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Labor Policy Evaluation: Lessons from the American Experience

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Executive Summary

The development of benchmarks facilitates the comparison of labor market performance across member states. Nevertheless, one must be cautious in drawing conclusions about labor market policy from benchmark indicators. Because many factors, including macro-economic monetary and fiscal policies, industrial policies, demographic factors and labor market policies, affect labor market performance, one cannot conclude that a particular country's labor market policies should be emulated simply because its labor market performance is superior to that of other countries. Formal evaluation studies are needed to provide convincing evidence that a specific labor market policy or program is successful in increasing employment and earnings in a cost-effective way.

The United States has devoted considerable resources to rigorously evaluating its labor market programs. This report summarizes the findings from research conducted on U.S. programs since the 1970s. The following are some of the main lessons from this research:

- Job search assistance is effective in speeding reemployment.
- Short-term classroom training programs are rarely effective in improving the employment or earnings prospects of participants and are usually not cost-effective. In contrast, many intensive long-term classroom training programs significantly improve clients' skills, employment and earnings and are cost-effective despite their high price tag.
- On-the-job training has been more successful than short-term classroom training in improving participants' earnings.

- Subsidized employment increases employment and earnings of participants during the program's duration and sometimes improves future employment and earnings.
- Some programs operated through the unemployment insurance system have been successful in reducing long-term employment and possible abuse of the system.

The European Commission should consider devoting resources to conducting formal evaluations of labor policies and programs identified as promising in its benchmarking studies.

4.1 Introduction

The December 1996, Dublin Council called for increased spending on active labor market policies, among other things, to address high levels of unemployment in member states. By itself, however, more spending on active labor market programs will not guarantee reductions in unemployment. Policymakers must distinguish those policies that truly increase employment and earnings, reduce government costs, and on net benefit society from those that do not.

One approach to identifying successful labor market strategies—and the approach studied in the current research project—is benchmarking. Developing benchmarks for labor markets in member states facilitates the comparison of labor market performance across countries.

Nevertheless, one must be cautious in drawing conclusions about labor market policy from benchmark indicators. Just because a particular country's labor market performance is superior to that of others does not necessarily mean that its labor market policies should be emulated.

Likewise, simply because a country's labor market performance is currently weak does not necessarily imply that its labor policies are bad. Many factors, including macro-economic monetary and fiscal policies, industrial policies, demographic factors, and labor market policies, affect employment performance. Thus, although benchmarking labor market performance is a useful way to identify potentially successful labor market policies, formal evaluations are needed to provide convincing evidence that specific policies are successful in increasing employment and earnings in a cost-effective way.

The United States is unique in the extent of resources devoted to rigorous evaluation of labor market policies. The purpose of this report is to review and draw lessons from the extensive literature on labor market policy evaluations in the United States over the last two decades. In section 4.2, I review the major labor market programs operating in the United States. In section 4.3, I discuss methodological issues concerning program evaluation. In section 4.4, I review the evaluation research in the United States on labor market policies in several key areas: job search assistance; classroom training; on-the-job training; subsidized employment; self-employment assistance; reemployment bonuses; and profiling of unemployment insurance recipients. I conclude in section 4.5 with an overview of the findings and their lessons for policy.

4.2 An Overview of Employment and Training Programs in the United States

A variety of active labor market programs, including job search assistance, education, training, and subsidized employment, operate in the United States. These programs typically target specific groups of workers, such as disadvantaged youth, disadvantaged adults, and dislocated workers. The main federal, active, labor market programs in the United States are described below. In addition, the U.S. Department of Labor and private foundations have sponsored many demonstration projects to test new initiatives. Many states also have independent employment and training programs, which are sometimes evaluated. These

¹Leigh (1995) notes that the evaluation of social policy in the United States is based on statistical analyses rather than internally generated feedback from employers and workers, as is done in most other countries. He cites Schellhaass (1991) writing on Germany, Björklund (1991) writing on Sweden, and Riddell (1991) writing on Canada, who each comment on the absence of formal evaluation in those countries compared with the United States.

demonstration projects and state or local programs will be described in subsequent sections of the report when the results of specific evaluation studies are discussed.

4.2.1 Employment Service

The oldest active labor market program in the United States is the Employment Service. The Employment Service was created in 1933 to assist unemployed workers find jobs. By law, the unemployed must register with the Employment Service as a condition of receiving unemployment insurance benefits. In contrast to the situation in many European countries, however, employers are not required to list vacancies with the Employment Service. Although unemployment insurance recipients are required to search for work, Leigh (1995) notes that the ability of the Employment Service to enforce that requirement is hampered by the fact that few employers register job vacancies with their office. The Employment Service has come to specialize in assisting the hard-core unemployed.

4.2.2 Programs Developed in the 1960s and 1970s

Programs that included a job training component were first developed in the 1960s. The Manpower Training and Development Act (MTDA) was passed in 1962 in response to concerns about rising unemployment and displacement of workers by automation. In addition to MTDA, the Trade Adjustment Assistance Act (TAA) was passed in 1962 to provide income assistance and training for workers found to have lost their jobs as a consequence of trade agreement concessions. In 1974, the TAA's provisions were liberalized to make assistance available to any displaced worker for whom expanding trade was deemed an important contributor to the job loss.

As unemployment fell during the 1960s, federal programs increasingly focused on the hard to employ, or so-called disadvantaged workers. In 1973 the MTDA was replaced by the

Comprehensive Employment and Training Act (CETA). One component of CETA focused on these disadvantaged workers, providing them variously with classroom training, on-the-job training, and public service employment. Another component of CETA focused primarily on workers who had recently lost their jobs (so-called displaced workers) in high-unemployment areas. CETA provided public service employment, which generally offered little or no job training, for these workers. Many of the evaluations of active labor market programs are of the CETA program.

4.2.3 Job Training Partnership Act

Because the public service employment component of CETA was widely criticized,
CETA was replaced in 1982 by the Job Training Partnership Act (JTPA), which emphasizes the
training and placement of workers in private-sector jobs. Separate programs within JTPA focus
on disadvantaged in-school and out-of-school youth, disadvantaged adults, and displaced
workers. These programs provide a mix of services to clients, including

- classroom training in specific occupational skills. These services are typically provided by local community colleges.
- basic education. These services are typically provided to disadvantaged workers
 who lack basic reading and writing skills needed to perform most jobs. These
 programs often help participants achieve a General Equivalency Degree (GED,
 which is obtained by taking a test that certifies high school equivalency), or
 provide classes in English as a second language.
- on-the-job training. The so-called on-the-job training in JTPA resembles subsidized employment. In this program, clients are placed with a private-sector employer and typically half of their wage is covered by the JTPA program for six months. The employer is required to provide the employee with a certain amount of on-the-job training according to a contract drawn up between the JTPA administrator and the employer. Although the wage subsidy ends after six months, the job is supposed to be permanent.

• *job search assistance.* Clients' job skills and interests are assessed; they are often given instruction in job search techniques, such as resume writing and job interviewing; and they are given help in finding job openings and setting up interviews with potential employers. Simple job search assistance is the least costly of all interventions and is the most common form of assistance for displaced workers.

The need to provide a quick response for workers affected by mass layoffs and plant closings was recognized by a 1986 Department of Labor Task Force and resulted in amendments to JTPA in 1988. Under the amendments, states were required to establish displaced worker units to provide on-site job search assistance and retraining for these workers. In the same year, the Trade Adjustment Assistance Act was modified to make training an entitlement for all TAA recipients. Under this amendment, TAA recipients must participate in training unless they receive a waiver.

The administration of JTPA is intended to be fairly decentralized. Authority for running JTPA programs is delegated from the federal government to the state governors, who in turn delegate authority for designing and administering the programs to Private Industry Councils. Reflecting JTPA's emphasis on private-sector jobs, the Private Industry Councils are composed primarily of business and labor representatives. The state and federal governments monitor the performance of local programs though performance standards. The performance standards, developed by the U.S. Department of Labor, focus on employment and wage outcomes of participants and, for youth, measures of skills enhancement. There are also performance standards for costs, though these have not been emphasized in recent years.

A widely recognized problem of performance standards is that, in an environment of limited budgets in which only a small fraction of eligible clients can be served, standards

discourage local programs from serving the most difficult-to-place clients. Yet, these clients are arguably the ones in the greatest need of such services. In response to widespread allegations of "cream-skimming" by local offices, JTPA was amended to require that at least 65 percent of a local program's clientele be individuals with identifiable barriers to employment. In addition, the amendments created incentive grants for local programs based partly on the extent to which the offices served individuals with barriers to employment.

The perverse incentives that performance standards may have on program administration illustrates a broader problem of using such standards to evaluate programs. Just because one program places a higher proportion of its clients in good-paying jobs than another program does not mean that the first program is performing better. One must control for such things as the program's client population and local economic conditions. Moreover, just because a client participating in a particular program finds a good job does not necessarily mean that the program intervention led to the job placement. Methodologies for assessing the performance of employment and training programs are discussed in section 4.3.

4.2.4 Welfare to Work Programs

Federal welfare assistance in the United States traditionally has been limited to income support for families with dependent children.² In 1981, states were given the authority to design programs to help move welfare recipients back into work. Some states and cities have experimented with programs that provide basic education, job search assistance, and support services to welfare recipients. Although participation in work programs was mandatory in many states, in practice states typically allowed so many exceptions to the work requirements that they

²Some states also provide income support to individuals who do not have dependent children.

affected only a minority of welfare recipients. The evaluations of some of these efforts will be discussed below.

The passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 by the U.S. Congress introduced a major overhaul of the welfare system, with an emphasis on moving welfare clients into work. Under the new law, states receive block grant funding for welfare programs and have considerable discretion in how those funds are spent. However, the federal legislation imposes strict new requirements for reducing welfare rolls. Families now face a lifetime limit of five years of federal welfare assistance, although states may exempt up to 20 percent of their caseload from this time limit. States may also reduce the cumulative amount of time families may receive assistance.

In addition, under the federal law, states must develop a plan to put families on welfare to work after they have been on assistance for two years. States are required to have at least 25 percent of their caseload participating in some form of work activity in 1997; by 2002 they must have 50 percent of their caseload participating in work activities. Work activities include work in subsidized or unsubsidized employment, on-the-job training, community service, vocational training, or the provision of child care to those participating in community service. Single-parent recipients must participate 20 hours per week, increasing to 30 hours per week in the year 2000. Two-parent families must work 35 hours per week.

With the U.S. economy booming, most states have been able to greatly reduce their welfare rolls in the last year. However, many fear that states will lack the resources necessary to move welfare parents into work activities should a slowdown occur. Below, the results of

several evaluations of welfare to work programs, conducted before the passage of the new law, are discussed.

4.3 Methodology

The goal of employment and training programs is typically to improve the future employment and income of participants, although increasing education levels and test scores and reducing welfare dependency and crime are sometimes also goals. How does one measure the effects of programs on these outcomes? Often program administrators keep records on the number of persons going through the program who obtain jobs upon completion, as well as the wages they receive. However, it is misleading to ascribe all the jobs and income participants receive to the employment and training program. Many may have gotten jobs without participation. Conceptually, what one wants to measure is the employment experience of a person with and without program intervention.

4.3.1 Matched Comparison Group Methodology

In practice, researchers have tried to measure the marginal effects of program participation—i.e., taking into account what would have happened in the absence of program participation—using one of two methodologies. The first is to compare the labor market performance of participants in the employment and training program under consideration with those in a comparison group. The characteristics of those in the two groups are matched as closely as possible. The labor market experiences of workers in the two groups are then compared.

Finding an appropriate comparison group can be difficult. In some cases, for instance, researchers have compared the labor market outcomes of those participating in employment and training programs with those who did not participate, controlling for various demographic characteristics such as age and education. Even if one can get a comparison group that looks very similar to the treatment group across observed characteristics, they may differ in unobserved but important ways. For example, workers participating in employment and training programs may have greater motivation, on average, than those who do not. Researchers ideally develop matched comparisons in which differences in unobserved characteristics such as motivation are unlikely to be a problem. For example, in a major study of employment and training programs for dislocated workers, services were provided to workers at one manufacturing plant that closed but not at another, similar plant. The experiences of workers in the two plants were then compared. Finding such clean comparisons can be difficult, however.

4.3.2 Random Assignment Methodology

The second, and preferred, research methodology for identifying program effects is random assignment. In this approach, participants are randomly assigned to control or treatment groups. With a sufficiently large sample and pure random assignment, the average observed and unobserved characteristics of members in the two groups should be virtually identical. Thus, the mean outcomes of those in the experimental group may simply be compared with the outcomes of those in the control group. The main drawback of random assignment experiments is cost. Because of the high cost of conducting such experiments, relatively few studies of employment and training programs have used this methodology.

4.3.3 Measuring Benefits versus Costs

Evaluation studies typically try to compare the benefits of the program to its costs. This may be done at several levels. First, the net benefits to participants are essentially what is being measured through the matched comparison group or random assignment methodology. Here the earnings (or other measure of program success) of participants are compared to what they would have received in the absence of participation. Second, the net benefits to nonparticipants, i.e., the rest of society, may be measured. Net benefits may include increased tax revenue as the result of greater employment, savings on unemployment insurance or welfare, and lower crime, less the costs of the program. Finally, evaluation studies often measure the net benefits to society as a whole. Net social benefits simply equal the sum of net benefits to participants plus the net benefits to nonparticipants. A program is considered cost-effective if the net social benefits are positive.

4.3.4 Caveats to Statistical Evaluation Studies

Several caveats should be attached to the results from any evaluation study, even when a comparison group has been carefully constructed or achieved through random assignment because even a carefully conducted study may overstate or understate the impacts of a particular program. If the number of jobs in an area is constrained by demand, then individuals who receive employment and training services may simply displace those who otherwise would have gotten the jobs. In this case, an estimated effect overstates the benefits of the program. Although employment and training programs may have negative displacement effects, taking jobs from individuals who do not participate in the program, they may also have positive spillover effects. As an example, it is often thought that youth in inner cities in the United States lack positive role

models in stable employment. Those who participate in an employment and training program and who obtain employment as a result potentially serve as role models for others in their community. The existence of such spillovers would result in an underestimate of the benefits of the program.

A common problem of evaluation studies in the United States is that individuals in a control group sometimes receive similar services from other programs, so that the estimated impacts understate the value of the program being studied. In addition, many individuals in the treatment group often choose not to participate in a program. Because of possible selection bias, it is important to average the employment outcomes of those who participate with those who do not before comparing outcomes with the control group. Still, such nonparticipation tends to dilute the measured benefits of the program.

Finally, one should exercise caution in drawing conclusions about the effectiveness of a particular program approach from a small number of evaluations. An evaluation may find no benefit from a particular approach either because the approach itself does not work or because the approach was poorly implemented in the site under evaluation. In some multisite evaluation studies discussed below, some sites performed much better than others. In these cases, qualitative studies are needed to learn exactly what about the administration (or perhaps the client population) made certain sites so successful.

4.4 Evaluations of Employment and Training Programs

Employment and training programs in the United States typically target a specific group of workers, such as disadvantaged youth, disadvantaged adults, parents on welfare, or dislocated

workers. Usually programs provide a variety of services to participants. Although some evaluation studies report the net effects of this bundle of services on such measures of success as employment and earnings, many have tried to estimate the separate effects of the various services. Previous reviews of this literature are largely organized by specific program (e.g., the Job Training Partnership Act programs) or by the target group (e.g., disadvantaged youth, disadvantaged adults, dislocated workers). Below, I organize the review of evaluation studies around specific services provided. I compile evidence from a large number of evaluation studies conducted over the last two decades on the effectiveness of four types of services: job search assistance, classroom training, on-the-job training, and subsidized employment. From this evidence, some consistent patterns emerge in the relative effectiveness of various approaches for various target groups. I also examine the effectiveness of three recent approaches used in the unemployment insurance system to speed the reemployment of UI recipients: self-employment assistance, reemployment bonuses, and the profiling of unemployment insurance recipients for job search and other services.

4.4.1 Job Search Assistance

Job search assistance is an integral component of most employment and training programs. Evaluation studies have generally found that job search assistance has positive, significant effects on employment for most types of workers. Moreover, because it is relatively inexpensive, job search assistance is usually cost-effective.

Between 1977 and 1981, a number of programs were funded under the Youth

Employment and Demonstration Projects Act to improve employment of disadvantaged youth.

Several of these programs focused on providing job search assistance, career information, and

job placement for in-school and out-of-school youths. Using a comparison group methodology, evaluation studies found that these programs resulted in short-term increases in employment and earnings for participants. However, these positive effects decayed after the first year of program participation and completely disappeared by two years following program completion. Thus, these evaluations suggest that the additional work experience the program participants gained did not translate into higher future employment and earnings.³

Many cities and states have had programs offering job search assistance, basic education, and support services to welfare recipients to help them find jobs and to get off welfare. In a review of evaluation studies of these programs, a recent report by the U.S. Department of Labor (1995) notes that initial results suggest that programs focusing on job placement were more successful at increasing the employment and earnings of participants than those focusing on basic education.

Unfortunately, a recent comprehensive evaluation of services provided to disadvantaged youth and adults under the Job Training Partnership Act, the main set of employment and training programs in the United States provided to this group, does not evaluate the effectiveness of job search assistance independent of other services. Evaluations of other services in this study are discussed further below.

Perhaps the best evaluations of job search assistance come from studies of dislocated workers.⁴ In the 1980s the U.S. Department of Labor funded a series of demonstration projects to test the effectiveness of alternative reemployment services for dislocated workers. These

³The results of these studies are summarized in Betsey et al. (1985).

⁴The following discussion draws heavily from the description in Leigh (1995).

services included simple job search assistance, classroom training, and on-the-job training. In the Buffalo program of the Dislocated Workers Demonstration Projects, workers laid off because of auto and steel plant closures were studied. The methodology used to assess the effects of training services in this demonstration was a matched comparison group. The employment and earnings outcomes of workers in plants receiving services were compared with those of workers in plants not receiving services. In the Texas Worker Adjustment Demonstration (WAD) projects, dislocated workers eligible for JTPA services were studied. In the New Jersey Unemployment Insurance Reemployment Demonstration Project, unemployment insurance recipients 25 years and older who had at least three years of tenure on their previous job and who had no date at which they expected to be recalled to their former job were targeted for study. A random assignment methodology was used to assess the impacts of various services provided to dislocated workers in the latter two studies.⁵

The evaluation studies of these demonstration projects generally found positive results for job search assistance. The study of the Buffalo demonstration project was complicated by the fact that few of the workers offered services actually opted to receive those services. Taking into account the possibility of selection bias in the decision to use services, the Buffalo study found that job search assistance increased weekly earnings in the treatment group by an estimated \$134, a figure that was statistically significant at conventional levels. Moreover, when the cost of the service was taken into account, job search assistance was the only service found to be cost-

⁵The results of the Buffalo study are reported in Corson, Long, and Maynard (1985); of the Texas WAD programs in Bloom (1990); and of the New Jersey program in Corson et al. (1989). There was also a demonstration project in Downriver, Michigan, which studied workers laid off as a result of plant closures in the auto and auto parts industry. However, because the evaluation study of this demonstration project did not provide separate estimates of the effects reemployment services, I do not discuss the results of this demonstration.

effective. In the Texas WAD programs, job search assistance was found to speed up reemployment. Although it resulted in higher earnings in the short-run, job search assistance did not help workers get better jobs and thus improve their earnings over the long run. The New Jersey unemployment insurance demonstration also found that job search assistance significantly sped up reemployment, leading to higher earnings in the short run.

4.4.2 Classroom Training

It is widely believed that many individuals lack basic skills necessary to hold a goodpaying job, and thus that job search assistance alone is insufficient. This argument is made not
only for disadvantaged youths and adults, who lack a history of stable employment, but also for
dislocated workers, whose job skills are specific to a particular industry and who may have
difficulty finding work in another sector. Classroom training is a component of many
employment and training programs in the United States. The nature of the classes range from
skills training for a specific occupation to basic education classes designed to improve reading,
writing, and math skills. Although it is widely agreed that many need training in basic education
and occupational skills, classroom training is expensive. The many evaluations of classroom
training programs provided to disadvantaged and dislocated workers in the United States have
examined 1) whether intensive, short-term classroom training, which is less expensive to provide
than long-term classroom training, is effective in improving skills, employment, and earnings and
2) whether any benefits from short-term and long-term classroom training outweigh their costs.

A recent study sponsored by the U.S. Department of Labor evaluated the effectiveness of services provided to disadvantaged youth and adults under the Job Training Partnership Act program. Sixteen sites in the United States were selected for study and within each site eligible

applicants were randomly assigned to either the treatment group, which was given access to the program services, and the control group, which was not given these services. Individuals within the treatment group were assigned to one of three service strategies: classroom training; on-the-job training and job search assistance; and other services, which included basic education and job search assistance. The study followed workers for 30 months after their application to the JTPA program.

The classroom training component of JTPA is designed to improve occupational skills and is short-term. The results of the JTPA study on the effectiveness of such classroom training were disappointing for all demographic groups. If classroom training represents an investment for the future, one would expect that the initial impact of classroom training on earnings would be small or even negative (if individuals were still in classroom training and this took away time from work activity) but that it would grow over time. Indeed, this was the pattern found for most groups. However, even after 30 months, the positive impact on earnings was never statistically significant for any group. Moreover, the costs of training outweighed the benefits for all groups except adult men (Bloom et al. 1994).

A separate evaluation of the Summer Training and Employment Program (STEP), which is a component of JTPA summer programs for in-school youth, also provides mixed evidence on the value of short-term classroom training (Grossman and Sipe, 1992). In the STEP program, disadvantaged youths age 14 and 15 are given remedial academic education, sex education, and summer jobs. The evaluation did find positive and significant short-term effects of the program: students improved their reading on average by seven-tenths of a grade after two summers of participation and the program cost per pupil was a modest \$600. However, the program appeared

to have no long-term benefits. By ages 17 to 19, STEP graduates had no higher grades or graduation rates than those in the control group, and girls who had graduated from STEP were no less likely to have had a child by ages 17 to 19 than those in the control group. Arguably, such short-term classroom interventions are insufficient to overcome the handicaps faced by disadvantaged youth.

From 1985 to 1988, the U.S. Department of Labor and several private foundations sponsored the JOBSTART Demonstration at 13 sites around the country. JOBSTART was designed to provide short-term basic education and vocational training, along with support services and job placement assistance to economically disadvantaged high school drop-outs aged 17 to 21. The effects of intervention were evaluated using a random assignment methodology at each site (Cave et al. 1993). JOBSTART participants were more likely to obtain a GED (high school equivalency degree) than were those in the control group. However, for the 13 sites overall, the higher rates of GED did not translate into significantly greater earnings during the four-year follow-up.

Although the results from the JOBSTART evaluation were generally discouraging, one site—the Center for Employment and Training (CET)—was extremely successful in improving the employment and earnings prospects of its participants. CET, which existed prior to the demonstration, provides short-term vocational training to disadvantaged adults as well as disadvantaged youth at 25 sites in three western states. The JOBSTART evaluation of CET's largest site found that youth participants' earnings were 40 percent higher than those in a control group in the third and fourth years following training (Cave et al. 1993). Another evaluation study found that single mothers who participated in the CET program earned over \$1500 more

than those in the control group in the second year following program completion (Mathematica Policy Research 1993).

The longer-term gains from short-term training found in the CET program are unparalleled in the United States and have been the subject of intense study. Various reasons have been put forward for the program's success, including that the staff have extensive knowledge of the local labor market and hire experienced individuals to teach relevant skills; that the CET program successfully integrates a basic education curriculum with vocational skills training, and thus students learn basic reading and math skills in the context of a real job situation; and that the curriculum is tailored to individual students' needs.

The importance of integrating any basic education skills learning with actual job training is illustrated by an evaluation of the California GAIN program, a program to assist welfare recipients that operated from 1988 to 1990. That program emphasized basic education.

However, at most sites evaluated, the basic education classes did not even result in improvements to basic literacy, let alone employment and earnings.⁶

Evaluations of employment and training programs for dislocated workers also show that short-term classroom training has not been particularly successful in improving the employment and earnings of these workers. The Buffalo demonstration program, discussed above, found that workers who participated in classroom training did not experience significantly greater earnings than those in control groups. Similarly, in the Texas WAD demonstration, those who received classroom training in addition to job search assistance did no better than those receiving job

⁶The program is evaluated in Friedlander, Riccio, and Freedman (1993). Leigh (1995, pp. 86-87) contains a discussion of one site in this program that did produce successful results.

search assistance alone. Results from the New Jersey UI Reemployment Demonstration also showed that participation in classroom training resulted in no significant increase in earnings, nor did it speed reemployment. A reanalysis of the New Jersey data by Anderson, Corson, and Decker (1991) found that those most likely to benefit from classroom training are the most educated and most job-ready.

Arguably, the very concept of short-term training programs is flawed. Individuals in need of basic education and skills require education and training over an extended period of time to measurably increase their skills. Yet, programs providing long-term classroom training are rare, because of their cost. Evaluations of several such programs, primarily targeting youth, however, suggest that long-term classroom training can be effective in improving skills, employment, and earnings among disadvantaged groups.

Evaluation studies show that it is extremely hard to help disadvantaged youth improve their education, skills, and employment prospects if they have already dropped out of school. Thus, many programs in the United States designed to reduce dropout rates among disadvantaged youth have been implemented at the state and local level in recent years. Random-assignment evaluation studies of several of these studies suggest that these programs are often very successful. For example, in the Quantum Opportunities Program, children from families on welfare receive tutoring, adult mentoring, career and college planning, and modest stipends for participation. This assistance is provided for all four years of high school. Although the degree

⁷The discussion of these programs draws heavily from U.S. Department of Labor, Office of the Chief Economist (1995).

of success of the program varied widely across sites, participants were more likely to finish high school and go on to college than were those in control groups at all of the sites.

In a model adopted in the state of California, students in the 10th through 12th grades with poor academic performance and attendance are placed in small-scale career academies. The students in these academies are trained in specific vocational skills such as electronics, health, computers, and finance and are mentored by employers. Many also are placed in summer internships with employers in their area of interest. Overall, studies show the academies reduce the dropout rate by 50 percent, although some sites had no positive impact.

In a program operating in the state of Maryland (Maryland Tomorrow), students at risk of dropping out are given summer jobs, along with intensive academic instruction during the summer and the school year, career guidance, adult mentoring, peer support, and tutoring.

Students participating in these programs receive these services throughout high school (grades 9 through 12). Initial evaluation of this program, however, suggests that it was not successful in lowering the dropout rate, but merely seems to postpone the time when students drop out.

Random-assignment evaluations of other high school dropout prevention programs emphasizing vocational training, funded by the U.S. Department of Education, also have produced mixed results. Many of these studies, however, suffered from small sample sizes. The largest two studies showed that the program reduced dropout rates by over 50 percent. For example, in a demonstration project in Detroit, Michigan, a large, economically depressed city, the two-year dropout rate of program participants was 11 percent, compared with 26 percent among those in the control group.

Together, the results from studies of dropout prevention programs in the United States suggest that programs providing extensive academic training and adult mentoring over the course of several years can significantly increase the probability that participants will finish high school and go on for post-secondary training. This, in turn, is expected to increase their employment and earnings prospects as adults. In contrast, one-shot summer programs do not seem to have long-lasting effects on student performance. The fact that there is wide variation in the success of dropout prevention programs across sites, however, is a reminder that effective implementation of a program at the local level is crucial to its success.

By and large, employment and training programs to assist youth after they have dropped out of school have been unsuccessful. A notable exception is the Job Corps, a federal training program for youth. The Job Corps is a highly intensive, residential program in which severely disadvantaged youth are provided basic education and vocational training along with various support services. They are also provided job placement services upon completion of the program, which lasts about a year. The program enrolls about 62,000 new participants each year. An evaluation study of the Job Corps in which participants were compared to a comparison group carefully matched on demographic variables was completed in the early 1980s (Mallar et al. 1982), and a new evaluation of Job Corps is currently being conducted.

The 1982 study found that Job Corps was quite successful in achieving its goals. About 25 percent of Job Corps participants achieved a high school degree or its equivalent (GED), compared with just 5 percent in the comparison group. They also had higher levels of employment and earnings. Four years after graduating from Job Corps, participants earned 15 percent more and worked three weeks more per year than those in the comparison group, on

average. The higher levels of education, employment, and earnings also translated into less government assistance. Participants required, on average, two weeks less of welfare assistance and one week less of unemployment insurance than those in the comparison group. Finally, the study found that Job Corps participants were less likely to commit felony crimes than those in the control group, though the overall arrest rate was no different in the two groups.

Although the program appears to improve participant outcomes on a number of fronts, it is quite expensive to implement because it is a residential program that lasts about a year.

Nevertheless, the 1982 study found that taking into account the value of the products produced at Job Corps centers, reduced government assistance, higher earnings, and reductions in felony crime, the future discounted benefits to society exceed the programs costs by about 45 percent.

Little evidence exists on the value of long-term classroom training for other groups of workers. Jacobson and LaLonde (1997) evaluated a training program for displaced workers run through community colleges in the state of Washington. In that program, money was primarily given to community colleges to develop new courses designed for displaced workers. The Jacobson and LaLonde study estimated that permanent income losses stemming from job loss were about \$2,000 per year among those that held a job for at least six quarters. Taking certain types of college courses, however, offset these losses. In particular, returns were high from taking college courses in technically oriented fields that trained students for jobs in high-wage sectors such as health, computers, equipment repair, high-tech manufacturing, and building repair. The equivalent of a full-time academic year in these types of courses were estimated to erase earnings losses associated with job loss. In contrast, Jacobson and LaLonde estimated that returns from less technically oriented courses were actually negative.

4.4.3 On-the-Job Training

In addition to classroom training, various federal, state, and local programs provide subsidies directly to companies to offset the costs of providing on-the-job training to workers. One component of the federal Job Training Partnership Act program subsidizes the wages of workers for up to six months in companies that offer a permanent job to participants and that provide on-job-training. Although a recent random-assignment evaluation study of JTPA found that short-term classroom training generally did not improve employment and earnings of participants, as discussed above, the results for the on-the-job training component were more positive (Bloom et al. 1994). The study evaluated the earnings of participants, compared with those in a control group over a 30-month period. The earnings of adult men and women recommended for on-the-job training were greater than the earnings of those in the control group throughout the 30-month period, and the earnings gap between participant and control group earnings grew over time. The earnings gaps were particularly significant for adult women. In contrast, the study's results suggest that on-the-job training has no impact on the earnings of female and male youths.

In addition to the federal JTPA program, many state and local governments subsidize employers' costs of providing on-the-job training. These subsidies are usually part of an economic development initiative. Holzer et al. (1993) evaluated the impacts of training subsidies to manufacturing firms in the state of Michigan on total hours of training provided by the firm and on productivity, as measured by scrap rates. The authors found that the training subsidies

⁸Among adult men, the earnings gap between OJT participants and those in the control group was statistically significant at the 0.10 level for only one of the three time periods examined.

increased the hours of training provided by the firm roughly threefold in the year the subsidies were provided and thus were not merely a windfall to the firm. In addition, they found that training subsidies were associated with a significant reduction in scrap rates and hence indicate that the additional training increased productivity.

4.4.4 Subsidized Employment

Subsidized employment programs typically provide work experience in the public or non-profit sector to disadvantaged youth and welfare recipients. The theory underlying these programs is that work experience will help individuals develop job skills, find future employment in the private sector, and thereby increase their future earnings and reduce their dependency on social services.

Subsidized employment programs have met with varied success in the United States. Evaluations of programs targeting youth have generally found that these programs significantly increase youth employment during the period in which they are in effect, but they have no lasting impact. The U.S. Department of Labor's Summer Youth Employment and Training Program provides minimum wage summer jobs to hundreds of thousands of disadvantaged youth. Crane and Ellwood (1984) estimate that for every three jobs provided in this program, two represent net new jobs. A similar result was found in a study of the Youth Incentive Entitlement Pilot Project (YIEPP), in which summer jobs and part-time jobs during the school year were provided to disadvantaged youth from 1978 to 1981 (Farkas et al. 1984). However, participation in YIEPP did not appear to increase high school enrollment or graduation.

The Supported Work experiment, which operated from 1975 to 1979, assessed the success of subsidized employment for disadvantaged high school dropouts, half of whom had

criminal records, and for welfare recipients. In the experiment, after an initial screening, half of the eligible participants were randomly assigned to the treatment group and received some training and subsidized work experience, primarily in the services sector for women and in construction for men. Those in the treatment group were supposed to try to find unsubsidized work not more than 18 months after enrollment in the program. The other half were placed in the control group and did not receive these services. Youth participants showed higher earnings than those in the control group during the period of subsidized employment. However, after their subsidized employment ended, they were no more successful in finding work than those in the control group.

The results of subsidized employment for welfare recipients were more positive. Couch (1992) found that welfare recipients in the treatment group earned significantly more than those in the control group for up to eight years following the start of the program. In addition, the cumulative benefits from higher earnings were greater than the social costs incurred during the training period.

Other encouraging evidence on the effectiveness of subsidized employment for welfare recipients comes from studies of the AFDC Homemaker-Home Health Aide Demonstrations, which were sponsored by the U.S. Department of Health and Human Services between 1983 and 1986 at seven sites. As in the Supported Work experiment, eligible participants—in this case household heads in families receiving welfare—were randomly assigned to treatment and control groups. Those in the treatment group received four to eight weeks of training and then were placed for up to 12 months in subsidized jobs as homemakers and home health aides. The evaluation of the program looked at employment and earnings one and two years after subsidized

employment ended. At almost all of the sites, those in the treatment group experienced significantly higher earnings and lower welfare dependence following the end of the program. The benefits from the higher earnings and lower welfare dependence exceeded program costs at six of the seven sites (Bell and Orr 1994).

4.4.5 Self-Employment Assistance

The unemployment insurance system in the United States is a patchwork of individual state systems, which are subject to some regulation and assistance from the federal government. Several programs and demonstrations have been initiated through the unemployment insurance system to speed reemployment and lower unemployment insurance payments in recent years. One such program is self-employment assistance. The North American Free Trade Agreement (NAFTA) Implementation Act passed by Congress allows states to establish self-employment assistance for the unemployed, and several states have passed enabling legislation.

In the early 1990s, two demonstrations were conducted in the states of Massachusetts and Washington to assess the costs and benefits of self-employment assistance. The results of these demonstration projects suggest self-employment assistance can help increase employment and earnings of the unemployed, albeit in a limited way. A key difference between the two projects was that in Washington only those expected to be at risk of exhausting their UI benefits were admitted to the program; in Massachusetts all UI recipients were allowed to participate. In each program, invited UI claimants had to attend an orientation meeting and to fill out an application for self-employment assistance. Then, applicants who met these criteria were randomly assigned

⁹The summary of these demonstration programs is drawn largely from the final report on the research projects, U.S. Department of Labor, Employment and Training Administration (1995).

to a treatment or a control group. While those in the control groups received only regular UI services, those in the treatment groups were required to attend workshop sessions on various business topics. Moreover, those in the treatment groups received self-employment allowances in lieu of their unemployment insurance checks and did not have to meet the usual work search requirements.

It should be emphasized that only a small fraction of targeted UI claimants expressed an interest in self-employment assistance by attending the initial seminar and filling in an application for assistance: 4 percent in Massachusetts and 2 percent in Washington. Thus, at best, self-employment assistance can only help a limited number of unemployed.

However, the results from the two demonstrations suggest that such programs can help those unemployed who are interested in self-employment. In both demonstrations, those in the treatment group were significantly more likely to experience self-employment and to spend more time in self-employment. In Washington and Massachusetts, members of the treatment group were more likely to be employed at the time of the follow-up interview (from 30 to 35 months following initial assignment to that group) and worked more hours than those in the control group. Those in the Massachusetts treatment group also had higher earnings than those in the control group. Moreover, in Massachusetts, participation in the program also reduced receipt of UI benefits by about \$900 per participant, on average, representing a substantial savings to the

system.¹⁰ Each demonstration program generated net social benefits; these were particularly large in the case of the Massachusetts program.

4.4.6 Reemployment Bonuses

Reemployment bonuses are intended to counteract the disincentive to search for work that unemployment insurance benefits create for recipients. In reemployment bonus programs tried in the United States, unemployment insurance recipients are given a cash bonus if they find employment (and keep it for a specified period of time) within a certain time frame.

The first evaluation study of a reemployment bonus program was conducted in the mid1980s in the state of Illinois. A random assignment experiment was conducted with two
treatment groups. Those in the first treatment were given a cash bonus of \$500 if they got a job
within 11 weeks of their initial UI claim. In the second treatment, the \$500 cash bonus went to
the employer of the UI recipient and was intended to act as a wage or training subsidy. While the
\$500 employer bonus had no effect on unemployment spells, the \$500 cash bonus to recipients
was found to have a large significant effect on reemployment. In this latter treatment, UI benefits
were reduced on average by \$158 and the duration of UI benefit receipt by 1.15 weeks.

Moreover, UI benefits were reduced by over \$2 for every dollar in bonus payments made, and no
evidence was found that claimants took less favorable jobs as a consequence of the program
(Woodbury and Spiegelman 1987).

¹⁰Members of the treatment group in Washington drew more UI benefits, on average, than those in the control group, but this result was largely by project design. Those participants who reached a certain stage in their business development received a lump-sum payment equal to the remaining amount of their UI benefit entitlement. Thus, participants in self-employment assistance were guaranteed their full UI benefits.

The success of the Illinois program generated great interest in the concept of reemployment bonuses, and the U.S. Department of Labor sponsored three more random assignment experiments in the states of Washington, Pennsylvania, and New Jersey. These experiments tested for the effects of a wide range of treatments in which the amount of the bonus and the time period in which the claimant must find a job were varied. The results from these experiments were much less favorable, however. Although the bonuses generally seemed to speed reemployment, the effects were not as large as in the Illinois experiment and the benefits from lower unemployment insurance payments did not outweigh the costs of the cash bonus and the administrative costs of running the program.¹¹

The results of these three experiments have dampened interest in reemployment bonuses in the United States. However, Davidson and Woodbury (1991) suggest that reemployment bonuses might be more successful in Canada and Europe. They argue that the reason the Illinois program was more successful than the programs in the other three states was that many workers in Illinois were eligible for extended UI benefits during the period during which the experiment was conducted. Those eligible for extended benefits were disproportionately likely to be affected by the bonus offer. Davidson and Woodbury argue that in Canada and most European countries where the duration of UI benefits is one year or longer—rather than the 6 months that is standard in the United States—reemployment bonuses are likely to be more cost-effective.

¹¹For a summary of these evaluations see Decker and O'Leary (1992), O'Leary, Spiegelman, and Kline (1993), and Leigh (1995).

4.4.7 Profiling of UI Recipients

Recent efforts to profile unemployment insurance recipients in the United States grow out of a dual concern that many abuse the system, exhausting their benefits without searching for work, and that the services to the long-term unemployed are inadequate. A study of UI recipients exhausting their benefits found that just 6 percent were receiving job search assistance and 1.4 percent attended training programs (Richardson et al. 1989). Under profiling, administrators use a statistical program to predict a new claimant's probability of exhausting UI benefits based on his or her demographic and work history characteristics. Those with the highest probability of exhausting their benefits are then targeted for job search or other services.

Random-assignment experiments were conducted in five states to test the effectiveness of UI profiling followed by job search assistance in speeding reemployment and reducing unemployment insurance payments. Job search services included materials on job openings, more job referrals, individualized assistance, and more intensive delivery of existing services. In several of the experiments, claimants were also required to make more frequent trips to the unemployment insurance or Employment Service office to establish eligibility.

Evaluation studies suggest that the program was successful in each state examined.

Those receiving job search assistance found employment anywhere from 0.5 weeks (on average) earlier than those in the control group in the state of Washington to 4.3 weeks earlier in one treatment in Minnesota. While Meyer (1992) points out that the decline in some of the states may be partly attributable to the stricter enforcement of eligibility requirements, resulting in more frequent denials of benefits, this was not a major factor in most sites. The program resulted in savings to the government of each state. The savings in UI payments plus the additional tax

savings to the government of each state. The savings in UI payments plus the additional tax revenue generated by quicker reemployment outweighed the costs of the program by about 2 to 1 in most states. In two studies, the earnings of job search assistance participants were also compared to those in the control group and were found to be similar. Thus, even though the job search assistance participants found jobs more quickly, they were not lower-paying jobs.¹²

The success of these experiments spurred the passage of unemployment insurance reform legislation in 1993, in which each state is now required to implement a Worker Profiling and Reemployment Services system. Under this system, unemployment insurance recipients are ranked by their probability of exhausting their UI benefits and are referred for reemployment services according to their ranking until local funds for assisting them are exhausted.

4.5 Conclusion

A wide variety of active labor market programs designed to increase employment and earnings and reduce unemployment operate at the federal, state, and local levels in the United States. Many of these programs have been formally evaluated using statistical comparison-group or random-assignment methodologies. Together these studies, summarized above, provide valuable evidence of the effectiveness of various approaches in combating unemployment. This evidence is valuable to policymakers not just in the United States but also in other industrialized countries with similar programs. The following are some of the main lessons from this extensive literature.

• Job search assistance is effective in speeding reemployment.

¹²For a summary of the results of these studies, see Meyer (1992).

Job search assistance is a relatively inexpensive form of help for the unemployed. Studies reviewed above show that it significantly increases employment or speeds reemployment of disadvantaged youth and adults as well as dislocated workers. Because of its low cost, analyses generally show that the benefits to society from job search assistance far outweigh the costs.

Job search assistance is no panacea for the employment problems facing disadvantaged and displaced workers, however. Many disadvantaged workers earn low wages, and studies have documented the fact that workers permanently losing their job are likely to experience substantially lower wages on a new job than on their old job. While some studies have documented the fact that speedier reemployment associated with job search assistance does not result in workers taking lower paying jobs, job search assistance does not help workers find better paying jobs either.

• Short-term classroom training programs are rarely effective in improving the employment or earnings prospects of participants and are usually not cost-effective. In contrast, many intensive long-term classroom training programs significantly improve clients' skills, employment, and earnings and are cost-effective despite their high price tag.

Training is widely viewed as a key mechanism for improving the earnings prospects of disadvantaged youth and adults and of dislocated workers who have only skills specific to the industry from which they were laid off. Most studies, however, find that those receiving short-term classroom training and job search assistance do no better in terms of employment and earnings than those receiving job search assistance alone. A notable exception is the Center for Employment and Training (CET) program. Disadvantaged youth and adults who received short-term vocational training through CET earned significantly more than those in the control group

two to four years following the training. This success has spurred much research into the Center in an effort to try to identify its strengths so that other programs may emulate them. Still, the fact that the vast majority of short-term training programs have failed to achieve their objectives suggests that short-term training is not an effective use of employment and training funds.

The fact that short-term classroom training is often ineffective in improving skills. employment, and earnings is perhaps not surprising. It is unrealistic to think that in a short period of time any program could improve workers' skills to such an extent it would result in substantially higher earnings. Arguably, to achieve substantial improvements in workers' skills requires long-term training. Indeed, the results from evaluation studies of long-term training have generally been more favorable. For example, in programs targeting youth, only those that operate year-round for several years have proved successful in curbing high school dropout rates. While the highly intensive, residential Job Corps program, a year-long program providing classroom training in basic education and vocational skills, has been successful in improving the skills, employment, and earnings of the most disadvantaged youth, JOBSTART programs, which were designed to provide a short-term, less expensive alternative to Job Corps, were largely unsuccessful. The limited evidence on programs to facilitate adult education at community colleges also suggests that such training can significantly increase earnings. Because of the expense, there are relatively few long-term classroom training programs. Nevertheless, whereas the societal benefits of short-term training rarely exceed the costs, long-term training programs often prove cost-effective.

• On-the-job training has been more successful than short-term classroom training in improving participants' earnings.

An evaluation of the on-the-job training component of JTPA showed that on-the-job training significantly improved the earnings of adult men and women, relative to those in a control group, but did not improve the earnings of youth. One study of training subsidies to manufacturing firms also showed that these subsidies increased training and improved productivity.

• Subsidized employment increases employment and earnings of participants during the program's duration and sometimes improves future employment and earnings.

Subsidized employment programs in the United States have primarily targeted disadvantaged youth and disadvantaged adults, particularly welfare recipients. Subsidized jobs are supposed to help individuals with significant barriers to employment develop experience and work skills that will help them find an unsubsidized job in the private sector. Studies have found that providing subsidized jobs for youth significantly increases employment among the targeted group but does not improve their chance of finding employment after the program ends. However, studies of welfare clients have found that providing subsidized jobs increases their future employment and earnings and reduces welfare dependence. The social benefits of the employment subsidies exceeded the costs in most programs studied.

• Some programs operated through the unemployment insurance system have been successful in reducing long-term employment and possible abuse of the system.

Providing self-employment assistance to the unemployed interested in starting their own business is effective in their increasing employment and earnings. As a mechanism for addressing long-term unemployment, however, this program is limited by the fact that relatively few unemployed are interested in self-employment. Several states have also tried providing bonuses to those who find jobs within a certain time frame. Experimental evidence from these

states, however, suggests that bonuses only slightly speed reemployment. The benefits to the government of reduced unemployment insurance and higher tax revenues generally do not compensate for the costs of the bonuses.

A more promising approach has involved the statistical profiling of unemployment insurance recipients. Under this program, now operating in all states, scarce employment and training resources are devoted to those who are deemed most likely to become long-term unemployed and who arguably are the most in need of assistance.

In conclusion, evaluation studies at the micro level, as summarized in this paper, are an essential complement to efforts to benchmark European economies. Benchmarks are particularly useful as an indicator of how well a country's macro economy is performing and thus how it's labor market institutions and policies work as a system. However, benchmarks are less useful in pinning down precisely what labor market policies are effective in reducing unemployment and increasing employment growth and earnings. As seen from the above review, evaluation studies have shown us that certain employment strategies seem to work much better than others.

Information from these types of micro studies are necessary to fashion a successful set of employment and training policies.

References

- Anderson, Patricia, Walter Corson, and Paul Decker. 1991. "The New Jersey Unemployment Insurance Reemployment Demonstration Project Follow-Up Report." Unemployment Insurance Occasional Paper 91-1, Washington, DC: U.S. Department of Labor.
- Bell, Stephen and Larry Orr. 1994. "Is Subsidized Employment Cost-Effective for Welfare Recipients?" *Journal of Human Resources*, vol. XXIX, no. 1(Winter): 42-61.
- Betsey, Charles L. et al. 1985. Youth Employment and Training Programs: The YEDPA Years, Washington, DC: National Academy Press.
- Björklund, Anders. 1991. "Evaluation of Labour Market Policy in Sweden." In Evaluating Labour Market and Social Programmes: The State of a Complex Art. Paris: OECD, 73-88.
- Bloom, Howard S. 1990. Back to Work: Testing Reemployment Services for Displaced Workers. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.
- Bloom, Howard S. et al. 1994. The National JTPA Study, Abt Associates, (February).
- Cave, George et al. 1993. JOBSTART: Final Report on a Program for High School Dropouts, New York, NY: Manpower Demonstration Research Corporation, (October).
- Corson, Walter, Shari Dunstan, Paul Decker, and Anne Gordon. 1989. "New Jersey Unemployment Insurance Reemployment Demonstration Project," Unemployment Insurance Occasional Paper 89-3, Washington, DC: U.S. Department of Labor.
- Corson, Walter, Sharon Long, and Rebecca Maynard. 1985. An Impact Evaluation of the Buffalo Dislocated Worker Demonstration Program, Princeton, NJ: Mathematica Policy Research, (March 12).
- Couch, Kenneth. 1992. "New Evidence on the Long-Term Effects of Employment Training Programs," *Journal of Labor Economics*, vol. 10, no. 4: 380-88.
- Crane, Jon and David Ellwood. 1984. "The Summer Youth Employment Program: Private Job Supplement or Substitute," Cambridge, MA: Harvard University, (March).
- Davidson, Carl and Stephen A. Woodbury. 1991. "Effects of a Reemployment Bonus under Differing Benefit Entitlements, or, Why the Illinois Experiment Worked." Staff working paper. Kalamazoo, MI: Upjohn Institute for Employment Research.

- Decker, Paul and Christopher O'Leary. 1992. An Analysis of Pooled Evidence from the Pennsylvania and Washington Reemployment Bonus Demonstrations, Unemployment Insurance Occasional Paper 92-7, Washington, DC: U.S. Department of Labor.
- Farkas, George et al. 1984. Post-Program Impacts of the Youth Incentive Entitlement Pilot Projects, New York, NY: Manpower Demonstration Research Corp.
- Friedlander, Daniel, James Riccio, and Stephen Freedman. 1993. "GAIN: Two-Year Impacts in Six Counties," New York, NY: Manpower Demonstration Research Corporation, (May).
- Grossman, Jean Baldwin and Cynthia Sipe. 1992. The Long-Term Impacts of the Summer Training and Education Program, Philadelphia, PA: Public/Private Ventures.
- Holzer, Harry et al. 1993. "Are Training Subsidies for Firms Effective? The Michigan Experience," *Industrial and Labor Relations Review*, vol. 46, no. 4 (July): 625-36.
- Jacobson, Louis and Robert LaLonde. 1997. Net Impact Evaluation of Retraining under ESHB 1998, Rockville, MD: Westat, Inc., (January).
- Leigh, Duane. 1995. Assisting Workers Displaced by Structural Change in an International Perspective. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.
- Mathematica Policy Research. 1993. Fifth-Year Employment Impacts at CET. Princeton, NJ.
- Mallar, Charles et al. 1982. Third Follow-Up Report of the Evaluation of the Economic Impact of the Jobs Corps Program, Princeton, NJ: Mathematica Policy Research.
- Meyer, Bruce. 1992. "Policy Lessons from the U.S. Unemployment Insurance Experiments," Working paper #4197. Cambridge, MA: National Bureau of Economic Research.
- O'Leary, Christopher J., Robert G. Spiegelman, and Kenneth J. Kline. 1993. "Reemployment Incentives for Unemployment Insurance Beneficiaries: Results from the Washington Reemployment Bonus Experiment," Kalamazoo, MI: W. E. Upjohn Institute for Employment Research Staff Working Paper 93-22.
- Richardson, Philip et al. 1989. Referral of Long-Term Unemployment Insurance Claimants to Reemployment Services. Washington, DC: U.S. Department of Labor Occasional Paper 89-2.
- Riddell, Craig. 1991. "Evaluation of Manpower and Training Programmes: The North American Experience." In Evaluating Labour market and Social Programmes: The State of a Complex Art. Paris: OECD, pp. 43-72.

- Schellhaass, Horst-Manfred. 1991. "Evaluation Strategies and Methods with Regard to Labour Market Programmes: A German Perspective." In *Evaluating Labour Market and Social Programmes: The State of a Complex Art.* Paris: OECD, pp. 89-106.
- U.S. Department of Labor, Employment and Training Administration. 1995a. Self-Employment Programs: A New Reemployment Strategy, Final Report on the UI Self-Employment Demonstration, Unemployment Insurance Occasional Paper 95-4, Washington, DC.
- U.S. Department of Labor, Office of the Chief Economist. 1995b. "What's Working (and What's Not): A Summary of the Economic Impacts of Employment and Training Programs," (January), Washington, DC.
- Woodbury, Stephen and Robert Spiegelman. 1987. "Bonuses to Workers and Employers to Reduce Unemployment: Randomized Trials in Illinois," *American Economic Review*, vol. 77 (September): 513-30.