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Paul T. Decker
Mathematica Policy Research

Christopher J. O'Leary
W.E. Upjohn Institute for Employment Research, oleary@upjohn.org

Upjohn Author(s) ORCID Identifier:
 https://orcid.org/0000-0002-3372-7527

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Reemployment Bonus Experiments

Paul T. Decker[*] and Christopher J. O'Leary[**]

[*]Mathematica Policy Research, Inc.
600 Maryland Avenue, SW
Washington, DC 20024

[**]W.E. Upjohn Institute for Employment Research
300 South Westnedge Avenue
Kalamazoo, Michigan 49007

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Abstract

Social experiments conducted in Pennsylvania and Washington tested the effect of offering Unemployment Insurance (UI) claimants a cash bonus for rapid reemployment. This paper combines data from the two experiments and uses a consistent framework to evaluate the experiments and determine with greater certainty the extent to which a reemployment bonus can affect economic outcomes. Bonus offers in each of the experiments generated statistically significant but relatively modest reductions in UI receipt. Since the estimated impacts on UI receipt were modest, the reemployment bonuses did not generate the UI savings necessary to pay for administering and paying the bonuses. Hence, contrary to earlier findings from a bonus experiment conducted in Illinois, findings from the Pennsylvania and Washington experiments strongly suggest that a reemployment bonus is not a cost-effective method of speeding the reemployment of UI claimants.

Paul T. Decker
Mathematica Policy Research
600 Maryland Avenue SW
Washington, D.C. 20024

Christopher J. O'Leary
W.E. Upjohn Institute for Employment
Research
300 South Westnedge Avenue
Kalamazoo, MI 49007

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I.   INTRODUCTION

The federal-state Unemployment Insurance (UI) system provides partial earnings replacement to established labor force members who are involuntarily unemployed and actively seeking work. Since UI beneficiaries receive money while not working, the UI system has the potential of prolonging spells of unemployment.[1] Historically, the program has used administrative work-search requirements and referrals to the Job Service to promote rapid reemployment and to limit UI receipt. In recent years policymakers have examined whether additional services, including monetary incentives, can be used to encourage claimants to gain reemployment sooner. The monetary incentives examined have included the reemployment bonus--a lump-sum cash payment made to claimants who become reemployed quickly.

A field experiment conducted in Illinois in 1984 provided strong evidence in support of the reemployment bonus concept. Woodbury and Spiegelman (1987) reported that the offer of a $500 reemployment bonus to Illinois UI claimants reduced the average spell of UI benefit receipt by more than a week. Furthermore, the Illinois reemployment bonus was cost-effective from the perspective of the UI system--for every dollar spent on bonuses in Illinois, UI benefit payments were reduced by more than two dollars.

The Illinois findings led the U.S. Department of Labor to sponsor two additional field experiments to further test the hypothesis that a reemployment bonus offer could significantly reduce insured unemployment and save the UI system money. In 1988 and 1989, reemployment bonus experiments testing a variety of reemployment bonus offers were conducted in Pennsylvania and Washington.[2] Evaluations of the separate experiments indicated that reemployment bonuses reduced the amount of time spent on UI, thereby reducing benefit payments. However, for all but one of the ten bonus offers tested in Pennsylvania and Washington, the amount of bonus payments plus the administrative costs associated with making the offers exceeded the savings in UI payments. The Pennsylvania and Washington findings stand in sharp contrast to those from Illinois and suggest that reemployment bonuses are not cost-effective from the perspective of the UI system.

To better understand how a bonus offer affects unemployment, in this paper we compare results from Pennsylvania and Washington experiments while controlling for the observable ways in which the experiments differed. We extend the previous research on reemployment bonuses

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[1]Burtless (1990) summarizes the literature on the disincentives inherent in the UI system. Meyer (1990) and Moffitt (1985) investigate the empirical impact of the UI system on unemployment spells.

[2]See Corson et al. (1992) and Spiegelman, O'Leary and Kline (1992).

by examining the UI receipt and earnings of a combined sample of claimants from both the Pennsylvania and Washington experiments. By pooling the two data sets and using a consistent framework to evaluate both experiments, we determine with greater certainty the extent to which the reemployment bonuses can affect economic outcomes. We also use the findings from the merged sample to provide a comprehensive evaluation of the benefits and costs associated with a reemployment bonus program.

II.   THE DESIGN OF THE EXPERIMENTS

Both the Pennsylvania and the Washington experiments tested several alternative bonus offers, which differed according to the amount of the offer and the period for which an individual qualified for the bonus. The various bonus offers that were chosen encompassed the majority of the policy-relevant reemployment bonus options. In both experiments, eligible claimants were assigned randomly to one of the treatment groups that received the bonus offers or to a control group that was not offered a bonus.[3] Both experiments incorporated similar bonus claims processes whereby claimants filed for the bonus payment once they fulfilled the eligibility requirements.

The Pennsylvania experiment tested four different bonus offers based on two alternative bonus amounts and two alternative qualification periods (Table 1). The two bonus amounts included a low amount, which was set at three times the claimant's UI weekly benefit amount (WBA), and a high amount, set at six times the claimant's WBA. The two qualification periods tested included a short period of 6 weeks and a long period of 12 weeks, beginning on the bonus offer date.[4]

The Washington experiment tested six different bonus offers based on three alternative bonus amounts and two alternative qualification periods. As in the Pennsylvania experiment, the three bonus amounts in Washington were tied to the claimant's weekly benefit amount (WBA). A low bonus offer equal to two times the claimant's WBA, a medium offer equal to four times the claimant's WBA, and a high offer equal to six times the claimant's WBA were made. The two qualification periods were tied to the claimant's potential UI duration. A short qualification

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[3]Random assignment provides that in the absence of the experiment the outcomes for the control group members should be similar to those for the treatment group members. Hence, any difference in behavior between the two groups can be attributed directly to the treatment.

[4] The Pennsylvania design also included fifth and sixth treatments. The fifth treatment tested a bonus offer that declined gradually from the high amount over a 12-week qualification period, thus giving claimants an incentive to become reemployed as quickly as possible within the 12-week period. Since this bonus offer was dissimilar to any other Pennsylvania or Washington bonus offer, we excluded the declining bonus treatment from the pooled analysis. The sixth Pennsylvania treatment was identical to the fourth treatment, except it excluded the offer of a job-search workshop that accompanied all of the other treatments. However, so few claimants participated in the workshop that there was effectively no difference between the groups, and, consequently, we combined the groups into a new group for this analysis called treatment 4.

period equal to 20 percent of the claimant's potential UI duration plus one week, and a long qualification period equal to 40 percent of the claimant's potential UI duration plus one week were offered.

The Pennsylvania and Washington experiments tested similar bonus offers. Indeed, some of the individual treatments in the two experiments were almost identical. In particular, the short qualification period-high bonus offer and long qualification period-high bonus offer treatments were nearly identical across the two experiments.

III.   THE POOLED PENNSYLVANIA AND WASHINGTON SAMPLE

To control for differences in the design and economic context of the two experiments, data from the Pennsylvania and Washington experiments were pooled to estimate treatment effects. This pooling of data also provided added precision in estimating impacts of the bonus offers.

1. Forming the Pooled Sample

Our strategy to adjust for differences across the experiments in estimating treatment impacts was first to combine the samples and then use a regression model that contained control variables to account for observable differences between the samples. The main differences between the experiments that affected the samples were the types of claimants eligible for bonus offers and the timing of the offers. Claimants who were waiting to be recalled to their previous job within 60 days or who were members of full referral unions were excluded from the Pennsylvania experiment but included for the Washington experiment. In addition, the bonus offer in Pennsylvania was made only after the waiting week or first payment was claimed, while the offer in Washington was made when claimants applied for benefits. These differences between the experiments suggest that the claimants who were sampled in the two experiments may have also differed.

In pooling the claimant samples from the two experiments, our objective was to make the samples as comparable as possible without excluding a large number of claimants. If we simply excluded from the pooled sample those Washington claimants who did not meet the Pennsylvania eligibility criteria, we would have reduced the Washington sample by as much as 30 percent. Even if that route were taken some of the exclusions would have been problematic, because they would have involved choosing a sample on the basis of a variable expected to be affected by the bonus offer. To avoid these problems, all claimants in the Washington experiment were retained

in the pooled sample, with the idea that binary indicators would be used to control for recall expectations and union hiring hall status in conducting the impact analysis.[5]

2. The Characteristics of the Samples and the States

The pooling process yielded an analysis sample of 27,616 claimants--12,082 claimants from Pennsylvania and 15,534 from Washington. Included in this sample are 3,354 claimants assigned to the Pennsylvania control group, and 3,082 claimants assigned to the Washington control group. Since control group members did not receive a bonus offer, the control groups from the two states may be used to compare the characteristics and UI outcomes of typical eligible claimants.

Relatively minor differences existed between the control samples in the two states. In both states, about 16 percent of the claimants were racial minorities, but in Pennsylvania the minority claimants were primarily black, while in Washington they were distributed evenly among black, Hispanic, and other nonwhite groups. The racial mixes among these UI claimants are generally representative of the racial distributions for the overall populations of the two states. In addition to the racial mix, the base-period earnings, weekly benefit amounts, and potential UI durations of the two samples of claimants also differed. Claimants in Pennsylvania had lower base-period earnings, but received higher weekly benefit amounts than Washington claimants. Claimants in Washington had longer average potential durations of UI benefits, due to the 30-week maximum duration in that state, compared with the 26-week limit for Pennsylvania.

In pooling data from the two experiments, it is also important to consider the economic context in which the separate experiments were operated, because different economic conditions may lead to differences in the outcomes of interest. Pennsylvania had a lower unemployment rate (5.1 percent in 1988), but a relatively modest rate of employment growth (1.9 percent between 1988 and 1989). In contrast, Washington had a slightly higher unemployment rate (6.2 percent in 1989), but a much higher rate of employment growth (6.8 percent between 1988 and 1989). Although one cannot determine conclusively which state had more favorable economic conditions based on these statistics, it does appear that the Washington economy was expanding more rapidly during the experiment.

The distributions of employment by industry were similar in the two states; Pennsylvania had a slightly greater percentage in manufacturing, and Washington a larger share in wholesale and retail trade. Earnings in UI-covered employment and the proportion of the population on public assistance were nearly identical in the two states.

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[5]We did not include a binary indicator for waiting week because, by definition, this variable would have depended on the outcome of interest. The alternate approach of excluding 30 percent of the Washington sample was tested. The resulting estimates were similar to estimates derived while using the full sample with binary indicators to control for stand-by or union hiring hall status.

Enrollment sites for the experiment in Pennsylvania handled 20 percent of all UI claims activity, while those in Washington handled 84 percent of that state's total. This difference is due in part to differences in the number of sites in which each experiment operated--12 sites in Pennsylvania compared to 21 sites in Washington. Nonetheless, each sample was representative of its state's racial and industrial employment mix. Additionally, despite the moderate coverage of state UI activity in the Pennsylvania experiment, Corson et al. (1992) report that the insured population in the experiment sites was representative of the statewide insured population, according to a wide variety of characteristics.

In the regression models used to estimate treatment impacts, we controlled directly for several personal characteristics, including gender, age, race, industry of previous employment, and earnings prior to the UI spell. We also controlled for each individual's UI parameters by including the UI weekly benefit amount and potential UI duration in the regressions. Finally, we controlled indirectly for economic conditions by including indicators for the site and time at which claimants entered the experiment. The inclusion of these indicators controlled for variations in mean outcomes across sites (and states) and across time, which were due at least in part to differences in the economic conditions at different sites (and states) and across time.

IV.   IMPACTS ON RECEIPT OF UNEMPLOYMENT INSURANCE BENEFITS

We used three measures of UI benefit receipt for our analysis of the impact of the treatments on UI receipt: (1) the number of weeks for which each claimant was paid benefits in the benefit year, (2) the dollar amount of UI benefits paid to claimants in the benefit year, and (3) whether claimants exhausted their benefits. Our regression model for estimating the impacts of the individual bonus offers on UI receipt contained binary indicators for each of the 10 treatments in the experiments. The regressions also contained variables to control for the individual characteristics of claimants, the timing of sample selection, and the UI office to which claimants reported.

Before considering the estimated treatment impacts, we should note that within the separate experiments, the control group in Pennsylvania collected UI longer and received more benefits than the control group in Washington. The bottom two rows in Table 2 show that the control group in the Pennsylvania experiment received an average of nearly 15 weeks of benefits, which was approximately 5 percent more in benefits than the Washington control group members, who received an average of 14.3 weeks of benefits. The differences in dollars of UI receipt were even larger: Pennsylvania control group members received an average of $2,387, compared with an average of $2,060 for Washington control group members--a difference of approximately 15 percent. Pennsylvania control group members were also more likely to exhaust their benefits-- 27.7 percent of the Pennsylvania control group members were exhaustees, compared with 23.9 percent of the Washington control group members.

The differences in mean UI receipt between the control groups are at least partly attributable to control-group differences in average UI weekly benefit amounts and potential UI durations. Average weekly benefit amount among the Pennsylvania control group was $14 greater than the average weekly benefit amount among the Washington control group, which partly explains why Pennsylvania claimants collected more UI dollars than Washington claimants. The difference in potential UI duration, which was one week less among Pennsylvania claimants than among Washington claimants, also probably contributed to the higher rate of benefit exhaustion among Pennsylvania claimants. Other things being equal, we would expect that a claimant whose potential UI duration is short would be more likely to exhaust his or her allotment of benefits than would a claimant whose potential UI duration is longer.[6]

Our estimates, which are presented in Table 2, demonstrate that the bonus offers generally reduced UI receipt in both experiments. The average impact of the bonus offers was a reduction in UI receipt of half a week, or $85, per claimant. These estimates are significant at the 99 percent confidence level. The largest impacts were estimated for the most generous bonus offers with the longest qualification periods--PT4 reduced UI receipt by 0.84 weeks or $133, and WT6 reduced UI receipt by 0.80 weeks or $146.[7]

The other treatments, whose bonus amounts and durations were more limited than those in either PT4 or WT6, generated smaller impacts on UI receipt. The estimated reductions in weeks of UI receipt generated by the other bonus offers ranged from 0.04 weeks for WT1 (low bonus/short qualification period) to 0.63 weeks for PT1 (low bonus/short qualification period) and 0.71 weeks for WT3 (high bonus/short qualification period). When measured in dollars of benefits, the impacts of the more limited bonus offers were again less than the impacts of the most generous bonus offers, ranging from an estimated $24 increase in UI receipt for WT1 (low bonus/short qualification period) to an estimated $118 reduction in UI receipt for WT3 (high bonus/short qualification period). The findings for treatments PT1 and WT4 are somewhat anomalous because they imply that two of the smallest-amount bonus offers had relatively large impacts, reducing UI receipt by 0.63 weeks and 0.59 weeks (or by $100 and $116), respectively.

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[6]Two other factors contributed to greater UI receipt among Pennsylvania claimants. First, as we noted in Section III, the Pennsylvania economy was expanding less rapidly than the Washington economy during the experiments. Consequently, Pennsylvania claimants may have had fewer reemploymentopportunities and therefore stayed on UI longer than did Washington claimants. Second, differences in the elgibility criteria may also have contributed to the differences in UI receipt. For example, the Pennsylvania experiment excluded claimants who expected to be recalled to their previous job within 60 days, while such claimants were included in the Washington experiment. These claimants were likely to return to work quickly and therefore receive less UI benefits than other claimants. The inclusion of these claimants in the Washington experiment drives down average UI receipt among the Washington sample relative to the Pennsylvania sample. Using regressions to explain UI receipt enabled us to control for these and other less obvious differences in generating our impact estimates.

[7] For brevity, Pennsylvania treatment 4 is referred to as PT4 and Washington treatment 6 is referred to as WT6, and so forth.

The estimated average impact of the bonus offers on UI benefit exhaustion was a one percentage-point reduction in the proportion exhausting, but the estimate is not statistically significant at the 90 percent level. The largest impact on exhaustion occurred in response to WT4 (low bonus/long qualification period), which reduced exhaustion by an estimated 3.2 percentage points. Three other Washington bonus offers, WT3, WT5, and WT6, reduced exhaustion by more than a single percentage point, but only the impact for WT5 (medium bonus/long qualification period) is significant at the 90 percent confidence level. For the Pennsylvania experiment, only PT4 (high bonus/long qualification period) appears to have reduced benefit exhaustion, although even that estimate is not statistically significant at the 90 percent confidence level.

Overall, our findings on UI receipt suggest that the more generous bonus offers generated larger impacts on UI receipt than did the less generous bonus offers. Based on this finding, we grouped the treatments and found that the average impact of treatments PT4 and WT6--the most generous bonus offers--on weeks of UI receipt was significantly greater than the average impact of the other bonus offers. The estimates demonstrate that the impact of PT4 and WT6, which reduced average UI receipt by 0.82 weeks, was about double the impact of the other eight bonus offers, which reduced average UI receipt by 0.41 weeks. The difference between the two estimates is statistically significant at the 95 percent confidence level. This difference demonstrates that, on average, limiting the bonus offer by shortening the qualification period or by reducing the bonus amount significantly limited the impact of the bonus offer on UI receipt.

Although the Pennsylvania and Washington bonuses tended to reduce average UI receipt, the impacts were not as large as the estimated impact of the initial reemployment bonus test--the Illinois Claimant Experiment. In the Illinois experiment, the $500, 11-week bonus offer generated a reduction in average UI receipt of 1.15 weeks (Woodbury and Spiegelman 1987). This impact is substantially larger than the impact of even the most generous bonus offers in Pennsylvania and Washington which averaged about double the amount offered in Illinois. The magnitude and the consistency of the impacts on UI receipt in Pennsylvania and Washington therefore suggest that reemployment bonuses are probably not as potent in reducing UI receipt as was first indicated by the Illinois experiment.

V.   IMPACTS ON EARNINGS

Since claimants reduced UI receipt in response to the reemployment bonus offers, we also expected to observe an increase in postapplication earnings for those offered a bonus. Given that both experiments specified bonuses be paid only to claimants who found reemployment, the bonus offers should have reduced UI receipt because they induced claimants to become reemployed more quickly. If claimants who received bonus offers became reemployed more quickly, it is likely that they also had greater earnings following their initial UI claim. However, earnings might not be higher among the bonus offer recipients if the reduction in weeks of UI compensation was spent out of the labor force instead of at work, or if the bonus offer induced claimants to accept

reemployment at lower wages. In this section, we examine earnings during the year following claimants' benefit application to determine if and how the bonus offer affected earnings.

Our analysis of impacts of the bonus offers on earnings is based on quarterly earnings of claimants derived from the state UI wage records. These records, which are organized by calendar quarter, were used because it is the best source of comparable earnings data for both experiments.[8] We examine earnings in four quarters, beginning with the quarter of benefit application.[9] Although earnings data for the first quarter partly reflect claimants' experience with pre-UI employers, random assignment implies that pre-UI earnings during this quarter should not vary significantly across treatment groups within each experiment. Hence, any significant cross-group differences in earnings in the quarter of benefit application should be attributable to the impact of the treatment on postapplication earnings.

In the absence of a reemployment bonus, the control group claimants in Washington received greater earnings after benefit application than did the control group claimants in Pennsylvania. Table 3 shows that, during the four-quarter period of observation, Washington control group members received an average of about $12,000, while Pennsylvania control group members received only about $9,300 over the comparable period. Two factors explain the differential earnings of the control groups in the two experiments. First, on average, the Washington claimants were more highly paid than the Pennsylvania claimants before their respective layoffs. We would expect that this difference in earnings would remain as claimants in both states became reemployed. Second, Washington claimants became reemployed more quickly than Pennsylvania claimants.

The treatments appear not to have increased the earnings of claimants significantly. Over the entire period of observation, treatment group members in the two experiments received an average of only $7 more in earnings than did control group members, as shown in the bottom right-hand corner of Table 3. The estimated impacts of individual treatments on earnings were generally modest, both in each quarter and over the entire observation period, and many of these estimated impacts were negative rather than positive. The impacts of the most generous bonus offers on earnings were more positive than the impacts of the less generous offers, but the

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[8] Interview data on earnings were also available for the Pennsylvania experiment, but not for the Washington experiment. Corson et al. (1992), used both wage records and interview data to investigate earnings in the Pennsylvania experiment, and found that wage records alone provide adequate information for evaluating the impacts of the bonus offers on earnings.

[9] A potential problem with the wage records arises because earnings data organized by calendar quarter cannot be used to isolate the impacts that occurred immediately after the benefit application date. This inflexibility may be important, because previous studies of a reemployment bonus in the New Jersey UI Reemployment Bonus Experiment (Corson et al. 1989) showed that the impact of the bonus offer occurred soon after benefit application. In our analysis we address this potential problem by reporting estimates for the quarter in which claimants applied for benefits, which encompasses the period immediately after benefit application. Corson and Decker (1990) discuss other potential problems with using UI wage records to estimate earnings impacts.

estimated impacts for even the most generous bonus offers were not significantly greater than zero.

Despite the lack of significantly positive earnings impacts, the estimates are not inconsistent with the UI impacts discussed in the previous section. For example, assuming that the 0.51 week reduction in UI receipt for the mean bonus offer translates directly into a 0.51 week increase in employment, the expected impact on earnings is $145 per claimant. This estimate is clearly within the 95 percent confidence interval of the estimated combined treatment effect on earnings presented in Table 3.[10]

Although our sample was large and our estimates relatively precise, the estimates are not precise enough to detect an earnings impact that is consistent with the estimated UI impacts. For example, given the standard errors in Table 3, the combined treatment effect would have to be equal to about $200 per claimant to be statistically significant at the 90 percent confidence level. This is higher than the $145 impact which is predicted based on the estimated UI impacts. For individual treatments, even a substantial positive impact on earnings, such as the $300 increase in earnings that we estimated for WT6 (high bonus/long qualification period), does not differ significantly from zero given the standard errors associated with our estimates. Hence, although our sample sizes are large and our estimate relatively precisely estimated, the standard errors of these estimates are still too large detect the modest impacts on earnings that were likely to have occurred in the experiments.

VI.   NET BENEFITS OF A REEMPLOYMENT BONUS OFFER

To guide policy makers in applying the results of our analysis and to help summarize the findings, this section presents a comprehensive analysis of the net benefits of a reemployment bonus in the UI program. In Table 4, we present estimates of the net benefits for each of the bonus offers in the Pennsylvania and Washington experiments and for the combined bonus offers in the two experiments. We analyze net benefits from the perspective of claimants, the UI trust funds, the government as a whole, and society as a whole. The computation of net benefits is based on the estimated impacts on UI receipt and earnings that are presented in Tables 2 and 3, receipt of bonus payments, administrative costs of the bonus programs, and empirical fringe benefit and tax rates.[11]

The bonus offers generally yield modest net benefits for claimants. Net benefits for claimants of the combined treatments are equal to $14 per claimant, as shown at the bottom of Table 4. The net benefits for claimants arise because the amount paid out to claimants in

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[10]Multiplying 0.51 weeks times $285, which is average weekly earnings among claimants in the base period, yields $145. From Table 3, the point estimate of $7 and the standarderror of $121 give an upper bound on the 95% confidence interval of $249.

[11]Corson et al. (1992, Chapter IX) provide a detailed discussion of the benefit-cost methodology used in the paper.

reemployment bonuses ($95 per claimant) exceeds the reduction in UI receipt ($85 per claimant), and there was also a slight increase in average earnings. Offers with a high bonus amount (PT3, PT4, WT3, and WT6) were more likely to yield positive net benefits for claimants than were offers with more modest bonus amounts.

The treatments were generally not cost-effective from the perspective of the UI trust funds. The combined treatments yield modest losses for the UI trust funds, as the costs of administering the bonus program and paying bonuses outweighed the UI savings generated by the bonus offers. The rest of the government received a small increase in revenue from the combined bonus offers because of tax revenue from the increase in claimants earnings, but the increase is so small that the government as a whole still lost net resources in response to the bonuses.

The finding that the Pennsylvania and Washington bonuses were not cost-effective contradicts the more promising benefit-cost findings from the Illinois Claimant Experiment. Woodbury and Spiegelman (1987) demonstrate that the Illinois bonus generated UI savings equal to more than twice the amount of the bonuses paid. The estimated net benefits of the Illinois were equal to about $130 per claimant, compared with net *costs* of $25 per claimant for the Pennsylvania and Washington bonuses. The difference in net benefits arises partly because the Pennsylvania and Washington experiments paid a bit more in bonuses than the Illinois experiment ($95 per claimant compared with $68 per claimant). But the biggest factor in explaining the difference in net benefits is that the Pennsylvania and Washington experiments generated smaller reductions in UI receipt than the Illinois experiment ($85 per claimant compared with $194 per claimant).

The net benefit findings for the Pennsylvania and Washington experiments imply, contrary to the Illinois findings, that reemployment bonuses do not pay for themselves. Although the Pennsylvania and Washington bonus offers caused significant reductions in UI receipt, the reductions were not large enough to pay for the costs of administering the bonus program and paying bonuses. Hence, the reemployment bonuses do not offer a cost-effective remedy for the reemployment disincentives inherent in the UI system.

Several factors might cause the net benefits that would be generated by an ongoing program to be different than those estimated for the experiments. First, bonus offers could have different impacts in economic environments that differ from the economic environments of Pennsylvania and Washington during the experiments. Second, some claimants who stopped collecting UI within the bonus qualification periods in Pennsylvania and Washington did not claim a bonus. Presumably, a greater percentage of these claimants might claim a bonus in an ongoing program, where the bonus would be part of the regular UI system, thereby increasing the costs of an ongoing program beyond our estimates. Third, displacement might prevent any positive impacts on net benefits from occurring in an ongoing program. Displacement would occur if a bonus-induced reduction in UI receipt were offset by an increase in unemployment and UI receipt among claimants or other unemployed workers who do not receive a bonus offer. Finally, the availability of a bonus may induce some unemployed workers, who in the absence of a bonus do

not even apply for UI benefits, to enter the system. Although we cannot estimate the effects of these other factors on net benefit estimates, three of the four factors would imply that the bonuses are likely to be even more costly than is suggested by the estimates. Hence, these factors contribute to the general conclusion that reemployment bonuses are not likely to be a cost-effective policy for the UI system.

VII.   CONCLUSION

The bonus offers tested in the Pennsylvania and Washington bonus experiments had similar impacts on average UI receipt and earnings among eligible claimants. The impacts on UI receipt were statistically significant but relatively modest. The combined bonus offers in the two experiments reduced UI receipt by an average of about half a week, or by $85. The average impact of the bonus offers on earnings was extremely small (an increase of $7 per claimant) and not statistically significant.

Since the estimated impacts on UI receipt were modest, the reemployment bonuses did not generate the UI savings necessary to pay for administering and paying the bonuses. Hence, the bonuses are not cost-effective from the perspective of the UI system. This finding contradicts the earlier findings from Illinois, which indicated that a reemployment bonus in that state generated UI savings equal to more than twice the costs of administering and paying the bonuses. Contrary to the results from the Illinois experiment, findings from the Pennsylvania and Washington experiments suggest that the reemployment bonus is not a cost-effective method of speeding the reemployment of UI claimants.

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TABLE 1
THE CHARACTERISTICS OF THE REEMPLOYMENT BONUS EXPERIMENTS

	Pennsylvania Experiment		Washington Experiment	

Bonus Structure

The four primary bonus offers took the following form:

	Qualification Period	
Bonus Amount	6 Weeks	12 Weeks
$3 \times$ WBA	Treatment 1 (PT1)	Treatment 2 (PT2)
$6 \times$ WBA	Treatment 3 (PT3)	Treatment 4 (PT4)

Six bonus offers were tested:

Bonus Amount	Qualification Period	
	$(.2 \times$ Potential UI Duration$) + 1$ Week	$(.4 \times$ Potential UI Duration$) + 1$ Week
$2 \times$ WBA	Treatment 1 (WT1)	Treatment 4 (WT4)
$4 \times$ WBA	Treatment 2 (WT2)	Treatment 5 (WT5)
$6 \times$ WBA	Treatment 3 (WT3)	Treatment 6 (WT6)

Eligibility Criteria

Pennsylvania Experiment:
- Initial claims only
- Regular UI claimants
- Initial satisfied monetary eligibility conditions
- Did not accept employment exclusively through a union
- Did not have a specific recall date within 60 days after benefit application
- Was not separated from job due to a labor dispute
- Signed for a waiting week or first payment within 6 weeks after benefit application date

Washington Experiment:
- Initial claims only
- Eligible to receive benefits from the state UI trust fund
- Monetary valid claims at the time of filing

Delivery of Bonus Offer

Pennsylvania: Offer made to claimants when they signed for a waiting week or first payment

Washington: Offer made at the time claimants filed for benefits.

Additional Requirements for Receiving the Bonus

Pennsylvania Experiment:
- 16 weeks of continuous employment (no employment interruption of more than one week).
- Did not claim UI benefits during the reemployment period.
- Employment at bonus-qualifying job averaged 32 or more hours per week.
- Maintained monetary and nonmonetary UI eligibility up to the point of reemployment.

Washington Experiment:
- 4 months of continuous employment (no employment interruption of more than one week)
- Did not claim UI benefits during the reemployment period.
- Employment at bonus-qualifying job averaged 34 or more hours per week.
- No separation issue in the initial UI claim that prevented UI benefit payments during the bonus qualification period.

Additional Services Offered

Pennsylvania: Voluntary job-search workshop

Washington: None

TABLE 2
THE ESTIMATED IMPACTS OF THE TREATMENTS ON UI OUTCOMES
(Standard Errors in Parentheses)

	UI Outcome			
	Weeks of Benefits Received in Benefit Year	Dollars of Benefits Received in Benefit Year	Rate of Benefit Exhaustion (percent)	Sample Size
Pennsylvania Treatments				
PT1 - Low bonus, short qualification period	-.63 * (.34)	-100 * (55)	0.2 (1.4)	1,385
PT2 - Low bonus, long qualification period	-.39 (.28)	-73 (46)	0.1 (1.1)	2,428
PT3 - High bonus, short qualification period	-.46 (.30)	-99 ** (50)	0.1 (1.2)	1,885
PT4 - High bonus, long qualification period	-.84 *** (.26)	-133 *** (43)	-1.6 (1.1)	3,030
Washington Treatments				
WT1 - Low bonus, short qualification period	-.04 (.29)	24 (48)	0.8 (1.2)	2,246
WT2 - Medium bonus, short qualification period	-.25 (.29)	-32 (47)	-0.5 (1.2)	2,348
WT3 - High bonus, short qualification period	-.71** (.32)	-118** (53)	-1.6 (1.3)	1,583
WT4 - Low bonus, long qualification period	-.59** (.29)	-116** (47)	-3.2 *** (1.2)	2,387
WT5 - Medium bonus, long qualification period	-.31 (.29)	-52 (47)	-2.0 * (1.2)	2,353
WT6 - High bonus, long qualification period	-.80** (.33)	-146 *** (54)	-2.1 (1.3)	1,535
Combined Treatments	-.51*** (.15)	-85 *** (25)	-1.0 (0.6)	21,180
Combined Control Group Mean	14.63	2,223	25.9	6,436
Pennsylvania Control Group Mean	14.94	2,387	27.7	3,354
Washington Control Group Mean	14.30	2,060	23.9	3,082

NOTE: Estimates are regression-adjusted. The sample includes 27,616 observations for whom we have data on both demographic characteristics and UI receipt. The explanatory variables in the regression include treatment indicators, cohort indicators, office indicators, the weekly benefit amount, entitled duration of benefits, base period wages, and dummy variables for union hiring hall membership, stand-by status, female, black, hispanic, other non-white race, age less than 35, age greater than 54, manufacturing, and industry code missing.

  * Statistically significant at the 90 percent confidence level in a two-tail test.
 ** Statistically significant at the 95 percent confidence level in a two-tail test.
*** Statistically significant at the 99 percent confidence level in a two-tail test.

TABLE 3
THE ESTIMATED IMPACTS OF THE TREATMENTS ON DOLLARS OF EARNINGS
(Standard Errors in Parentheses)

		Quarter of Benefit Application	Quarter 1	Quarter 2	Quarter 3	Sample Size
Pennsylvania Treatments						
PT1 -	Low bonus, short qualification period	-.20 (103)	19 (98)	-89 (96)	-199 ** (97)	-289 (272)
PT2 -	Low bonus, long qualification period	117 (86)	87 (81)	-25 (80)	-14 (81)	165 (226)
PT3 -	High bonus, short qualification period	-19 (92)	116 (88)	-11 (86)	56 (87)	141 (244)
PT4 -	High bonus, long qualification period	-32 (81)	70 (77)	81 (75)	53 (76)	171 (214)
Washington Treatments						
WT1 -	Low bonus, short qualification period	11 (89)	-178 ** (85)	-60 (83)	1 (84)	-226 (236)
WT2 -	Medium bonus, short qualification period	-36 (88)	-54 (84)	-143 * (82)	100 (83)	-134 (232)
WT3 -	High bonus, short qualification period	-24 (100)	63 (94)	-19 (93)	176 * (94)	196 (262)
WT4 -	Low bonus, long qualification period	-74 (88)	36 (83)	-138 * (82)	-9 (83)	-186 (232)
WT5 -	Medium bonus, long qualification period	-98 (88)	-42 (83)	-70 (82)	24 (83)	-186 (232)
WT6 -	High bonus, long qualification period	-134 (101)	102 (95)	143 (94)	189 ** (95)	300 (265)
Combined Treatments		-22 (46)	26 (44)	-29 (43)	31 (43)	7 (121)
Combined Control Group Mean		$2,844	$2,119	$2,719	$2,922	$10,605
Pennsylvania Control Group Mean		$2,649	$1,698	$2,351	$2,605	$9,303
Washington Control Group Mean		$3,058	$2,581	$3,121	$3,270	$12,031

NOTE: The sample includes 27,549 observations for whom we have data on both demographic characteristics and earnings. We excluded observations with earnings greater than $100,000 in any quarter. The explanatory variables in the regression include treatment indicators, cohort indicators, office indicators, the weekly benefit amount, entitled duration of benefits, base period wages, and dummy variables for union hiring hall membership, stand-by status, female, black, hispanic, other non-white race, age less than 35, age greater than 54, manufacturing, and industry code missing.
[a]Quarters 1, 2, and 3 are the first, second, and third full calendar quarters after benefit application.
 * Statistically significant at the 90 percent confidence level in a two-tail test.
 ** Statistically significant at the 95 percent confidence level in a two-tail test.

TABLE 4
ESTIMATED NET BENEFITS
(Dollars per Claimant)

| | | Perspective | | |
| | Claimant | Government | | Society |
		UI Trust Fund	Government Total	
Pennsylvania Treatments				
PT1 - Low bonus, short qualification period	-312	41	-53	-365
PT2 - Low bonus, long qualification period	142	-1	42	184
PT3 - High bonus, short qualification period	127	-10	28	155
PT4 - High bonus, long qualification period	171	-31	20	191
Washington Treatments				
WT1 - Low bonus, short qualification period	-168	-71	-122	-289
WT2 - Medium bonus, short qualification period	-87	-65	-91	-178
WT3 - High bonus, short qualification period	198	-37	23	222
WT4 - Low bonus, long qualification period	-224	51	-16	-241
WT5 - Medium bonus, long qualification period	-124	-79	-117	-241
WT6 - High bonus, long qualification period	328	-80	19	347
Combined Treatments	14	-25	-21	-7

NOTE: The estimated benefits and costs of the bonus offers are based on the estimated impacts on UI receipt and earnings presented in Tables 2 and 3 and the bonus and administrative costs described in Spiegeleman, O'Leary, and Kline (1992) and Corson et al. (1992).