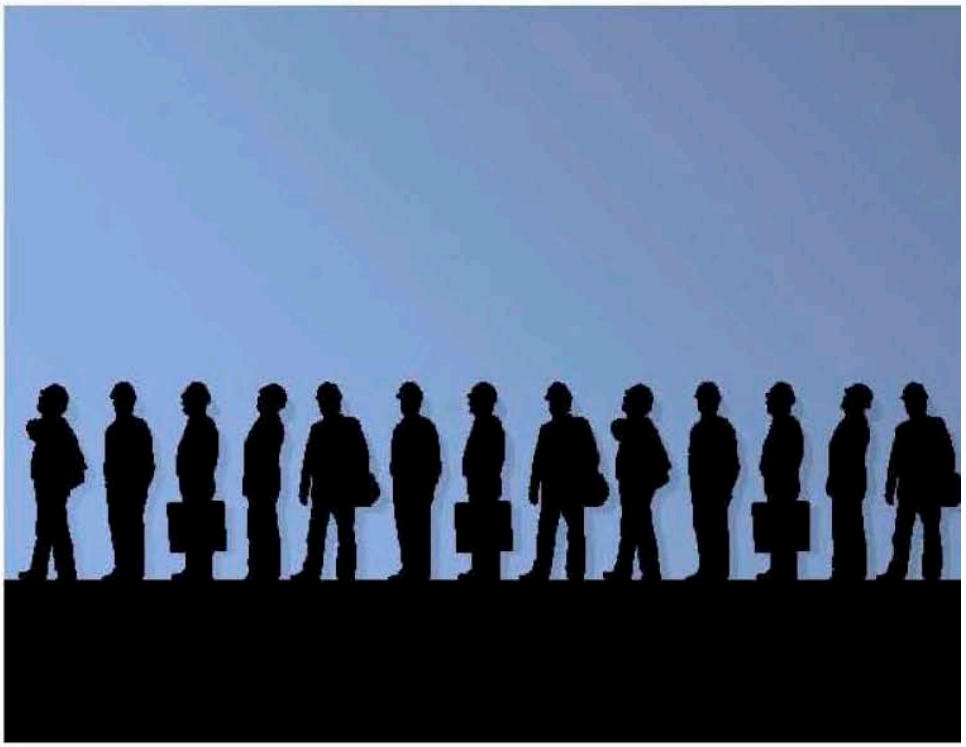
WAGE INSURANCE AND WAGE SUPPLEMENTS:
FINAL EVALUATION DESIGN REPORT

A Report to the United States Department of Labor



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ABSTRACT

The U.S. labor market has changed significantly in many respects since the creation of the unemployment insurance (UI) program in 1935. The provision of cash benefits associated with UI has changed as well, yet the basic structure of the UI program remains the same. Due to the possibility that features of the UI program may prolong periods of unemployment, many are looking to alternative measures to encourage more rapid reemployment and ensure better earnings recovery. Two proposed measures are the provision of wage insurance and/or the provision of wage supplements as a complement to UI, designed to increase the speed of reemployment and improve the wages of reemployed individuals.

This report outlines design parameters, evaluation methods, data sources, tasks, timelines and next steps for conducting a wage insurance and a wage supplement demonstration and accompanying evaluation. We propose key research questions related to program design and results, along with supplemental research questions gathered from the literature, feasibility analysis of the demonstrations, and discussions with our expert advisory committee and USDOL policy and program staff. Design parameters and options are outlined for each demonstration. These include program eligibility, targeting, supplement amount, duration and timing, and administrative infrastructure, and are largely based on the existing literature. We propose an implementation study and randomized control trial to capture the labor market impacts of the wage insurance and wage supplements demonstrations using employer records, state UI records, and survey data. We recommend that the evaluation begin early on in the implementation phase, and that a benefit/cost analysis be conducted. A discussion of the feasibility of the demonstrations and evaluation is included, along with potential threats to validity. Due to the large sample size and randomized control trial design, statistically significant results should be achievable. We conclude with a list of proposed tasks and timelines as next steps.

INTRODUCTION

The University of Texas at Austin's Ray Marshall Center has conducted background research for the U.S. Department of Labor's Employment and Training Administration to support the design of demonstrations for and rigorous evaluation of the provision of wage insurance and/or wage supplements to unemployed individuals as a complement to more traditional unemployment insurance (UI). In previous project reports, Center researchers reviewed existing research on the topic, as well as supporting data, and identified and analyzed the feasibility of options for further research and demonstrations to test wage supplement and wage insurance strategies (King & Tingle, 2015a & 2015b). As noted in these reports, policymakers, program administrators and researchers are increasingly concerned that certain features associated with UI receipt, including benefit levels and duration (especially the availability of extended benefits), may unnecessarily delay or discourage rapid reemployment and that new approaches such as wage insurance and/or wage supplements should be considered. These programs may also help workers recover wages lost as a result of their displacement.

In this report, the final report of the project, Center researchers outline the proposed wage supplements and wage insurance demonstrations and offer recommendations for evaluating them. The first section restates and expands the research questions guiding the demonstrations. The second section presents design parameters and options. The third section describes methods and major data sources for the evaluation. The fourth section offers an assessment of the evaluability of the demonstrations. The fifth and final section outlines next steps, the key tasks and timelines for implementing the demonstrations and launching the evaluation.

KEY RESEARCH QUESTIONS

Several key research questions guide the conduct of a demonstration of wage insurance and/or wage supplements:

- Will these programs lead to reductions in benefit exhaustion, total UI benefit payments received, and UI claim duration?

- Will these programs yield positive impacts on longer-term earnings on a new job for reemployed workers?
- Will these programs lead to better retention on the new or subsequent jobs?
- Will these programs lead to savings after deducting program costs? How are net benefits of these programs shared among participants (jobseekers, employers), taxpayers and society? Do these programs yield greater net benefits for certain groups of workers (e.g., prime-aged or older workers)?

Additional research questions for such demonstrations emerged from our review of the literature (King & Tingle, 2015a), our analysis of the feasibility of the demonstrations (King & Tingle, 2015b), and discussions with our expert advisory committee and USDOL policy and program staff. These additional questions include the following:

- Will wage insurance erode wages by subsidizing some workers and potentially displacing others? If so, to what extent?
- Will wage insurance and/or wage supplements suffer from adverse selection by disproportionately attracting workers with less stable work histories? If so, to what extent?
- Will these programs adversely affect employer provision of employee benefits? If so, to what extent?
- Will there be "gaming" by employers or claimants if the demonstration designs gives rise to moral hazard?
- Will the worker's lower reservation wage with the wage supplement offer hurt the quality of the job match?

DESIGN PARAMETERS AND OPTIONS

Due to the fundamental difference between wage supplements and wage insurance, namely the time orientation of each program, the design parameters proposed for each are distinct. Program eligibility, targeting, supplement amount, duration and timing, and administrative infrastructure were each discussed in the Wage Demonstration Feasibility Analysis Report (King & Tingle, 2015b). The proposed parameters below represent what appear to be the most viable options

for large-scale demonstrations. These parameters are summarized in Table 1 at the conclusion of the report.

WAGE SUPPLEMENTS DEMONSTRATION

The wage supplements demonstration would be characterized by a monetary incentive for rapid employment for UI-eligible unemployed workers. Designed to reduce the time to reemployment, the proposed demonstration should result in generalizable findings through a randomized control trial. The parameters of the demonstration must be crafted to avoid giving rise to moral hazard (for example, an employer hiring employees with subsidies instead of those that would be hired otherwise, or firing subsidized workers whose subsidies expired and hiring new subsidized workers). Additionally, the demonstration should be limited in length so as not to expose taxpayers to uncontrolled liability. It is recommended that some sites provide supplements through the employer and others by paying benefits directly to the employee through a voucher system to see if there are differential effects (stigmatization, for example). In sites where employees directly receive benefits, workers could apply for the subsidy after they are hired. Employers would not be cognizant of the benefits if they go straight to the worker.

The recommended parameters for *wage supplements* include a supplement amount of 50% of the difference between earnings on the new job and the last pre-layoff job, capped yearly at $10,000 as recommended by the existing literature (e.g., see Kletzer & Rosen, 2008 and LaLonde, 2007). A less costly alternative would be to set the supplement amount at some or all of the average weekly benefit from UI, rather than a function of the difference between the pre- and post-displacement jobs. The amount would be financed either through traditional federal/state UI funding or through dislocated worker demonstration funds from the Workforce Innovation and Opportunity Act (WIOA Section 170), and administered through the state workforce agency. UI-eligible workers dislocated[1] for any reason and who are reemployed at wages below those on their pre-layoff jobs are proposed as the target eligible sample, though variations might include offering wage supplements either to prime-aged workers likely to be long-term unemployed or to long-tenure

[1] Eligible individuals could either be defined narrowly to include only those UI-covered workers meeting the WIOA definition of "dislocated worker" or more broadly to encompass those unemployed workers not meeting that definition.

workers with more than two years on the job. Wandner (2010) has noted that targeting through the Worker Profiling Reemployment System (WPRS) could improve the effectiveness and efficiency of reemployment bonuses, and we propose that targeting might similarly enhance wage supplement programs. The duration and timing of the demonstration should vary by site to test the effects of supplement duration on reemployment timing and rates, job quality, and job retention. Two- and four-year supplements are proposed. The sites in which they are tested should be geographically distant to avoid contamination. Demonstrations should take place in up to six (6) urban sites across three to four diverse states to enhance the generalizability of the ultimate findings.

WAGE INSURANCE DEMONSTRATION

The wage insurance demonstration is designed to address the problem of dislocated workers who are fortunate enough to secure new jobs at the same or higher wages but who may face significant earnings losses when they lose these jobs and become employed in a new occupation or industry at some point in the future. The program would provide insurance for individuals against future loss of wages by providing insurance to help them temporarily make up the difference in wages earned in their new job and the wages earned in their pre-layoff job. This demonstration may need to continue to pay wage insurance benefits for a longer period than wage supplements are paid to ensure a large enough sample of workers can utilize the insurance benefits.

The recommended parameters for *wage insurance* include a demonstration in up to six (6) urban sites as well. After paying a predetermined fee to a special UI state fund, workers reemployed at lower wages would become eligible to receive benefits. This fee may be lower than what wage insurance would cost on the private market, with the financing mechanism (traditional UI funding or WIOA) making up the difference. An alternative design would be to offer the wage insurance program at no cost to participants. The supplement amount would be offered to cover up to 50% of the difference between the old and new wage, with a $10,000 cap, just as for the wage supplements demonstration. The insurance would be financed through a combination of employer and employee contributions. Eligible workers targeted for the demonstration would be dislocated workers reemployed at the same or higher wages as their pre-layoff job, as suggested by the related literature (see Kletzer,

2004 and Lalonde, 2007), though the program could also be offered to a wider range of workers or all workers in some of the test sites. Duration would similarly be two to four years, although a demonstration with a longer time span may provide more valuable insight and address possible moral hazard issues. Wage insurance should be offered in at least some of the same sites as the wage supplements in order to test for differential take-up effects.

EVALUATION METHODS AND DATA SOURCES

The proposed demonstration evaluation would include both an *implementation study* and an *impact analysis* using an *experimental design*, i.e., a randomized control trial, to capture labor market impacts. UI wage and claim records for treatment and control group members would be the primary data source. When linked with employer records (ES-202), each state's longitudinal UI data should allow researchers to examine and analyze employment, industry of employment, and earnings impacts. These administrative records would need to be supplemented with quantitative survey data to allow evaluators to better measure and understand such aspects as selection effects and employer and jobseeker attitudes toward supplements and insurance, among others.

Outcomes of particular interest for the evaluation include the reemployment rate, time to reemployment, earnings on the new job, earnings replacement relative to the last major pre-layoff job, employment retention on both the new job and subsequent jobs, the amount of supplements paid, and the costs per outcome of interest. Records of program implementation would enhance the analysis, and such information could be collected through interviews with UI office staff and employers. This information would include unemployed workers' awareness and understanding of both wage supplements and wage insurance (as relevant in the specific site), employer awareness and understanding of the programs offered in the site, aspects of UI office staff experience with administering wage supplements and insurance (including awareness and understanding), and the ability of the control group members to access substitutes for either program.

A *benefit/cost analysis* should also be conducted, using a framework encompassing the benefits and costs to government, society, taxpayers, employers, and employees. Administrative costs, benefit amounts, and the financing of each should be measured, and potential benefits, including increased earnings and skills

for workers, potential decreases in UI claim duration, and potential decreases in total benefits paid should be captured to develop a full picture of the value of the programs.

The evaluation should begin as close to the start of the demonstration as possible in order to capture implementation issues and begin to access and collect administrative data from states in an expeditious manner. In addition, note that, with large numbers of treatment and control group members, significant results may be gleaned earlier than in other demonstrations. The evaluation should control for a range of factors, including age, gender, and ethnicity.

EVALUABILITY ANALYSIS

Based on the proposed demonstration parameters, the sample size for the wage supplements demonstration is likely to be very large over the two- to four-year demonstration periods in each site. The large numbers of treatment and control group members give little reason for concern regarding balancing across groups to examine effects by age, gender, race/ethnicity, occupation, industry, tenure on the job and other factors. A power analysis with a conservatively estimated minimum detectable effect size revealed that a sample size of only 2,000 individuals would result in findings with statistical power well above the recommended threshold of 0.80 (Cohen, 1992). As the proposed scale of the demonstration is much larger, the demonstration should be able to be successfully evaluated. In each site, over a four-year trial period with just 10% of the eligible unemployed individuals assigned to treatment, at least 15,000 individuals may be expected to receive treatment in each site. A smaller demonstration may be implemented, provided that sufficient subgroup sample sizes exist to yield statistically significant results. The particular subgroups of interest include age, gender, industry, and race. Table 2 at the conclusion of the report shows the necessary sample size needed to test for effects on specific subgroups using UI program data from September 2015. These necessary sample sizes range from N=4,307 for statistically significant gender effects to N=151,077 for the effects of the program on American Indians and are based on the power analysis provided in the Feasibility Analysis Report (King & Tingle, 2015b).

For the wage insurance demonstration, the expected sample size would likely be smaller and would depend heavily on whether the demonstration is open

to all employed individuals or those recently reemployed after collecting UI. However, reemployment rates suggest that the take-up rate for wage insurance would be significant. While the sample size of the wage insurance demonstration is unlikely to be as large as the wage supplements demonstration, it will need to be sufficiently large to yield statistically significant results. With a small minimum detectible effect size, a similar result in necessary sample size is expected. Based on quarterly reemployment rates for UI recipients and the percent change in post-UI wage relative to pre-UI wage from the New Jersey Unemployment Insurance Reemployment Demonstration Project, a sufficient take-up rate for the wage insurance program is expected (see Wandner, 2010). Therefore, for the wage insurance demonstration, the statistical power of the randomized control trial is also expected to be well above the acceptable level.

Potential threats to validity in the analysis of the demonstrations are the quality of implementation, the generalizability of results, and economic and labor market climate. The state workforce agency local office, and Congressional interest, willingness, and capacity for implementing a relatively complex demonstration may be limited, which could lead to poor program implementation. As the demonstrations will operate in a modest number of sites, the representativeness of the labor markets and types of workers served may hinder the generalizability of results. For the wage insurance demonstration, the predetermined fee may result in a self-selection bias toward those who perceive they are more likely to become reemployed in the future at a lower wage than in their current job. Finally, if the U.S. economy and labor market were to improve to such an extent that very few UI-eligible workers became dislocated, implementing and evaluating the wage supplements and wage insurance demonstrations could prove difficult. This is unlikely to be a problem since, even in a reasonably strong economy, substantial numbers of jobs are being shed even as new ones are being created.

Demonstrations have successfully faced similar challenges before (see Wandner, 2010). With a potentially large sample size and feasible demonstration parameters, this demonstration evaluation could result in particularly robust empirical results.

NEXT STEPS: PROPOSED TASKS AND TIMELINES

Among the major tasks and approximate timelines associated with the proposed Wage Insurance/Supplements Demonstrations and Evaluation are the following:

- USDOL issues *Requests for Proposals (*and/or *Solicitations for Grant Announcements)* for a 7-year Wage Insurance/Supplements Demonstrations and accompanying Evaluation — June 2016
- Demonstrations and evaluation contractors selected — August 2016
- Contracts negotiated/signed and work begins — September/October 2016
- Detailed demonstrations/evaluation designs submitted to USDOL — December 2016
- States/sites recruited to participate in the demonstrations — January to August 2017
- States/sites begin demonstrations operations — by October 2017
- Evaluation begins — October 2017
- *Baseline Wage Insurance/Supplements Implementation Report* submitted to USDOL — by December 2018
- Second *Wage Insurance/Supplements Implementation Report* submitted to USDOL — by December 2019
- Initial *Wage Insurance/Supplements Outcomes Report* submitted to USDOL — by December 2020
- First *Wage Insurance/Supplements Outcomes and Impacts Report* submitted to USDOL — by December 2021

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Table 1. Wage Supplement and Insurance Demonstration Proposal Summary

Program	Proposed Parameter	Comments
Wage Supplement		
Eligibility/Targeting	UI-eligible workers dislocated for any reason, regardless of prior earnings, who secure employment at wages below those on their pre-layoff jobs. Variations include offering wage supplements to prime-aged workers likely to be long-term unemployed (per WPRS) and/or long-tenure workers with 2+ or 3+ years on the job.	
Supplement Amount	50% of difference between earnings on the new v. last pre-layoff job, capped at $10K/yr.	
Duration & Timing	Duration/timing vary by site to test effects of duration on reemployment timing, rates, job quality, and retention. Some sites might test 2-, others 4-year supplements, with 2- & 4-year duration sites geographically distant.	Coupled with similar variation in wage insurance offers of 2 and 4 years.
Financing & Costs	Offered as options to local UI and training programs in some sites, as substitutes in others. Financed through WIOA or traditional UI means.	
Administration	Demos in up to 6 urban sites in 3-4 states willing, able to meet demonstration and evaluation specs, e.g., data quality and accessibility, past experience. Sites vary in employment mix, earnings levels, and unemployment.	
Wage Insurance		
Eligibility/Targeting	Dislocated workers reemployed at same/higher wages as on their pre-layoff jobs. Variation offers wage insurance in some sites to test for differential take-up with/out supplements.	
Amount	50% of difference between earnings on the new v. last pre-layoff job, capped at $10K/yr. Alternatively,	
Duration & Timing	Offered up to 2 or 4 years in different sites.	Coupled with similar variation in wage supplement offers of 2 and 4 years.
Financing & Costs	Workers reemployed at same/ higher wages for predetermined fee paid into special UI state fund combined with WIOA funds or traditional UI means.	
Administration	Demos in up to 6 urban sites in 3-4 states willing, able to meet demonstration and evaluation specs, e.g., data quality and accessibility, past experience with demos. Sites vary in employment mix, earnings levels, and unemployment.	

Table 2. Necessary Demonstration Sample Size by Subgroup

Category	Subgroup	Proportion of Current UI Claimants	Necessary Sample Size	Demonstration Size
Gender	Female	.456	1964	4,307
Race	Asian	.035	1964	56,1115
	African American	.192	1964	10,230
	American Indian	.013	1964	151,077
Age	Older (55+) Workers	.236	1964	8,322
Industry	Agriculture	.025	1964	78,560
	Manufacturing	.108	1964	18,185
	Construction	.088	1964	22,318