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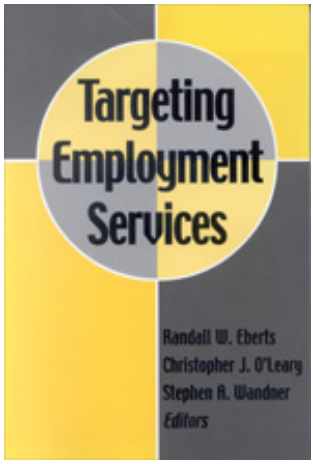
Targeting Reemployment Bonuses



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Chapter 6 (pp. 161-186) in:
Targeting Employment Services
Randall W. Eberts, Christopher J. O'Leary, and Stephen A. Wandner, eds.
Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2002
DOI: 10.17848/9781417524440.ch6

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Targeting Reemployment Bonuses

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Field experiments to evaluate the potential for using cash bonus offers to promote early return to work by unemployment insurance (UI) claimants were conducted in four states between 1984 and 1989. The first experiment was initiated by the Illinois Employment Security Department and yielded encouraging results. This led the U.S. Department of Labor to include a bonus treatment in the New Jersey reemployment experiment. Even though evidence from New Jersey was not strongly positive, to further clarify the findings from Illinois, the Labor Department sponsored multitreatment experiments in Pennsylvania and in Washington State. Results from the latter two experiments were not supportive of the idea that the reemployment bonus could be a cost-effective way to promote rapid reemployment, and policy momentum for the bonus idea faded.

In 1994, the Clinton administration proposed to Congress a federal reemployment bonus program to be narrowly targeted to dislocated UI claimants by a worker profiling mechanism based on objective characteristics such as level of education and length of work experience.[1] The previous year, a profiling mechanism of this type had been incorporated into federal legislation which authorized programs to provide job search assistance and self-employment allowances. Clinton's 1994 reemployment bonus proposal died in Congress, and reemployment bonuses are not presently available in the United States. However, any

future legislative initiative on bonuses would likely include a targeting mechanism.

By 1995, mechanisms for early identification of UI beneficiaries who are likely to experience long jobless spells were implemented in all states. These procedures are called profiling models and are part of state Worker Profiling and Reemployment Services (WPRS) systems required by the 1993 federal law. The models are designed to identify UI beneficiaries who are most likely to exhaust their benefit entitlement, so that reemployment services can be delivered quickly and prolonged unemployment can be forestalled.

Since WPRS profiling models currently being used by the states identify potentially dislocated workers, they offer a natural means for targeting reemployment bonus offers. This chapter summarizes recent findings from simulation analysis using data from the Pennsylvania and Washington experiments. These experiments were financed with money that Congress earmarked in 1987 to investigate methods for promoting reemployment of workers dislocated from their jobs because of structural change in the economy. While the first evaluations found little evidence that the reemployment bonus is an effective intervention for dislocated workers, our simulation results suggest that targeting reemployment bonus offers with state profiling models may appreciably improve the cost-effectiveness of the bonus.

The analysis of this chapter yields positive evidence consistent with findings from targeting studies for other employment programs that targeting services can increase reemployment success. For example, Corson and Decker (1996), who applied a similar simulation analysis to the job search assistance intervention for dislocated workers in the New Jersey experiment, estimated a significant improvement in program effectiveness.

THE REEMPLOYMENT BONUS EXPERIMENT

The first reemployment bonus experiment was conducted in Illinois during 1984–1985. It found that a $500 reemployment bonus offer to UI claimants for returning to work within 11 weeks (the *qualification period*) and staying employed at least four months (the

reemployment requirement) reduced the duration of UI compensated unemployment by 1.15 weeks and saved more than two dollars in UI benefit payments for every dollar paid out in bonuses and administration of the bonus offer (Woodbury and Spiegelman 1987). Treatment designs for the four experiments are given in Table 6.1, and mean net impact estimates are in Table 6.2.[2]

Encouraging results from the Illinois reemployment bonus experiment led to replication trials in other states to test if the large effects found in Illinois could be duplicated. The other experiments varied the bonus amount and the qualification period in an attempt to find the optimal bonus.

The reemployment bonus offer in the 1985–1986 New Jersey experiment also had a four-month reemployment requirement, but it had a

Table 6.1 Treatment Designs for the Reemployment Bonus Experiments

State	Bonus amount ($)	Qualification period (weeks)	
Illinois	500	11	
New Jersey	Declining[a]	12	
Pennsylvania		6	12
	3 × WBA	Low bonus, short qualification	Low bonus, long qualification
	6 × WBA	High bonus, short qualification	High bonus, long qualification
	Declining[a]	—	Declining[a], long qualification
Washington		(0.2 × potential UI duration) + 1 week	(0.4 × potential UI duration) + 1 week
	2 × WBA	Low bonus, short qualification	Low bonus, long qualification
	4 × WBA	Medium bonus, short qualification	Medium bonus, long qualification
	6 × WBA	High bonus, short qualification	High bonus, long qualification

[a] Declining means an initial bonus offer of half the remaining U.I. entitlement payable for reemployment within two weeks and then declining by 10% per week.

Table 6.2 Mean Net Impacts on Weeks and Dollars of UI in the Benefit Year across Four Experiments

Experiment	Net impact on weeks of UI benefits	Net impact on dollars of UI benefits
Illinois	–1.15** (0.29)	–194** (47)
New Jersey	–0.69** (0.23)	–101** (45)
Pennsylvania	–0.54** (0.21)	–95** (37)
Washington	–0.40** (0.21)	–63** (33)

NOTE: The impact estimates reported in this table are based on the full analytic samples examined in each experiment. Eligibility conditions for these samples are summarized in Table 6.3. The remaining estimates in this chapter for Pennsylvania and Washington are based on samples restricted by profiling considerations. Standard errors are in parentheses.

12-week qualification period and a bonus amount that decreased as the duration of insured unemployment lengthened. Net impacts on UI receipt in the New Jersey experiment were much smaller than in Illinois, with the bonus offer yielding only a 0.69 week reduction in UI payments. This raised questions about the appeal to the UI system of such a bonus offer (Corson et al. 1989).

The states of Pennsylvania and Washington each conducted separate reemployment bonus experiments in 1988–1989 involving a total of 11 different treatments, as described in Table 6.1. The Washington experiment had a mean bonus offer of about 3.5 times the weekly benefit amount (WBA) and a qualification period that averaged about 7.5 weeks long. Pennsylvania paid either three or six times the WBA and had qualification periods of either 6 or 12 weeks. There was also a long qualification period treatment with a declining bonus in Pennsylvania. Some of the bonus offers in Pennsylvania and Washington were nearly identical. These were the short qualification/high bonus offer and long qualification/high bonus offer treatments (Decker and O'Leary 1995, p. 536). As a result, it was hoped that the evaluation findings from the two experiments would be complementary and reinforcing.

The Pennsylvania and Washington treatments were intended to supplement information provided by the Illinois experiment by identifying which bonus amount and qualification period was most effective.

Among the five treatments in Pennsylvania and six treatments in Washington, only four were cost-effective from the perspective of the UI system (Decker and O'Leary 1995). As reported in Table 6.2, the mean net impact of the five Pennsylvania treatments of –0.54 weeks of UI and the mean net impact of the six Washington treatments of –0.41 weeks of UI were even more modest than the New Jersey results.

Other analyses have examined the individual experiments and their relationship to one another. The Illinois results were found to be stronger than the other experiments because of the opportunity to reduce much longer potential durations of benefits since extended benefits were available during roughly the first half of the operation of the Illinois experiment (Davidson and Woodbury 1991; O'Leary, Spiegelman, and Kline 1995). New Jersey impacts were found to be weaker than those in Illinois because of the differences in the behavioral responses to fixed versus declining reemployment bonus offers (Decker 1994). Slightly stronger results in Pennsylvania than Washington were attributed to tighter labor markets in Pennsylvania than in Washington during the operation of the two experiments (O'Leary, Spiegelman, and Kline 1995). Differences in impact estimates among the experiments may be further reconciled by examining the alternative targeting of offers resulting from the differing eligibility conditions among the experiments.

It is important to note that each of the four experiments compared reemployment earnings of those offered a reemployment bonus with those in control groups not offered a bonus. Despite spells of compensated unemployment, which were shorter on average, reemployment earnings were no lower for those offered a bonus. Treatment and control reemployment earnings were virtually identical in all of the experiments, suggesting that the offer of a reemployment bonus does not induce job seekers to accept lower quality jobs as measured by the rate of compensation. Long-term follow-up evidence from the New Jersey experiment is particularly compelling on this point. Earnings were tracked in each of six years immediately following the experiment, and neither in any particular year nor cumulatively over the six-year period was there a significant difference in earnings between those offered a bonus and those in the control group (Corson and Haimson 1995, p. 36).[3]

ELIGIBILITY FOR THE EXPERIMENTS

Previous analyses of the reemployment bonus experiments have examined neither the effects of targeting bonus offers nor the effects of differences in eligibility conditions. In most analyses, the implicit targeting resulting from eligibility criteria for the experiments has been accepted as a contextual datum. Each of the four experiments had slightly different eligibility requirements for unemployed workers to participate as members of treatment or control groups. The experiments were mainly focused on permanently separated employees who were going to have difficulty finding new employment. However, the degree of sample screening varied; this was because of a conscious effort to coordinate designs to increase the information provided by the collection of experiments.

Eligibility criteria for the four experiments separated into UI and dislocated worker criteria are summarized in Table 6.3. The requirements were intended to assure that workers opened a UI benefit claim, dealt with UI administrative rules, and experienced some degree of displacement from work.

To elicit the maximum possible bonus impact, offers should be made as soon as possible after a claim for UI benefits is opened. The offer was made after employment service (ES) registration in Illinois, after a first UI payment in New Jersey, and after claiming a UI waiting week in Pennsylvania.[4] In the Washington experiment, the bonus offer was made during the initial UI claim interview, which is well before receipt of the first benefit payment. Furthermore, bonus payments in Washington were sometimes made to persons who never even filed for waiting-week credit.[5] The other experiments required UI payment for bonus payment eligibility.

The presence and extent of dislocated worker criteria varied greatly across the experiments. Screening was extensive in New Jersey, while it was nonexistent in Washington. In terms of this design feature, the Illinois and Pennsylvania experiments fell in between. In Illinois, New Jersey, and Pennsylvania, offers were aimed mainly at permanently separated unemployed workers. Those awaiting recall and union hiring hall members were either explicitly or indirectly excluded. No such

Table 6.3 Eligibility Criteria for the Reemployment Bonus Experiments

State	UI eligibility criteria	Dislocated worker criteria
Illinois	Initial UI claims only	Eligible for a full 26 weeks of potential duration Registered with Job Service (to exclude temporary layoffs and union hiring hall members) At least age 20, not older than 54
New Jersey	First UI payments only	Three years tenure on prior job Age 25 or older Union hiring hall exclusion Exclude temporary layoffs: recall expected on a specific date
Pennsylvania	Initial UI claims only Regular UI claims Initially satisfied monetary eligibility conditions Not separated from job due to a labor dispute Signed for a waiting week or first payment within 6 weeks of benefit application date	Union hiring hall exclusion Exclude employer attached: must not have a specific recall date within 60 days after benefit application
Washington	Initial UI claims only Eligible to receive benefits from the state UI trust fund Monetarily valid claims at the time of filing	

exclusion was imposed in Washington, where the sample design provided that more restrictive screens could be imposed on the experimental data as part of the subgroup analysis. Results from Washington indicate that targeting offers to dislocated workers, defined as those with three or more years of prior job tenure, would modestly increase treatment effects.[6] Additionally, requiring a waiting week in Washington would probably have increased net impacts of the bonus offer.[7]

STATE PROFILING MODELS

In all states, profiling done as part of a WPRS system involves a two-step process. The first step excludes UI claimants expecting recall by their previous employers and those who are members of full-referral union hiring halls. These exclusions are applied to focus services on dislocated workers, and because such UI beneficiaries are not required to actively seek reemployment on their own. The second step identifies those among the remaining group who are most likely to exhaust UI benefits. Almost all states perform the second profiling step using a statistical model that predicts the probability of benefit exhaustion.

The factors used to help predict exhaustion in state WPRS models usually include education, job tenure, change in employment in the prior industry and occupation, and the local unemployment rate. Federal civil rights law prohibits UI benefit eligibility screens based on age, race, or gender, so these factors are excluded. When workers open a new claim for UI benefits, their personal and labor market characteristics are used in a profiling equation to predict their individual probability of UI benefit exhaustion. State WPRS systems then quickly refer UI claimants with a high probability of exhausting benefits to special reemployment assistance (Wandner 1997).

As seen in Table 6.4, the profiling models in Pennsylvania and Washington also include variables summarizing beneficiary UI entitlement. The profiling models in these two states have similar elements, but the Washington model includes more variables in the education and industry categories.[8] Furthermore, because of the great differences in Washington labor markets, three different models are used in that state. Our simulation analysis was based only on the model for the Puget

Table 6.4 Variables in the Pennsylvania and Washington WPRS Profiling Models[a]

Variable	Number of categories in Pennsylvania	Number of categories in Washington
Education	2	5
Job tenure	1	1
Industry	2	17
Local economic conditions	1	1
UI entitlement	2	2

[a] Variables for age, race, and gender are prohibited by federal civil rights law.

Sound area, which is home to more than half of the state's profiled UI claimants.

TARGETING THE BONUS OFFER

Bonus targeting simulations were performed using both the parameters in the actual Pennsylvania and Washington models set in 1994 and new models for each state estimated on the control group data from the experiments.[9] The newly estimated models used similar methods and prediction factors as the original state models.[10] Results from the two sets of models were broadly consistent. In this chapter, we present only results from the new models estimated on data gathered during the experiments in Pennsylvania and Washington.

Predicted exhaustion probabilities were computed for UI claimants in both the treatment and the control groups. Cases were then sorted from the highest to lowest exhaustion probability. The net impacts of the bonus offer were then computed for different groups defined by deciles of the distribution of predicted exhaustion probabilities. Alternative possible target groups were formed by gradually lowering the exhaustion probability threshold. Impact estimates were computed by contrasting benefit receipt by treatment group members with control group members in the same deciles of *ex ante* predicted probability of

UI benefit exhaustion. Estimates for both the incremental decile groups and the cumulative samples were examined.

The estimates provided in Table 6.5 do not provide clear guidance about which probability threshold generates the largest impacts. Impacts are relatively large when the offer is made to either the top 20 or 50 percent of the exhaustion probability distribution. For the Pennsyl-

Table 6.5 Impacts of Combined Treatments on UI Benefit Dollars Paid per Claimant by Predicted Probability of UI Benefit Exhaustion

	Pennsylvania		Washington	
Exhaustion probability group	Cumulative percentage group	Decile group	Cumulative percentage group	Decile group
Top 10% of predicted exhaustion probabilities	–245	–245	–106	–106
	(216)	(216)	(165)	(165)
Top 20%, 9th decile	–244	–235	–176	–264*
	(153)	(219)	(113)	(154)
Top 30%, 8th decile	–175	–34	–95	92
	(124)	(206)	(91)	(148)
Top 40%, 7th decile	–199*	–246	–91	–29
	(108)	(219)	(78)	(141)
Top 50%, 6th decile	–161*	–16	–117*	–213
	(95)	(193)	(69)	(129)
Top 60%, 5th decile	–174**	–260	–112*	–51
	(85)	(192)	(62)	(120)
Top 70%, 4th decile	–119	193	–57	107
	(78)	(185)	(56)	(113)
Top 80%, 3rd decile	–100	12	–35	32
	(72)	(188)	(51)	(108)
Top 90%, 2nd decile	–105	–165	–32	45
	(67)	(183)	(47)	(94)
Total, 1st decile	–115*	–196	–30	48
	(63)	(187)	(44)	(73)
Sample size	5,201	5,201	12,144	12,144

NOTE: Standard errors are in parentheses. ** = Statistically significant at the 95 percent confidence level in a two-tailed test; * = statistically significant at the 90 percent confidence level in a two-tailed test.

vania experiment, the 10th, 9th, 7th, and 5th deciles have the largest estimated impacts. For the Washington experiment, the 9th and 6th deciles have the greatest estimated impacts. In the Washington experiment the lower five deciles all have smaller impacts, while for Pennsylvania the lowest two deciles have substantial effects. All of this suggests that narrowly targeting a bonus offer to those most likely to exhaust, may not be the best strategy to maximize the overall response. Based on these findings, we choose to examine the effects of bonus offers made to the top quarter and the top half of the exhaustion probability distribution.

NET IMPACTS OF TARGETED BONUS OFFERS

Net impact estimates of all Pennsylvania and Washington treatments on dollars of UI payments in the benefit year are reported in Table 6.6 for the full sample, the top 50 percent most likely to exhaust UI benefits, and the top 25 percent most likely to exhaust. The results suggest that targeting a reemployment bonus to claimants with high exhaustion probabilities can yield larger reductions in UI receipt than a nontargeted bonus. However, the use of a higher probability threshold for targeting does not necessarily translate into larger UI reductions.

Among the 11 individual treatments in the two states, there is not a consistent pattern of higher treatment impacts for samples above the percentile cutoffs. Targeting to either the top 25 percent or top 50 percent of the distribution yields higher impacts in 9 of the 11 treatments compared to a nontargeted bonus offer. The common factor among the treatments with higher impacts above the thresholds is that in most cases they involve a long qualification period.

For the mean bonus offer in both experiments, impacts are larger and statistically significant when the offer is made to the top 50 percent of the exhaustion probability distribution. Targeting to the top half of the distribution raises the impact on UI benefit payments in the Pennsylvania experiment from –$115 to –$161, and in the Washington experiment from –$30 to –$117.

Our findings suggest that targeting a reemployment bonus to claimants with high predicted exhaustion probabilities can yield larger

Table 6.6 Summary of Net Impacts on Benefit Year UI Payments ($ per claimant)

Bonus amt.	Qualif. period	Top 25%	Top 50%	Full sample
Pennsylvania bonus offers[a]				
Low	Short	156	72	–33
		(244)	(173)	(112)
Low	Long	–169	–188	–116
		(199)	(135)	(91)
High	Short	–110	22	–72
		(213)	(147)	(99)
High	Long	–236	–264**	–159*
		(180)	(125)	(83)
Declining	Long	–252	–301**	–147
		(209)	(146)	(100)
Mean	Mean	–152	–161*	–115*
		(136)	(95)	(63)
Washington bonus offers[b]				
Low	Short	–77	–47	32
		(145)	(95)	(61)
Low	Long	–139	–187**	–74
		(136)	(93)	(59)
Medium	Short	–143	–121	11
		(138)	(93)	(60)
Medium	Long	12	–33	1
		(136)	(93)	(59)
High	Short	–135	–126	–87
		(157)	(108)	(67)
High	Long	–279*	–228**	–104
		(158)	(108)	(68)
Mean	Mean	–117	–117*	–30
		(100)	(69)	(44)

NOTE: Standard deviations are in parentheses. ** = Statistically significant at the 95 percent level of confidence in a two-tailed test; * = statistically significant at the 90 percent level of confidence in a two-tailed test.

[a] Pennsylvania bonus amount: low = 3 × WBA; high = 6 × WBA; declining = half the remaining UI entitlement with the initial offer good for two weeks and then declining by 10 percent per week. Pennsylvania qualification period: short = 6 weeks, long = 12 weeks.

[b] Washington bonus amount: low = 2 × WBA; medium = 4 × WBA; high = 6 × WBA. Washington qualification period: short = 0.2 × (potential UI duration) + 1 week; long = 0.4 × (potential UI duration) + 1 week.

reductions in UI receipt than a nontargeted bonus. However, targeting does not guarantee larger reductions in benefit payments. Furthermore, the use of a higher probability threshold for targeting does not necessarily translate into larger UI reductions. In our estimates, the lower threshold (top 50 percent) usually yields larger impacts for the targeted group than the higher threshold (top 25 percent). We also found that the improved response associated with targeting follows more consistently for bonus offers with a long rather than short qualification period.

NET BENEFITS

Net benefits are considered here from three distinct perspectives: the UI system, government, and all of society. The most narrow view of net benefits considered is that of the UI system itself. It is reasonable to assume that in an actual bonus program, bonuses would be paid from the UI trust fund. Costs to the UI system are bonus payments and administrative costs, while benefits are the savings in UI payments to claimants plus any increased UI tax revenue resulting from increased earnings.

A somewhat broader perspective for assessing net benefits is the government taken as a whole. Government represents the collection of all public agencies that levy taxes and dispense public services. Benefits to government from a bonus program include the reduction in UI compensation paid, and additional taxes generated as a result of increased earnings. The latter include income taxes, payroll taxes, and taxes on employee earnings paid by employers. Costs to the government include the cost of administering the bonus offer program and bonus payments.

The ultimate acceptability of a program depends on whether it generates positive net benefits to society as a whole. Society gains from a program if the aggregate value of output increases. For a bonus program, gains to society may be approximated by the increase in compensation paid to claimants who respond to the bonus offer by obtaining jobs more quickly. Societal costs are simply the costs of administering the program.[11]

Previous examinations of net benefits for reemployment bonus offers found results to be increasingly favorable as the perspective was

gradually broadened from the UI system itself, to the government, and finally to society as a whole. The bonus offers have generally not been found to be cost-effective from the narrow perspective of the UI system. At best, a nontargeted bonus appears to be a break-even proposition for society as a whole (O'Leary, Spiegelman, and Kline 1995, pp. 264–267).

The estimates of administrative costs used in our net benefit computations probably bound the range of costs that would be experienced in an actual program. The cost per offer in Pennsylvania was estimated at $33, while the cost in Washington was put at $3. The Pennsylvania estimate reflects the administrative cost of running the experiment, while the Washington estimate was provided by the state employment security agency as the likely cost per offer under an ongoing program. Certain costs associated with running an experiment would not be incurred in an operational program, and this largely explains the difference in the two estimates. It is likely that the average administrative cost of an ongoing program would lie between these extremes.

Based on the predicted probability of UI benefit exhaustion, Table 6.7 presents estimates from each of the three evaluation perspectives of net benefits for bonus offers made to the top 25 percent, the top 50 percent, and all of those for whom the model was estimated. That is, union hiring hall members and temporary layoffs awaiting job recall were excluded when making computations.[12] Restricted sample sizes mean that few of the parameters in Table 6.7 were estimated with statistical precision; nonetheless, we proceed to discuss the observed patterns of response to targeted bonus offers.

From the narrow perspective of the UI system, net benefit computations for the Pennsylvania experiment suggest that targeting the bonus offers increases net benefits for all three long qualification period treatments, but diminishes net benefits for treatments with a short qualification period. The improved net benefits for the long qualification bonus offers were large enough to result in the overall mean response to targeted bonus offers having positive point estimates for the Pennsylvania experiment. These results are driven mainly by the reduction in UI benefit payments due to targeting, since the added bonus payment costs from targeting were estimated to be modest in the Pennsylvania sample.

For all government and society, targeting offers in the Pennsylvania experiment improved net benefits for all treatments except the high bonus/long qualification period offer. The result for this treatment was due to lower earnings observed for the targeted group. In Pennsylvania the high bonus/long qualification offer is the only treatment which suggested that a bonus offer might induce reemployment in jobs inferior to the prior one.[13] In contrast, the low bonus/long qualification offer did not have unfavorable impacts on earnings and resulted in very favorable net benefit estimates.

Evidence from the Washington experiment also suggests that targeting to those most likely to exhaust UI benefits can improve the cost-effectiveness of bonus offers. However, the results for Washington are not as pronounced as in the Pennsylvania data. The higher bonus payment costs in the Washington experiment are the reason that treatments with the higher bonus amounts fail to have positive net benefits for either target group.

The most favorable treatment design and targeting plan to emerge from our analysis combines a low bonus amount with a long qualification period, targeted to the 50 percent most likely to exhaust UI benefits: for example, a bonus amount set at three times the weekly benefit amount, a qualification period 12 weeks long, and targeted to the half of claimants most likely to exhaust their UI benefit entitlement. Our estimates suggest that such a bonus offer would promote quicker return to work and save the UI trust funds between $50 and $100 per offer. The net benefits to all government and to society should be significantly greater.

CAVEATS

Targeting with profiling models improves the appeal of the reemployment bonus program for employment policy. However, two potential behavioral effects might reduce cost-effectiveness for an operational program.[14] First, an actual bonus program could have a *displacement effect*. Displacement occurs if UI claimants who are offered a bonus increase their rate of reemployment at the expense of other job seekers not offered a bonus. Second, there is also the risk that an

Table 6.7 Net Benefits of the Bonus Offers above Alternative Percentile Cutoffs of Predicted UI Exhaustion Probabilities ($ per claimant)

Offer		UI system[a]			All government[b]			Society[c]		
Bonus amount	Qualification period	Top 25%	Top 50%	Full sample	Top 25%	Top 50%	Full sample	Top 25%	Top 50%	Full sample
Pennsylvania treatments										
Low	Short	–223	–87	–40	325	65	–48	1,638	432	–57
		(245)	(173)	(113)	(1,022)	(765)	(502)	(992)	(745)	(489)
Low	Long	66	93	28	300	363	147	679	790	331
		(200)	(135)	(91)	(830)	(599)	(401)	(806)	(584)	(391)
High	Short	–37	–148	–54	231	56	0	557	588	133
		(215)	(148)	(100)	(897)	(635)	(421)	(871)	(617)	(409)
High	Long	43	69	–23	–78	80	51	–402	1	191
		(182)	(126)	(84)	(755)	(525)	(355)	(733)	(510)	(345)
Declining	Long	134	186	31	421	603	304	841	1,239**	797
		(211)	(147)	(101)	(890)	(636)	(442)	(865)	(619)	(430)
Mean	Mean	19	30	–10	192	227	95	494	567	286
		(137)	(95)	(64)	(584)	(428)	(282)	(568)	(417)	(275)
Washington treatments										
Low	Short	19	–11	–81	91	–183	–434	239	–578	–1,181
		(145)	(95)	(61)	(2,110)	(1,143)	(724)	(2,105)	(1,139)	(721)
Low	Long	59	112	20	241	172	56	602	195	116
		(136)	(93)	(59)	(2,616)	(1,434)	(899)	(2,612)	(1,431)	(897)
Medium	Short	–6	–1	–113*	–533	–177	–471	–1,757	–590	–1,195*
		(138)	(94)	(60)	(1,801)	(1,156)	(720)	(1,796)	(1,152)	(717)

Medium	Long	–221	–151	–143**	–680	–403	–524	–1534	–845	–1,273*
		(137)	(93)	(60)	(1,817)	(1,038)	(659)	(1,812)	(1,034)	(656)
High	Short	–111	–105	–87	–512	–317	–350	–1,339	–708	–879
		(160)	(109)	(68)	(2,221)	(1,265)	(845)	(2,215)	(1,260)	(842)
High	Long	–112	–84	–131*	518	150	–13	2,096	778	387
		(161)	(110)	(69)	(3088)	(1686)	(1027)	(3,084)	(1,682)	(1,025)
Mean	Mean	–56	–32	–86*	–169	–132	–303	–379	–336	–725
		(101)	(69)	(44)	(1,519)	(852)	(528)	(1,516)	(849)	(526)

NOTE: Standard errors are in parentheses. ** = Statistically significant at the 95 percent confidence level in a two-tailed test; * = statistically significant at the 90 percent confidence level in a two-tailed test.

[a] For the UI system, net benefits are UI benefit savings plus UI tax revenues on additional earnings minus the costs of bonus payments and program administration. The current average UI tax rates on earnings are 1.00 percent in Pennsylvania and 1.15 percent in Washington.

[b] For government, net benefits are UI benefit savings plus all added tax revenues due to added earnings (UI taxes, Federal Income Contribution Act tax of 15.02 percent, federal income taxes assumed to be 15 percent, and state income taxes which are 2.80 percent in Pennsylvania and zero in Washington) minus the costs of bonus payments and program administration.

[c] For society as a whole, net benefits are simply additional earnings minus administrative costs since taxes and transfer payments cancel from a societal perspective.

operational bonus offer program could induce an *entry effect*; that is, the availability of a reemployment bonus might result in a larger proportion of unemployed job seekers filing for UI, or entering the UI system.

If entry and displacement effects are sizeable, actual program cost-effectiveness will be lowered. However, targeting offers to only those most likely to exhaust UI should reduce both these risks. Targeting would introduce uncertainty that a bonus offer would be forthcoming upon filing a UI claim, which should reduce the chance of a large entry effect. Targeting should also lower any potential for displacement, since a smaller proportion of claimants would receive the bonus offer.[15]

CONCLUSION

Earlier research has indicated that a nontargeted reemployment bonus program is not good public policy since it would not reliably conserve UI trust fund reserves. In this chapter, profiling models similar to those in state WPRS systems are used to reexamine evidence from the Pennsylvania and Washington reemployment bonus experiments.

Targeting offers with WPRS models to UI claimants identified as most likely to exhaust benefits is estimated to increase cost-effectiveness of the reemployment bonus. The best candidate to emerge for a targeted reemployment bonus is a low bonus amount, with a long qualification period, targeted to the half of profiled claimants most likely to exhaust their UI benefit entitlement.

A reemployment bonus targeted with WPRS models is an appealing policy option for a cost-effective early intervention to promote reemployment. It would be administratively simple to implement, it is likely to be cost neutral to the UI program, and it may yield significant positive net benefits to individuals and society. Similar to other reemployment initiatives examined in this volume, targeting services with statistical models based on participant characteristics appears to be a practical and cost-effective strategy.

Notes

For constructive comments that helped to improve this paper, we thank Jennifer Warlick, Jeff Smith, and participants at the Targeting Employment Services Conference, Kalamazoo, Michigan, April 30–May 1, 1999. Kenneth Kline provided excellent research assistance. We thank Nancy Mack and Claire Black for clerical assistance. Opinions expressed are our own and do not necessarily represent those of the W.E. Upjohn Institute for Employment Research, Mathematica Policy Research, or the U.S. Department of Labor. We accept responsibility for any errors.

1. In this chapter, a *dislocated worker* is someone with significant prior job attachment who has lost his job and has little prospect of returning to it or to another job in a similar occupation and industry. This is consistent with the program eligibility definition in the Economic Dislocation and Worker Adjustment Assistance Act (EDWAA) of 1988, which amended Title III of the Job Training Partnership Act (JTPA) of 1982, and provides funds to states and local substate grantees so they can help dislocated workers find and qualify for new jobs. The EDWAA definition includes workers who lose their jobs because of plant closures or mass layoffs; long-term unemployed persons with limited job opportunities in their fields; and farmers, ranchers, and other self-employed persons who become unemployed due to general economic conditions. Leigh (1995) summarized the EDWAA.
2. Local public employment offices served as enrollment sites in each of the experiments. They were selected to achieve samples which were representative of UI claimants in the state as a whole. Sampling of claimants within each local office was done by random assignment. Sample sizes were set large enough to achieve the precision needed for estimating individual and subgroup treatment impacts of policy interest.
3. O'Leary, Decker, and Wandner (2001) reported that earnings outcomes were more favorable for the targeted groups, but there was no significant impact. However, groups in the bottom 75 and 50 percent of the exhaustion probability distribution in the Washington experiment had statistically significant reductions in earnings. That is, the strongest observed tendency of the bonus to induce reemployment in inferior jobs was exhibited by those below the targeting thresholds. Targeting would minimize any tendency in this direction.
4. The *waiting week* is a period of noncompensable unemployment which must precede UI payments in a new benefit year.
5. Spiegelman, O'Leary, and Kline (1992, p. 8) explained the eligibility arrangement for people in the Washington experiment who started a new UI benefit year but never claimed a waiting week or benefit.
6. Bonus impacts for UI claimants with three or more years of tenure in the Washington experiment were somewhat larger, but they were not statistically significantly greater than impacts for the complementary group (Spiegelman, O'Leary, and Kline 1992, pp. 116–119).

7. Interpretation of this result is tentative because of the econometric problem that estimation involves sample selection based on an endogenous variable (Spiegelman, O'Leary, and Kline 1992, p. 110). However, the finding appears to be validated by results under *ex ante* eligibility screens applied in the other experiments.
8. Examples of WPRS profiling models from a number of states are given in Balducchi (1996). Most states with statistical models have chosen to predict UI exhaustion using a logistic regression specification.
9. Both Pennsylvania and Washington use logistic regression models to predict UI benefit exhaustion, since the variable that we are trying to predict is whether individuals exhaust their UI benefits or do not.
10. Details about the original state profiling models, the newly estimated models, and all simulation results are given in O'Leary, Decker, and Wandner (1998).
11. Details of the component estimates for the net benefit computations are provided in O'Leary, Decker, and Wandner (2001).
12. This is the first screen in the WPRS profiling system. Union hiring hall members and those awaiting recall had to be excluded from the Washington sample for computations. As seen in Table 6.2, such beneficiaries were not in the Pennsylvania data at all since they were not given bonus offers.
13. This earnings result for the high bonus offer in Pennsylvania is consistent with the interpretation by Nicholson (2001) of the reemployment bonus as a wage subsidy.
14. As suggested by Meyer (1995).
15. Davidson and Woodbury (1993) found that without targeting displacement could be in the range of 30 to 60 percent, even though bonus offers induce quicker job matches which generates more income growth and new job vacancies. Targeting could significantly reduce this risk.

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Comments on Chapter 6

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This chapter considers the desirability of using profiling to target reemployment bonuses to those displaced workers expected to have the most difficulty finding new employment and hence the longest spells of unemployment. It reports on simulations conducted by the authors that utilize parameters estimated in experiments conducted in Washington and Pennsylvania. Their analysis is very interesting and first rate. Moreover, the chapter is clearly and concisely written. By limiting the description of the technical aspects of the microsimulations, the authors focus the reader's attention on the policy issues at hand: can targeting with profiling enhance the power of reemployment bonuses? If so, how is the target group best defined? Which combination of sample selection and bonus eligibility criteria maximizes the impact of reemployment bonuses?

My primary impression is that this chapter is too short. Indeed, my comments focus more on what the authors do not say than on what they do say. The chapter left me wanting to know more; not more about the experiments or the simulations themselves—I trust that there is little improvement that could be made in the technical area. Rather, I want to know more about the unemployed workers who were treated by the experiments and whether the bonuses were in their best interest. I want to know more about the motivations of the unemployed, how they approach the search for a new job, and what goes through their minds as they decide whether to accept jobs that might be offered to them. Do they weigh short-run gains against long-run payoffs? Does the prospect of a reemployment bonus in a time when every penny counts prompt them to choose a different job than they would have in its absence? When a bonus is available, do they accept the first offer they re-

ceive rather than continue the search for a job that might better match their skills and could lead to greater long-run payoffs? And if this is the case, does the policy of reemployment bonuses promote the best interests of the unemployed? Can the outcomes be labeled "reemployment successes," to borrow a term from the chapter, or is it in the best interest of the UI program that the bonuses seek to promote?

The analysis of the net benefits of the reemployment bonuses focuses on entities other than the unemployed individual. For example, in the section entitled "Net Benefits," the authors state:

> Previous examinations of net benefits for reemployment bonus offers found more favorable results as the perspective broadened from the UI system, to all government, to society as a whole. The net benefits to the UI system of a reemployment bonus offer are the reduction in UI benefit payments, minus the cost of bonus payments, minus any additional costs that result from administering a reemployment bonus.

If the best interests of the individual were the primary focus, I suspect that the net benefits would be the difference in the discounted flow of future earnings between the treatment and control groups. This measure would take into account both differences in wage and salary levels and the expected tenure on the jobs. Yes, I worry that the bonuses could affect not only the type of job accepted but also the length of employment on that job.

It may be that it isn't possible to calculate this measure with the data from the Washington and Pennsylvania experiments. From the description in the chapter I could not tell whether and how long the experiments followed the unemployed after they returned to work. If these are not available, it is understandable that the potential effects of bonuses on earnings and job duration are not investigated empirically here.

It has also occurred to me that the effects of the bonuses on worker well-being lie beyond the scope of this chapter but are addressed in other chapters of this volume. My comments may reflect the fact that I read only one-tenth of the total manuscript. If I had read the whole manuscript, would my questions be answered?

Similarly, would I have bothered to raise these questions if I were more familiar with this literature? Experts in this area may be able to tell me that other studies not included in this volume have examined

my questions and demonstrated that bonuses do not affect job search, job choice, or job tenure. Does the fact that bonuses are targeted at the unemployed workers most likely to exhaust benefits suggest a different sort of mental calculus? How do these workers see their choices? Is the decision rule I suggested above—that of weighing the short-run gains of accepting a "bird in the hand" plus bonus versus the long-run payoffs of continued search for a better placement—inappropriate for them? Or might you tell me that the rules of UI programs eliminate this issue by requiring that UI beneficiaries accept the first job offer they receive. I hope not, because that too would seem a shortsighted policy.

If the issues I have raised are not answered elsewhere in this volume or are not common knowledge among the audience targeted as readers of this book, then I urge the authors to acknowledge this line of questioning. Perhaps this could be done in the Caveats section, or maybe at an earlier point in the chapter in a discussion of the meaning of "reemployment success." Only then could I agree with their conclusion that "a reemployment bonus targeted with WPRS models is an appealing policy option for a cost-effective early intervention to promote reemployment. It . . . may yield significant positive net benefits to individuals and society."

In the absence of such a discussion, I am left with a lingering impression that the reemployment bonuses share with welfare reform an emphasis on reducing expenditures even if it means sacrificing the well-being of the targeted group. My understanding of the UI system is that it was designed to give unemployed workers an opportunity to search not only for a job, but also for a job that was right for them. In contrast, a system of bonuses that encourages UI beneficiaries to rush through the search process seems to have cost savings as its goal. If this emphasis on cost saving is not the message that the authors want to send, I think it would be prudent for them to give equal time to the best interests of the unemployed.

Targeting Employment Services

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2002

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Library of Congress Cataloging-in-Publication Data

Targeting employment services / Randall W. Eberts, Christopher J. O'Leary, Stephen A. Wandner, editors.
p. cm.
Proceedings from a conference held on April 29 to May 1, 1999 in Kalamazoo, Michigan.
Includes bibliographical references and index.
ISBN 0-88099-244-1 (cloth : alk. paper) — ISBN 0-88099-243-3 (pbk. : alk. paper)
1. Unemployed—Services for—Government policy—United States—Congresses. 2. Employment agencies—United States—Management—Congresses. 3. Manpower policy—United States—Congresses. I. Eberts, Randall W. II. O'Leary, Christopher J. III. Wandner, Stephen A.
HD5875.T37 2002
362.85′84′0973—dc21

2002024572

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300 S. Westnedge Avenue
Kalamazoo, Michigan 49007-4686

Cover design by Jan Underhill.
Index prepared by Nancy Humphreys.
Printed in the United States of America.