Level	21.6	6.7	4.2	-7.6*	4.2
50 to 75% of Poverty Level	35.7	3.6	4.8	1.1	4.8
75 to 100% of Poverty Level	22.4	-10.1***	3.8	7.9*	3.8

Table 6. Control Group Means, Effects of SSP Regular, and Incremental Effects of SSP Plus on Income and Poverty.

*Notes:* Effects on income are measured as average monthly effects in the six months prior to the 54 month follow-up survey. Effects of SSP Regular are relative to the control group. Incremental effects of SSP Plus are relative to SSP Regular. Other transfer payments include the Child Tax Benefit, the Goods and Services Tax Credit, Employment Insurance, and provincial tax credits. Other nonwage income includes alimony, child support, income from roomers and boarders, and other reported income. Family income is measured as the sum of the sample member's net income and the labor income of any other members of that person's family. Income below poverty level is calculated by comparing annualized family income with the annual low-income cut-off (LICO) defined by Statistics Canada for the sample member's location and family size.

\*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level.

that since SSP Plus, several other programs providing employment services for welfare recipients have been launched in the United States and the United Kingdom. Some of these programs focus on job retention and career advancement rather than assistance in finding jobs. These programs are currently being tested in a series of random assignment experiments (see www.mdrc. org for details). While several of these programs are providing financial incentives in addition to employment services, none of the financial incentives are as generous as the ones provided in SSP Plus and none are able to identify the incremental effects of the employment services. Nonetheless, when the results from these more recent experiments become available, they should add significantly to our knowledge about the importance of employment services in financial incentive programs for welfare recipients.

#### REFERENCES

- Bloom, Dan, Richard Hendra, Karin Martinson, and Susan Scrivener. 2005. *The Employment Retention and Advancement Project: Early Results from Four Sites.* Washington, D.C.: U.S Department of Health and Human Services, June.
- Bloom, Dan, and Charles Michalopoulos. 2001. How Welfare and Work Policies Affect Employment and Income: A Synthesis of Research. New York: MDRC, May.
- Card, David, and Dean Hyslop. 2005. "Estimating the Effects of a Time-Limited Earnings Subsidy for Welfare-Leavers." *Econometrica*, Vol. 73, No. 6 (November), pp. 1723–70.
- Card, David, and Philip K. Robins. 1998. "Do Financial Incentives Encourage Welfare Recipients to Work? Evidence from a Randomized Evaluation of the Self-SufficiencyProject." In Solomon Polachek, ed., *Research in LaborEconomics*, Vol. 17, pp. 1–56. Stamford, Conn., and London: JAI Press.
- \_\_\_\_\_. 2005. "How Important Are 'Entry Effects' in Financial Incentive Programs for Welfare Recipients? Experimental Evidence from the Self-Sufficiency Project." *Journal of Econometrics*, Vol. 125, No. 1-2 (March), pp. 113-39.
- Ford, Reuben, David Gyarmati, Kelly Foley, and Doug Tattrie, with Liza Jimenez. 2003. Can Work Incentives Pay for Themselves? Final Report on the Self-Sufficiency Project for Welfare Applicants. Ottawa: Social Research and Demonstration Corporation, October.
- Hotz, V. Joseph, and John Karl Scholz. 2003. "The Earned Income Tax Credit." In Robert A. Moffitt, ed., *Means-Tested Transfer Programs in the United States*. Chicago: University of Chicago Press.
- Lei, Ying, and Charles Michalopoulos. 2001. SSP Plus at 36 Months: Effects of Adding Employment Services to Financial Work Incentives. Ottawa: Social Research and Demonstration Corporation, July.
- Lin, Winston, Philip K. Robins, David Card, Kristen Harknett, and Susanna Lui-Gurr. 1998. When Financial

Incentives Encourage Work: Complete 18-Month Findings from the Self-Sufficiency Project. Ottawa: Social Research and Demonstration Corporation, September.

- Michalopoulos, Charles, Cynthia Miller, Philip K. Robins, Pamela Morris, David Gyarmati, Cindy Redcross, Kelly Foley, and Reuben Ford. 2002. Making Work Pay: Final Report on the Self-Sufficiency Project for Long-Term Welfare Recipients. Ottawa: Social Research and Demonstration Corporation, July.
- Michalopoulos, Charles, Philip K. Robins, and David Card. 2005. "Making Work Pay for Itself: Evidence from a Randomized Social Experiment for Welfare Recipients." *Journal of Public Economics*, Vol. 89, No. 1 (January), pp. 5–29.
- Ochel, Wolfgang. 2001. Financial Incentives to Work—Conceptions and Results in Great Britain, Ireland, and Canada. Working Paper No. 627, Center for Economic Studies and Ifo Institute for Economic Research, Munich, Germany, December.
- Quets, Gail, Philip K. Robins, Elsie C. Pan, Charles Michalopoulos, and David Card. 1999. Does SSP Plus Increase Employment? The Effects of Adding Services to the Self-Sufficiency Project's Financial Incentives. Ottawa: Social Research and Demonstration Corporation, May.
- Robins, Philip K., and Charles Michalopoulos. 2001.
  "Using Financial Incentives to Encourage Welfare Recipients to Become Economically Self-Sufficient." (Paper presented at the November 2000 conference "Welfare Reform Four Years Later: Progress and Prospects," sponsored by the Federal Reserve Bank of New York.) *Economic Policy Review*, Vol. 7, No. 2, pp. 105-23.
- Zabel, Jeffrey, Saul Schwartz, and Stephen Donald. 2006. "An Econometric Analysis of the Incremental Impact of SSP Plus." SRDC Working Paper Series 06-06. Ottawa: Social Research and Demonstration Corporation, March.