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Policies for displaced workers: An american perspective

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Policies for Displaced Workers: An American Perspective

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ABSTRACT

American employment policy for displaced workers started in the Great Depression with programs for the employment service, unemployment insurance, work experience, and direct job creation. Assistance for workers displaced by foreign competition emerged in the 1960s along with formalized programs for occupational job skill training. The policy focus on displaced workers was sharpened in the 1980s through the Worker Adjustment and Retraining Notification Act and the Economic Dislocation and Worker Adjustment Assistance Act. Field experiments on services to dislocated workers led to Worker Profiling and Reemployment Services systems in all states, and federal rules adopted as part of the North American Free Trade Agreement Act permitted UI benefit receipt while starting self-employment. Evaluation evidence suggests there should be continuous connection of unemployment compensation recipients to reemployment services, skill training closely connected to employer requirements, earnings supplements to ease transitions to different jobs, efforts to maintain and strengthen employer-employee relationships, information channels to employees and communities about impending employment disruptions, and targeting of services to improve returns on public investments. While no silver bullet emerges to solve worker displacement, many different programs addressing a variety of needs can improve labor market outcomes after permanent job loss.

JEL Classification Codes: J65, J68

Key Words: displaced workers, reemployment, unemployment insurance, employment service, public employment policy, job training, wage subsidies, direct job creation, self-employment

Acknowledgments:

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INTRODUCTION

Evaluations of a wide range of active labor market programs (ALMPs) across a variety of countries have produced three essential findings: 1) job search assistance programs are the most cost-effective, 2) large-scale public service employment programs are the least cost-effective and most costly, and 3) job training programs and employment subsidies fall somewhere in between, with the degree of cost-effectiveness dependent on proper targeting of assistance (Schwanse 2001, p. 22). These conclusions from the rapporteur at an Organization for Economic Cooperation and Development (OECD) conference on ALMPs are useful to bear in mind while considering programs aimed at providing assistance to workers with long-term job attachment who are permanently displaced by mass layoffs or plant closings.

BACKGROUND

American employment policy for displaced workers started in the Great Depression and has been refined over the years. The Great Depression yielded the Employment Service (ES), created by the Wagner-Peyser Act of 1933; the federal-state unemployment insurance system (UI), created by the Social Security Act of 1935; and some large direct-job-creation efforts, which included workplace behavior training and some on-the-job skill training. Permanent job separation on a massive scale spawned the Emergency Conservation Work Act of 1933, creating the Civilian Conservation Corps (CCC) and the Emergency Relief Appropriation Act of 1935, creating the Works Progress Administration (WPA). The CCC and WPA were direct job creation programs emphasizing income transfer, but the elements of work activity and

infrastructure investment provided essential workforce training. Although it was administered by the U.S. Department of Labor, the CCC was directed by the U.S. Departments of Agriculture and the Interior and managed by the U.S. Army, which had the equipment and experience to manage hundreds of thousands of participants (Perkins 1946).

Additional income support and job training assistance for workers displaced by foreign competition emerged in 1962 as the Trade Adjustment Assistance (TAA) Act. Formalized programs for occupational job skill training started that same year with the Manpower Development Training Act (MDTA) and continued with the Comprehensive Employment and Training Act (CETA) of 1973, which included public service employment.

Key elements in most recent employment legislation have been sunset and evaluation requirements. The sunset is a date when the program will expire, and the evaluation is intended to inform subsequent legislation. Nascent systems for performance measurement emerged in CETA and were codified in the Job Training Partnership Act (JTPA) of 1982. The JTPA came into force at a time of high public concern over permanent job loss from economic restructuring fostered by Reagan-era business tax policy changes.

A wave of programs aimed specifically at helping displaced workers emerged in subsequent years. There were major changes in TAA in 1982. The Worker Adjustment and Retraining Notification (WARN) Act was signed into law in 1988 along with the Economic Dislocation and Worker Adjustment Assistance Act (EDWAA) that same year. Field experiments and valuations of services to dislocated workers led to the UI reforms of 1993 that established Worker Profiling and Reemployment Services (WPRS) systems in all states. Also in 1993 federal rules permitting continued weekly UI benefit receipt while pursuing self-

employment were adopted as part of the North American Free Trade Agreement (NAFTA).

Each of these programs were policy responses to actual or expected worker dislocation.

The impact of displacement on the earnings profile of jobless Americans participating in MDTA was identified by Ashenfelter (1978). He noticed a marked decline in earnings in the months preceding permanent job loss that led to new job skill training. This decline has come to be known as the “Ashenfelter dip” in earnings. Research based on UI earnings records of Pennsylvania workers during the 1980s, many of whom were affected by restructuring in the American steel industry, estimated that permanent job loss resulting from a plant closing or mass layoff reduced future earnings by approximately 25 percent (Jacobson, Lalonde, and Sullivan 1993). The negative impact on local communities of massive job and income loss can persist for decades.

Jacobson, LaLonde, and Sullivan (1993, p. 685) “find that high-tenure workers separating from distressed firms suffer long-term losses averaging 25 percent per year. In addition, we find that displaced workers’ losses: (i) begin mounting before their separations, (ii) depend only slightly on their age and sex, (iii) depend more on local labor-market conditions and their former industries, (iv) are not, however, limited to those in a few sectors, and (v) are large even for those who find new jobs in similar firms.” In other words, they say, “displaced workers future earnings losses average 25 percent per year and persist, losses begin before job separation, [and] are large even for those who find new jobs in similar firms.” Their research is based on UI earnings records from Pennsylvania for the years 1974–1986.

WORKER DISPLACEMENT IN THE GREAT RECESSION¹

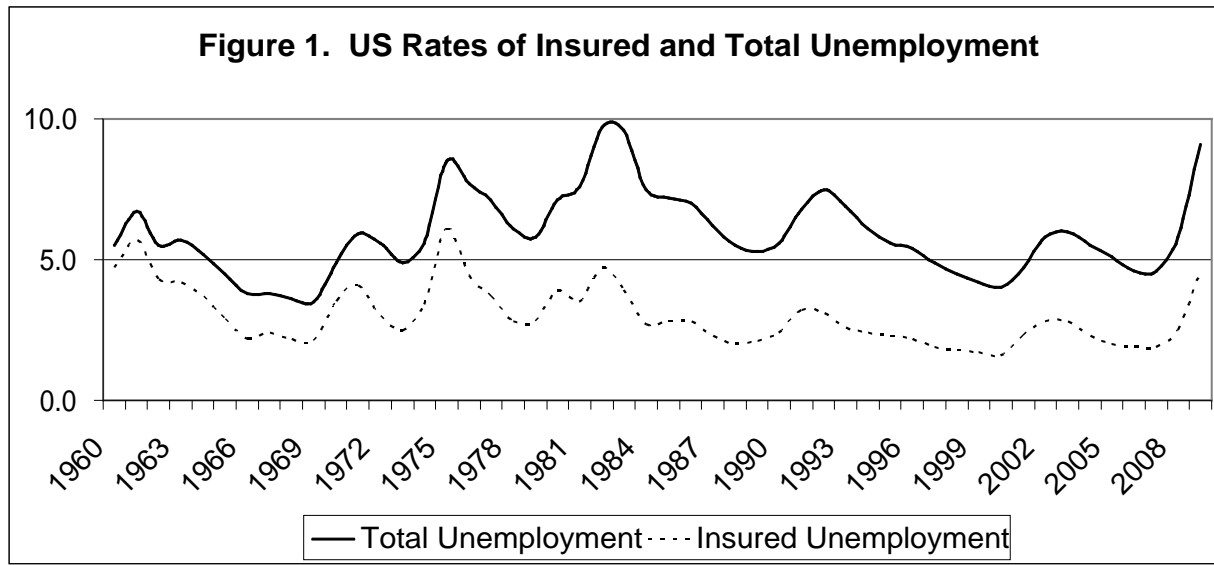
The economic recession in the United States officially began in December 2007.² From that month until October 2009, the number of unemployed Americans more than doubled, from 7.5 to 15.7 million. During that same period, the monthly unemployment rate increased from 4.9 to 10.2 percent of the labor force.³ These dramatic changes happened in an extremely short period of time. Only one other time since 1948 has the average monthly national unemployment rate been higher, and that was during the deep recession of 1982, when the unemployment rate hit 10.8 percent, and that level was reached over a time span nearly four years in duration (Figure 1).

Figure 1 not only shows peak unemployment over the past 50 years occurring in 1982, but illustrates a differing pattern of unemployment over time before and after that date. The unemployment lows during economic expansions were successively higher preceding 1982, and the unemployment lows during economic expansions were successively lower in the first two economic expansions following 1982. The year 1982 is also the tipping point in patterns of employer dismissals of workers. Before 1982, temporary furloughs were commonly followed by employer recalls. Permanent industrial restructuring began in the early 1980s and accelerated in the following years. Manufacturing plant closings and mass layoffs mushroomed in the 1980s. Unemployment reached a cyclical low in 1989 at 5.3 percent of the labor force; the next business expansion resulted in unemployment reaching an even lower 4.0 percent in the year 2000.

¹ This section adapted from O'Leary and Eberts (2009).

² National Bureau of Economic Research (NBER) business-cycle expansions and contractions, <http://www.nber.org/cycles/cyclesmain.html>.

³ Labor force statistics from the Current Population Survey, Bureau of Labor Statistics, U.S. Department of Labor, <http://www.bls.gov/webapps/legacy/cpsatab1.htm>.



The macroeconomic stability after the 1980s has been attributed to a new era of steady monetarist economic management. Credit tightening by the central bank of the United States, the Federal Reserve (Fed), in 2001 led to a rise in unemployment followed by a gradual return to a low of 4.6 percent in 2006 and 2007. The previous economic recovery was supported by cuts in federal personal-income-tax rates as well as lower interbank-lending-rate targets by the Fed. Unemployment remained at historical lows until the tremors of the recent financial crisis began to shake markets.

New claims for unemployment insurance (UI) benefits averaged 322,000 per week from 2005 through 2007. In the 52 weeks from the end of October 2008 through the end of October 2009, UI claims averaged 577,000 per week. In the week ending 10 days before Barack Obama was inaugurated as president of the United States, a total of 956,791 Americans filed new claims for UI benefits (USDOL 2010). The new president seized the initiative to renew employment policy, and occupational skill training received prominent attention in the federal

macroeconomic stimulus bill called the American Recovery and Reinvestment Act (ARRA) of 2009.

From September 2008 to September 2009 the rate of unemployment rose dramatically, from 6.2 to 9.8 percent of the labor force, and the composition of the unemployed changed substantially. The unemployment rate among full-time workers rose from 6.3 to 10.7 percent, while for part-time workers unemployment rose from 5.9 to 6.4 percent. During this period there also was an increase in the rate of involuntary part-time work by those who would prefer full-time work (BLS 2008).

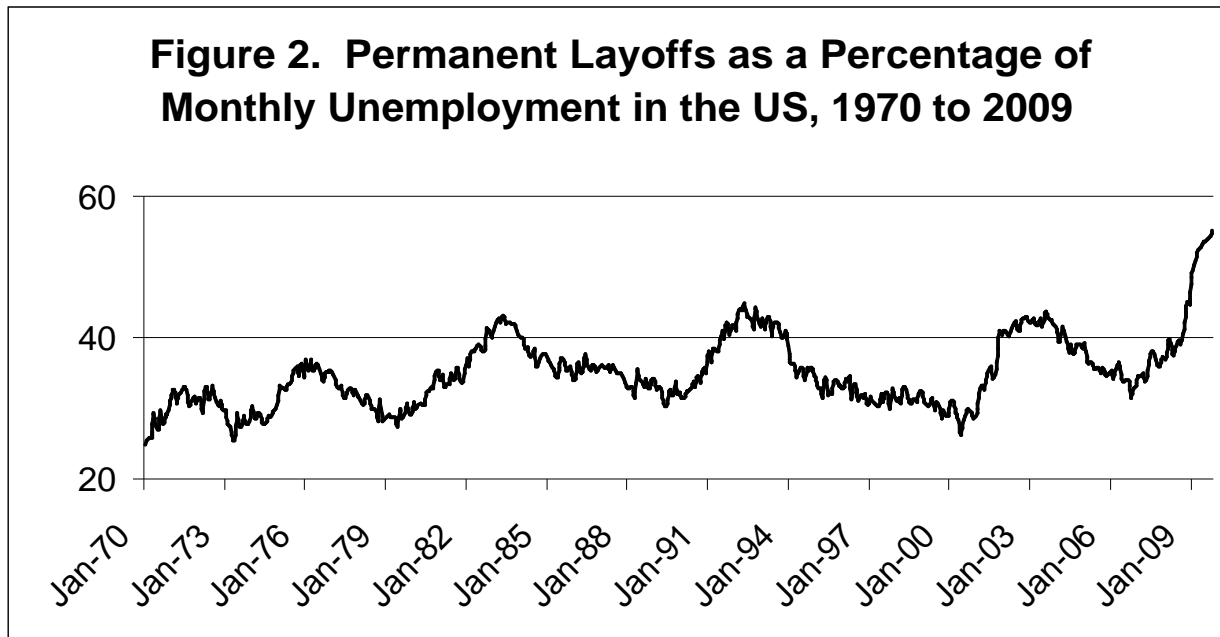
The wave of industrial restructuring starting in the 1980s continued throughout much of the remainder of the century. Compared to the very quick rise in unemployment in 2008 and 2009, the recent previous recessions occurred during steady decline in manufacturing employment and were followed by what came to be known as jobless economic recoveries. That is, unemployment was slow to fall as economic activity resumed. Economic restructuring involved employment shifts across employers and industries, requiring occupational change and retraining of the workforce. The present recession has caused unemployment to rise higher than previous recent recessions, and the rise has occurred much more quickly, as unemployment has surged at a feverish pace.

The stock of unemployment at any time is the net result of new inflows from job loss, new labor-market entry, and labor-market reentry, minus outflows due to new employment and labor force withdrawals. The rise in unemployment resulting from inflows among the jobless swamped all other flows. In the three months from December 2008 through February 2009, a total of 9.8 million new claims for UI were filed.

This large and quick rise in unemployment has led some analysts to speculate that the current recession is different from the previous two. Erica Groshen (2009) of the Federal Reserve Bank of New York asserts that “deeper recessions tended to be more cyclical”; therefore, a larger share of job separations may have been temporary rather than permanent layoffs in such recessions. She cites job losses in the current recession as being more widely diffused across industries and posits that temporary and permanent layoffs may be more balanced in this one than in other recent recessions. The previous recessions were engineered by the Fed’s gradually raising the target interbank lending rate 25 basis points every six weeks. However, the current wave of layoffs was largely driven by the complete unavailability of credit to business at any price. Businesses that normally manage operating cash flows with bank lines of credit found that those sources had evaporated overnight. Banks were hoarding cash to secure their own balance sheets as value in their loan portfolios evaporated.

Other analysts suggest that a jobless economic recovery might persist for longer than was seen in recent recessions. Writing on the Atlanta Federal Reserve Bank’s macroblog, Melinda Pitts (2009) cites evidence that very small businesses, employing 50 or fewer persons, contributed 45 percent of the nation’s job losses during the first year of the current recession. That is significant given the facts that one-third of job growth was attributed to very small firms in the expansion preceding the 2001 recession and that only 9 percent of job losses in the 2001 recession originated in such firms. Pitts quotes William Dudley, president of the Federal Reserve Bank of New York, as saying that as credit worthiness of small-business borrowers has deteriorated, “some sources of funding for small businesses—credit-card borrowing and home equity loans—have dried up ... and, small businesses have few alternative sources of funds.”

Recent data from the U.S. Bureau of Labor Statistics (BLS 2009) indicates that permanent layoffs as a share of total unemployment have reached an all-time high of over 55 percent (Figure 2). This rate had previously only reached as high as 42 percent in 1983, 45 percent in 1992, and 44 percent in 2003. The current, dramatically higher rate of permanent layoffs suggests a protracted period of high joblessness in the coming months.



POLICY RESPONSE TO WORKER DISPLACEMENT

Public response to permanent worker displacement in the United States can be grouped into four main categories of programs. These are 1) income replacement policies, including UI, TAA, and the experimental reemployment bonus programs; 2) worker adjustment programs such as those associated with the WARN Act; 3) labor supply enhancing programs such as the ES and job training; and 4) labor demand policies such as self-employment assistance and wage subsidies. The latter group might also include direct job-creation programs for public service

and public works; these focus on income replacement with the ancillary benefits of adding to public infrastructure, amenities, and community-building. The following review of results focuses on the first four groups of programs; the exposition relies on O’Leary and King (2005).

Income Replacement Policies

The federal-state UI system was established to provide temporary partial income replacement to involuntarily separated workers with strong labor force attachments. Ancillary aims of the American UI system included maintenance of aggregate purchasing power in the macroeconomy and strengthening worker-employer attachments through experience rating of employer UI taxes for benefit financing. Research has shown that the availability of UI income replacement lengthens unemployment durations beyond what they would be in the absence of compensation (Decker 1997). However, when aggregate unemployment is high and rising, the proportion of unemployed workers who are involuntarily jobless rises; hence, income replacement and maintenance of aggregate spending power is paramount. Examining the six previous recessions before 2000, Chimerine, Black, and Coffey (1999, p. 68) estimate that the average UI income multiplier was 2.15, providing a significant automatic stabilizer to the economy. Targeted group and individual extensions of UI and training assistance are provided by trade adjustment programs to those who may suffer long jobless durations even in the absence of a general economic decline. Finally, this section considers reemployment bonuses, which change the timing of paying UI benefits in an attempt to counteract work disincentive effects.

Unemployment Insurance

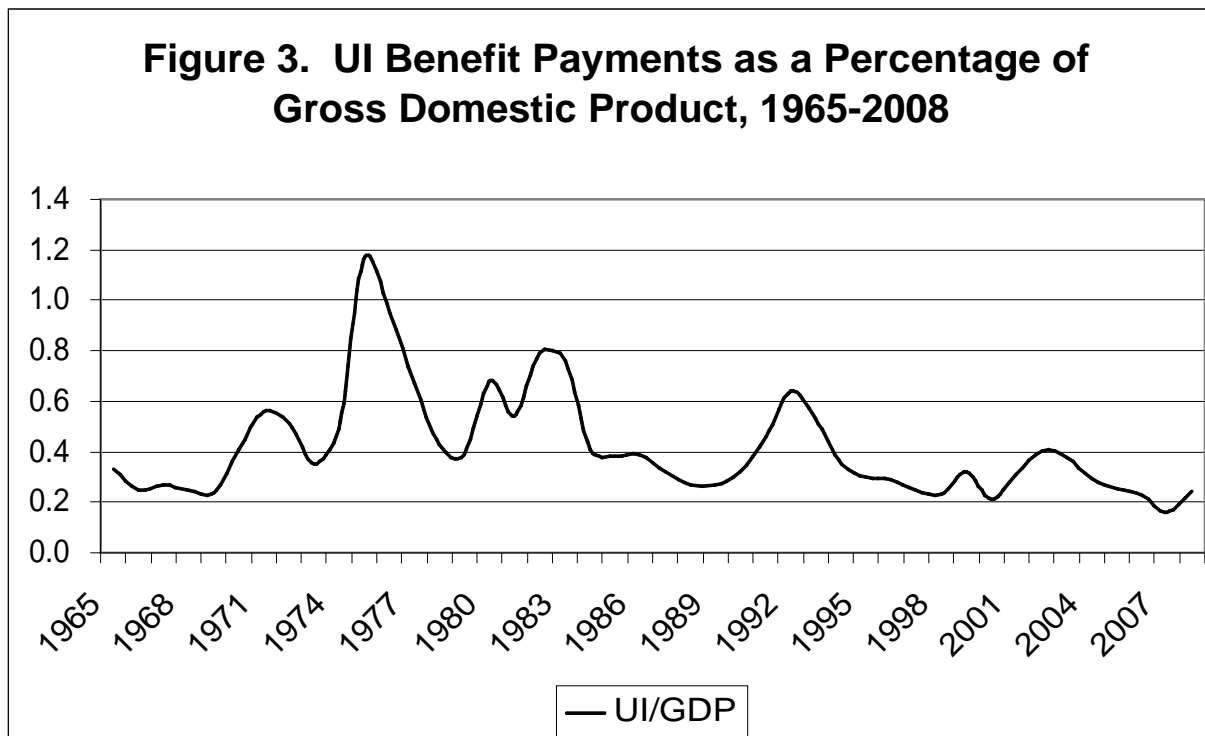
In terms of exposure to hardship from job loss, the increase in the share of long-term unemployment is an informative measure. With long-term joblessness defined as a person’s

being more than six months out of work, the rate of long-term joblessness increased from 21.2 percent of all unemployed in September 2008 to 35.6 percent of all unemployed in September 2009 (BLS 2009). In the United States, the maximum duration of entitlement to regular unemployment insurance benefits is 26 weeks in all but two states, where it is 30 weeks. During the recent recession, more than half of all UI beneficiaries exhausted their entitlement to regular UI benefits.

Since 1960, the labor-force share of workers covered by UI has trended upward. Today nearly all wage and salary employers are required to pay UI taxes on their payrolls, and employees covered by UI included 86.8 percent of the labor force in 2008. The majority of workers not covered by UI work in self-employment; others working on family farms or for churches. The dramatic rise in UI coverage—from 57.7 percent of the labor force in 1960—resulted mainly from 1972 UI reforms that brought nonprofit and governmental agency employers under the system.

Despite the broadened coverage, the ratio of insured to total unemployed has been cut in half—from 86 in 1960 to 43 percent in 2008 (Figure 1). The declines were sharpest in the 1960s and fell again in the 1970s. The reduced share of jobless workers receiving UI benefits dampens the strength of the UI system to inject spending during economic downturns, thereby acting as an automatic macroeconomic stabilizer. As a share of aggregate economic activity, measured by gross domestic product (GDP), total UI benefits have been declining in importance (Figure 3).

Since 1965, UI benefits as a share of GDP have ranged between 0.16 and 1.16 percent. The highest rates occur during recessions, when GDP is depressed and UI benefit payments have increased. Since the peak of 1.16 percent in 1975, the subsequent recessions have seen UI-GDP ratios at successively lower cyclical peaks, reaching 0.79 percent in 1982, 0.64 percent in 1992,



and 0.40 in 2002. After the 1982 recession, when many states were forced to borrow from the federal government to pay UI benefits, several states increased their UI eligibility requirements.

This lowered UI recipiency rates and reduced the countercyclical effectiveness of the UI system to inject significant amounts of UI benefits automatically during economic recessions.⁴

As a percentage of GDP, UI has made up a larger share during the current recession. This is both because GDP has declined and because there have been huge increases in the number of beneficiaries and their average duration of benefit receipt. Additionally, there have been a series of federally financed UI benefit extensions for exhaustees of the regular 26-week entitlement. These amount to two extensions of up to 20 weeks and a third adding up to 13 weeks, depending on the level of unemployment in a state, meaning that the maximum potential duration of benefits in many states with high unemployment is now 79 weeks. As

⁴ Recent estimates based on five post-World War II recessions suggest that a spending multiplier of UI benefits is 2.15 during periods of high unemployment. That means that each \$1.00 of UI benefits received by the unemployed acts to increase gross domestic product (GDP) by \$2.15 through respending in the economy.

unemployment continues to rise, Congress has just passed another extension of UI benefits, adding 20 weeks of benefits in states with unemployment over 8.5 percent and 14 weeks of benefits in other states. President Obama signed this benefit extension into law on Friday, November 7, 2009. The total amount of UI paid out in the 12 months ending June 30, 2009 was \$75.0 billion in regular UI benefits, plus more than \$34.7 in federally funded extended benefits.⁵ That total is 0.77 percent of GDP at the \$14.3 billion annual rate estimated in October 2009 (BEA 2009).

Regarding UI for jobless workers, the main elements of the American Recovery and Reinvestment Act of 2009, signed by President Obama in February of that year, include provisions to do the following:

- Continue federally funded extended UI benefits for up to 33 weeks, through December 31, 2009, at a cost of \$27 billion. Subsequently extended to December 31, 2010.
- Increase UI benefit amounts by \$25 per week through June 30, 2010, at a cost of \$9 billion. Subsequently extended to December 31, 2010.
- Make a \$7 billion distribution from the Unemployment Trust Fund, of the type granted by the Reed Act, to states having legal provisions for items listed in the McDermott Unemployment Insurance Modernization Act. The money would be allocated to the states based on their share of the nation's unemployment. States would receive one-third of their allocation for having an alternate base period (ABP) for monetary determination of UI eligibility.⁶ The remaining two-thirds would be granted for having two of the following four provisions: 1) permitting claimants who normally work part-time jobs to be seeking only part-time work as reemployment, 2) permitting eligibility for job separations due to employer harassment or compelling family reasons, 3) having allowances of at least \$15 per

⁵ In addition to fully paying for benefits under the permanent extended benefits program, the federal government has also fully paid for a series of extended UI benefits programs. As of September 16, 2009, the funding levels are as follows: Tier 1, \$21.6 billion; Tier 2, \$6.5 billion; ARRA April, \$0.4 billion; ARRA May, \$1.1 billion; ARRA June, \$1.9 billion; and ARRA July, \$3.3 billion; for a total of \$34.7 billion (USDOL 2009).

⁶ The UI base period is the time frame over which prior earnings are examined to determine an individual's UI eligibility and benefit entitlement. The standard base period (SBP) is the first four of the five most recently completed calendar quarters. The alternate base period (ABP) would be the four most recently completed calendar quarters. For example, if the SBP was from July 2008 to June 2009, the ABP would be from October 2008 to September 2009.

dependent up to at least \$50 total per week, and 4) giving job search waivers for 26 weeks to beneficiaries involved in commissioner-approved job training.

- Pay Consolidated Omnibus Budget Reconciliation Act (COBRA) costs to extend health insurance coverage to the unemployed, lengthening the period of COBRA coverage for older and tenured workers beyond the 18 months provided under current law.⁷ Specifically, workers 55 and older, and workers who have worked for an employer for 10 or more years, will be able to retain their COBRA coverage until they become Medicare-eligible or secure coverage through a subsequent employer. In addition, the bill subsidizes the first 12 months of COBRA coverage for eligible persons who have lost their jobs on or after September 1, 2008, at a 65 percent subsidy rate, the same rate provided under the health coverage tax credit for unemployed workers under the Trade Adjustment Assistance program. The estimated cost of all this is \$30.3 billion.
- Provide 100 percent federal funding through 2010 for optional state Medicaid coverage of individuals (and their dependents) who are involuntarily unemployed and whose family income does not exceed a state-determined level but is no higher than 200 percent of poverty, or who are receiving food stamps.

Trade Adjustment Assistance

The current Trade Adjustment Assistance (TAA) program was created by the Trade Expansion Act of 1962 (P.L. 87-794) and substantially modified by the Trade Act of 1974 (P.L. 93-618). The North American Free Trade Agreement Transitional Adjustment Assistance program (NAFTA-TAA) was created by the North American Free Trade Agreement Implementation Act (P.L. 103-182). Both are entitlement programs. Since it began, TAA has shifted from being a program that was little used in the 1960s to a program covering manufacturing, particularly the steel and automobile industries, in the late 1970s to early 1980s, and light-industry and apparel workers in the mid- to late 1990s. The estimated number of

⁷ The Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1986 gave workers and their families who lose their health benefits because of a job separation the right to continue health benefits provided by the group health plan of their prior employer for limited periods of time. The separating employees who choose to continue coverage must pay the health insurance premium themselves.

workers covered by program certifications peaked at almost 705,000 in fiscal year 1980, which was largely a reflection of layoffs experienced in the auto and steel industries.⁸

In its current form, TAA provides extended income replacement payments like UI to trade-impacted unemployed workers who have exhausted their 26 weeks of regular UI benefits. These income-support payments, called Trade Readjustment Allowances (TRAs), are paid at weekly rates equivalent to UI and are available during job search and participation in job skill retraining. Current durations of TRAs effectively extend UI by up to 130 weeks for eligible displaced workers in full-time training and by up to 156 weeks if remedial training is also necessary.

The TAA program also currently provides an allowance for direct job-search expenses of up to \$1,500 and an allowance for relocation for reemployment or job search of up to \$1,500, the federal employee limit for relocation expenses. Expenses are also paid for participation in job skill training, which may be full-time or part time, but full-time training is required for TRA eligibility. An 80 percent tax credit is also provided under the health coverage tax credit (HCTC) for expenses associated with extending health insurance coverage during joblessness, as covered by the TAA program.

Certification for TAA is by employer, but displaced workers age 50 or over may be eligible for Reemployment Trade Adjustment Assistance (RTAA). Participants are eligible for job skill training support, TRA, and the HCTC. Combined benefits under RTAA are capped at \$12,000 over a period of up to two years.

Decker and Corson (1995) evaluate the marginal effects of significant TAA expansions instituted in 1988, during a period of major displaced-worker policy innovation. They use

⁸ This synopsis of the TAA legal evolution is drawn from USDOL (2010).

samples from before and after the 1988 changes in a quasi-experimental evaluation design. They estimate that displaced workers suffered large income losses, but that the expanded TAA job training had no significant impact on earnings within three years after TAA participation.

Reemployment Bonuses

Regular UI benefits are financed by employer payroll taxes in all states, plus employee taxes in Alaska, New Jersey, and Pennsylvania. As social insurance UI provides temporary income support during involuntary joblessness. For a given tax burden, more people can be served if average UI durations are shorter. For the 12 months ending April 2009, regular UI benefit payments totaled \$56.6 billion and had an average duration of 15 weeks. Shortening UI average durations by one week would save about \$3.75 billion, meaning that more people could be served by UI under a given tax burden, or that for a given level of insured unemployment more money could remain in the hands of employers for business investment and job creation. The reemployment bonus experiments investigated the efficacy of incentive payments to shorten UI durations.

Between 1984 and 1989, four reemployment bonus experiments targeted at unemployment insurance (UI) recipients were conducted in the United States. These experiments provided various levels of lump-sum payments to UI recipients who took new, full-time jobs within 6 to 12 weeks of their benefit application and held those jobs for at least three to four months. Empirical UI research had produced evidence that UI payments might lengthen jobless durations beyond what they would be in the absence of UI.⁹ The purpose of these interventions was to learn more about the behavioral response of UI recipients to changes in the UI program. Reemployment bonuses were intended to speed the return to work in a manner that

⁹ Decker (1997) provides a survey of the UI disincentive literature.

would benefit employees, employers, and the government, and would be cost-effective. UI claimants would be better off if they returned to work sooner and found jobs that were similar and paid similar wages to the jobs they would have taken in the absence of a bonus offer. Employers would be better off if they experienced lower UI payroll taxes. The government would be better off if the cost of the bonus was offset by a decrease in UI benefit payments to unemployed workers and an increase in income and other tax contributions by workers during their longer period of employment.

Illinois UI Incentive Experiment. The first bonus experiment was conducted in Illinois during 1984–1985 and was sponsored by the Illinois Department of Employment Security. Its goal was to examine the theoretical and empirical economic implications of a reemployment bonus offer to UI claimants and the potential for developing a cost-effective bonus program. The Illinois design provided \$500 bonus amount, equivalent to about four weeks of UI benefit payment, i.e., 4 times the UI weekly benefit amount (WBA). To collect a bonus payment, treatment group members needed to become reemployed within 11 weeks of filing their UI claims.

The estimated impact of the Illinois reemployment bonus offer to UI claimants was a reduction in the duration of UI compensated unemployment by 1.15 weeks (Woodbury and Spiegelman 1987). This reduction was so great that the reemployment bonus was cost-effective to the UI Trust Fund, generating a benefit cost ratio was 2.32. At the same time, participants suffered no reduction in post-unemployment wages, indicating that the bonus offer did not reduce job quality.

New Jersey UI Reemployment Demonstration. Independent of the Illinois experiment, the U.S. Department of Labor (USDOL) sponsored a New Jersey UI experiment that included a

reemployment bonus treatment group. This project was designed and became operational in 1985 and 1986, before the results from the Illinois experiment became available. As such, the New Jersey experiment was not designed to replicate or validate the Illinois experiment. The New Jersey bonus offer was designed so that the amount of the offer was tied to a claimant's remaining UI benefit entitlement and the amount paid was larger in cases of more rapid reemployment. The initial bonus offer was one-half of the claimant's remaining entitlement at the time of the offer. This offer amount remained constant for the first two full weeks after the initial offer. Thereafter the amount of the bonus offer declined by 10 percent of the original amount per week, falling to zero by the end of the eleventh full week of the bonus offer. Initial bonus offers in New Jersey averaged \$1,644, which was about nine times the UI weekly benefit amount.

The evaluation of the New Jersey experiment suggested that the reemployment bonus, as it was implemented in New Jersey, generated modest savings in UI. Since the cost of offering and paying the bonuses exceeded the modest UI savings, the New Jersey bonus was not cost-effective from the perspective of the UI system.

Pennsylvania and Washington Reemployment Bonus Experiments. In 1987, with the evaluation of the Illinois experiment completed and the New Jersey experiment operations over, the USDOL sponsored two additional reemployment bonus experiments, one in Pennsylvania and the other in Washington state. In contrast to the Illinois experiment, these later trials generated much more modest results. In the Pennsylvania and Washington experiments the bonus offers were set as multiples of the worker's weekly benefit level. This design was adopted because in the Illinois experiment claimants receiving less than the UI maximum weekly benefit responded more strongly to bonus offers than those constrained by the maximum (O'Leary,

Spiegelman, and Kline 1995, p. 267). The Pennsylvania and Washington experiments tested benefit levels that bracketed the Illinois bonus amount ($4 \times$ the weekly benefit allowance, or WBA) and tested qualifications both similar to the earlier offers and about half as great.

The resulting designs provided for four treatment groups in Pennsylvania and six in Washington. The dimensions of each design were the level of the bonus (high and low in Pennsylvania; high, medium, and low in Washington) and the qualification period or duration of the bonus offer (short and long in both states). While half of the 10 treatments in Pennsylvania and Washington were cost-effective to claimants, society, and the government sector as a whole, only two of the treatments were cost-effective for the UI system. (Decker and O'Leary 1992, 1995)

The relatively weak response to the bonus offer in Pennsylvania and Washington led to a reexamination of the powerful Illinois results. It was discovered that within the designed experiment, a second experiment had unintentionally taken place. In 1984, as Illinois was recovering from a major recession, the availability of Federal Supplemental Compensation (FSC) was terminated. This resulted in about half of the claimants studied having 38 weeks of UI benefit eligibility, with the remainder being eligible for only 26 weeks of regular UI benefits. It turns out that the mean bonus response of -1.15 weeks in Illinois was made up of a response of -1.78 weeks for those eligible for FSC and -0.54 weeks for those not eligible. The average response of -0.54 for the non-FSC sample in Illinois is close to the response observed in Pennsylvania and Washington, where the entitled duration of benefits was also similar.

Among the individual treatments, the impact on weeks of UI benefits ranged from -0.05 for the low bonus amount–short qualification period offer in Washington to -1.78 for the bonus offer to FSC-eligible claimants in Illinois. Impacts for Pennsylvania tended to fall between those

for Illinois and those for Washington. Overall, a cash bonus can be expected to modestly shorten spells of insured unemployment—the mean effect of the offers made in the three states yielded about a one-half week reduction in weeks of UI benefits.

The degree of response to the bonus offer was also examined for important subgroups within the sample. Results from Pennsylvania and Washington suggest that UI claimants in low-unemployment areas and claimants whose prior employment was in manufacturing tended to respond more strongly to the bonus. However, close inspection of subgroup results reveals one main finding: there is no difference between any pair of subgroups shown that is both statistically significant at conventional confidence levels and consistent across the three experiments. The implication of this finding is quite striking—the reemployment bonus has a remarkably even impact on various subgroups of workers, whether delineated by gender, age, race, industrial sector of employment, level of local unemployment, or level of the weekly benefit amount.

O’Leary, Decker, and Wandner (2005) investigate whether targeting reemployment bonus offers to unemployment insurance (UI) claimants identified as most likely to exhaust benefits would reduce benefit payments. They show that targeting bonus offers with profiling models similar to those in state WPRS systems can improve cost-effectiveness. However, estimated average benefit payments do not steadily decline as the eligibility screen for targeting is gradually tightened. The authors find that narrow targeting is not optimal. The best candidate to emerge 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.

Two potential behavioral effects might reduce cost-effectiveness for an operational program (Meyer 1995): 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 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 entering the UI system.

If entry and displacement effects are sizable, actual program cost-effectiveness will be lowered. However, targeting low bonus amount—long qualification period 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. Also, targeting should reduce any potential for displacement, since a smaller proportion of claimants would receive the bonus offer.¹⁰

Worker Adjustment Policy

The Worker Adjustment and Retraining Notification (WARN) Act was signed into law on August 4, 1988, and became effective February 4, 1989.¹¹ The law requires advance notice of plant closures and mass layoffs. The essential WARN rules require 60-day advance notice of mass layoffs and plant closing by employers of 100 or more workers. By WARN definition, mass layoffs involve either more than 500 layoffs or at least 50 layoffs if they constitute one-third or more of an enterprise's workforce. Plant closings subject to WARN involve the loss of at least 50 jobs over a 30-day period. Under either circumstance, notification must be given to workers, local government officials, and the state's dislocated worker adjustment unit.

¹⁰ Davidson and Woodbury (1993) estimate that a nontargeted bonus offer to all UI claimants could increase unemployment durations among those not eligible for UI by between 0.2 and 0.4 weeks.

¹¹ WARN was established by Public Law 100-379, enacted August 4, 1988, with regulations 20 CFR 639 in Federal Register Vol. 54, No. 75. WARN became effective February 4, 1989.

A study by the General Accountability Office (GAO 2003) found that in 2001, 1.75 million workers lost jobs through extended mass layoffs. These involuntary permanent job separations happened through 8,350 plant closures and mass layoffs; of these events, only about one-quarter were subject to WARN's advance notice requirements. The GAO (2003) report recommended improved education of employers regarding their WARN responsibilities and associated employee rights. The following are brief summaries of two studies evaluating the effects of WARN principles on workers and local communities.

Worker Adjustment and Retraining Notification (WARN) Act

Folbre, Leighton, and Roderick (1984) examine the effects of advance notice of plant closings on local area unemployment rates and labor force size. They examine the effects of major plant closings (those involving more than 100 workers) in Maine for a period prior to advance notice becoming mandatory in the state. They identify 107 such major plant closings between 1971 and 1981. A total of 21,225 workers were directly affected, and a multiplier of 2.3 meant that 49,219 Maine workers felt an impact. The authors find that *voluntary* provision by a firm of at least one month's advance notice to displaced workers significantly diminishes the closing's impact on the local area unemployment rate in the month of closing.

Ehrenberg and Jakubson (1988, p. 75–76) find that receiving advance notice appears to reduce the probability that a displaced worker will suffer any spell of unemployment, but that it has no effect on the individual's duration of nonemployment if he or she becomes unemployed, or on the individual's earnings if he or she finds reemployment. Their work is based on the U.S. Bureau of Labor Statistics' (BLS) 1984 Displaced Worker Survey. They say that "contrary to concerns expressed by critics of advance notice, we also find no evidence that advance notice

leads a firm's most productive workers to quit prior to their planned displacement date, thereby disrupting a firm's operations in its final weeks" (Ehrenberg and Jakubson, p. v).

Labor Supply Enhancing Policies

Job Search Assistance and the UI work test

Job Search Assistance (JSA) comprises a bundle of services available from the public labor exchange which may include the following: resume preparation assistance, job finding clubs, provision of specific labor market information, development of a job search plan, and orientation to self-service resources (job vacancy listings, resume preparation, word processor competency testing, telephones for contacting employers). In the evaluations of JSA that have been done, job search workshops (JSW) are treated as a distinct service. A summary of evaluations on job search assistance and the work test is given in Table 1.

Three specific evaluations of JSA done in the past 20 years have been particularly influential in shaping public labor exchange policy. All three evaluations were done as field experiments involving random assignment. Among other offerings of the public employment service, job referrals and placements have not applied an experimental design because of the untenable design requirement of withholding from the control group basic services having universal entitlement. Consequently, JSA evaluations have focused on UI claimants and have usually involved providing additional services.

It is well documented that in performing its income replacement function, UI acts as a disincentive to rapid return to work (Decker 1997). The work test that links the UI and ES programs in the United States is an institutional mechanism for monitoring whether UI

Table 1 Net Impacts of Labor Exchange Services

Service	Impacts on benefit year UI weeks	Study location	Study summary
Employment Service (ES) referrals	-2.10	Washington	Jacobson & Petta (2000)
ES referrals	-1.10	Oregon	Jacobson & Petta (2000)
Stronger work test	-0.55	Charleston, SC	Corson et al.(1985)
Stronger work test plus placement	-0.61	Charleston, SC	Corson et al.(1985)
Stronger work test plus placement and JSW	-0.76	Charleston, SC	Corson et al.(1985)
Report 4 employer contacts	-0.70	Maryland	Klepinger et al. (1998)
Make 2 employer contacts but no reporting	0.40	Maryland	Klepinger et al. (1998)
Make 2 employer contacts plus JSW	-0.60	Maryland	Klepinger et al. (1998)
Make 2 employer contacts, both verified	-0.90	Maryland	Klepinger et al. (1998)
Remove the work test	3.30	Tacoma, WA	Johnson & Klepinger (1994)
Remove the work test	5.28	Northern Ireland	McVicar (2008)
Job search assistance (JSA)	-0.47	New Jersey	Corson et al. (1989)
JSA plus training	-0.48	New Jersey	Corson et al. (1989)
JSA plus reemployment bonus	-0.97	New Jersey	Corson et al. (1989)
Structured job search	-1.13	DC	Decker et al. (2000)
Individual job search	-0.47	DC	Decker et al. (2000)
Individual job search plus training	-0.61	DC	Decker et al. (2000)
Structured job search	-0.41	Florida	Decker et al. (2000)
Individual job search	-0.59	Florida	Decker et al. (2000)
Individual job search plus training	-0.52	Florida	Decker et al. (2000)
WPRS profiled and referred to services			
Connecticut	-0.25	Connecticut	Dickinson et al. (1999)
Illinois	-0.41	Illinois	Dickinson et al. (1999)
Kentucky	-0.21	Kentucky	Dickinson et al. (1999)
Kentucky	-2.20	Kentucky	Black et al. (2003)
New Jersey	-0.29	New Jersey	Dickinson et al. (1999)
Maine	-0.98	Maine	Dickinson et al. (1999)

NOTE: JSW means job search workshop. WPRS means Worker Profiling and Reemployment Services.

beneficiaries are available and actively seeking work. The JSA evaluations have investigated various approaches to improving the effectiveness of the work test for UI.

Charleston Claimant Placement and Work Test Experiment. The first field experiment addressing aspects of the UI work test in the United States began enrollment in February 1983 in Charleston, South Carolina. Random assignment of 5,675 new initial UI

claimants to three treatment groups and a control group was completed in December 1983. The experiment was designed to evaluate new procedures intended to improve the UI work test and enhance ES practices. The three treatments tested represented successively larger bundles of services. This design permitted researchers to contrast the treatments against each other as well as against the single control group.

Claimants assigned to the control group were given the customary work test, which involved informing claimants that ES registration was required but involved no systematic monitoring of this requirement. The three treatments in Charleston were as follows:

1. A strengthened work test, requiring that an ES registration notice be sent after the first UI benefit check was paid. Payment of the second check would be suspended for failure to register with the ES. This required establishment of improved data-sharing systems between UI and ES.
2. A strengthened work test, plus enhanced placement services. These services included a personal placement interview within one week of the first UI check, a job referral or an outreach attempt to contact a prospective employer (job development), and training in using the job vacancy listings. Treatment-assigned claimants were also told they would be called for special services again once they drew nine weeks of benefits.
3. A strengthened work test, enhanced placement services, plus job search workshops. The workshops included a three-hour JSW and, after four weeks of UI benefits, a JSW on labor market information.

The strengthened work test had the greatest impact. By itself, it shortened the duration of compensated joblessness by more than half a week; the impact estimate was -0.55 weeks of UI benefits. This effect was statistically significant, but not significantly different from the estimated effect of the second treatment: the addition of enhanced placement services resulted in an impact estimate of -0.61 weeks, or an insignificant increase over the strengthened work test alone. The impact estimate for the third treatment, which added JSWs, was -0.76 weeks of UI benefits, a modest incremental effect over either of the other treatments.

Impacts of the treatments were concentrated among men (who averaged impacts of greater than -1.0 weeks for all treatments) and among workers in the construction industry (who had impacts of over -4.0 weeks). The relatively low cost of treatments resulted in jaw-dropping benefit-cost ratios in excess of 4. That is, more than four dollars in UI benefit payments were saved for every dollar spent on the work test, JSA, and JSW services. The third treatment, which involved the largest number of components, had an average cost of only \$17.58 in 1983 dollars.

In 1969 the UI trust fund was added to the federal unified budget. Conservation of UI funds consequently improves the overall budget picture. In the 1980s' political environment of huge federal deficits, the Charleston Claimant Placement and Work Test Experiment drew attention to the strengthened work test, JSA, and JSW as appealing policy tools. These instruments offered the potential of providing positive services while conserving UI trust fund dollars.

Washington Alternative Work Search Experiment. Effects of the UI work test and related services of the public labor exchange were further investigated by a field experiment using random assignment that was conducted between July 1986 and August 1987 at several Tacoma, Washington, job service centers. A total of 6,763 UI claimants were assigned to one of three treatments, and 2,871 claimants were assigned to the control group, which followed the existing Washington state work search policy.

The standard work search rule required three employer contacts per week, plus an eligibility review interview (ERI) 13 to 15 weeks after the initial claim was filed. This ERI involved a one-hour group session followed by a 15-minute individual interview. The focus of both sessions was on UI eligibility. The three treatments in Tacoma were as follows:

1. Exception reporting. This was a complete relaxation of the work test. Claimants were not required to file the standard biweekly continued UI claim form and were told that UI payments would continue until the claimant reported a change in circumstances, such as a return to work or an increased level of earnings.
2. New work search policy. This treatment had individualized work search requirements, including a group ERI followed by an intensive one-on-one follow-up interview.
3. Intensive services. This contained Treatment 2's individualized work search requirements, plus the following services: a two-day JSW after four weeks (two days of classroom instruction plus 10 hours of phone canvassing); a group ERI after 12 weeks, with a focus on employability development; and individual follow-up.

Suspension of enrollment into the first treatment was done earlier than planned because the larger-than-expected response could easily be detected with a sample much smaller than designed. Claimants relieved of the work test and continued claim filing increased their weeks of UI benefits drawn by a statistically significant 3.34 weeks. This impact was bigger for women with children and men without children, and for married women and unmarried men.

The new work search policy which provided custom-tailored services and schedules, had an effect on UI benefit receipt of +0.17 weeks and was statistically indistinguishable from the existing standard work search rule applied uniformly to all claimants.

Treatment 3, which was customized and had a JSW after four weeks and an ERI after 12 weeks, had a statistically significant impact of -0.47 weeks. Impacts were bigger for women without children and unmarried women. An analysis of the timing of the components of this treatment and claimant response (at 4 and 12 weeks), combined with analysis of the timing of the standard treatment given the control group (at 13 to 15 weeks) and the response to that standard treatment, provided new insight into claimant behavior. In both cases, researchers observed suspension of UI benefit receipt to be more common immediately before a scheduled

intervention rather than after the service was provided. Such a response might be termed an “invitation effect.”

This led to the conclusion that the timed elements of the work test—JSW and ERI—acted more like a stick prodding return to work than a carrot providing nourishment for achieving that end. The researchers speculated that the response to Treatment 2 had no identifiable peaks in the timing of exit from UI receipt because the individually customized schedule attenuated the observed response to an ERI invitation.

Needless to say, exception reporting was estimated to be very costly. Individualized requirements generated no differential impact. An invitation to attend either an ERI or a JSW shortens duration, with the latter having a bigger effect. Exit rates are lower during and after the ERI and the JSW, suggesting it is the requirement to attend rather than the value of the session that shortens duration.

Maryland UI Work Search Experiment. Enrollment in the Maryland UI work search experiment was conducted in six public labor exchange offices around the state throughout the calendar year of 1994. A combined sample of 23,758 new monetarily eligible UI claimants were enrolled in the experiment.

The standard work search policy was given to the control group. This required two job search contacts per week, which had to be reported on the biweekly UI continued claim form but were not verified. The four alternative treatments tested made these directives to claimants:

1. Report four weekly employer contacts, which will not be not verified.
2. Contact two employers per week. Beneficiaries need not report the two contacted.
3. Report two weekly employer contacts, which will not be verified, plus attend a four-day JSW soon after claiming benefits.

4. Report two weekly employer contacts. Beneficiaries are told their employer contacts will be verified.

Requiring four employer contacts per week yielded a statistically significant impact of -0.7 weeks of UI benefits. This reduction in duration resulted even in the absence of any verification of the offers. Requiring two employer contacts per week, but removing the requirement to report the two contacts, resulted in a statistically significant increase in UI benefit durations of $+0.4$ weeks. The impact of requiring two employer contacts per week, which were not verified, plus attendance at a four-day JSW early in the unemployment spell was -0.6 weeks of UI. Like the Tacoma experiment, this impact was due to increasing the amount of hassle associated with staying on UI, not to increasing claimants' job search skills. Notably for employers, this third treatment also reduced the probability of a claimant's returning to his or her prior employer.

Requiring two employer contacts to be reported, plus telling claimants that their two contacts would be verified, impacted UI benefits by -0.9 weeks. The verification rate of 10 percent appeared to be an adequate threat. Notably, the impact of this fourth treatment occurred during the first spell of joblessness. Similarly, the first treatment generated the bulk of its response during the first spell of joblessness in the benefit year.

The effects of Treatments 1, 3, and 4 were not associated with lower reemployment earnings. However, eliminating the work search reporting requirement, as in Treatment 2, raised reemployment earnings by a statistically significant 4 percent.

A second control group facing the standard work test was also tracked, but claimants assigned to this group were told that their behavior was being tracked as part of an experiment. This was done to permit testing for the presence of a Hawthorne effect. This is relevant in

ensuring external validity of the evaluation. If part of the treatment response to a new work test is simply due to placing added attention on the work test, then such an effect could quickly dissipate after actual implementation. Impact estimates computed as a contrast between the participant group and each of the two control groups were virtually identical, suggesting the absence of any Hawthorne effect.

JSA in the UK. Results from some of the experimental evaluations raised questions about whether shorter UI durations were observed because of the positive value of the content of JSA, or simply because beneficiaries ended UI receipt to avoid the hassle of JSA. Some insight into this question can be had from the experience in the United Kingdom (UK), where unemployment compensation (UC) is administered by the public employment service and has a uniform initial entitled duration of 12 months. In 1987, a new program called “Restart” was introduced nationally. Under Restart, UC beneficiaries nearing six continuous months of benefit receipt were called in for an appointment at their local ES office and were provided with an intensive package of JSA.

An evaluation of the UK’s Restart program by Dolton and O’Neill (1996) estimated short-term effects similar to those observed by Johnson and Klepinger (1994) in the Tacoma alternative work search experiment. Both evaluations suggested a modest shortening in the duration of compensated unemployment and concluded that the invitation for intensive JSA acted more as a prod than a support for reemployment.

Dolton and O’Neill (2002) conducted a subsequent random-assignment field experiment in which the treatment group received the standard Restart services when nearing six continuous months on claim, while the randomly selected control group was given the Restart services after approaching 12 continuous months of receiving UC benefits. They found evidence that, over the

short term, required JSA might appear to act like a stick, prodding UC beneficiaries to go back to work, but over the long term an earlier JSA intervention supported higher success in the labor market and higher earnings—evidence that JSA can have valuable content for job seekers.

Targeted Job Search Assistance

Targeting of JSA surfaced as a policy option during the 1990s, following the massive economic restructuring and worker dislocation of the previous decade. Earlier research had identified JSA as a cost-effective tool for promoting return to work. The question of whether JSA would be effective for those at risk of long-term unemployment was evaluated in the context of a major field experiment in New Jersey (Corson et al. 1989). Together with earlier evidence on JSA cost-effectiveness, results from the New Jersey experiment supported establishment of the Worker Profiling and Reemployment Services (WPRS) system, which required targeted JSA (Wandner 1994).

Two subsequent experiments have evaluated the effectiveness of targeted JSA. The first was undertaken around the time of WPRS start-up, with special accommodations made to ensure experimental integrity (Decker et al. 2000). The second evaluation was done using data from after WPRS implementation (Black et al. 2003). In this section, we briefly review the design and findings of these studies.

New Jersey UI Reemployment Experiment. Enrollment into the New Jersey UI Reemployment Experiment was done between July 1986 and June 1987 (Corson et al. 1989). The sampling frame for random assignment was set to target the evaluation to dislocated workers claiming UI benefits. Characteristics screens were set to construct the sampling frame.

These screens required that a claimant meet five conditions. The claimant 1) must receive a first UI payment, and that payment must occur within five weeks of applying for

benefits; 2) must be at least 25 years of age; 3) must have worked for the pre-UI claim employer for at least three years; 4) may not be on standby awaiting return to the claimant's previous job with a specific recall date; and 5) may not be a union hiring hall member.

The first three of these eligibility conditions permitted the offer of an intervention early in the jobless spell; and of these three, the second and third ensured that subjects of the experiment were well established labor force members separated from a long job attachment. The fourth and fifth conditions provided the potential for interventions to affect job search plans. Claimants who are awaiting recall to their prior job and members of union hiring halls are not required by the UI system to engage in active job search.

Random assignment sent 2,385 claimants to the control group and 8,675 to one of three treatment groups. All three treatments included JSA, the first being JSA alone. The second treatment added job training to JSA.¹² The third treatment added a cash reemployment bonus to JSA. The bonus was for reemployment within 11 weeks of the claim and was a cash payment of half the remaining UI entitlement, with the initial offer good for two weeks and then declining by 10 percent per week. The bonus was not paid if return to work was a recall, or if the job was temporary, seasonal, part time, or with a relative. For all three treatments, at five weeks into the claim, all claimants were given JSA orientation, skills and aptitude testing, a JSA workshop, and an assessment or counseling interview.

During the benefit year, the impacts on weeks of UI benefit receipt were -0.47 , -0.48 , and -0.97 for the three treatments, respectively. All of these impacts were estimated to have statistical significance. The cumulative impacts on weeks of UI benefit receipt over the six years after the initial benefit claim were -0.76 , -0.93 , and -1.72 for the three treatments, respectively,

¹² A relocation allowance was also available in Treatment 2, but it was rarely used.

with the impact from the third treatment estimated to have statistical significance (Corson and Haimson 1996).

The New Jersey UI Reemployment Experiment demonstrated that JSA targeted to claimants likely to be long-term unemployed had the same cost-effective impact as that found for other groups of UI claimants—about half a week shorter UI receipt. The encouraging results for the bonus treatment led the U.S. Department of Labor to further investigate the ideal design for a reemployment bonus offer (Decker and O’Leary 1995).

Job Search Assistance Experiment. The Emergency Unemployment Compensation Act of 1991 authorized the U.S. Department of Labor to conduct the Job Search Assistance Experiment. The experiment was designed to evaluate whether providing early JSA to claimants identified by statistical models as being likely to exhaust their UI benefit entitlement would be cost-effective (Decker et al. 2000). During the planning stages of the evaluation, which was scheduled to be run in the District of Columbia and the state of Florida, federal legislation leapfrogged public policy analysis.

In 1993 President Clinton signed Public Law 103-152, which required state employment security agencies to establish and use a system of profiling all new claimants for regular UI benefits. The Worker Profiling and Reemployment Services (WPRS) system was intended to identify UI claimants who were most likely to exhaust their regular benefits, so that they might be provided with early reemployment services to make a faster transition to new employment.

The WPRS established a two-stage process. First, UI recipients who are expecting recall or who are members of a union hall are dropped. These groups are excluded because they are not expected to undertake an active independent job search. Second, remaining UI recipients are ranked by their likelihood of exhausting regular unemployment insurance benefits. Beneficiaries

are then referred to early reemployment services in order of their ranking until the capacity of local agencies to serve them is exhausted. The early assistance comprises at least eight hours of job search assistance, which usually includes an orientation to self-help facilities available at the public labor exchange and a JSW.

The JSA experiment proceeded with enrollment in Florida between March 1995 and March 1996 at 10 sites around the state where regular WPRS operations were temporarily delayed. Random assignment in Florida involved 8,071 claimants. In Washington, D.C., the experiment counted as the federal district's WPRS implementation. Random assignment enrollment for the JSA experiment was done in all public labor exchange offices throughout the District between June 1995 and June 1996 and involved 12,042 claimants.

The JSA experiment established an eligible pool of claimants using a two-stage process: 1) exclude job-attached and union hiring hall members, then 2) evaluate claimants' probability of exhausting UI entitlement and target those with highest probabilities for the evaluation. These claimants were randomly assigned to a control group or one of three treatments. The treatments were as follows:

1. Structured job search assistance (SJSA): orientation, testing, JSW, and one-on-one assessment interview. Failure to participate could result in denial of UI benefits. Two additional visits with staff to report job search progress.
2. Individualized job search assistance (IJSA): orientation and one-on-one assessment interview. Individual plan developed, which may include additional mandatory services.
3. Individualized job search assistance with training (IJSA+): identical to IJSA, plus a coordinated effort with EDWAA staff to enroll the customer in training.

The impacts of the three treatments on weeks of UI compensation in the benefit year in Washington, DC, were -1.13 , -0.47 , and -0.61 respectively, all estimated to have statistical

significance. Estimates of the same parameters in Florida were -0.41 , -0.59 , and -0.52 , all of which, again, were statistically significant. Both evaluations indicated that reemployment occurred at wage rates similar to prior levels. The treatments had generally positive and significant effects on earnings in Washington, DC, but no impact on participant earnings in Florida.

Structured JSA emerged as the most cost-effective intervention examined. The authors of the evaluation report attributed the generally larger impacts observed in Washington, DC, to stricter enforcement of JSA participation requirements. They recommend making particular JSA services mandatory and maintaining clear linkages between UI and ES in the new one-stop environment under the Workforce Investment Act (WIA).

Evaluation of Worker Profiling and Reemployment Services in Kentucky. While Kentucky was included among the states studied in the national evaluation of WPRS, an independent assessment of WPRS in Kentucky based on an experimental design arrived at a much different conclusion. The profiling model used in Kentucky was developed by economists at the Center for Business and Economic Research at the University of Kentucky (Berger et al. 1997). In working with the Kentucky Department for Employment Services on the WPRS system, they advocated a methodology for assignment to WPRS which provided ready data for an experimental evaluation of WPRS effectiveness.

Kentucky divides the predicted UI exhaustion distribution into 20 groups spanning 5 percentile points each. Every week the local WPRS capacity is hit within one of the 20 groups. That group is referred to as a profiling tie group (PTG). In Kentucky, profiled WPRS customers within PTGs are randomly assigned to WPRS, or not. This is viewed as an appropriate rule for

referral to WPRS from a group of UI claimants having scores that are not statistically significantly different. It also provides the basis for evaluation of WPRS based on random trials.

From the PTGs, experimental and control groups were formed by the random trials to conduct an evaluation of the WPRS in Kentucky (Black et al. 2001). Data was collected starting with the very beginning of WPRS implementation in Kentucky, in October 1994, and lasting through June 1996. The PTGs yielded a total sample of 1,981 claimants, and 1,236 of these were assigned to mandatory WPRS JSA. Compared to the total population of 48,002 profiled and referred Kentucky claimants during that period, means of observable characteristics (age, schooling, gender, race, prior earnings, weekly benefit amount) for the experimental treatment group were not statistically significantly different from those in the control group.

The impact estimates for WPRS in Kentucky were dramatic. On three outcomes of interest, the estimated impacts were -2.2 weeks of UI, $-\$143$ in UI benefits, and a $\$1,054$ increase in earnings during the UI benefit year. The difference in these estimates from the national WPRS evaluation were most likely due to the fact that Black et al. (2003) essentially confined their contrasts within PTGs, thereby achieving a closer counterfactual. Dickinson et al. (1999, 2002) compared those assigned to WPRS who had the highest probability of benefit exhaustion against all those profiled but not referred, including many with very low exhaustion probabilities. This meant the comparison group in the national evaluation was likely to have a shorter mean benefit duration than program participants even in the absence of WPRS services.

The extraordinary foresight of the Kentucky Department of Employment Services to include randomization in assignment to WPRS should be a model for all state and local employment service delivery agencies. In setting up WPRS administrative rules, the Kentucky agency realized the value of evaluation research and used that orientation to help resolve the

resource allocation problem. When resources are limited, randomization in program assignment can always be viewed as an equitable mechanism. It has the added benefit of providing for very strong evaluation evidence.

Job training for displaced workers

A number of researchers have summarized the literature on publicly funded training, producing syntheses of what we do (and don't) know, focusing mainly on experimental evaluations of training for several groups that have been the object of attention in federal and state efforts for decades: disadvantaged adults and youth; dislocated workers; and welfare recipients. This paper draws upon earlier syntheses and distills findings from recently completed experimental and quasiexperimental evaluations. It stresses *per-participant earnings impacts* as the primary outcome of interest. Impacts and associated costs have been converted into constant 2001 dollars.

The rationale for relying mainly on experimental evaluations is that, despite recent enhancements in quasiexperimental methods for evaluating training (e.g., Heckman et al. 1999 and Hollenbeck et al. 2005), the best evidence comes from well designed and structured experiments relying on randomly assigned treatment and control groups. This was recognized by the 1985 Job Training Longitudinal Survey Research Advisory Committee (1985), which recommended that the U.S. Department of Labor redirect its resources to conducting experimental training evaluations. This recommendation resulted in the National JTPA Study, which ran from 1985–1993 (Bloom et al. 1994; Orr et al. 1996). Barnow (1987); Fraker and Maynard (1987); Friedlander et al. (1999); and LaLonde (1986) all reached essentially the same conclusion.

Presentation of per-participant or per-enrollee rather than per-assignee impacts is a matter of discussion among evaluation researchers. Despite the use of random assignment to treatment or control status, not all of those assigned to a given treatment—e.g., classroom training or OJT/Job Search Assistance (JSA) in the National JTPA Study—actually received it. Per-assignee impacts are lower than per-participant or per-enrollee ones. Results presented here are per-participant impacts, emphasizing earnings impacts for those actually receiving services rather than those merely assigned to them.

A final issue to be addressed is the basis for comparison, termed the counterfactual. In many training evaluations, the standard counterfactual has been a no-services control group. In fact, the more realistic basis for comparison is one where control group members may receive whatever education, employment, and training services are generally available to the community, just not those specifically funded by the program being evaluated. This is the stance adopted for the National JTPA Study, the Job Corps evaluation, and other major evaluations conducted since the mid-1980s. What is being estimated is the *incremental* impact of training over and above the effects of services that are readily available in the community.¹³

Duane Leigh (1989, 1990, 1995) reviewed what we know about job training for dislocated workers, the various programs and approaches that have been developed since the early 1960s to assist them, and their effects. Unfortunately, experimental evaluations of dislocated worker programs have been the exception, so our understanding of their impacts is limited. Only two have been conducted to date: the Texas Worker Adjustment Demonstration

¹³ Kane and Rouse (1999, p. 74) suggest that researchers have been far too conservative in interpreting JTPA training impacts, a point also made in the recent paper by Barnow and Gubits (2002).

(1984-87)¹⁴ and the New Jersey Reemployment Demonstration (1986–1987). The dearth of experimental evaluations for dislocated worker services probably stems in part from the nature of the programs themselves: they are often viewed as “emergency” or “rapid” responses to immediate crises in communities rather than ongoing efforts to address industrial or labor market shifts.

The Texas Worker Adjustment Demonstration tested a two-tiered service model for dislocated workers in Houston and El Paso in the mid-1980s (Bloom 1990). Tier I services consisted basically of job search assistance, while Tier II—which could only be reached subsequent to participation in Tier I—consisted of occupational skills training. In essence, the Texas demonstration sought to test an early version of “work-first-plus” for dislocated workers. More than 2,200 workers were randomly assigned to Tier I, Tier I/II, and control group statuses across all sites. UI wage records and survey-based data provided information on their outcomes. Key impact results included the following:

- Earnings impacts for displaced women were substantial and sustained over the one-year follow-up period, although these diminished over time. In 2001 dollars, women participants earned approximately \$1,890 (34 percent) more because of their participation.
- Impacts for males were smaller and shorter-lived, producing gains of only \$1,108 in 2001 dollars (8 percent).
- No additional gains were found for adding Tier II services to Tier I job search (p. 137); however, problems with implementing the design may well have precluded such impacts.¹⁵

¹⁴ The author served as assistant director of research, demonstration and evaluation for the Texas JTPA program during this period and expended considerable effort to ensure that an experimental design was the basis for the Texas demonstration. An Abt Associates team led by Howard Bloom, then at New York University, conducted the evaluation.

¹⁵ Most of the Tier II referrals to training were in the Houston site, and, unfortunately, many of these were referrals of former white-collar professionals to what was seen as blue-collar training. A more appropriate test of this Tier I/II design would have been desirable.

- The New Jersey UI Reemployment Demonstration in the mid-1980s sought to test whether the UI system could be used to identify and serve UI-eligible dislocated workers early in their unemployment spells to accelerate their return to work. Some 8,675 UI claimants were randomly assigned to three service packages for the demonstration: 1) JSA only, 2) JSA combined with training (some enrollees) or relocation assistance (very few), and 3) and JSA combined with a cash reemployment bonus. Incremental impacts were computed relative to outcomes for UI claimants receiving regularly available services. Mathematica Policy Research conducted the evaluation. Corson and Haimson (1995) found the following:
 - None of the treatments had any long-term impacts on employment, earnings, or weeks worked when measured up to six years after random assignment.
 - While all three treatments had positive impacts, the JSA combined with the reemployment bonus was the only service strategy that led to statistically significant, initial increases in earnings, and these increases were modest and very short-lived—i.e., for just the first quarter.
 - Training—in which relatively few workers participated—had no added impact on earnings in either the near- or longer-term, although this may have been an artifact of the small numbers enrolled. Reanalysis of earnings impacts for those actually enrolled in training indicated that participation in training—CT and OJT—did appear to enhance participant earnings.¹⁶

To date, we have not fully tested the impact of skills training or retraining for dislocated workers with a solidly implemented demonstration evaluated with an experimental design. Recent analyses by Jacobsen et al. (2001, 2002) using Washington State administrative data suggest that the returns to community college education for dislocated workers are significant and may endure for several years. However, their estimates of the returns to education and training are derived from statistical comparisons of “observationally similar” groups of displaced

¹⁶ Estimated earnings effects for training participation are very high: for example, second-year, per-enrollee impacts of \$1,402 (insignificant) for CT and \$10,987 for OJT (significant at the 99 percent level) in 1986-1987 dollars (see Corson and Haimson 1995, p. 48). Note that these estimates are based on very small numbers and are not true experimental impact estimates. Only 15 percent of those referred to training received it, while 19 percent of those offered the reemployment bonus received it (pp. 18-19).

workers (Jacobsen, LaLonde, and Sullivan 2002, p. 203) and lack the precision of most quasi-experimental estimates.

The quasi-experimental analysis conducted by Hollenbeck et al. (2005) in seven states found that dislocated workers being served in WIA experienced statistically significant incremental impacts, as follows:

- Dislocated workers receiving training services gained just \$386 per quarter.
- Male dislocated workers gained \$357 per quarter, while female dislocated workers gained \$422 per quarter from WIA training services.

Although WIA has been in place for more than a decade, there has never been a rigorous evaluation of its effectiveness using a field experiment involving random assignment. Congress, on the other hand, required that WIA's predecessor—the Job Training and Partnership Act—be evaluated using the random assignment approach.¹⁷ Therefore, most of what we know about the effects of job training programs is from that JTPA evaluation. However, Upjohn Institute staff and others have conducted evaluations of WIA for a few states using nonexperimental econometric methods yielding results that are generally consistent with the JTPA field experiment estimates.

The quasi-experimental econometric evaluations of WIA training have been done in a few states using program administrative and wage record data. The results from these studies as presented in Table 2 have been standardized by Hollenbeck (2009) to constant 2008 dollars. To create comparison groups for training participants, all of these studies used the nonexperimental

¹⁷ The field experiment methodology creates a comparison group by randomly assigning individuals to either a treatment group or a control group. Individuals in the treatment group receive training, and those in the control group do not. As the assignment is random and with a large enough sample, the average characteristics of persons in the two groups should be similar in terms of observable factors such as demographics as well as unobservable attributes such as motivation for employment. In principle this approach eliminates selection bias. Therefore, examining differences across treatment and control groups in the means of worker outcomes, such as employment and retention rates, yields net impacts of training.

approach of statistical matching on scores of the propensity to participate in training. Net impacts of training were then determined by comparing outcomes for individuals who participated in the training programs to their matched counterparts who registered for job search with the ES but were not recorded as participating in any specific service. With the exception of reemployment rates in Indiana, the results are consistent across the studies and across the states. The evidence suggests that job training for displaced workers under WIA is effective, especially in increasing employment rates, but also in generating higher earnings.

Based on the experimental evaluation under JTPA, job training yielded positive but modest effects on employment and earnings. The effects varied by gender, economic and labor market status, and the way in which training services were delivered. Women appeared to respond more favorably to training than men: earnings gains after 30 months from leaving the training program were nearly 7 percentage points higher for women than men. Adult women on welfare benefited even more. The same advantage was found for young women, although the results are not statistically significant.

Table 2. Summary of Estimates of Training Effects from Nonexperimental Evaluations of WIA Job Training

Study authors (year)	States	Employment rate (percentage points)	Quarterly earnings (\$)
Hollenbeck and Huang (2003)	Washington	6.7**	354**
Hollenbeck et al. (2005)	7 States	5.9**	483**
Hollenbeck and Huang (2006)	Washington	4.2**	391**
Heinrich, Mueser, and Troske (2008)	12 States	1.4	-\$36
Hollenbeck (2009a)	Indiana	15.9**	394**

NOTE: Quarterly earnings are in 2008 dollars. ** Statistically significant at the 0.05 level in a two-tailed test. .
Hollenbeck and Huang (2003)—Area: WA; Treatment: exit in 1997/1998; Follow-up period: 8 to 11 quarters after exit.
Hollenbeck, Schroeder, King, and Huang (2005)—Area: 7 states; Treatment: exit in 2000/2002; Follow-up period: 2 to 7 quarters after exit.
Hollenbeck and Huang (2006)—Area: WA; Treatment: exit in 2001/2002; Follow-up period: 9 to 12 quarters after exit.
Heinrich, Mueser, and Troske (2008)—Area: 12 states; Treatment: entry in 2003/2005; Follow-up period: 11 to 14 quarters after entry.
Hollenbeck (2009a)—Area: IN; Treatment: exit in 2005/2006; Follow-up period: 7 quarters after exit.
SOURCE: Hollenbeck (2009b).

Curiously, adult men and women fared better in on-the-job training under JTPA, whereas young men and women responded more favorably to classroom training, although the results for youth were not statistically significant. Finally, even though adult women had higher earnings gains than adult men, the net benefits to society for men and women were about the same. Programs with only classroom training did not generally have statistically significant results, except for women, and when classroom training was strongly linked to employers.

Labor Demand Policies

Three noteworthy field experiments to induce hiring or job creation by employers are summarized in this section: 1) the Dayton wage subsidy experiment, 2) the Illinois UI employer incentive experiment, and 3) the Washington and Massachusetts UI self-employment experiments.

Self-employment

Self-employment initiatives for unemployed persons have been operating in Europe since 1979.¹⁸ Seventeen countries belonging to the Organisation for Economic Co-operation and Development (OECD) have programs patterned after either the French model, which grants a lump sum to the unemployed who plan to become self-employed, or the British model, which gives a series of periodic support payments during the start-up phase of self-employment.¹⁹ The British model amounts to a waiver of the work search requirements for continued receipt of

¹⁸ Background information on the European experience with self-employment assistance and the American experiments in self-employment for unemployed persons can be found in Wandner (1992).

¹⁹ The French model is followed in Luxembourg, Norway, Portugal, Spain, and Sweden, while the British model is used in Australia, Belgium, Canada, Denmark, Finland, Greece, Ireland, Italy, the Netherlands, and Germany.

periodic unemployment compensation payments. American experiments recently tested the French model in Washington State and the British model in Massachusetts.

Wage subsidies and supplements

In standard usage, a *wage subsidy* is a payment directly to an employer to partially offset the wage costs for a newly hired employee, while a *wage supplement* means a payment directly to a worker. There is much less evidence about the latter, but results from the wage subsidy suggest a supplement may be more effective. The main appeal of the wage supplement is that it is unlikely to create the type of stigma that employers may attribute to workers for whom they receive wage subsidies. The importance of the Earned Income Tax Credit (EITC) may be largely due to the fact that it is paid directly to working families without any employer knowledge.

Among the four tests of wage subsidies in the United States, two operated as government programs run through the tax system and two worked as voucher experiments. During the late 1970s and early 1980s, the New Jobs Tax Credit (NJTC) and the Targeted Jobs Tax Credit (TJTC) allowed employers to reduce tax payments by a fraction of the amount paid to workers hired under the programs. Hamermesh and Rees (1984, p. 99) report that NJTC subsidies were drawn for one-third of all the new jobs created during the period it was in effect. However, Perloff and Wachter (1979) estimate that the NJTC resulted in just 3 percent more jobs than would have been created without the program. The TJTC was intended to increase employment among certain targeted disadvantaged groups. Hollenbeck and Wilke (1991) found that the TJTC increased labor market success of “nonwhite male youth, but is stigmatizing for eligible individuals from other race/sex groups.” This finding that a wage subsidy acts as a stigma also emerged from the experimental studies.

Dayton Wage Subsidy Experiment. A targeted wage subsidy was operated as a field experiment with random trials in 1980–1981 by the U.S. Department of Labor in Dayton, Ohio. Burtless (1985) reported that “the results show conclusively that workers known to be eligible for targeted wage subsidies were significantly less likely to find jobs than were otherwise identical workers whose eligibility for subsidies was not advertised” (p. 106). Burtless “speculates that the vouchers had a stigmatizing effect and provided a screening device with which employers discriminated against economically disadvantaged workers” (p. 105).

Illinois Unemployment Insurance Incentive Program. Another experiment testing an intervention that amounted to a wage subsidy was not restricted to economically disadvantaged workers but may have also stigmatized job seekers. Woodbury and Spiegelman (1987) report that for the Illinois Reemployment Bonus Experiment, cash bonuses paid directly to persons who gain reemployment have a powerful effect in reducing the duration of unemployment, while if a cash payment for hiring a job seeker is made to employers the effect is almost nil. Employers may be reluctant to hire workers who present a voucher for payment from the state because it signals that the worker may have "hidden" characteristics which hinder their finding employment without a state subsidy.

Most programs for the unemployed are either income-support or labor-supply enhancing; the wage subsidy is a labor demand stimulus. But apparently regardless of the form of delivery of the subsidy to employers, it has a stigmatizing effect on workers. An obvious alternative is the wage supplement, which is paid directly to workers. This type of program has even been recommended to help welfare recipients, who may face the most severe stigma, gain reemployment.²⁰

²⁰ See for example Lerman (1985).

Minnesota Emergency Employment Development (MEED) Program. The Minnesota Emergency Employment Development program, known by its acronym, MEED, was in place from 1983 to 1989 (Minnesota Job Training Office 1988). About 45,000 people enrolled in the program, which provided a wage subsidy of up to \$4 per hour (about \$10 in 2008 dollars) for employers to hire new workers, many of whom were low-skilled or among the long-term unemployed. Following their MEED experience, more than 20,000 of those workers succeeded in staying on with their employers or finding other permanent, unsubsidized employment, according to a report by the Corporation for Enterprise Development.

Over the 30-month period from July 1, 1983, to December 31, 1985, 30,547 people enrolled in MEED. Of these, 11,537 were eligible for or were receiving cash public assistance welfare payments. Wage subsidies of up to \$4 per hour for wages plus up to \$1 per hour for fringe benefits were paid to employers hiring unemployed workers in Minnesota. Among all enrollees, 60 percent were hired by private-sector businesses. Over the program's final six months, from July 1 to December 31, 1985, all MEED-subsidized hiring was done by private sector businesses. Of these hirees, 80 percent were retained by their employers for at least 60 days after the six-month wage subsidy period ended. Among all those hired, the average wage was \$5.07 per hour, and for those hired by private-sector firms the average wage was \$5.15. Of the 30,547 participants, 49 percent were in permanent unsubsidized jobs after the MEED subsidy ended. Of the 8,044 enrollees overall who were placed in private-sector firms, 83 percent were still working in unsubsidized jobs 60 days after subsidies ended.

Objective assessments of MEED have been much more favorable than such assessments were for earlier wage subsidy experiments. These evaluations have viewed MEED from an economic development perspective. State job creation efforts frequently cost more than \$50,000

(and sometimes even up to \$100,000) per new job created when attracting new employers. For example, the southeastern states of the United States have attracted German, Japanese, and Korean automakers by providing job training, local and state property tax exemptions, and site development assistance. The MEED, on the other hand, cost about \$25,000 per new job created, and the new jobs were provided to unemployed people, thereby reducing the deadweight cost associated with hiring others who would have been hired anyway.

POLICY THEMES

This paper reviews American evidence on the effectiveness of public policies at addressing permanent job loss and long-term unemployment. The real and permanent solution to joblessness lies in private-sector job creation through business success. Government efforts can provide a salve during unemployment, a stimulus to the aggregate economy, cultivation of labor supply, nurturing of labor demand, and facilitation of job matching. This summary section reviews the potential for public employment policy success in difficult labor markets, current initiatives for linking UI with the ES for reemployment services, federal endorsement of targeted reemployment services, and current policy to stimulate labor demand. Finally, the section offers speculation about other initiatives that could be tried or expanded.

The Potential for Public Employment Policy

Job search may seem futile when employers are rapidly shedding workers. Indeed, the value of public spending on reemployment efforts can be questioned in severe economic times. However, even while new American UI claims exceeded 600,000 every week in early 2009, contemporaneous employment reports announced net wage and salary jobs declining at a

comparatively modest pace of about 600,000 per month. Hiring in the U.S. economy continued at a rate of more than 4 million jobs per month. In the American labor force of just over 154 million people, there were 54.6 million jobs filled in the 12 months ending in March 2009 (<http://www.bls.gov/news.release/jolts.htm>). At any given time, about one-third of all American jobs have been newly filled in the previous 12 months. That dynamism of the labor market is an axiom of public employment policy in the United States.

Current Initiatives Linking UI and ES

This paper has provided a review of studies documenting the value of requiring active job search by UI beneficiaries and linking UI to the ES. Two recent efforts provide additional evidence that work search requirements and JSA affect the duration of insured unemployment: 1) Reemployment and Eligibility Assessment (REA) programs and 2) a Wisconsin reemployment demonstration in One-Stop Career Centers. Both studies strengthened work search enforcement and linkages to reemployment services. The REA initiative was a U.S. Department of Labor demonstration project with a budget of \$20 million to provide assistance to states establishing new or significantly revamped REA programs. REAs are an eligibility review program, run within the UI program without the participation of One-Stop center staff. REA efforts were implemented in 21 states in 2005. Federal funds for REAs were appropriated with the proviso that research would be conducted in the pilot states to learn if REAs could be a model for shortening jobless durations and reducing insured unemployment.²¹ Evidence from Minnesota suggests that REAs reduced the duration of UI benefit receipt by 1.2 weeks (Benus et al. 2008).

²¹ See the Employment and Training Administration's Field Memorandum No. 17-04, "Fiscal Year (FY) 2005 Unemployment Insurance (UI) Reemployment and Eligibility Assessment Grants," dated August 12, 2004.

Recent federal initiatives have pumped millions of dollars into states to broaden the use of REA programs for UI beneficiaries.

Another promising approach was embodied in the ambitious Wisconsin demonstration project, also sponsored by the Employment and Training Administration (ETA) of the U.S. Department of Labor. It brings UI and One-Stop center staff together to provide reemployment services and eligibility reviews in the One-Stop center. In this cooperative operations model, UI staff are out-stationed in the one-stop centers. The Wisconsin demonstration, with its quasiexperimental evaluation design, provides further information about the cost-effectiveness of ES cooperation in the UI work test. Those receiving additional attention for the work test in One-Stop centers shortened UI durations by 1.8 weeks and lowered benefit year compensation by \$468 (Almandsmith 2005, p. 7).

In addition to the favorable net impacts of labor exchange services, all studies evaluating the effectiveness of ES interventions consistently report very low costs per customer served by the public ES. It is difficult to find reliable data on the cost per service, since most cost accounting is at the program level and not the service level. Estimates derived from expenditure data for Georgia put the cost per staff-assisted service between \$360 and \$712 (O'Leary and Eberts 2004). Jacobson and Petta (2000) put the average cost per staff-assisted service in Oregon and Washington at \$330. In comparison, training costs are at least \$1,400, and they can be considerably higher (O'Leary and Eberts 2004). Consequently, ES interventions are relatively inexpensive. Combining inexpensive services with significant estimated benefits yields a benefit-cost ratio greater than 1.

Targeting Reemployment Services

Technological developments in UI claims processing have reduced the interaction between UI program staff and jobless workers, thereby restricting monitoring of the work test and decreasing the number of personal referrals to reemployment services. A countervailing impact is the increase in referrals to reemployment services through the WPRS system for claimants who are most likely to exhaust their entitlement to regular UI benefits. The American Recovery and Reinvestment Act of 2009 (ARRA) was signed into law by President Obama on February 17, 2009. To provide states with administrative guidance for implementing employment policies enunciated in ARRA, the ETA on March 18, 2009, issued Training and Employment Guidance Letter (TEGL) 14-08 (Small 2009). In this guidance letter, “the ETA strongly encourages [states] to take an expansive view of how [ARRA] funds can be integrated into transformational efforts to improve the effectiveness of the public workforce system” (p. 3).

Furthermore, the letter says, “In utilizing reemployment services (RES) funding in [ARRA], ETA encourages states to consider the following: Collaboration between State Employment Service, Unemployment Insurance, and Labor Market Information Offices” (p. 21).

On page 22, it outlines several actions for states to take: “The [ARRA] allows spending on information technology to better target and serve UI claimants. ETA encourages states to consider. These include

- “Updating the state UI profiling model to improve effectiveness in targeting claimants.
- “Integrating and improving the communication and data transfer of UI claimant identification and characteristics data between the UI and One-Stop Career Center– or Wagner-Peyser Act–funded employment service.
- “Integrating LMI into a strategic decision–making system.
- “Infrastructure upgrades to administrative systems.”

The letter adds, “With the limited funds available and the large numbers of UI claimants that would benefit from reemployment services (RES), ETA encourages states to assess claimants through the use of existing statistical profiling models using claimant characteristics, as known from their initial UI claim, to help identify the most effective mix of interventions and services for different groups of UI claimants” (p. 21).

However, the letter notes that “matching the types of services with the skills and abilities of claimants to be served will vary from state to state depending on the type of profiling model used, the local labor market dynamics, and the claimant characteristics” (p. 21).

The themes recommended by USDOL (2009) for targeting reemployment services follow the principles of targeting employment services embodied in the WPRS system, the Frontline Decision Support System (FDSS) developed by Eberts and O’Leary (2002), and the Service Outcomes and Monitoring System (SOMS) proposed for Canada (Colpitts 2002).

Incumbent Worker Training

As with evaluations of work sharing, questions about deadweight have been raised regarding incumbent worker training. By “incumbent worker training,” we mean publicly supported training within enterprises by current employers for workers identified as being at risk of job loss. Such workers are retrained with the promise of new skills and a new job along with employer retention. Among the types of job training provided to both displaced and disadvantaged workers, on-the-job employer-provided training has been identified as one of the most effective at promoting employment and earnings. Incumbent worker training is gaining attention in the current policy environment.

Wage Subsidies to Employers

Despite the weak effects of wage subsidies documented in this paper based on findings from evaluations of the Dayton, Illinois, wage subsidy experiment and the Targeted Jobs Tax Credit, a new tax credit has taken effect in the United States. On March 8, 2010, President Obama signed the Hiring Incentives to Restore Employment (HIRE) Act. This new \$17.5 billion legislation includes new tax benefits directly related to hiring employees. The new tax incentives for businesses to hire unemployed workers are: 1) payroll tax exemption of the employers' share of Social Security taxes on wages paid (6.2 percent) to these workers after March 18, 2010, and 2) employer tax credit of up to \$1,000 per worker. In order to qualify for the business tax credits new employees must be: 1) hired between February 3, 2010 and January 1, 2011, and 2) newly-hired employees must have been unemployed during the 60 days prior to starting work, or worked fewer than 40 hours for someone else during that 60-day period. Earlier tries at hiring subsidies were little used, giving rise to speculation that hiring subsidies stigmatize workers in the eyes of employers. With tepid employer demand for workers, this latest attempt at hiring subsidies has been adopted as a relatively inexpensive effort to stimulate job demand. However, some commentators have asserted that the meager incentives offered will have similarly small effects on employer hiring (Bartik and Bishop 2009).

Work Sharing

Work sharing was not one of the main topics discussed in the body of this paper, since the lone U.S. evaluation study of work sharing—done in California in the 1980s—found that a work sharing scheme operating through the UI system neither preserved nor added to jobs in the long run. Additionally, in the United States there is some legal uncertainty about the status of UI work sharing subsidies payable under laws in 19 states using UI Unemployment Trust Fund

reserves. However, widespread use of work sharing in these 19 states and throughout Europe during the recent recession has rekindled interest in work sharing. Under the typical work sharing arrangement, a worker is paid a percentage of his full UI weekly benefit amount that is equal to his percentage reduction in weekly hours of work.

New federal legislation to clarify the federal-state legal uncertainty over work sharing is likely to move toward enactment in the near future. While there is no evidence at the microlevel that work sharing saves or expands jobs within firms, evidence from WARN-related research suggests that informing workers and slowing the rate of discharge can soften the impacts of mass layoffs on local communities. Prolonging employer attachments, even at reduced hours and weekly earnings, maintains eligibility for employer-provided health insurance and workers' compensation insurance, and it keeps intact work-related networks for active job search and outplacement.

Wage Insurance

Permanent job loss causes significant declines in lifetime earnings patterns. The reduction in future earnings prospects can also prolong job search because of unrealistic wage expectations. Some have argued these conditions require wage insurance. Unions have strongly opposed wage insurance, viewing it as a public policy that would support a downward wage spiral. With interest in wage subsidies tepid because of stigma effects, and unemployment exhaustion rates above 50 percent for regular benefits plus the potential for nearly two years of UI including extended benefits, a modification in UI could be tried. A modification to the UI earnings disregard could create a system that would be like wage insurance in three ways: 1) it would avoid carrying a stigma because it would be paid directly to the unemployed without

employer knowledge, 2) it could shorten jobless spells by lowering the market reservation wage, and 3) it could gradually decline as hours and earnings rise on a new job.

In the context of Canadian EI, the earnings disregard could be raised from 25 percent to 50 percent with a 50-cent weekly benefit reduction for every dollar earned beyond that level. Break-even earnings would be 2.5 times the weekly benefit amount. Compensable periods could be limited to the current benefit year, or they could be extended until the dollar benefit entitlement is exhausted while participants were earning income in the job market. A field experiment in Washington State suggested that liberalizing the earnings reduction formula would measurably increase reported market earnings for program participants during their period of benefit receipt (O'Leary 1997).

CONCLUSION

We have reviewed results from several employment programs that have endeavored to address worker displacement. Some of these may be ready for program adoption; others are ripe for policy development and testing before widespread implementation. Evidence suggests policy should pursue the following six goals: 1) a continuous connection of unemployment compensation recipients to reemployment services, 2) skill training closely connected to employer requirements and opportunities, 3) earnings transition schemes to help workers adjust to major declines in lifetime earnings patterns, 4) efforts to maintain and strengthen employer-employee relationships, 5) information channels to employees and communities about impending employment disruptions, and, for most of these programs, 6) targeting guided by net impact principles ensuring the best returns on public investments.

American evidence on public policy related to displaced workers suggests there is no silver bullet likely to solve all worker displacement problems at once. However, there are many arrows in the quiver that together may help ease the problem and improve labor market outcomes.

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