

EXPERIMENTAL EVIDENCE ON THE USE OF EARNINGS SUPPLEMENTS AS A STRATEGY TO “MAKE WORK PAY”

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INTRODUCTION

This paper presents new evidence on the use of earnings supplements as an incentive to encourage labour market integration. The findings suggest that a well-designed financial incentive programme for welfare recipients can be a triple winner – employment can be increased, the earnings and incomes of poor families can be raised, and this can be accomplished at little or no net increase in the cost of government transfers. In other circumstances, however, where the level of available earnings is not the main barrier to employment (or at least where it is not perceived to be so by unemployed individuals), offering to supplement earned incomes will likely have much more limited effects.

Over the past several years, Human Resources Development Canada (HRDC) has been sponsoring two large-scale demonstrations to test the use of alternative financial incentive programmes to encourage employment. Both of these projects are managed by the Social Research and Demonstration Corporation (SRDC).

- The **Self-Sufficiency Project** makes generous payments directly to social assistance (welfare) recipients who go to work full time.
- The **Earnings Supplement Project** offers partial compensation to unemployment insurance beneficiaries who have to take poorer paying jobs in order to get back to work quickly.

Randomised experiments are being used to estimate the impacts of the financial incentives that these projects are testing. This paper brings together findings from several social experiments that actually make up the two projects.

BACKGROUND

A characteristic of income support programmes is their potential to create disincentives to work. In the case of social assistance programmes, people typically receive benefits when they do not work and have their benefits reduced or eliminated if they begin working. Historically, this was based on the notion that welfare was a source of income of last resort for those members of the poor population who were considered unemployable or for whom work was considered inappropriate. Today, any attempt to reform welfare must deal with a troubling dilemma – how to encourage work and independence, while simultaneously alleviating poverty.

Transferring income to poor people in order to reduce poverty reduces their incentive to seek and accept employment, particularly if their potential earnings are low.¹ This problem is reflected in the real-life experiences of welfare-dependent families. Because many of those receiving social assistance benefits have low levels of education or limited work experience, they often can only find work that will pay them less than the amount they can receive in welfare benefits. Therefore, they face a stark choice. They can continue to rely on welfare or they can accept a lower income in the work world, at least until their earnings rise with the acquisition of skills and experience.² This is the classic “welfare trap”.

In the case of unemployment insurance programmes, the principal goal is to provide monetary assistance to unemployed people who are searching for work during a temporary interruption of employment and earnings.³ Unemployment benefits subsidise unemployed workers as they search for work. This may lead to a more efficient matching of unemployed workers to available jobs by enabling job seekers to continue looking until they find the best possible employment opportunity. This helps workers, firms and the economy as a whole. However, unemployment insurance, by providing payments to people when they are not working, can also lead to more unemployment.⁴

Fiscal pressures that governments face, combined with changes in public attitudes about who should be expected to work, have led to increased policy interest in finding ways to redesign income transfer programmes so that they will encourage work and reduce long-term reliance on government transfers. At the same time, there is a concern that, despite increases in overall output and employment, some groups are not experiencing much in the way of earnings gains. Some workers in low-wage jobs may be unable to support themselves and their families, even though they are working full time. If so, then programmes that provide “in-work” benefits and that allow workers to combine earned income and transfer income in new ways, may be necessary.

DESCRIPTION OF THE PROJECTS

The Self-Sufficiency Project

The Self-Sufficiency Project (SSP) (Box 1) was launched at the end of 1992 and has enrolled some 9 000 single-parent social assistance recipients in two Canadian provinces. SSP offers earnings supplements to single parents who have been receiving social assistance for at least a year, on condition that, within one year of being selected for the programme, they leave welfare for full-time work.⁵ These earnings supplements are paid directly to the participants on top of their earnings from employment in the form of monthly cash payments. They can be received for up to three years, so long as participants continue to work full-time and remain off social assistance.⁶

Box 1. Features of the SSP programme model

- A substantial financial incentive for work relative to non-work. (SSP pays half the difference between actual earnings and an earnings “reference level”, which varies by province. For most participants, the supplement doubles what they would receive in earnings from a minimum wage job or receive from welfare.)
- A relatively low tax-back rate for those who experience increases in earnings while receiving a supplement (the effective marginal tax-back rate is 50 per cent, which is low compared with the provisions for disregarding income in the calculation of welfare payments).
- Targeting toward longer-term recipients of social assistance (at least a year on the welfare rolls).
- Time limits both on how long participants have to take up the financial incentive offer (twelve months) and on how long they can receive payments (three years).
- A full-time work requirement (30 or more hours per week) that prevents most people from reducing their work effort in response to the programme.

The Self-Sufficiency Project actually comprises three separate experiments. The main (or “recipient”) sample is testing the financial incentive with approximately 6 000 single parents who had been receiving social assistance for at least one year. The “SSP Plus” sample is made up of 299 single parents who also had been receiving social assistance for at least one year. These participants were offered employment-related services in addition to the financial incentive. Finally, the SSP “applicant” sample comprises just over 3 300 single parents who were enrolled in SSP at the time they were starting a new social assistance claim. Applicant sample members who were assigned to the programme group became eligible for SSP’s supplement payments if they first remained on welfare for a year and then left welfare for full-time work in the following 12 months.⁷ Ultimately, 57 per cent of programme group members in the applicant sample remained on welfare long enough to establish eligibility for the SSP supplement. This sample is now being used to estimate SSP’s programme effects on people who are relatively new entrants to welfare and have shorter histories of social assistance receipt.⁸

Interim findings are now available from all three SSP study samples. Results are based on data from administrative records and from participant follow-up surveys conducted 18 months after the point of random assignment for the recipient and SSP Plus samples and from an equivalent follow-up survey conducted 30 months after random assignment for the SSP applicant sample. Since participants who were assigned to the programme group were allowed up to 12 months to find a job and leave welfare and could then receive supplement payments for up

Table 1. **Summary of findings from the Self-Sufficiency Project and the Earnings Supplement Project**

	Self-Sufficiency Project					Earnings Supplement Project	
	Recipients	SSP Plus	(Differential impact) ¹	Applicants	(Adjusted)	Repeat EI users	Displaced workers
Take-up rate ² (%) (percentage points)	35.2	51.7	(+17.0)	27.0	(45.0)	4.7	20.5
Impacts on: Full-time employment ^{3,4} (percentage point change)	+15.2	+17.4	(+2.4)	+12.1	(+20.3)	n.a.	+4.4
Earnings (% change) (percentage points)	+61.5	+54.3	(+16.7)	+39.8	(+66.8)	n.a.	-4.6
Incidence of social assistance receipt (percentage point change)	-13.0	-20.4	(-3.9)	-12.0	(-20.2)		
Weeks of EI benefits	-	-	-	-	-	+0.4 wks	+0.2 wks
Net cost (monthly cover per programme group member)	+\$55	+\$79	(0)	-\$29	(-\$49)	+\$23	+\$89

1. SSP Plus differential impacts are not based on a comparison of the main Recipient and SSP Plus results shown in Col. 1 and 2 of the table. Rather, they are derived by comparing SSP Plus impacts (Col. 2) to the SSP impacts on only that portion of the Recipient sample enrolled in New Brunswick during the period of three-way random assignment. One anomaly is that the increase in earnings produced by the SSP financial incentive alone was much lower for this sub-sample (an increase of 37.6 percentage points) than for the full SSP Recipient sample. This may be an artefact of the small sample size.
2. The adjusted take-up rate for the SSP Applicant sample refers to the take-up rate among those who remained on welfare long enough to establish eligibility and the adjusted impacts refer to the impacts per eligible programme group member, rather than the full-sample impacts.
3. For SSP, impacts on employment, earnings and incidence of social assistance receipt are calculated for the 5th quarter after random assignment for the Recipient and SSP Plus samples; and the 9th quarter after random assignment for the Applicant sample (the equivalent point in time for those who established eligibility); while the net cost estimates are based on data for the six-month period preceding the follow-up surveys.
4. For ESP, the impact on the employment of displaced workers refers to the six-month period following random assignment; the impacts on earnings, weeks of EI receipt and net cost are based on data for the 15 months after random assignment.

to three years, this is an early point at which to assess the effects of the programme. The long-term benefits and costs are still unknown. Nevertheless, because of the one-year take-up window, it is possible at this point to assess how effective the SSP offer was in getting people to begin work full time who otherwise would not have done so. It is also possible to get an early look at SSP's impacts on public transfer payments, incomes and poverty.

The Earnings Supplement Project

The Earnings Supplement Project (ESP) (Box 2) involves just over 11 500 unemployed individuals who applied for unemployment benefits in nine communities in seven Canadian provinces. ESP drew samples from two groups of applicants for Employment Insurance.⁹ The project enrolled a sample of just over 8 100 displaced workers and a sample of about 3 400 repeat users of unemployment insurance.¹⁰

Box 2. Features of the ESP programme model

- Supplement payments make up 75 per cent of the amount by which the earnings at a participant's new job fall below the earnings in the participant's previous job.
- Supplement payments are subject to two caps. First, earnings in the previous job (used in the calculation of the re-employment earnings loss) are capped at the level of maximum EI-insurable earnings. Second, the supplement payments themselves are capped at a maximum of \$250 per week.
- Those offered an opportunity to receive a supplement have a limited period of time (a maximum of 26 weeks for displaced workers; 12 weeks for repeat EI users) to find a qualifying job, stop receiving unemployment benefits, and register for supplement payments.
- Supplements can be received for up to two years from the date the supplement offer is made and the job search period begins.
- Participants have to take full-time jobs (30 or more hours a week) in order to receive supplement payments. Workers who go back to work with their previous employer at their previous job location are not eligible for supplements.

The initial development of this project was prompted by the findings of the UI re-employment bonus experiments in the United States. There, lump-sum bonuses were paid retrospectively to unemployment insurance recipients who returned to work within an allowable job-search period and who did not reapply for UI benefits within a specified "qualifying period" after returning to work. The generosity of the bonus payments, the job-search period and the qualifying period varied among the four experiments that were conducted.¹¹

Rather than paying a lump-sum bonus, ESP offered regular payments to "top-up" the wages of those who went back to work quickly. It was hoped that this would encourage people to consider available employment opportunities that

offered wages that otherwise would be unacceptable to them.¹² Eligible participants were offered a temporary supplement to their earnings if they left unemployment insurance for full-time work within a specified period of time and if, in doing so, they experienced a reduction in earnings.¹³ With the exception of the maximum allowable job-search period, ESP used the same programme model for both displaced workers and repeat users of unemployment insurance.

Results are now available from both the ESP sub-studies. Programme impacts for displaced workers were estimated using administrative records and data from a follow-up survey conducted 15 months after random assignment. For repeat EI users, only impacts on EI receipt were estimated; this was done using data from administrative records.

PROGRAMME DESIGN ISSUES

Before turning to the findings from these projects, it is worth considering the nature of earnings supplement programmes more generally. Financial incentive programmes that supplement participants' earned incomes represent a particular kind of labour market intervention (Box 3). In a partial equilibrium framework, they operate on the supply side of the labour market, not on the demand side. That is, these programmes do not create jobs; they try to influence the job-search and job-acceptance behaviours of individuals by raising the financial returns from working. For welfare recipients, the objective is to break the “welfare wall” by increasing the returns from work and thus lowering the relative generosity of social assistance benefits. For the unemployed, the objective is to lower the “reservation wage” of the unemployed individual so that jobs that offer wages that previously were judged to be too low, now become acceptable. Earnings supplement programmes are unlikely to have any significant effect on the demand side of the labour market; these programmes assume that jobs are already available.¹⁴

The impact produced by the offer of a financial incentive will generally be made up of some combination of three effects: the employment effect induced by the incentive, windfalls paid to people in the absence of any behavioural change,¹⁵ and a programme entry effect associated with a behavioural response by people who previously would not have sought assistance but who now apply in order to access the new incentive.¹⁶

Changing people's behaviour through a programme that supplements their earnings requires the consideration of a number of complicated design issues in order to have a positive impact on labour market outcomes without substantially raising the cost to government. The challenge to programme designers is to maximise work effects, while minimising windfalls and entry effects. Ideally, a programme would offer each person a financial incentive that is just large enough

Box 3. Three effects of financial incentives to encourage employment

Work effects: this is the effect that the programme is principally designed to achieve. People who would not have worked otherwise, do so now that they can receive the financial incentive. The result is more work, less reliance on transfer payments, and increased earnings and incomes. Recipients, taxpayers and government budgets all win with this type of effect.

Windfall effects: some people who would have gone to work anyway, now receive benefits from the financial incentive programme, even though there has been no change in their labour market behaviour. Recipients gain; they have more total income. However, their work effort remains the same (or, in some cases, may actually decline). Taxpayers and government budgets lose with this effect, since paying some people without any behavioural change increases the cost of attaining any particular level of labour market impact in the programme group as a whole.

Entry effects: in order to qualify for the new financial incentive, some people (*e.g.* the working poor) who previously would not have applied for assistance (*e.g.* from the existing welfare programme) now apply. Furthermore, some new applicants for assistance, who otherwise would have quickly stopped receiving assistance, may continue to receive benefits longer in order to meet qualifying requirements that might be required to receive the new incentive. Recipients may gain, assuming they can find a new job, while taxpayers and government budgets lose, since they end up paying more benefits to more people than they would have otherwise.

to bring about the desired change in behaviour – not so small that it has no effect, not so large that most of the payments are windfalls to the participants. In the real world, however, such precision is unachievable. Incentives cannot be individually tailored, not just because it is impractical in terms of programme delivery, but also because it is impossible to know *ex ante* what size of incentive each person requires.

There are three key questions to be answered in designing an earnings supplement programme.

- Who should be eligible for the supplement?
- When should the supplement offer be made?
- How generous should the financial incentive be?

Who should be eligible for a supplement? First, starting from the assumption that work is available at some given wage, one has to ask why some people are unwilling to accept those job opportunities. In SSP, for example, participants had an alternative source of non-work income and they faced high tax-back rates if they went to work. Even here, however, a decision was made to restrict eligibility only to single parents

because they typically face significant barriers to full-time employment and are, consequently, among the groups who are least likely to leave welfare for work without assistance.

In ESP, it was assumed that many displaced workers had high reservation wages based on their previous earnings. Furthermore, for some of them, those wage expectations were unrealistic because their skills and experience were not easily transferable to other employment situations and were thus less highly valued by new employers. In the case of repeat EI users, it was hypothesised that some were deterred from taking off-season jobs or seeking jobs that would provide year-round employment because many of those jobs initially offered lower wages.

When should the supplement offer be made? Answering this question requires judgements to be made about the interplay of four factors – entry effects, windfalls, potential savings in the costs of other programmes, and the potential for the programme to have an impact.

Offering the programme early (for example, at the start of an unemployment insurance spell as was done in ESP) may hasten re-employment and avoid the potential “scarring” effects of prolonged unemployment.¹⁷ Job search while employed may also be more effective than job search while unemployed and could result in individuals regaining their previous levels of earnings more quickly through a series of job changes.¹⁸ Early interventions may also increase the likelihood that cost savings (unemployment benefit savings from those who return to work more quickly) will offset some of the costs of the new financial incentive programme, thereby increasing the potential for the programme to be cost-effective.

However, intervening early, before people have demonstrated whether they can become employed quickly on their own, means that programme payments will likely include a high proportion of windfalls. Furthermore, if the financial incentive is generous and has qualifying conditions that are relatively easy to meet (for example, qualifying after spending only a short time unemployed and receiving welfare or unemployment benefits), then the financial incentive could cause a significant entry effect.¹⁹

On the other hand, delaying the incentive offer increases the length of time that some people will remain unemployed. Public expenditures on income support (unemployment benefits, welfare) will, consequently, be higher. Furthermore, if people do experience a scarring effect, then the incentives may ultimately be ineffective. By the time they are offered, participants may be unable to attract any job offers; or the costs of the programme may be much higher because the wages that participants can command at that point are lower (and, therefore, the costs of the required incentive are higher) than if participants had been induced to take a job earlier in their unemployment spell.

How generous should the supplement be? There are at least three dimensions to this question. How large should the payments be? How long should they last? And should anything other than the financial incentive be provided? Again, there are no simple answers.

In part, generosity levels need to reflect the goals of the programme. An emphasis on poverty reduction would suggest that a relatively more generous form of earnings supplementation should be provided; this is also likely to produce larger windfalls, however. Efforts to maximise work effects need to be based on some assessment of how generous an incentive will be required to induce the desired behavioural change. If the supplement is competing with other income transfers (Employment Insurance or welfare, for example) then the offer has to be more attractive than these other forms of assistance. If potential participants are expected to experience a protracted period of difficulty in adjusting to the labour market (as might a long-term welfare-dependent population) then it may be necessary to provide assistance for a long time, such as SSP's three-year supplement period.

If the principal objective is to encourage people to act quickly once the programme has been offered, then time limits can be placed on the offer (as in both SSP and ESP). Such time limits also reduce windfalls by decreasing the number of people who can receive a supplement simply by going to work when they would have chosen to so anyway.

Although earnings supplements are essentially financial incentive programmes, the provision of some additional services or supports may significantly increase the proportion of the targeted clientele who will take advantage of the offer. Therefore, programme designers need to consider whether anything other than a pure financial incentive should be offered. The SSP Plus study, for example, was designed specifically to assess the incremental effects of including employment services.

PROJECT RESULTS

The Self-Sufficiency Project

Among the group of single-parent social assistance recipients participating in the main recipient study,²⁰ about one of three (35.2 per cent) of those offered the financial incentive left welfare for full-time work within their one-year "take-up window" and began receiving supplement payments.²¹

About two-thirds of the programme group did not take up the supplement offer, although the majority reported that they thought they would be much better off financially if they went to work full time with a supplement. The most commonly

cited reason (either the main reason or one of the reasons) for not taking advantage of the supplement was the inability to find a job or to get enough hours of work. This was one of the reasons given by 50 per cent of non-takers. The next most frequently cited reasons were personal or family responsibilities (25 per cent) and health problems or disabilities (19 per cent).

Providing a package of employment-related services substantially increased the likelihood that eligible participants could take advantage of the financial incentive. In the SSP Plus sub-study, in addition to the offer of an earnings supplement, participants could receive help in preparing résumés, take part in a job-finding club, were given job leads and were assigned to job coaches. The effect on programme take-up was dramatic. More than half (51.7 per cent) of those eligible for incentives plus services left welfare for full-time work within a year.²²

But take-up is only part of the story and it does not tell us whether the programme actually made a difference. At this point in the experiment, the most striking *impact* produced by SSP's financial incentive is that it *doubled* the percentage of sample members working full-time. The peak impact was 15.2 percentage points on the full-time employment rate – just over 29 per cent of programme group members were working full time, compared with 14 per cent of the control group. It appears that this impact was mostly achieved by inducing people to work full-time who otherwise would not have worked at all.

The impacts on full-time employment were broad-based, affecting sample members with varying life situations and histories.²³ The impacts tended to be larger, however, for people who were more job-ready and for those who faced fewer barriers to employment.

SSP's impact on employment is reflected in reduced receipt of social assistance and increased earnings. Welfare receipt was down among programme group members (a 13 percentage-point reduction on the likelihood of receiving welfare and a 14 per cent reduction in the amount received).²⁴ Programme group members were found to have substantially higher average earnings (up 61.5 per cent) than control group members and higher average incomes (up 19.2 per cent including the supplements but net of foregone social assistance payments and additional taxes paid).²⁵

As with take-up rates, the impact results also show that financial incentives can be an even more powerful tool when offered in combination with other services. The programme impacts in the SSP Plus study were also higher than those produced by the offer of a financial incentive alone. The largest *incremental* impact was on participants' earnings (an additional impact of 16.7 percentage points over that produced by incentives alone). Job-finding assistance not only helped more participants find jobs, it helped at least some of them to obtain better paying jobs.

The incremental impacts of services on the full-time employment rate (an additional 2.4 percentage-point increase) and on welfare receipt (a further 3.9 percentage-point reduction) were more modest, however. Services increased the probability that participants would start full-time work; however, the job loss rate was also higher among these participants. It appears that “digging deeper” into the welfare caseload by providing job-finding assistance meant that a larger proportion of those who were helped into jobs had difficulty holding on to full-time employment. Thus, helping these people leave welfare for work is only a first step; an important part of the policy challenge is to find effective ways of helping people retain employment.

From a government budget perspective, the cost of SSP’s supplement payments is partially offset by the social assistance savings and the additional income tax generated. On balance, however, the recipient study found that there was a small net cost to government of \$55 per month per programme group member. This is because some of those receiving supplements (for up to three years) would have left welfare on their own within that time (the windfalls referred to above).

SSP appears to be an efficient transfer mechanism, however. It was estimated that each extra dollar in net government transfer payments led to two dollars in increased earnings, totalling three dollars of additional income for these poor families – and the majority of the extra income came from the work effort of participants themselves.

By raising both the earnings and transfer incomes (social assistance and SSP payments) of programme group members, SSP is having a substantial anti-poverty effect during the period of supplement receipt. A sizeable fraction of the SSP-generated income gains was spent on basic needs (food, children’s clothing, and housing), resulting in a decreased use of food banks, a 12.4 percentage point reduction in the percentage with family incomes below Statistics Canada’s low-income threshold, and an increased likelihood of holding savings accounts and registered retirement savings plans.

The programme impacts were found to be even larger in SSP’s applicant study. A simple comparison of the impacts on employment and welfare receipt shows that the magnitudes of the impacts are similar in the applicant sample and the recipient sample. There is an important difference to keep in mind, however. In the recipient sample, all those assigned to the programme group were immediately offered an earnings supplement if they left welfare for full-time work. In the applicant sample, however, the programme impacts were produced only by those applicant programme group members who remained on welfare for a year after random assignment in order to become eligible for the SSP offer. If one assumes that those who left welfare more quickly (and, therefore, never established eligibility for a

supplement) were not affected by the offer, then the impact estimates can be adjusted by dividing them by the percentage of the programme group that did remain on welfare long enough to establish eligibility.²⁶ This adjustment produces impacts per *eligible programme group member*.²⁷

Such an adjustment significantly increases the estimated applicant group impacts. The impact on full-time employment becomes 21 percentage points; the reduction in the incidence of welfare receipt becomes 20.2 percentage points; there is a 66.8 per cent increase in average monthly earnings; and a 19 percentage point reduction in the proportion of families with incomes below the low-income cut-off. These adjusted impacts with more recent entrants to welfare are then substantially larger than those achieved with the longer-term recipient sample.

As noted, the increase in impacts found with the applicant group was especially large in the case of earnings. Those who had been on welfare for a shorter period of time (and who were presumably more “job-ready” on average), were not only more likely to find jobs, they were able to get better paying jobs.²⁸ Higher earnings resulted in lower average supplement payments among “applicants” and higher tax receipts by government. The net result was a small net *decrease* in the government’s transfer costs (about \$29 per month per programme group member) – even while supplement payments are being made.

The Earnings Supplement Project

We turn now to the findings from the Earnings Supplement Project. Among repeat users of unemployment insurance, ESP was generally greeted with considerable scepticism.²⁹ Only 41 per cent of those who were asked to take part in the study agreed to participate. Of those, only 4.7 per cent returned to work within 12 weeks, experienced an earnings loss and received a supplement payment.

The main reason for the lack of interest in ESP was that about 90 per cent of those who were assigned to the programme group expected to be able to return to their most recent employer. This limited the appeal of ESP for several reasons. First, people may have been reluctant to leave existing long-term (albeit part-year) employment relationships for new risky year-round jobs for which they would receive a supplement for only a temporary period of time. Second, they may have encountered difficulty in finding temporary off-season jobs that would not interfere with their planned return to their more important job (in fact, they may have had trouble finding any off-season work at all). Third, since most were expecting to be able to return to their old job, ESP may not have provided sufficient incentive to compensate them for the loss of their non-market time. In sum, there were several early signals that ESP would not be effective in changing the labour market behaviour of repeat users of unemployment insurance.

An analysis of EI benefit receipt confirmed the absence of a programme impact. ESP did not reduce the overall amount of unemployment benefits received in any of the 15 months following random assignment. Furthermore, over the full 15-month period, programme group members actually received \$158 *more* in EI benefits on average than the control group received.³⁰ ESP also did not reduce the number of weeks for which individuals received unemployment benefits during the same 15-month period.³¹

ESP increased government expenditures taking into account unemployment benefits and supplement payments combined. The average monthly amount paid to those in the programme group was \$349 (or 4.7 per cent) more than the amount of EI benefits paid to control group members (and this was significant at the 0.05 significance level).

In conclusion, ESP was not effective in reducing the reliance on unemployment insurance by these repeat users; nor was it effective in decreasing costs to government.

ESP's experience in recruiting displaced workers was quite different than that encountered with repeat users of unemployment insurance.³² Very few displaced workers refused to take part in the study (fewer than 5 per cent of the project application forms were returned marked refused). Consequently, it was possible to recruit a large and diverse sample.

Among those assigned to the programme group, 20.5 per cent left EI for full-time work, experienced a reduction in earnings and received supplement payments.³³ Those who received supplement payments were paid, on average, \$8 705 for 64 weeks of full-time employment during the two-year supplement receipt period. Most supplement recipients received substantial amounts for a long period of time; about 44 per cent of all recipients were still receiving payments when their supplements expired at the end of two years.

ESP had a small positive impact on the speed of re-employment among displaced workers. There was a modest increase in full-time employment, which occurred toward the end of the six-month job-search period. ESP increased the percentage of displaced workers who became re-employed full-time anytime during the six-month job-search period by 4.4 percentage points.³⁴ Before the end of the first year, however, the control group had "caught up" in terms of employment and there were no further differences in employment rates between the two groups.

In producing the re-employment effect, ESP may have caused a few displaced workers to take jobs that paid less than the ones they would have taken otherwise. It also may have caused average earnings during the 15-month follow-up period to be lower than they would have been otherwise, presumably by inducing a few supplement group members to take lower paying jobs. Total earnings during the follow-up period were \$682 (or 4.6 per cent) less for programme group members; this difference was not statistically significant, however.³⁵

ESP had virtually no effect on the amount or duration of unemployment benefits received by supplement group members. The estimated programme impact on average weeks of unemployment benefit payments during the first 15 months after random assignment was an *increase* of 0.2 weeks (or 0.9 per cent). The estimated impact on total benefits received was an *increase* of \$90 (or 1.4 per cent).³⁶

ESP produced a modest transfer of resources from the Canadian government (taxpayers) to the two out of 10 displaced workers who received supplement payments. On average, supplement group members experienced a small financial gain of \$569 during the first 15 months after random assignment. This was because the supplement payments they received exceeded the earnings losses they incurred, and their unemployment benefit payments were virtually unchanged.

Overall, this small average gain did not reduce the level of financial hardship experienced. Nevertheless, the large supplement payments made to the small fraction of displaced workers who received large payments were an important source of temporary income for this sub-group.³⁷

ESP produced a net financial cost for the Canadian government of \$1 340 per supplement group member during the first 15 months after random assignment. This occurred because supplements were paid to those who qualified but without producing an offsetting reduction in the amount of unemployment benefits paid. Therefore, on balance, the programme produced a transfer of resources from the government (taxpayers) to individual displaced workers. This helped to compensate those who received supplement payments for the welfare losses they may have incurred through their displacement experiences.

CONCLUSIONS

Do earnings supplements “work”? The answer depends in part on the policy objectives, since they define what we mean by “works”. Based on the results presented here, from two large-scale tests of earnings supplements, the answer is that earnings supplements appear to work in terms of encouraging more employment by some people.

The SSP experience suggests that financial incentive programmes can play a significant role in helping some participants move into employment. About a third of the long-term single-parent welfare recipients responded to SSP’s supplement offer by leaving welfare for full-time work. When a modest package of employment-focused services was provided the take-up rate rose from one in three to one in two. Most importantly, the impacts produced so far on full-time employment are among the largest ever seen in a carefully evaluated welfare-to-work programme.

Furthermore, the evidence from SSP shows that a work-conditioned financial incentive can not only increase work effort but it can raise the incomes of poor families. The apparent efficiency of SSP as a public transfer mechanism should be particularly encouraging to those seeking anti-poverty tools that do not encourage dependency. Not only do participants' incomes rise, but most of the increase is due to the work effort of the individuals themselves.

The cost-effectiveness of the SSP intervention will ultimately be determined with longer-term follow-up data, including information on the post-programme welfare recidivism rate. However, the findings from the applicant sample suggest that a mature programme of this sort might pay for itself even during the period when supplements are being paid.³⁸

Half of those exposed to the SSP offer were unaffected by the financial incentive, however, even when job-finding help was provided to them. It remains unclear how to best help those who were left behind make the transition from welfare to work – or even how to determine what proportion of them should be encouraged to make the transition to employment in their present circumstances. In addition, the higher job-losing rate among SSP Plus participants significantly moderated the differential employment impact achieved by adding services. A difficult policy challenge is to find ways of supporting people in their efforts to remain employed and of helping them progress to better jobs with better pay.

The results of ESP are more difficult to interpret. The offer to temporarily protect workers from substantial earnings losses clearly made no difference to the labour market behaviour of repeat users of unemployment insurance. However, among displaced workers, there was an impact.

The employment impact was relatively small and short-lived; but ESP did induce a few displaced workers to return to work a few weeks earlier than they otherwise would have (but not soon enough to have an impact on their receipt of EI benefits). Perhaps more significantly, a few displaced workers did receive substantial supplement payments; for them, ESP was an important source of temporary income.

Thus a policy objective of promoting rapid re-employment would not appear to provide a sufficient basis for implementing a programme like ESP. Such an approach might be appropriate, however, if the goal was to provide financial compensation to displaced workers who must take lower-paying jobs and who thus bear a disproportionate share of the cost of economic adjustment. Providing such compensation can be expected to entail a net cost to the government, however. It is unlikely that a programme that was sufficiently generous to be attractive to potential participants could also produce enough savings in unemployment benefits and increased tax revenues to be cost-effective.

Another lesson worth mentioning is that marketing is important – perhaps more important than minor variations in the generosity of the incentive. At this point in SSP, no clear link has been established between small differences in supplement generosity and either programme take-up or impact.³⁹ Participants received strong messages from staff that SSP would “make work pay” and several reminder calls were made during the 12-month job-search period. It is likely that these marketing efforts played a key role in persuading participants to take up the offer. Presumably, the financial incentive needs to be sufficiently large to make the messaging credible. It is also possible that, over time, families for whom SSP is relatively less generous will come to realise they are little better off and they may be less likely to remain employed.⁴⁰

In ESP, there was more of a “softer sell”. Although the need to take prompt action within the job-search period was emphasised, the supplement was characterised (and, based on focus group discussions, was perceived by participants) as a last resort to fall back on if their job search did not have the results they were expecting. Having to taking a lower-paying job, even with partial compensation for the reduction in earnings, was not something that participants looked forward to with any enthusiasm.⁴¹

Finally, rules matter. The one-year-on-welfare requirement, for example, was important in limiting entry effects in SSP. It is not surprising that SSP’s entry effects experiment found only a very small entry effect. Few people, who would not otherwise apply for welfare, are likely to be induced to bear the stigma of welfare receipt for a year in order to qualify for SSP’s financial assistance. Also, the time limits that were imposed in both SSP and ESP on how long participants had to take up the supplement offers helped reduce windfall payments.

A comparison of the pattern of supplement receipt to the employment experiences of control group members in SSP, for example, suggests that about a third of those receiving supplements would have left welfare for full-time work without the supplement offer. In the case of ESP for displaced workers, the allowable take-up (or job-search) period represented a considerable portion of the period for which they could receive unemployment benefits. Here, the majority of those who initiated supplement payments would have gone back to work just as quickly without ESP’s supplement; and, among those who were induced to go back to work more quickly, re-employment was hastened by only a few weeks or a few months.

We cannot say from these experiments whether the rules that were established were optimal. Nevertheless, they were critical in producing the results that were achieved in these two cases.

NOTES

1. For a general discussion of the incentive effects of transfer systems, see Barth and Greenberg (1971), Kesselman (1969 and 1973), and Masters and Garfinkel (1977). For an analysis of the empirical evidence on two specific forms of income transfer, see Hum and Simpson (1991) and Robins (1985) on negative income tax experiments in Canada and the United States, respectively, and Eissa and Liebman (1996) and Scholz (1996) on the Earned Income Tax Credit in the United States.
2. For a discussion of the difficulties that single parents experience as social assistance recipients and in their efforts to make the transition from welfare to work, see Bancroft and Vernon (1995).
3. Unemployment insurance can have other important purposes, as well, such as providing income support to those whose employment is interrupted because they are temporarily unable to work, due to maternity or sickness, for example. In addition, an unemployment insurance programme may provide some funds for “active labour market programmes” (*e.g.* training, job creation and wage subsidy programmes) designed to increase recipients’ longer-term employment prospects. Finally, the payment of unemployment benefits may play an economic stabilisation role in reducing the effects of economic recessions and regional economic disparities.
4. There are at least three ways in which it could do so. First, receipt of unemployment benefits can decrease the financial pressure on people to look for new jobs, which can result in longer durations of unemployment. Second, the availability of unemployment benefits may encourage people with a weak attachment to the labour force to seek work in order to collect benefits at a later date. Without unemployment insurance, these people would not participate in the labour market and would not be counted as unemployed. Third, the premiums collected to finance unemployment insurance are a tax on jobs and, therefore, they discourage employers from creating jobs and employees from accepting them. For a general discussion of these effects, see Canada (1994, pp. 13-14). For discussions of the work disincentive effects of unemployment benefits, see Atkinson and Micklewright (1991), Devine and Kiefer (1991), and Christofides and McKenna (1996).
5. For a detailed description of SSP’s programme model and how the project was implemented, see Mijanovich and Long (1995).
6. As long as participants initiate supplement payments within the 12-month period available to them, they remain eligible to receive supplements anytime they are working full time during the next 36 months. They can stop and restart employment (and supplement receipt) any number of times within this three-year period.

7. The applicant sample was originally used to try to measure the potential "entry effect" caused by the future availability of the earnings supplement. In this case, what was actually measured was a "delayed exit effect" determined by whether people would prolong their stay on welfare to become eligible for SSP's supplements. The findings showed that the percentage of the programme group that remained on welfare for a year was approximately 3 percentage points higher than for the control group. The simple group mean difference was 2.6 percentage points and was not statistically significant. When the impact was adjusted by means of an ordinary least squares regression model that included 42 baseline characteristics as co-variates, the estimate was 3.1 percentage points and was statistically significant at the 0.10 level. These results are reported in Card *et al.* (1997) and Berlin *et al.* (1998).
8. Members of the SSP recipient sample had been receiving welfare for *at least* one year; 76 per cent had been receiving welfare for two or more of the previous three years and 42 per cent had been receiving welfare continuously for at least three years. Those in the applicant sample qualified for SSP with the minimum requirement of one year in receipt of welfare, and the average member of the applicant sample had spent only three months on welfare in the previous two years.
9. Effective July 1, 1996, the *Employment Insurance Act* replaced the former Unemployment Insurance programme with Employment Insurance (EI).
10. Displaced workers were defined as those who had at least three years of continuous employment and who were experiencing a permanent job loss at the time of ESP enrolment. Repeat EI users were defined as those who were applying for unemployment benefits for the fourth consecutive year.
11. The primary goal of those experiments was to test whether such bonuses could reduce the government's cost of unemployment benefits, without reducing claimants' future earnings by causing them to take new jobs prematurely. The first experiment (in Illinois) found that the reduction in total benefit payments more than offset the cost of the bonuses; the next three experiments, however, found that bonuses did not produce impacts that were large enough to pay for themselves. For a summary of the results of the UI re-employment bonus experiments, see Meyer (1995).
12. For a detailed description of ESP's programme model and information on how the project was implemented, see Bloom *et al.* (1997).
13. An eligible participant could also qualify for supplementation by finding a job that did not entail any immediate earnings reduction. Although no supplement payments would be made for such employment, the participant's eligibility for future supplementation would be established in the event that, during the two-year period of supplement eligibility, the participant's earnings did fall below those in the previous job. Some commentators have suggested that this form of guarantee against catastrophic earnings losses should be available to workers who may be displaced in order to compensate them, since they disproportionately bear the cost of adjustments that are necessary for others to benefit from economic growth. See, for example, Bailey *et al.* (1993). In ESP, however, very few participants (1.5 per cent of the sample) initiated without an immediate earnings loss.
14. Of course, it is possible that a large-scale programme that supplemented the earnings of low-wage workers would increase the supply of such workers, thereby exerting downward pressure on market wage rates. Any reduction in wage rates could lead to an increase in the amount of labour demanded (jobs offered) by employers, thereby increasing the total number of jobs available.

15. As discussed by Greenberg *et al.* (1995), any programme that offers financial incentives to encourage work effort inevitably makes some payments to people who would have gone to work anyway.
16. For example, see Moffitt (1992) for a review of these effects in the U.S. welfare system.
17. See Ruhm (1991) for a discussion of the scarring effects that may be associated with lengthy periods of unemployment.
18. Belzil (1996) found that employed job search is substantially more effective than unemployed job search for mature workers; unemployed job search was found to be slightly more effective for younger workers, however.
19. An illustration of this problem was provided by the introduction, in October 1989, of the Supports to Employment Program (STEP) for social assistance recipients in the Province of Ontario. STEP increased the total amount of earnings that people could have without affecting their entitlement to social assistance benefits. It also provided some special benefits to social assistance recipients who went to work (for example, a payment toward the first month's child care expenses and a lump-sum start-up benefit to cover the initial costs of starting a new job). Shortly after STEP was introduced, the number of welfare cases in Ontario began to rise. The average General Welfare Assistance caseload increased by 32 per cent in 1990 and by a further 62 per cent in 1991. It is impossible to disentangle the impact of the more generous STEP benefits from the effects associated with a recession that hit Ontario particularly hard between 1990 and 1992. However, the Ontario government was sufficiently concerned that, in August 1992, it introduced the "STEP-notch", which withheld eligibility for most STEP benefits until after new welfare entrants had been in receipt of social assistance for three months. This action was prompted, at least in part, by a concern that low-income workers were seeking to qualify for welfare in order to receive STEP benefits. We thank John Stapleton, Ontario Ministry of Community and Social Services, for providing information on this example of a policy response to a perceived entry effect.
20. For complete 18-month impact results, see Lin *et al.* (1998).
21. A significant minority of supplement takers did not maintain continuous full-time employment, however; they thus became temporarily ineligible for supplement payments. Consequently, in any given month, the percentage of the programme group that was actually receiving an earnings supplement was lower than the take-up rate.
22. For complete SSP Plus 18-month findings, see Quets *et al.* (1999).
23. Statistically significant impacts on full-time employment, ranging from 9.2 percentage points to 23.2 percentage points, were estimated for a number of sub-groups defined according to baseline characteristics (for example, participant's age, number and age of children, educational attainment, with or without self-reported limitations on their ability to accept employment, working full- or part-time at baseline or unemployed and not looking for work).
24. These results are for the 5th quarter after random assignment and are statistically significant at the .01 level. SSP did, however, increase the percentage receiving *either* income assistance or SSP payments by 7 percentage points, since some of those now receiving SSP supplements would have left welfare on their own during this period.
25. The SSP payments are taxable, as, of course, are participants' earnings; social assistance payments are not taxable.

26. Card *et al.* (1999) discusses why this assumption may not be strictly correct in this case. The adjusted impacts are nonetheless presented as a plausible upper bound on the impacts of an SSP programme that targeted those who had been on welfare just one year.
27. This is equivalent to the "no-show" adjustment that was made in estimating "impacts per enrollee" in the evaluation of the Job Training and Partnership Act. For a discussion of this adjustment and the conditions under which it is appropriate, see Bloom (1984).
28. Among "applicants", about half of the additional employment resulting from SSP was in jobs with wages within \$1 of the minimum wage (among those in the "recipient" study, about three-quarters of additional jobs paid wages at this level). However, about a third of additional employment among "applicants" paid more than \$3 over the minimum wage (less than 3 per cent of the additional employment among "recipients" paid wages at that level).
29. For complete findings, see Tattrie (1999).
30. The programme group average was \$7 641 compared with \$7 483 for the control group. This difference was not statistically significant, however.
31. Members of the programme group received EI benefits for 27.8 weeks during the 15-month period, compared to an average of 27.4 weeks for the control group. (Although, in two of the 15 months, ESP slightly reduced the percentage who were receiving benefits.) Again, the increase was not statistically significant.
32. For complete findings, see Bloom *et al.* (1999).
33. In fact, 27 per cent of supplement group members qualified to receive supplement payments by quickly finding a new full-time job that paid less than their previous one. Only, 72 per cent of these "supplement qualifiers" actually received supplement payments, however. Those with the highest expected payments were the most likely to apply for and receive them; many of those whose earnings made them eligible for only small supplement payments did not bother to apply for them. Additionally, 12 per cent of the supplement group members qualified for "earnings insurance" by quickly finding a new full-time job that paid as much or more than their previous job; but only one out of eight of these qualifiers bothered to initiate (register for) their earnings insurance. Of this very small group, only seven people ever used their earnings insurance to subsequently obtain supplement payments.
34. In the sixth and seventh months after random assignment, full-time employment among programme group members was 4.1 and 3.2 percentage points higher than among control group members. These estimates are statistically significant at the 0.01 and 0.05 significance levels respectively.
35. Average hourly earnings were 2.5 per cent less than they would have been otherwise and this difference was statistically significant at the 0.10 level.
36. Programme group members received an average of \$6 460 in benefits, paid for a period of 22.1 weeks; control group members received \$6 370 for 21.9 weeks. These differences were not statistically significant.
37. The data on financial hardship was collected by means of the 15-month participant follow-up survey. In-depth interviews were conducted with 31 supplement recipients who had experienced large re-employment earnings losses and had received large supplement payment until they reached the end of their two-year eligibility period. For these recipients, ESP was indeed an important source of income. The supplement payments helped them meet their financial obligations and, for most, the loss of the supplement was at least somewhat difficult.

38. A new programme like SSP would presumably offer assistance to all on the welfare rolls who met the qualifying conditions, for example, had been on the rolls for at least a year. Therefore, the results with the SSP recipient sample provide the best estimate of the effects of a newly implemented programme. But all new welfare entrants would likely learn about the programme as they entered welfare. Therefore, over time, the composition of the eligible population would resemble the SSP applicant sample. Therefore, this applicant study provides better estimates of the effects of an established programme.
39. The relative generosity of the SSP offer differs somewhat between British Columbia and New Brunswick because of differences in provincial social assistance programmes and the different "earnings reference levels" set for each province. Furthermore, the SSP offer does not take into account family composition, whereas welfare benefits do; so the SSP offer is relatively less generous for families with more children.
40. Depending on the policy objectives, it may not be appropriate to look for the least generous supplement that will produce the desired work effect. To the extent that the policy is aimed at lifting people out of poverty, a somewhat more generous programme of earnings supplementation may be desirable.
41. It is also interesting that 28 per cent of those who met the qualifying conditions for a supplement did not bother to apply for one. These appeared to be mainly people who would qualify for small payments or who expected their payments to last for only a short time.

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