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Summary and Policy Implications

Philip K. Robins University of Miami Reemployment Bonuses in the Unemployment Insurance System

> Evidence from Three Field Experiments

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8 Summary and Policy Implications

Philip K. Robins

The previous chapters have presented findings from three unemployment insurance (UI) bonus experiments conducted in the United States during the 1980s. This chapter summarizes the findings, provides an assessment of what they seem to imply for the viability of a national system of UI bonuses, and compares a bonus system to other possible UI reform measures.

SUMMARY OF RESULTS

Background of Experiments

The UI bonus experiments were conceived just after unemployment in the United States had reached a post–World War II high. In 1982 and 1983, for example, the civilian unemployment rate was nearly 10 percent (Council of Economic Advisers 1999). During the 1960s, the unemployment rate averaged under 5 percent and during the 1970s, it averaged just over 6 percent.

High unemployment, coupled with a growing consensus among academics and policy analysts that the UI program exacerbated unemployment by reducing the incentive to become reemployed, prompted policymakers to search for alternative ways to help lower unemployment. Offering a bonus was a novel idea. It was thought that a bonus, if structured properly, could partially offset the financial disincentives of the UI system and reduce unemployment.

Economic theory provided an unambiguous prediction about the impact of a bonus on the length of an unemployment spell. Basic jobsearch theory implies that if a time-limited offer of a bonus is extended to UI recipients, a number of them would respond by finding employment more quickly than they would if there had been no bonus. The reduced unemployment would be the result of the combined effects of more intensive job searches and a greater incentive on the part of the unemployed to accept jobs that are offered (because of a lower reservation wage).

From the policymaker's perspective, the source of the reduced unemployment is important. If the reduced unemployment comes about as the result of lower reservation wages, then the bonus may induce workers to accept lower-paying jobs. On the other hand, if jobsearch intensity increases, workers may find jobs that pay at least as much as they would in the absence of a bonus offer.

The key policy questions that arose then were 1) by how much would a bonus reduce unemployment, 2) by how much would the reduced unemployment lead to lower UI payments, 3) would the reduced unemployment be associated with lower or higher paying jobs, 4) to what extent would the cost of the bonus be offset by reduced UI benefits, and 5) would the U.S. economy be better or worse off by the enactment of a bonus program?

These were critical questions that seemed well suited to being answered definitively by a carefully conceived and operated social experiment. In 1984, the Illinois bonus experiment was launched. It was followed in 1988 by the Pennsylvania and Washington bonus experiments.¹

Features and Main Findings

Table 8.1 summarizes the features and main findings from the Illinois, Pennsylvania, and Washington experiments.² The Illinois experiment tested a single treatment.³ Unemployment insurance recipients were offered a bonus of \$500 if they found a job within 11 weeks of filing for benefits and if they held the job for at least 4 months. The experiment in Pennsylvania tested four treatments.⁴ Unemployment insurance recipients were offered bonuses ranging from \$105 to \$1,596 if they found a job within 6 or 12 weeks of filing for benefits and held the job for at least 16 weeks. The experiment in Washington tested six treatments. Unemployment insurance recipients were offered bonuses ranging from \$110 to \$1,254 if they found a job within 3 to 13 weeks and held the job for at least 4 months.

	Illinois,	Pennsylvania,	Washington,
	1984–1985	1988–1990	1988–1989
Number of sites	22	12	21
Sample size	8,138	12,226	15,534
Treatment	4,186	8,834	12,452
Control	3,952	3,392	3,082
Average weekly UI benefit	135	185	153
and range (\$)	(51–161)	(35–266)	(55–209)
Average replacement rate ^b (%)	36	43	39
Number of bonus treatments	1	4	6
Average bonus offer and	500	778	574
range (\$)	_	(105–1,596)	(110–1,254)
Average qualification	11 weeks	9.8 weeks	8.4 weeks
period and range	_	(6–12 weeks)	(3 –13 weeks)
Reemployment period	4 months	16 weeks	4 months
Percent leaving UI by qualification date	43	57	56
Percent fully qualifying for bonus	30	34	31
Percent receiving bonus	14	11	15
Average bonus payment ^c (\$)	68	98	95
Average impact on benefit weeks, regression- adjusted	-1.04* (-1.46** FSC-elig.; -0.65* FSC-inelig.)	-0.58**	-0.40*
Average impact on annual benefit amount ^c (\$)	-150	-102	-63
Average impact on probability of employment, quarter 3	0.021	-0.014	0.00
Average impact on annual earnings ^c (\$)	250*	93	-88

Table 8.1 Summary of Findings from the UI Bonus Experiments^a

Table 8.1 (continued)

	Illinois,	Pennsylvania,	Washington,
	1984–1985	1988–1990	1988–1989
Net annual benefit per			
claimant ^d (\$)			
Claimant	105	66	-33
UI system	78	1	-36
Government	142	24	-57
Society	247	90	-91

^a For impacts, * = statistically significant at the 10% level; ** = statistically significant at the 5% level.

^b Average UI benefit/average wage.

^c Taken from Chapter 7, Tables 7.2, 7.3, and 7.4. For the Pennsylvania and Washington experiments, values are weighted averages across treatment groups.

^d Claimant net benefits are earnings impact minus reduced UI benefits plus bonus payment minus estimated taxes. UI system net benefits are reduced UI benefit minus bonus payment minus administrative cost of bonus program. Government net benefits are UI system net benefits plus increased taxes. Society benefits are earnings impact minus administrative cost of bonus program. Administrative cost is assumed to be \$3 per claimant and taxes are assumed to be 25% of earnings impact.

Each bonus experiment had what seemed to be relatively large sample sizes, ranging from 8,138 in Illinois to 15,534 in Washington. However, as will be discussed below, unless a "parameterized" model is used to estimate impacts, the sample sizes in Pennsylvania and Washington were not really large enough to detect modest *differential* impacts among the various bonus treatments.⁵

The UI programs in the three states provided weekly benefits that replaced, on average, nearly 40 percent of weekly wages. The bonuses represented between two and six times the weekly UI benefit amount (WBA). On the surface, then, the bonuses appeared to have the potential to provide a significant financial incentive. However, the bonuses would have to reduce unemployment by at least 2 to 6 weeks among those who took up the bonus, otherwise they would not be cost-effective from the perspective of the UI trust fund. Because a number of recipients received "windfall" benefits (that is, they received a bonus without reducing their unemployment), the reduction in unemployment *among those who responded to the offer* would have to be greater than 2 to 6 weeks for the bonus to be cost-effective.

As Table 8.1 indicates, between 43 and 57 percent of the treatment group members left UI by the qualification date and, of those, between half and three-quarters fully qualified for the bonus. However, the proportion of claimants receiving bonuses was very low in all three experiments, ranging from 11 to 15 percent of eligible treatment group members. Surprisingly, almost half of those who fully qualified for the bonus failed to claim it. In Illinois, roughly three-quarters of those that fully qualified for the bonus claimed it, while in Washington and Pennsylvania approximately one-half of those fully eligible for the bonus claimed it. Such a large number of "no-shows" increases the costeffectiveness of the bonus, but the take-up rate by eligible claimants in a full-scale national program would probably be higher than that experienced in the experiment. The administrators of the experiments have not provided any explanation why so many individuals failed to claim the bonus. Certainly the transaction costs involved in filing a claim would appear to be low relative to the payoff.

Although in some sense each of the 11 treatments in the 3 experiments can be viewed as independent programs, the average experimental effect in each experiment can be loosely considered the result of a treatment that is the weighted average of the bonus offers and qualification periods in each experiment. For the most part, it is this "average treatment" that will be the major focus of attention in what follows.

Each experiment significantly reduced the number of weeks claimants received UI benefits, with Illinois having the largest impact of just over one week and Pennsylvania and Washington reducing UI benefit receipt by close to one-half week. If the Federal Supplemental Compensation (FSC-eligible) treatment group is excluded from the Illinois calculations, the reductions in UI receipt become similar across all experiments, ranging from 0.40 week in Washington to 0.65 week in Illinois. Although it is not entirely clear why those eligible for FSC benefits would be more likely to respond to the bonus, one explanation is presented in Chapter 6 (see p. 199). In short, because FSC-eligibility reduces search effort, the marginal cost of increased search is lower, and the bonus can have an increased impact.

The Pennsylvania and Washington experiments tested more than one treatment in order to measure the sensitivity of the impact to the bonus amount. The Pennsylvania experiment tested two bonus amounts and two qualification periods. The Washington experiment



Figure 8.1 Results of the Washington and Pennsylvania Experiments

tested three bonus amounts and two qualification periods. Figure 8.1 shows the relationship between the bonus amount in each experiment and the impact on UI benefits for each qualification period. This figure indicates that only in the case of the short qualification period in the Washington experiment and the long qualification period in the Pennsylvania experiment does their appear to be a pattern of increasing negative impact on UI benefit amount with the size of the bonus. However, with the exception of the short qualification period in the Washington experiment, the differences in impacts across treatments are not generally very large and are not statistically significant. Thus, one must conclude that the Pennsylvania and Washington experiments were not very successful in measuring the sensitivity of the impact to the bonus amount.

Because so few members of the treatment group received a bonus, the bonus amount per treatment group member averaged only \$68 in Illinois, \$98 in Pennsylvania, and \$95 in Washington. The average reduction in UI benefits exceeded the average bonuses (including administrative costs) in Illinois and equaled the average bonus in Pennsylvania, making the bonus cost-effective from the perspective of the UI trust fund in Illinois and cost-neutral in Pennsylvania. Only the Washington experiment was not cost-effective from the perspective of the UI trust fund.

While seemingly cost-effective in Illinois, a higher take-up rate would have reversed this conclusion. As indicated above, it is not known why the take-up rate was so low in Illinois (as well as in the other two experiments). If bonuses are to remain a serious policy alternative, future research needs to investigate and understand the reasons for the low take-up rate.

In addition to reducing UI benefits, the bonuses also increased earnings in Illinois and Pennsylvania, but they decreased earnings in Washington. Because there was no significant change in the probability of being employed in any of the experiments, the increased earnings in Illinois and Pennsylvania implies that the claimants were probably not taking lower paying jobs in order to receive the bonus. Wage rates may have been somewhat reduced in Washington.

In Illinois and Pennsylvania, the claimants experienced net benefits from the program. The net benefits arose because of both the bonus payments plus the increased earnings (net of taxes). In Washington, the net benefits to claimants were slightly negative because earnings and UI benefits fell by more than the bonus payments.

The Illinois and Pennsylvania experiments also conferred net benefits on society. The positive net societal benefits arose because of the increased earnings. Because the Washington experiment decreased claimant earnings, net benefits to society were negative.

Generalizing the Experimental Findings

Chapter 6 described three major concerns that arise in generalizing the experimental findings to a national program. First, there is the possibility that the availability of a bonus would induce more individuals to apply for UI benefits. At the time of the experiments, approximately 65 percent of those eligible for UI were applying for benefits. It would seem likely that the percentage of eligible persons that apply for UI would be greater under a national program. Second, as has been indicated, the take-up rate among persons that were fully eligible for a bonus was only about 50 percent. Again, it is likely that the take-up rate would be higher under a national program, perhaps because of greater information about the bonuses, less stigma attached to receiving them, and belief in the credibility of the issuing agent. Finally, there is the possibility that bonus recipients would "crowd out" other workers from jobs that the others would have taken. Accounting for each of these concerns affects the net benefits of the program. In some cases, net benefits increase, while in others they decrease. Table 8.2 shows how net benefits change from each of the four perspectives (claimant, UI system, government, and society), after accounting for these concerns. The first row of Table 8.2 shows the net benefits under a hypothetical program having a bonus of \$500, a qualification period of six weeks, a UI take-up rate of 65 percent, a bonus take-up rate of 50 percent, and no crowding out. These conditions approximate the average conditions prevailing in the three UI experiments. Under these conditions, net benefits from all four perspectives are positive.

Increasing the UI take-up rate to 75 percent increases the net benefits to the claimant but decreases the net benefits to the UI system and the government, making them negative. Because there is no change in real output, net benefits to society only change slightly due to higher administrative costs. Increasing the bonus take-up rate further increases the net benefits to the claimants and further decreases the net benefits to the UI system and the government. Finally, allowing for a crowding-out ratio of 40 percent reduces net benefits from all perspectives except the UI system.

Of course, it is not known with certainty whether these changes, which were estimated using a simulation model, would occur under a

Parameter	Claimant	UI system	Government	Society
Base program ^a	32	21	40	72
Increase UI take-up rate to 75%	78	-26	7	71
Increase bonus take-up rate to 75%	96	-40	-25	71
Increase crowding-out ratio to 0.40	68	-44	-35	34

 Table 8.2 Net Annual Benefits per Claimant under a Hypothetical National Program (\$)

NOTE: Taken from results from the Pooled Experimental Samples in Chapter 7, except for claimant benefit calculation. Each successive row represents a change from the previous row.

^a Bonus = 500, qualification period = 6 weeks, UI take-up rate = 65%, bonus take-up rate = 50%, crowding out ratio = 0.

national program. Nonetheless, the experimental findings strongly suggest that a national bonus program similar to the ones tested in the three UI experiments would not be cost-effective from the perspectives of the UI Trust Fund or the government. However, claimants and society are predicted to experience net benefits from the program, even after accounting for "macro-effects."

ASSESSING THE EXPERIMENTS

There are at least two ways in which to assess the UI experiments. First, one needs to determine whether they achieved their objective of providing definitive information about the impacts of a UI bonus system. Second, if the impacts are judged as definitive, one needs to form a conclusion about whether bonuses are a good idea for national policy. Regardless of whether or not they are a good idea for national policy, the experiments may be judged as successful if they provided definitive answers to the questions originally posed.

From the standpoint of standards for social policy research, the experiments were quite successful. As described in Chapter 2, the experiments were generally carried out as originally designed and the use of randomized treatments ensured that the results had internal validity. Furthermore, the findings were generally consistent across the experiments; however, there were some differences in the findings that might limit their generalizability. UI benefits were significantly decreased in all three experiments by similar amounts, but average earnings rose in Illinois and Pennsylvania and fell in Washington (although the Pennsylvania and Washington earnings impacts were not statistically significant). None of the experiments significantly affected employment, although the estimated impact was positive in Illinois, negative in Pennsylvania, and zero in Washington. Overall, however, the differences across experiments were not large enough to be statistically significant. Financial incentives appeared to work the way economists and policy analysts predicted they would, but the impacts were not nearly as large as advocates of a bonus would have hoped for.

In addition to some inconsistencies across the experiments, they were also not entirely successful in pinpointing the differential impacts of alternative program features, such as the size of the bonus and the length of the qualification period. Given the success of the Illinois experiment (which tested only a single bonus treatment), the Pennsylvania and Washington experiments were designed to confirm the Illinois results and to provide estimates of the sensitivity of impacts to various program features. The Pennsylvania experiment tested four treatments and the Washington experiment tested six treatments, both varying the size of the bonus offer and the length of the qualification period.⁶

Within each experiment, there were no statistically significant differences across treatments. In a continuous variable model in which weeks of UI was regressed on the bonus amount and the length of the qualification period (plus other control variables), the estimated impacts were not statistically significant at conventional levels, although both were of the expected negative sign (see Chapter 4, Table 4.3). When the Pennsylvania and Washington samples were pooled, the impact of the bonus amount was statistically significant at the 10 percent level. When all three experimental samples were pooled, the length of the qualification period became statistically significant at the 5 percent level, but the impact of the bonus amount was not statistically significant.

What can the lack of significant differences across treatments be attributed to? It appears that the sample sizes were not large enough to detect differences of the order of magnitude that actually occurred. Of course, it could not have been known beforehand what the impacts would turn out to be, but it appears not enough attention was paid to identifying differential impacts across treatments. In retrospect, it might have been better to have tested fewer treatments in Pennsylvania and Washington, with greater differences in bonus amounts and qualification periods to have possibly generated larger differential impacts. However, parameterizing the bonus and qualification options was always considered an acceptable alternative format that generally requires smaller sample sizes across treatments, although functional form in a parameterized model is an important issue that needs to be resolved before determining sample size requirements.

Despite these shortcomings, the experimental approach appears to have generated credible and definitive findings relative to other evaluation methods. As noted by Linkz (1999), policymakers were generally convinced by the experimental findings, found them simple to comprehend, and concluded that the experimental design was the only one that would have produced credible results. The only real limitation of the experimental approach was that it took some time for the results to be generated and disseminated and by the time they became available (the late 1980s and early 1990s), the policy agenda had changed somewhat, with welfare reform overshadowing UI reform and fiscal conservatism gripping Congress. By the time the results became fully available, UI bonuses had become a much less feasible policy option. Worker profiling had taken center stage as the policy of choice, and the experiments did not provide any direct evidence on how worker profiling would work with a system of bonuses (although, as I indicate below, more recent work has used the experimental data to simulate the effects of worker profiling in a system with bonuses).

ALTERNATIVE POLICIES

The results presented in this book have suggested that the UI bonus schemes tested in the Illinois, Pennsylvania, and Washington experiments were only marginally cost-effective from the perspective of the UI Trust Fund and the overall government budget. If a relatively unrestricted bonus scheme does not achieve the kinds of objectives that were originally hoped for, the natural question arises as to whether there are alternative policies for encouraging reemployment among UI recipients that may be more cost-effective. In this section, I discuss five alternatives that have been proposed since the UI bonus experiments were undertaken. Three of these—an earnings supplement, stricter sanctioning of work-search requirements, and stricter worksearch requirements—have also been evaluated using a randomized experiment. The other two—worker profiling and Unemployment Insurance Savings Accounts (UISAs)—have been evaluated using nonexperimental methods.

An Earnings Supplement

One alternative to bonuses is to provide an earnings supplement to UI recipients who are willing to take a pay cut to become reemployed more quickly. The objective of a UI supplement scheme is to cushion any income losses suffered as a result of the pay cut. In order to minimize windfall, the supplements should be provided only to individuals who would otherwise not have become reemployed. Displaced workers (persons who have lost stable, long-term, and often well-paying jobs due to technology, increased international competition, or shifting market demand) and repeat users of UI are groups for whom an earnings supplement might be effective.

Permanent job displacement is a problem throughout North America and Europe.⁷ In Canada, between 1981 and 1991, more than one million persons were permanently laid off from jobs. Unemployment insurance in Canada (now officially referred to as Employment Insurance) is the largest source of government assistance to displaced workers. The UI system in Canada is more generous than it is in the United States. It replaces close to 55 percent of wages for most workers and pays benefits for up to 50 weeks. As in the United States, much has been written about the potential for the Canadian UI system to prolong unemployment. Because of this, and because of the high cost of the UI program in Canada, policymakers there have been exploring new kinds of reemployment policies.

Given the limited success of the UI bonus experiments, Canadian policymakers were reluctant to test a similar kind of program. Instead, they proposed and tested an alternative—an earnings supplement. An earnings supplement is designed to make up part of the earnings loss suffered by displaced workers who are able to find reemployment more quickly but at wages lower than what they had previously experienced. In 1995, the Canadian government funded an experimental evaluation of an earnings supplement program for displaced workers and repeat users receiving UI. The experimental program, termed the Earnings Supplement Project (ESP), was carried out on close to 6,000 persons (half of which were assigned to a control group and half to a treatment group) in five Canadian cities.⁸

The features and findings of the ESP are presented in Table 8.3.⁹ To be eligible for the supplement, UI recipients had to find a full-time job (30 hours or more of work per week) within 6 months of filing for UI benefits. This job could not be with their most recent employer at their previous work location. If an eligible job were found, the individual could receive a weekly payment equal to 75 percent of the difference between the previously weekly insurable wage and the new wage, with a maximum supplement equal to Can\$250 per week.¹⁰ Thus, if the individual found a job that payed the same, or more, than the previous job no supplement would be paid.

Individuals were eligible for the supplement for up to two years. Unlike the U.S. bonus experiments, there was no required preemployment period—individuals became eligible to receive the supplement immediately after finding a full-time job.

As Table 8.3 indicates, the average supplement recipient was paid more than Can\$8,700, averaging about Can\$137 per week. Like the proportion of the treatment group collecting a bonus in the U.S. experiments, however, the proportion of the ESP treatment group receiving a supplement was extremely low-only 21 percent of the treatment group received the supplement (compared with between 11 and 15 percent of the treatment group that received a bonus in the U.S. experiments).¹¹ The percentage leaving UI by the qualification date (26 weeks after filing for UI benefits) was similar to the percentage in the U.S. experiments (48 percent compared with between 43 and 57 percent) and the percentages fully qualifying for the supplement were also similar (28 percent compared with between 30 and 34 percent). Furthermore, unlike the U.S. bonus experiments, the ESP supplement had no perceivable impact on UI receipt. In fact, the treatment group actually stayed on UI slightly longer and received slightly more UI than the control group. Although the treatment group had a 0.023 higher employment rate than the control group (similar to the impact in the Illinois bonus experiment), average earnings were lower, although not significantly so. Thus, unlike the U.S. bonus experiments, some ESP recipients were induced to find lower paying jobs and overall employment was not increased by enough to result in an overall increase in average earnings during the first five quarters of the program.

Because of the lack of an impact on UI benefit receipt, ESP was not cost-effective from the perspective of either the UI system or the government. Additionally, because claimant earnings fell, ESP had negative net benefits for society. Only claimants benefited from the

Supplement i roject (ESI) Experiment	
Years operated	1995–1997
Number of sites	5
Sample size	5,912
Treatment	2,960
Control	2,952
Average weekly UI benefit (Can\$)	308
Average UI replacement rate ^b (%)	55
Number of treatments	1
Weekly supplement	\$250 or 75% of lost earnings, whichever
	is less
Maximum number of weeks supplement could be paid	104
Average supplement paid over 104 weeks (Can\$)	8,705
Average number of weeks supplement was paid	64
Average weekly supplement (Can\$)	137
Qualification period to get full-time job (≥30 hours)	26 weeks
Reemployment period	none required
Percent leaving UI by qualification date	48
Percent employed full-time by qualification date	42
Percent qualifying for supplement	28
Percent receiving supplement	21
Average impact on UI benefit weeks, quarters 1-2	0.2
Average impact on UI benefit amount, quarters 1–5 (Can\$)	90
Average supplement paid, quarters 1-5 (Can\$)	1,165
Impact on probability of employment, quarters 1-2	0.023*
Impact on earnings, quarters 1–5 (Can\$)	-682
Net annual benefit per claimant ^c (Can\$)	
Claimant	592
UI system	-1,072
Government	-1,208
Society	-617
	(continued)

Table 8.3 Summary of Findings from the Canadian UI EarningsSupplement Project (ESP) Experiment^a

Table 8.3 (continued)

SOURCE: Adapted from Bloom et al. (1999).

^c Based on Tables 7.1 and 7.4 of Bloom et al. (1999). Claimant net benefits are earnings impact plus plus UI benefit impact plus supplement payment minus estimated tax change. UI system net benefits are minus UI benefit impact minus supplement payment minus administrative cost of supplement program. Government net benefits are UI system net benefits plus estimated tax change. Society benefits are earnings impact minus administrative cost of supplement program. Administrative cost is \$89 per claimant over quarters 1–5 and taxes are assumed to be 25% of earnings impact.

program, but by less than their supplement payments (because of the decreased earnings). Hence, ESP served primarily to transfer income from taxpayers to UI recipients, but not in a cost-effective manner. From the perspective of public policy, an earnings supplement that partially replaces lost earnings appears to be much more costly and much less effective than a one-time bonus.

Stricter Sanctioning

In recent years, U.S. social policy has been increasingly using sanctions, rather than financial incentives, to promote work effort. Sanctioning consists of penalizing recipients who do not comply with program regulations. The greater emphasis on sanctioning has been a response to claims that recipients of social transfers are abusing the system.

In the UI program, sanctioning takes the form of reducing benefits (possibly to zero) for persons who do not comply with the work-search requirements. Surprisingly, little is known about the impacts of stricter sanctioning in the UI program. Recently, Ashenfelter, Ashmore, and Deschênes (2000) reported the results of four randomized experiments that took place during the mid 1980s and tested the effects of stricter enforcement and verification of work-search requirements in the UI program.¹²

The UI sanctioning experiments contained several treatments. One treatment gave claimants an expanded initial eligibility questionnaire and emphasized the UI work requirement, including being notified that

^a For impacts, * = statistically significant at the 10% level.

^b Weekly UI benefit / weekly wage.

work search is subject to verification and that the claimant might be disqualified if the requirement wasn't being met. In addition, at the initial visit to the UI office, the claimant completed a work history form which was used later to review the accuracy of the monetary determination of eligibility. A portion of claimants receiving the first treatment was given a second treatment consisting of an actual verification of job contacts. The evaluators compared claimants receiving the second treatment with those in the treatment group that were not subject to the verification procedures to infer the impact of the verification procedures.

Table 8.4 presents the results of the experimental evaluation. In no case did the verification procedure significantly affect qualification rates or UI recipiency rates or benefit amounts.¹³ The authors concluded that sanctions are not cost-effective.

Stricter Work Search Requirements

In contrast to stricter sanctioning of existing work-search requirements, another possible UI policy would be to increase the work-search requirements themselves. In 1986, an experiment was undertaken in Tacoma, Washington, that tested several treatments of differing worksearch requirements. The design and findings from this experiment are reported in Johnson and Klepinger (1994).

The Tacoma experiment had four treatments, as indicated in Table 8.5. Treatment A eliminated the work-search requirements entirely. Treatment B had the standard work-search requirements and, hence, served as the control group for the experiment. Treatment C provided individualized requirements, by tailoring them to individual circumstances, and increased the requirements and provided services for claimants who didn't find work within a reasonable period of time. Treatment D combined intensive job-search assistance with employability development planning.

Prior to the experiment, members of each treatment group had similar characteristics. They received, on average, a weekly UI benefit of about \$146, which replaced about 63 percent of their pre-UI earnings.

Impacts of the experiment are also presented in Table 8.5. As indicated by the relative impacts of treatment A, the results strongly suggest that existing work-search requirements reduce UI benefits paid,

Years operated	1984–1985
Number of sites	4
Sample size	3,877
Treatment ^a	1,966
Control	1,921
Average weekly UI benefit entitlement ^b (\$)	116
Average replacement rate ^c (%)	51
Impact of work search verification on ^d	
Temporary disqualification rate	0.007
Average weekly benefits	0.85
Observed claim duration (weeks)	-0.23

Table 8.4 Summary of Findings from U.S. UI Sanctioning Experiments

SOURCE: Data from Ashenfelter, Ashmore, and Deschênes (2000).

^a There were two treatment groups. Members of the first treatment group had their work search verified in addition to a number of other verifications of initial and continuing eligibility, while members of the second treatment group were subjected to the additional verifications of eligibility but not the verification of work-search verification. The authors used differences between the two treatment groups to isolate the impact of the work-search verification component.

^b Measured over the treatment and control groups.

^c In three of the four sites for which earnings data were available. The rate equals the average UI benefit entitlement/average earnings.

^d Derived from a comparison of mean outcomes of the first treatment group with the second treatment group. None of the impacts are statistically significant at the 10% level or lower.

weeks receiving UI benefits, and the percent exhausting benefits, but have no impact on employment or earnings (the lack of a negative impact on earnings may be viewed as a positive finding because it implies that work-search requirements lead to a greater intensity of search rather than a reduction in the reservation wage).

Increasing work-search requirements beyond their present levels, however, had only a modest impact. Treatment C had no significant impact on any of the UI outcomes and only modestly increases the employment rate by 1.7 percentage points. Treatment D reduced weeks of UI receipt by about one-half week and had no impact on earnings. Johnson and Klepinger indicated that Treatment D is cost-effec-

	Treatment	Treatment	Treatment	Treatment
Variable	A ^b	\mathbf{B}^{b}	C^{b}	$\mathbf{D}^{\mathbf{b}}$
Sample size	2,246	1,964	2,533	2,871
Average weekly UI benefit (\$)	147	145	147	145
Average replacement rate ^c (%)	63	63	63	63
Services received (% of sample)				
Eligibility review interview	0.4	24.6	33.2	19.3
Job-search workshop	0.0	0.1	0.1	15.2
Job referral	14.8	17.9	16.9	15.7
Job placement	5.7	6.8	7.2	6.0
Job counseling	1.3	1.3	1.2	1.6
Impact relative to status quo (Treatment B) ^d				
Total UI benefits paid (\$)	265**	_	5	-68
Weeks of UI benefits received	3.34**	—	0.17	-0.47*
Percent exhausting benefits	12.5**	_	0.5	-0.3
Percent employed	-0.9	_	1.7***	1.3
Hours of work	-6	_	2	22
Hourly wage rate ^e	0.12	_	-0.13	-0.01
Total earnings (\$)	-23	_	-24	292

 Table 8.5
 Summary of Findings from the Washington Alternative Work-Search Experiment, 1986–1988^a

SOURCE: Data from Johnson and Klepinger (1994).

^a * = Statistically significant at the 10% level; ** = statistically significant at the 5% level; *** = statistically significant at the 1% level.

^b Treatment A: no work-search requirement;

Treatment B: status quo (at least three contacts per week);

Treatment C: Individualized requirements, Varying contracts per week (up to five); Treatment D: Intensive job-search assistance and employability development planning.

^c Average UI benefit/average earnings.

^d Impacts are regression-adjusted. For UI variables, the impact is measured over the full benefit year. For the employment and earnings variables, the impacts are measured over the full two years after applying for benefits.

^e Hourly wage rate impacts are selectivity-corrected.

tive, but this inference is based on a statistically insignificant reduction of \$68 in UI benefits paid.

Worker Profiling

Since the mid 1990s, in response to congressional legislation, states have been implementing Worker Profiling and Reemployment Services (WPRS) systems (see, e.g., Eberts and O'Leary 1996). These systems actively help UI recipients shorten time out of work by identifying UI recipients who are most likely to exhaust benefits and referring them to required reemployment services.

Under the WPRS, UI recipients most likely to exhaust benefits are identified using a statistical methodology that assigns a probability of exhaustion to each UI recipient eligible for profiling. The probabilities are derived from a regression model that links the effects of personal characteristics and economic factors to the probability of exhaustion.

O'Leary, Decker, and Wandner (1997) argued that worker profiling can be used in a bonus program to potentially improve net benefits to the UI system. By restricting bonuses to claimants most likely to exhaust benefits, they maintain that windfall bonuses will be lower and impacts on UI benefit receipt rates and benefit amounts will be higher. Although there is no experimental evidence demonstrating that there would be an improvement in net benefits under a UI bonus program with worker profiling, O'Leary, Decker, and Wandner simulated the effects of worker profiling in the Pennsylvania and Washington UI bonus experiments.

A summary of their simulation results is presented in Table 8.6. They examine two types of profiling schemes. One would limit benefits to the top 50 percent of claimants most likely to exhaust benefits. The other would limit benefits to the top 25 percent of claimants most likely to exhaust benefits. In both cases, UI benefits were reduced by more in the profiled group. In addition, despite higher bonus amounts for the profiled group, net benefits to the UI system were higher. Perhaps surprisingly, the more restrictive profiling scheme (those limiting the bonus to the top 25 percent of claimants most likely to exhaust benefits) yielded lower net benefits than the less restrictive profiling scheme (those limiting the bonus to the top 50 percent of claimants most likely to exhaust benefits). However, the differences between the

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Variable	Pennsylvania	Washington
Impact on UI benefits paid ^b		
Bottom 50%	-70	31
Top 50%	-172*	-117*
Difference	-102	-148
Bottom 75%	-109	13
Top 25%	-129	-118
Difference	-20	-131
Average bonus paid		
Bottom 50%	86	67
Top 50%	103	142
Difference	17	75
Bottom 75%	92	85
Top 25%	104	166
Difference	12	81
Net benefit per claimant from perspective of UI system		
No worker profiling	-13	-76
Worker profiling, top 50%	36	-28
Worker profiling, top 25%	-8	-51

 Table 8.6 Simulated Net Benefits under Worker Profiling,

 Pennsylvania and Washington UI Experiments^a (\$)

SOURCE: Data from O'Leary, Decker, and Wandner (1997).

^a * = Statistically significant at the 10% level.

^b For combined treatments using the authors' profiling models.

two types of profiling schemes were small and the differences between profiled and nonprofiled claimants in either scheme were not statistically significant. The authors concluded that a low bonus amount (perhaps three times the WBA) and a long qualification period (perhaps 12 weeks) targeted to the top half of claimants most likely to exhaust UI benefits would be the most cost-effective type of bonus profiling scheme. They estimated that such a scheme would save the UI Trust Fund about \$50 per offer.

While profiling appears to make a bonus program more cost-effective, the improvement is minimal. Moreover, the existing results on profiled bonuses are based on nonexperimental simulations and may not occur under an actual program. In addition, the statistical models used to predict exhaustion rates tend to have low explanatory power and may not be accurately defining the optimal target group. Finally, in the presence of profiling, it is possible that claimants will alter their behavior to be more likely to meet the criteria used to select bonus-eligible claimants. If this occurs, the profiling procedure will become an even less accurate tool for identifying the group least likely to be receiving windfall benefits from a bonus program.

Unemployment Insurance Savings Accounts

A more radical proposal to encourage reemployment among UI recipients is the use of Unemployment Insurance Savings Accounts (UISA). As proposed by Feldstein and Altman (1998), all working persons would be required to save a fraction of their wages (up to 4 percent) in special government accounts. The funds in these accounts would earn the market rate of interest and could be drawn upon if the people were to become unemployed. In the event that the funds are exhausted, the government would lend these people money, again at the market rate of interest. If the person retires or dies with a positive balance in the account, it would be converted into retirement income or bequeathed to heirs. Negative balances would be forgiven.

By using personal wealth to subsidize unemployment, Feldstein and Altman argued that reemployment would be encouraged. Only persons who expect to retire or die with negative balances would face the same adverse reemployment incentives as under the present UI system.

Using historical data from the Panel Study of Income Dynamics, Feldstein and Altman simulated the performance of such a system. They found that only 5 percent of employees would retire or die with negative balances. They also estimated that UISAs would save the UI trust fund about half the benefits being paid under the current system. They suggest the savings could be used to reduce payroll taxes.

While such a system has intuitive appeal, about half the benefits would be paid to individuals with negative balances at retirement. This raises serious questions regarding the equity of such a system, although the current system also raises questions of equity. Furthermore, it is possible that the percentage of persons with negative balances at retirement could be even larger than suggested by the historical data, if there are adverse behavioral impacts (people borrowing money by increasing unemployment to build up negative balances at retirement). Without an actual field test of system of UISAs, it is difficult to draw any firm conclusions about its likely impacts.

CONCLUSIONS

The UI bonus experiments achieved their objective of providing credible estimates of the likely impacts of a UI bonus system. The experimental results indicate that bonuses are unlikely to have major impacts on unemployment and may only be marginally cost-effective.

The results are generally consistent across the experiments, although the magnitude of impacts varied. Impacts on benefit weeks were remarkably similar across the experiments (ranging from -0.40 to -0.65 week, excluding the FSC sample in Illinois), but the impacts on earnings were quite different (ranging from \$250 in Illinois to -\$88 in Washington). The Illinois experiment had the most positive impacts, leading to positive net benefits on all segments of society. The Pennsylvania experiment also yielded positive net benefits, but they were smaller than in Illinois. The Washington experiment yielded negative net benefits on all segments of society, although a few positive results did emerge for specific treatments. Despite the general similarity across experiments in average bonus amounts and qualification periods, the differences in net benefits across experiments are somewhat perplexing. Davidson and Woodbury hypothesize in Chapter 6 that differences in macroeconomic conditions across the three experimental sites (namely differences in job separation rates and growth rates in available jobs) could be responsible for the differences in net benefits across the sites.

The Illinois experiment had only one treatment and was not designed to test the sensitivity of responses to different treatment levels. The Pennsylvania and Washington experiments had several treatments and were specifically designed to test the sensitivity of responses to different treatment levels. However, the Pennsylvania and Washington experiments were not entirely successful in measuring the sensitivity of responses to different treatment levels. While the sample sizes for the entire experiments were adequate to measure experimental-control differences, the sample sizes for the individual treatments were probably not large enough to measure moderate differences in response across treatments.

Nonetheless, the evidence appears conclusive that bonuses are not the panacea originally envisioned. Allowing for macro effects that could not be measured by the experiments (higher UI take-up rate, higher bonus take-up rate, and crowding out) makes the evidence even less supportive of the bonus option.

Alternatives to bonuses have been proposed, but none appears to yield more desirable effects. Earnings supplements, tighter sanctioning, and increasing work-search requirements beyond their present levels all appear to be ineffective reforms. While some have suggested that worker profiling would improve net benefits, the evidence so far suggests that it is unlikely profiling would lead to consistently positive net benefits, although subsequent refinement of this technique may yield more positive results. However, the ability to identify key target groups is a difficult problem limiting the development of effective profiling models. Finally, the impacts of more radical reforms such as Unemployment Insurance Savings Accounts are largely speculative and may prove so inequitable that they would not be politically palatable.

The search for reform in the UI system is not as intense today as it has been in the past, largely because the economy has been healthy and unemployment has been much lower. Nonetheless, the search continues because the adverse work incentives still exist within the system and the economy might worsen in the future. As new approaches are developed, the evidence from this book strongly suggests that if at all possible, randomized experimental evaluations of such approaches should be undertaken. I believe randomized experiments provide the most effective way of gathering definitive evidence about the likely effects of a particular programmatic change and should be favored over non-experimental evaluation techniques. However, the worst possible action would be to adopt a new approach without any scientific evaluation at all.

Notes

- There was a fourth UI bonus experiment conducted in New Jersey in 1986 and 1987. The New Jersey experiment had three treatments: job-search assistance, job-search assistance plus training or relocation, and job-search assistance plus a reemployment bonus. The New Jersey experiment is not considered in this book because the bonus offers were made only after seven weeks of insured unemployment, and hence could not be replicated in a real national program where information about the bonus would be available from the beginning of an insured unemployment spell. For details about the New Jersey experiment and its results, see U.S. Department of Labor (1989) and Meyer (1995).
- 2. The dollar amounts reported in Table 8.1 and subsequent tables pertain to the years in which the studies were conducted. If the reader wishes to convert the study year amounts to present-day dollars (say, for the year 2000), the study year amounts would be multiplied by the ratio of a price index in the year 2000 to the price index in the study year. If the study was conducted over more than one year, an average price index over the study years may be used as an approximation. One commonly used price index is the Consumer Price Index, or CPI. For example, in the case of the Illinois experiment, the study period was 1984 to 1985. The CPI for the year 2000 (1982-1984 = 100) was 172.2. The average CPI over the years 1984 to 1985 was 105.7. Thus the average weekly UI benefit in Illinois of \$135 reported in Table 8.1 would be the equivalent of \$200 in year-2000 dollars $($135 \times 172.2/105.7)$. To convert Pennsylvania and Washington dollar amounts to year-2000 dollars, one would use the year 2000 CPI and the average CPI in Pennsylvania over the years 1988 to 1990 (which was 124.3) and the average CPI in Washington over the years 1988 to 1989 (which was 121.2). Similar calculations can be made for the other dollar amounts reported in this chapter.
- 3. As has been noted, Illinois also had a second experiment where bonuses were offered to employers, but extremely low participation precluded it from having any significant impacts. The employer experiment was not considered in this book because it differed from the experiments in Pennsylvania and Washington.
- 4. More than one treatment was tested in the Pennsylvania and Washington experiments because the success of the Illinois experiment encouraged policymakers to seek ways of finding the most cost-effective structure for a national bonus program. The Pennsylvania experiment tested a declining bonus offer (like in the New Jersey experiment) but, because it cannot be easily compared to a fixed bonus offer, it is not considered in this book.
- 5. The sample sizes for the Pennsylvania and Washington experiments were not determined on the basis of measuring differential impacts among the various treatments but rather were determined on the basis of measuring treatment-control impacts. By a parameterized model, it is meant that a response surface is estimated in which the treatments are quantified into a small number of continuous variables (like bonus amount or qualification period) rather than by a series of discrete dummy variables representing treatments. Thus, it was implicitly assumed

by the designers of the Pennsylvania and Washington experiments that differential impacts among the treatments would be estimated using a parsimonious response surface model. See, for example, Table 4.3 in Chapter 4.

- 6. There was no attempt to vary the preemployment period, which was set at four months in all three experiments.
- 7. See Lauzon (1995) for a discussion of the problem in Canada, Ross and Smith (1993) for a discussion of the problem in the United States, and OECD (1990) for a discussion of the problem in Europe.
- 8. The five cities were Saskatoon, Saskatchewan; Granby, Quebec; Winnipeg, Manitoba; Oshawa, Ontario; and Toronto, Ontario.
- 9. The information in this table was taken from Bloom et al. (1999). It only pertains to the program for displaced workers.
- 10. At an exchange rate of 0.75 Canadian dollars per U.S. dollar, the maximum supplement in U.S. dollars would be about \$187.50.
- 11. The low percentage of treatment group members receiving a supplement in ESP may be due to the fact that UI recipients are unwilling to jeopardize long-run job prospects by taking a short-term lower-paying job. By taking a lower-paying job, claimants would have to reduce job-search behavior and might miss out on finding a new job more comparable to the predisplacement job.
- 12. The four experiments took place in Hartford, Connecticut; Worcester, Massachusetts; Nashville, Tennessee; and Falls Church, Virginia.
- 13. Other components of the treatment also did not have statistically significant impacts.

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