

ACTIVE LABOR MARKET PROGRAMS: A REVIEW OF THE EVIDENCE FROM EVALUATIONS

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Foreword

Active labor market programs have been widely implemented in OECD countries for over two decades and over the past few years the Bank has become increasingly involved in providing assistance to client countries to design such programs. In spite of their widespread use, there are polar positions both within the Bank and among policymakers and researchers on the effectiveness of active labor market programs - on the one hand, proponents of these programs argue that active labor market programs are both necessary and useful, short only of a panacea for reducing unemployment and protecting workers, while opponents contend that these programs are a waste of public money with high opportunity costs.

Part of this divergence of views arises from the fact that these programs have rarely been rigorously evaluated, and, until recently, the evidence from evaluations had not been studied in a systematic manner. Building up on studies done by the OECD and the ILO over the past few years, this paper contributes to the discussion by synthesizing the findings of these evaluations - over 100 studies - and attempting to draw some best practice lessons.

This paper justifies the importance of doing a rigorous evaluation to examine the impact and cost-effectiveness of active labor market programs. Based on a thorough evaluation of evidence, it also shows that while some active labor market programs can be useful to some workers, their effectiveness depends not only on their design but also on the overall macro and labor market framework within which they operate.

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Summary

Many interventions in the formal labor market are clustered under the title “active labor market programs” (ALMP). Such programs may lead to direct job creation (through additional jobs offered by a new public works scheme), help the unemployed fill existing vacancies (through re-training to meet the new job requirements), or improve the functioning of the labor market (through employment information and labor offices). The analytics of these programs vary considerably; for example, public works is very much a demand side intervention, training a supply side one, while labor market intermediation can be seen as an attempt to bridge these two sides of the labor market.

Active programs vary in their aims. Some programs emphasize efficiency; for example, more information leads to better job matching. Others concern distributional aspects. For example, public works can be targeted to specific areas particularly hit by poverty. Yet others can be introduced or maintained based on political considerations; for example, retraining is offered to some groups of dismissed workers, while the already unemployed could have filled these jobs.

These programs rest on the assumption that, for one reason or another, some market failure exists in the labor market or in other markets (for instance, existence of monopolies in product markets). Some also rest on the premise that certain market outcomes are socially unacceptable (as is the case with high unemployment leading to social unrest). Some people would argue, however, that the term “labor market program” is a contradiction in itself: if the market works, no program should be required. The policy emphasis instead should be on making markets work.

The theoretical debate on the need for active and passive programs is bound to continue, depending on the values and assumptions adopted by economists. However, given that many countries do implement these programs, a more pragmatic approach is not whether to have them, but whether the intended objective (“benefit”) is met, and at what cost. Empirical evidence from evaluations of active programs is, in this respect, indispensable.

In this paper, we survey evidence based on the evaluation of active labor market programs. We have examined about 100 evaluations. Many of these studies have already been summarized by others (such as OECD and ILO), but we have also included a significant number of individual studies. And though most studies apply to OECD countries - mainly the U.S., Canada, U.K., Sweden and Germany - we have added information on developing and transition economies such as Hungary, Poland, the Czech Republic, Turkey and Mexico. While it can be argued that the lessons from developed countries on the effectiveness of these programs may not be directly applicable to developing countries, it is unlikely that these programs will be more successful in developing countries given the scarcity of administrative capacity to implement these programs and the paucity of monitoring and evaluation experience to study their effectiveness.

The studies we summarize are recent, and have taken advantage of the advances made in model development and econometric analysis. However, a number of issues affecting the reliability of the findings of these studies for guiding public policy remain open. First, there are unresolved technical issues, such as handling selection bias and assessing deadweight and displacement/substitution effects. Second, there are a variety of data problems in the specific surveys. These include benchmarking pre-intervention profiles (employment history, human capital attributes, etc.) and the tracking of participants and non-participants for no more than one or at most two years while, in many cases, the full impact of policies is unlikely to play out in this short period of time (such as in the case of training and self-employment). Third, administrative data which may be called upon to provide supplementary information tend to be surprisingly poor, so that the nature or the intensity of the intervention received by the participant is often uncertain.

While these remarks indicate that a definitive conclusion on which and under what conditions ALMP can be justified economically, the evidence points to some generalizations about active labor programs. We summarize them programmatically:

- *Public works* can help the more disadvantaged groups (older workers, the long-term unemployed, those in distressed regions) as a poverty/safety net program. They are ineffective instruments as an escape route from permanent unemployment. Program participants are less likely to be employed in an unsubsidized job, and they earn less than individuals in the control group.
- *Job search assistance* has positive impact and is usually cost-effective relative to other ALMPs. Programs that have yielded positive results have generally been implemented under favorable macro-economic conditions. However, job search assistance does not seem to significantly improve either the employment prospects or wages of youth.
- *Training for the long-term unemployed* can help when the economy is improving. Small-scale, tightly targeted on-the-job training programs, often aimed at women and older groups, offer the best returns. However, the cost-effectiveness of these programs is generally disappointing. The real rate of return is rarely positive, and they are no more successful than job search assistance programs in terms of post-program placement and wages. A caveat here is that job search assistance may not be a direct substitute for training as it may cater to different groups of the unemployed.
- *Retraining for those laid off en masse* usually has little positive impact and, as in case for the long-term unemployed, it is more expensive and no more effective than job-search assistance. Again, job search assistance may not be a direct substitute for retraining, as the target groups may be somewhat different.
- *Training for youth* generally has no positive impact on employment prospects or post-training earnings - it clearly cannot make up for the failures of the education system. Taking costs into account, the real rate of return of these programs in both the short- and long-run is usually negative.
- *Micro-enterprise development* programs are usually taken up by only a small fraction of the unemployed and are associated with high deadweight and displacement effects. The failure rate of these businesses is quite high. As in the case of training for the long-term unemployed, assistance targeted at particular groups - in this case, women and older individuals - seems to have a greater likelihood of success.
- *Wage subsidy* programs are unlikely to have a positive impact. They have substantial deadweight and substitution effects, and the wage and employment outcomes of participants are also generally negative as compared to a control group. Careful targeting can reduce, but not eliminate, substitution and deadweight effects, and further controls may be necessary to ensure that firms do not misuse this program as a permanent subsidy program.

There are polar positions on the effectiveness of active labor market programs. On one hand, proponents of these programs argue that active labor market programs are both necessary and useful, short only of a panacea for reducing unemployment and protecting workers. Opponents of the programs tend to summarily dismiss these programs as a waste of public money with high opportunity costs to other social programs and labor market efficiency as a whole. Based on a thorough evaluation of evidence, this paper shows that some programs can be useful to some workers in some cases. There are also good design features for each program, but external (to the programs) conditions need to be taken into account (a good program in one country can prove to be a bad one for another; a program found to be useful in the past may no longer be the case). This calls for realism in setting the objectives of ALMP and also setting standards against which active labor market programs should be evaluated. However, due to lack of evaluative evidence, the conditions under which programs will succeed have not been fully identified. A very *broad generalization* on the effectiveness of these programs leads to the conclusions that:

- Some of these programs - such as wage subsidies or training for youth - are unlikely to be cost-effective instruments in reducing unemployment.
- Some programs - such as job search assistance - are likely to have positive impacts on the

probability of finding employment if they are well-designed and implemented.

- However, the impact and cost-effectiveness of most of the active labor market programs depends not only on their design, but also on the overall macro and labor market framework in which they are designed.

This assessment dictates the following policy approach:

- If a country is going to institute labor market programs, a good practice is to start with modest programs.
- Sound impact evaluation techniques should be used to evaluate the instituted programs. Relying only on non-scientific evaluations may lead to incorrect policy conclusions. A good micro evaluation will involve comparing labor market outcomes for individuals who have gone through a particular program with those of a control group of their peers and will also utilize data on program costs. These will help to answer the important questions: (a) what is the impact of the program?; (b) are the impacts large and costs low enough to yield net social gains?; and (c) is this the best outcome that could have been achieved for the money spent?
- Based on these evaluations, the programs should be tightly targeted at those for whom they are found to be the most cost-effective, or, if the evaluations point towards these programs being ineffective, they should be amended or discarded.

ACTIVE LABOR MARKET PROGRAMS: A REVIEW OF THE EVIDENCE FROM EVALUATIONS

I. INTRODUCTION

This paper provides a review of evaluations of active labor market programs (ALMPs). The empirical literature on evaluations of ALMPs is vast and often provides contradictory conclusions depending on country, time period and specific program characteristics under consideration. The aim of this review is to provide a summary of these evaluations and attempt to draw some best practice lessons. Most of the evaluations come from industrialized countries, though ALMPs are also found in developing ones. International organizations, specialized research institutes and individual researchers have undertaken the evaluations. Most are in-depth studies of one policy in a particular country (especially the US, Canada and the UK) at a time, though some compare programs in a cross-country context. Data problems, and the inability to track participants over a reasonably long time period after they graduate from the program, account for the variety of the results of ALMP evaluations in developing countries. In addition, administrative data which may be called upon to provide supplementary information are often surprisingly poor, so the evaluator is not sure about the nature or the intensity of the intervention the participant has actually received.

ALMPs are effectively an intervention: they are usually funded by public funds and payroll taxes and aim to increase the allocative function of the labor market (such as in the case of job search assistance), direct the distributional outcomes of labor markets (as in the case of targeting the poor in public works programs), or increase the political acceptability of reforms (for example, retraining may be provided to retrenched workers to enable them to compete for other jobs). Alternatively, ALMPs can be thought of as an instrument to correct some market failure (for example, to address a credit market failure in the case of micro-enterprises) or, even when such a failure does not exist, to divert an “economically efficient” outcome to a “socially desirable” one. In the latter case, political economy considerations are important. For example, if unemployment is deemed “unacceptably” high, then an intervention to reduce it in one way or another may be considered appropriate, even though it may create some other inefficiencies in the labor market or in other markets. Often these social and political considerations dictate which programs are to be offered. Evaluating ALMPs is, therefore, a complicated task, as they often address multiple objectives, for many of which there are significant trade-offs. This can be the case between efficiency and distribution objectives, or between those two objectives and political economy considerations. Therefore, an evaluation of an ALMP needs to take into account the context and the objectives of the program.

Additional complications arise because of measurement problems. Though the direct financial cost of a program is usually known, its indirect (opportunity) costs are typically unknown. For example, the opportunity cost of re-training unemployed workers includes the loss of opportunities for offering pre-employment training to first time job seekers. Similarly, what appears as a benefit to a program participant may be offset by a corresponding loss among non-participants. For example, a wage subsidy can increase the employability of a dismissed worker. However, he may take up a job currently filled by a non-subsidized worker.

Notwithstanding difficulties in the conceptualization and measurement of the effects of ALMPs, there have been many studies evaluating some or all aspects of these programs, such as their costs, effectiveness, efficacy, net impact, efficiency, sustainability as well as issues of program implementation. These aspects can be highlighted as follows: a job created through a public works program, say, costs \$5,000 for one year and creates 3,000 jobs, all of which were taken up by newly unemployed. In terms of efficacy (the

relationship between project objective and outcome), the project may have “failed,” in the sense that it originally aimed primarily at the long-term unemployed poor. The net impact might have been small or large depending on how many of the 3,000 newly unemployed would have found a job had the program not been in place – if all 3,000 would have found a job of similar duration, earnings and so forth, the net impact would be zero (alternatively stated - the program has a 100% deadweight loss). To measure efficiency, one needs to know the net impact and compare it to total (direct and indirect) costs of the program. One can also add here the notion of “relative efficiency”: even if this public works program is found to have the desired effect, it may not be worth pursuing if there are alternative interventions that have higher social returns.

The preceding discussion shows that ALMPs are not “something for nothing”: they can be useful but they also have costs. In a period of scarce resources for social services (broadly defined to include health, education, pensions and assistance to the poor in addition to unemployed workers), it is crucial to rigorously assess whether these programs have been successful in generating employment and gains in earnings for those who participate in them in an efficient way. Hence, evaluating them can provide guidance about when to introduce them, and how to design and implement them. At the same time, evaluations can also suggest when ALMPs should be adjusted or be reduced in scale or, for some of them, even be abandoned.

The paper is arranged as follows. Section II defines active and passive policies. Section III examines the patterns of expenditures on these programs. Section IV discusses the importance of evaluating these programs and the techniques to perform the evaluations. Section V discusses the results of evaluations for the various active labor programs, and Section VI concludes.

II. WHAT ARE ACTIVE PROGRAMS?

The use of policies aiming to facilitate employment growth and re-employment started increasing with the rise in unemployment in OECD economies after 1973. These policies, later collectively termed “Active Labor Market Policies” (OECD, 1993) included three main elements:

- Mobilizing labor supply with job creation schemes, job subsidies and so on;
- Developing employment-related skills with measures such as retraining;
- Promoting efficient labor markets with employment services, job-matching and counseling.

Within this framework, the more common ALMPs are (Table 2.1 describes these programs):¹

1. direct job creation (public works schemes/public service employment)²;
2. public employment services/job search assistance agencies;
3. training/retraining for unemployed adults and those at risk of unemployment;
4. support to unemployed persons in starting up small businesses (micro-enterprise development);
5. wage/employment subsidies to firms to hire unemployed individuals.

In theory, ALMPs policies can lower structural unemployment two ways: by promoting more efficient matching between job-seekers and vacancies, and bringing discouraged and socially excluded workers (such as the long-term unemployed or women workers who dropped out of the labor force) back into the labor market. Targeted retraining and employment services would enhance their ability to re-enter the labor force and compete effectively for jobs. However, to the extent that unemployment is structural, one might argue that there are bound to be some adjustments in demand and supply, with corresponding changes in prices and incentives. Thus, the use of ALMPs begs the question as to whether one should speed up the pace of adjustment, or leave it to market forces while spending funds in other social areas.

As time has passed, the need to answer this question has become urgent. Most ALMPs in OECD countries were initially introduced to counter what was expected to be a short-term increase in unemployment. However, this did not materialize (“ratchet effect”)³, and doubts were therefore raised about the justification of ALMPs. For example, if a crisis is expected to last for a few months, then it may be wise to preserve employment, even through wage subsidies, to avoid what appear to be high private costs (such as costs of workers’ dislocation and fixed costs of firing/hiring for firms). However, if the crisis lasts longer, it does not require much persuasion to conclude that deficit-financed preservation of employment can be unsustainable at the macro level and can damage labor supply incentives at the micro level.

As ALMPs became more permanent features of OECD labor markets, the need for evaluation became more pressing. In the next section, we examine evaluation evidence after we present some statistics on expenditures on ALMPs

¹ There are several smaller programs that we have not mentioned in this overview. In former Soviet Union countries, for example, vacancy fairs are regularly organized. In Russia in 1996, more than 2,500 vacancy fairs were organized in which 11,000 enterprises and 647,000 people participated. Close to 100,000 people were placed in jobs as a result of these fairs.

² While we use the terms public works and public service employment interchangeably, public works usually refer to physical/civil works to develop infrastructure usually carried out in developing countries. In OECD countries, similar programs are denoted as public service employment and may be used to employ individuals as, for examples, nurse aids and teachers aids.

³ Average unemployment levels reach new highs in successive recessions and stay above their previous level in periods of boom.

Table 2.1
Active and Passive Labor Market Programs: Some Key Features

Program	Description and Objective	Examples of Bank Projects	Possible Pros	Possible Cons	Some Key Issues
1. Public Works and Public Service Employment	Publicly funded low-wage employment to address poverty and nutrition objectives and create temporary employment - these programs are mainly income-generating schemes rather than autonomous employment generation	Road construction - Rwanda, Albania, Colombia, Morocco; Sewage/waste collection - Senegal, Lithuania, Morocco; Construction of schools and health care facilities - Madagascar, Honduras, Indonesia, Yemen.	<ol style="list-style-type: none"> 1. May assist disadvantaged groups to regain labor market contact. 2. Leads to production of public goods and develops infrastructure. 3. Self-targeting, if wages are set effectively. 4. Program may be used to get people off social assistance - people refusing jobs are not provided unemployment insurance. 	<ol style="list-style-type: none"> 1. Crowding out of private sector jobs, especially if targeting is ineffective. 2. Stigma attached to them may not increase individual's employability. 3. Jobs may be of low productivity. 	<ol style="list-style-type: none"> 1. How long should job last? 2. What should be the wages on the job? 3. What should the proportion of wages in the total program cost be? 4. How should the benefits of such a job be maximized despite their low marginal productivity? 5. Are these programs effective in generating employment and higher wages for program participants, and are they cost-effective? 6. Should private or public contractors be hired to implement the projects?
2. Job search assistance/ Employment Services	The main objective of employment services is brokerage - matching jobs with job seekers. Job-search assistance comprises many different types of services; for example, initial interviews at employment offices, in-depth counseling during the unemployment spell, job clubs etc.	Provision of counseling services to displaced workers -Turkey; Assisting redundant workers in their job search, including preparation of resumes and providing information about employment opportunities - Brazil, Jamaica.	<ol style="list-style-type: none"> 1. Helps reduce the length of unemployment. 2. Reasonably inexpensive. 3. Used to pre-screen participants who may get assistance from other ALMPs. 	<ol style="list-style-type: none"> 1. Crowding out of private services. <ol style="list-style-type: none"> 1. Deadweight loss - individuals who get jobs through employment services are generally the most qualified and would have gotten the jobs in the absence of these services. 2. Benefits only a fraction of job-seekers. 	<ol style="list-style-type: none"> 1. What is the role of private job search agencies? 2. What is the effectiveness of counseling services? 3. What training/material do staff in employment offices need to perform their functions more effectively?

Table 2.1 (continued)
Active and Passive Labor Market Programs: Some Key Features

Program	Description and Objective	Examples of Bank Projects	Possible Pros	Possible Cons	Some Key Issues
3. Training and Retraining	Aims at helping new entrants to the labor force and redeployed workers (either the long-term unemployed or those laid off <i>en masse</i>) to accumulate skills that will enable them to compete for jobs.	Establish a training program to help retrenched workers - Jamaica; Improve the effectiveness of training programs by making them demand-driven - Cape Verde; Provide adult training for unemployed workers to reorient their skills - Romania; Finance apprenticeship programs to promote employment for youths – Argentina.	<ol style="list-style-type: none"> 1. Increase in productivity of unemployed individuals. 2. When well-targeted may benefit some groups (e.g. the disadvantaged, women). 	<ol style="list-style-type: none"> 1. Usually programs are poorly targeted, resulting in deadweight loss - those who benefit from the training are those who would have gotten jobs anyway. 2. Job search intensity may be reduced during the course of training. 3. Do poorly when the economy is not growing (i.e. when there are few jobs) and this is typically the situation during which they are instituted the most. 4. One of the most costly ALMPs instituted the most. 	<ol style="list-style-type: none"> 1. How can these programs be better targeted? 2. Is unemployment arising due to skill shortages? 3. What is the duration of these programs and how effective are they in isolation or in coordination with other labor market programs? 4. What is the role of the government and the private sector in the provision and financing of training? 5. How cost-effective are these programs: are people who go through these programs better off in terms of wages and re-employment probabilities? 6. Should training providers sign contracts with prenegotiated rates of placement and financial incentives/disincentives?

Table 2.1 (continued)
Active and Passive Labor Market Programs: Some Key Features

Program	Description and Objective	Examples of Bank Projects	Possible Pros	Possible Cons	Some Key Issues
4. Micro-enterprise Development	Creating and promoting small-scale new businesses and providing self-employment through technical assistance, credit and other support. They are often aimed at countering “market failures,” not in the labor market but in the capital or land markets.	Support private micro earning generating activities through establishment of a Fund - Eritrea; Promotion of small businesses through the development of small business incubators - Albania; Credit to women to help in starting up small scale enterprises in rural areas - Morocco; Small business incubators- Poland.	<ol style="list-style-type: none"> 1. Assist in creating entrepreneurial spirit. 2. An alternative to unemployment insurance. 	<ol style="list-style-type: none"> 1. Individuals who form micro-enterprises would have formed them anyway without this assistance (deadweight loss). 2. Small businesses who do not get this assistance may be displaced. 	<ol style="list-style-type: none"> 1. What kind of support - e.g. financial/technical - should be provided to those starting up an enterprise? 2. What is the duration of this support? 3. What instruments should be devised to most effectively screen potential participants? 4. What is the impact of these programs - what is the proportion of unemployed that take advantage of these benefits, the proportion of businesses that survive and how many additional jobs are created?
5. Wage Subsidies	Generally aimed at the long-term unemployed and youth, these are designed to subsidize employer’s cost of hiring unemployed individuals. The government pays part of the salary for a period of time following which firms may decide to hire the individual and pay the entire salary.	Provision of wage subsidies to firms to hire unemployed - Argentina; Wage subsidies to firms - Poland and Hungary.	<ol style="list-style-type: none"> 1. May lead to permanent employment by helping individuals develop some work-related skills. 2. Helps individuals maintain contact with the labor market. 3. May be somewhat equitable - providing the long-term unemployed with jobs even if it happens at the expense of the short-term unemployed. 	<ol style="list-style-type: none"> 1. Deadweight loss - those that are provided subsidies would be hired anyway. 2. A worker taken by a firm in a subsidized job is substituted for an unsubsidized worker who would have otherwise been hired. The net employment effect can be zero. 3. Employers may view workers as cheap labor and lay them off once the subsidy period ends. 	<ol style="list-style-type: none"> 1. Who should receive the subsidy - the employer or the employee? 2. What is the duration of the subsidy and mode of payment (lump sum or spread out over time)? 3. At what point in the unemployment spell should the subsidy be offered? 4. Is the subsidy more effective when combined with any other intervention (e.g. training)? 5. What is the effectiveness of these programs: how many individuals are retained in their jobs/find new jobs at the end of the apprenticeship and how many rejoin the rolls of the unemployed?

III. EXPENDITURES ON ACTIVE LABOR MARKET PROGRAMS

In 1985/86, industrialized OECD countries spent about 0.75 percent of GDP on average on these programs.⁴ There was significant variation across countries - while the U.S. spent 0.3 percent of GDP on ALMPs, Sweden spent over 2.1 percent of GDP on these programs. By 1992/93, average expenditures on these programs had risen somewhat to about 1.1 percent of GDP but the average has remained roughly constant since then (Table 3.1). Since the late 1980s, transition economies have also instituted these programs. Expenditures on ALMPs in transition economies included in the Table are lower on average than in industrialized countries and have declined since the beginning of the decade.

Table 3.1
Public Expenditures on Active Labor Market Programs in OECD Countries
(as % of GDP)

Country	1985/86	1992/93	1995/96
Australia	0.42	0.76	0.84
Austria	0.28	0.36	0.39
Belgium	1.23	1.21	1.41
Canada	0.63	0.67	0.56
Denmark	1.09	1.97	2.26
Finland	0.91	1.68	1.57
France	0.67	1.06	1.30
Germany	0.81	1.62	1.43
Greece	0.21	0.31	0.27
Ireland	1.58	1.31	1.75
Italy	0.45	1.88	1.08
Japan	na	0.09	0.10
Netherlands	1.09	1.40	1.37
New Zealand	0.84	0.80	0.71
Norway	0.66	1.34	1.16
Portugal	0.41	0.87	0.83
Spain	0.34	0.59	0.67
Sweden	2.11	3.07	2.25
U.K.	0.75	0.59	0.46
U.S.A.	0.28	0.21	0.19
Unweighted Average	0.77 (0.77)	1.08 (1.14)	1.03 (1.08)
<i>Eastern Europe</i>			
Czech Republic	na	0.18	0.14
Hungary	na	0.61	0.43
Poland	na	0.38	0.32

Note: Averages in parentheses exclude Japan.

Source: OECD (1997)

⁴ These numbers pertain to national government expenditures. In some countries, state and provincial governments also finance such initiatives separately.

In almost all OECD countries, training for the unemployed is "the largest category of active programs (Table 3.2), and is often perceived as the principal alternative to regular unemployment benefits" (OECD, 1994a). In many countries, in fact, training - for those laid off en masse, for the long-term unemployed, and for youth - accounts for over 50 percent of the expenditure on active labor market programs. This is followed by expenditures on employment services and public works programs. Countries generally spend less than 10 percent of expenditures on active programs on micro-enterprise development or wage subsidies, a notable exception being Poland, where over 30 percent of public expenditures on active programs go into these two programs.

Table 3.2
Distribution of Expenditures on ALMPs (% of Total Active Expenditure on ALMP)
(Selected OECD Countries 1995/96)

Country	Training	Public Works	Micro-Enterprises	Job Subsidies	Emp. Services	Total as % of GDP
Australia	33.7	26.5	3.6	7.2	28.9	0.84
Belgium	35.7	40.7	0.0	7.9	15.7	1.41
Canada	48.2	5.4	7.1	3.6	35.7	0.56
Denmark	77.0	12.8	3.5	1.3	5.3	2.26
France	55.8	17.1	3.1	12.4	11.6	1.30
Germany	55.2	21.0	2.1	4.9	16.8	1.43
Ireland	32.0	38.3	1.1	14.3	14.3	1.75
Netherlands	54.7	9.5	0.0	9.5	26.3	1.37
Sweden	59.1	19.1	3.1	7.6	11.1	2.25
U.K.	53.2	2.1	2.1	0.0	42.6	0.46
U.S.A.	57.9	5.3	0.0	0.0	36.8	0.19
Unweighted Average	51.1	18.0	2.2	6.2	22.3	1.3
<i>Eastern Europe</i>						
Czech Republic	14.3	7.1	0.0	7.1	71.4	0.14
Hungary	30.2	25.6	0.0	14.0	30.2	0.43
Poland	40.6	21.9	6.3	25.0	6.3	0.32

Note: Training includes measures for youth and the disabled, some of which may be non-training related.

Source: OECD (1997)

While active and passive labor market programs are common in OECD countries, many developing countries have also instituted these programs. Over the past few years, the World Bank has also been involved in supporting active labor market interventions - with the exception of job subsidies - in developing countries. Between FY92 and FY96, the Bank has funded projects which have supported over 270 such components across all regions (Table 3.3).

Table 3.3
Distribution of World Bank Project Components on ALMPs by Region (FY92-FY96)

Region	Public Works	Micro Enterprises	Training	Emp. Service	Adjustment Services
Africa	43	22	23	2	5
Europe and Central Asia	20	10	13	13	6
East Asia and the Pacific	17	5	10	8	2
South Asia	8	1	2	0	0
Latin America and the Caribbean	21	14	10	5	2
Middle East and North Africa	11	3	5	2	1
All	120	55	63	30	14

Note: Adjustment Services include a variety of active programs, often tied directly to large-scale privatization programs (e.g. in Romania, Turkey and Macedonia).

Source: Dar and Tzannatos (1998)

Lending for public works programs forms the bulk of the Bank's support for ALMPs, but significant resources have also gone into funding micro-enterprises (especially in Africa, Latin America and ECA), training activities (especially in Africa and East Europe and Central Asia), employment services (especially in East Europe, Central Asia, and East Asia) and adjustment services (especially East Europe and Central Asia).

IV. THE IMPORTANCE OF GOOD EVALUATIONS

In spite of the large public expenditures on these programs, rigorous evaluations of ALMPs have been relatively uncommon. In the continuing effort to improve the targeting and efficiency of social programs, policymakers are now increasingly realizing the importance of rigorous evaluations. They want to know what programs accomplish, what they cost, and how they should be designed to achieve maximum efficiency and cost-effectiveness. These questions determine which of the types of evaluation are chosen (Box 4.1).

Box 4.1: Main Types of Evaluations

- **Performance Monitoring:** These evaluations provide information on how a system or program is operating, and on the extent to which specified program goals are being achieved. Examples of performance indicators in the case of active labor market programs are: proportion of program participants employed, monthly earnings of program participants, cost of program etc.. Results are used by policymakers to assess program performance and accomplishments.
- **Impact Evaluations:** These evaluations focus on the question of causality. Did the program have its intended effects? What was the magnitude of the effect? Did the program have any unintended consequences: positive or negative? These evaluations, when done well, can be used to compare program outcomes with some measure of what would have happened without the programs.
- **Cost and Cost-Benefit Evaluations:** These evaluations address how much the program costs, preferably in relation to alternative uses of the same resources and to the benefits being produced by the program.
- **Process Evaluations:** These answer questions about how the program operates, and document the procedures and activities undertaken in service delivery. Such evaluations help identify problems faced in delivering services and strategies for overcoming these problems.

Source: Harrell et. al. (1996)

A comprehensive evaluation will include all the activities mentioned in the Box above. However, in reality, there are few such evaluations. The questions raised, the target audience for findings, and resource constraints limit the evaluation focus to one or two of these activities. As we shall see in the next section, the evaluations we have reviewed are almost exclusively impact evaluations. In some of cases, where cost data are available, cost evaluations have also been done. Below we discuss some of the evaluation techniques used in performing an impact evaluation.

A. IMPACT EVALUATION TECHNIQUES⁵

Techniques for evaluating the effectiveness of labor programs can be either scientific and non-scientific. The scientific evaluations are of two types: experimental and quasi-experimental. Experimental or classically designed evaluations require selection of both the "control" and "treatment" groups - those who receive the assistance and those who do not - prior to the intervention. If large numbers of individuals are randomly assigned to treatment and control groups, average characteristics of the two groups should not differ significantly; thus, any difference in outcomes can be attributed to program participation. Quasi-experimental studies, select treatment and control groups after the intervention. To compute program effectiveness, statistical techniques correct for differences in characteristics between the two groups.

Non-scientific techniques do not use control groups in evaluating the impact of interventions, relying instead on statistics compiled by program administrators. These evaluations are of little use in determining whether program participants are doing better: without a control group, it is difficult to attribute success or failure of participants to the intervention, since these effects are contaminated by other factors, such as worker-specific attributes. However, in some cases, these evaluations (e.g. interviews with employers and employees) can provide some information on deadweight loss, as well as substitution and displacement effects. Nonetheless, it is difficult to judge how robust the results are, as this will depend on how the sample of firms was chosen and how respondents were interviewed. (Box 4.2 lists some of the commonly used terms in the impact evaluation literature.)

(i) Classically Designed (Randomized) Experiments

This technique was originally developed to test drug-effectiveness, with program participants and those excluded from treatment randomly selected prior to the intervention. If large samples are randomly assigned to treatment and control groups, observable and unobservable characteristics of the two groups should not differ on average, and so any difference in outcomes can be attributed to program participation. The main appeal here lies in the simplicity of interpreting results - the program impact is the simple difference between the means of the samples of program participants and control group members on the outcome of interest. The pitfalls are failure to assign randomly (because of nepotism, or excluding high risk groups to achieve better results), changed behavior upon learning of assignment to either group (enrolling in private programs, intensifying job search), high costs due to large sample sizes, and ethical questions about excluding some people from the intervention.

While randomization is thought to ensure the absence of selection bias among participants, proponents of randomized experimentation make a controversial assumption: that randomization does not alter the program behavior being studied. This may not be the case, and in fact the bias induced by randomization may be quite strong (Heckman, 1992). For example, individuals who might have enrolled in a nonrandomized regime may make plans anticipating enrollment in training. With randomization they may alter their decision to apply or undertake activities complementary to training (the Hawthorne effect). Thus risk-averse persons will tend to be eliminated from the program.

⁵ This section draws from Dar and Gill (1998)

Box 4.2: Some Commonly Used Terms in the Impact Evaluation Literature

Some of the commonly used terms in the evaluation literature are defined below.

- **Deadweight Loss:** Program outcomes are not different from what would have happened in the absence of the program. For example, wage subsidies place a worker in a firm which would have hired the worker in the absence of the subsidy.
- **Substitution Effect:** A worker hired in a subsidized job is substituted for an unsubsidized worker who would otherwise have been hired. The net employment effect is thus zero.
- **Displacement Effect:** This usually refers to displacement in the product market. A firm with subsidized workers increases output, but displaces/reduces output among firms who do not have subsidized workers. This can also occur in helping individuals start up enterprises.
- **Additionality:** This is the net increase in jobs created. It is the total number of subsidized jobs less deadweight, substitution and displacement effects.
- **Treatment and Control Group:** Program beneficiaries are the “treatment” group. In a scientific evaluation, their outcomes are compared with a “control” group of individuals who did not participate in this program. The treatment and control groups could be assigned at random ex-ante (before the program) or chosen ex-post. This will be discussed in detail in Section III.
- **Selection Bias:** Program outcomes are influenced by unobservable factors not controlled for in an evaluation (e.g. individual ability, willingness to work). Such factors can also arise as a by-product of the selection process into programs where individuals “most likely to succeed” are selected into programs (“creaming”).
- **Randomization Bias:** This refers to bias in random-assignment experiments. In essence, this says that the behavior of individuals in an experiment will be different because of the experiment itself and not because of the goal of the experiment. Individuals in an experiment know that they are part of a treatment group and may act differently, and the same could hold true of individuals in the control group. The potential change in behavior is referred to as the Hawthorne effect.

(ii) *Quasi-Experimental Techniques*

In these techniques, the treatment and control groups are selected *after* the intervention. To get the effect of the program, econometric techniques correct for the differences in characteristics between the two groups. The main appeal lies in relatively low costs, and that interventions can be done at any time. The main drawback is that these techniques - if done properly - are statistically complex. Attributes of individuals in treatment and control groups are different; techniques for adjusting for differences in observable attributes (e.g., sex, education, age, region) are relatively straightforward but subject to specification errors; correcting for unobservable characteristics (e.g., motivation, family connections) requires a convoluted procedure that can yield wildly different results depending upon specification. A quasi-experimental evaluations are of three types - regression-adjusted for observables, selectivity-corrected (regression-adjusted for both observables and unobservables), and matched pairs:

Regression-adjusted for observables. This technique assesses the impact of participation in a program when the observable characteristics (e.g. sex, age, education) of the participant and comparison groups differ. This method is appropriate for computing program impact estimates when the difference between the participant and comparison samples can be explained by observable characteristics.

Regression-adjusted for observed and unobservable variables (selectivity-corrected). When selection into programs is not random, and participation in a program is due to both observable and unobservable characteristics, program impacts computed using the technique in (i) above are likely to be biased. The concern is that even if participants and non-participants have similar observable characteristics, there are some unobservable characteristics (e.g. innate ability) which would cause non-participants to have different responses to the program if they had participated. This technique uses the Heckman selectivity method to try to control for these unobservables.

Matched pairs. As observable characteristics of the individuals chosen in the control and treatment groups are bound to be different, these groups are likely to have different success rates in finding employment, even in the absence of active labor market programs. To control for these spurious differences, synthetic control groups are constructed using a matched pairs approach. The synthetic control group, a subset of the entire control group, is composed of individuals whose observable characteristics most closely match those of the treatment group.

(iii) Relative Strengths Of Techniques

Estimating the effect of trainee earnings on an employment program using randomized and quasi-experimental techniques, Lalonde (1986) has shown that randomized experimentation yields significantly different results from quasi-experimental techniques. Policymakers should be aware that available non-experimental evaluations of training programs may contain large biases.

However, while randomized experimentation is theoretically the best technique to estimate the effects of interventions, quasi-experimental techniques may be superior in practice. The main weakness of randomized experiments is that among those who participate in the evaluation, it is difficult - if not impossible - to ensure that individuals in the control group do not alter their behavior in a way that contaminates the experiment. For example, people who were denied participation in public training may enroll in private programs, which would bias the results of any evaluation of public programs.⁶ The second weakness of randomized experiments is that it may be difficult to assure that assignment is truly random. For example, applicants may be selected into the program due to nepotism, or administrators of the program may intentionally exclude high-risk applicants to achieve better results. The third problem concerns ethical questions about treating humans as experiment subjects. Finally, experimental evaluations are only possible for future programs, since the control and treatment groups have to be selected *ex ante*.

Using the dual criteria of rigor and feasibility, then, randomized experiments are not necessarily superior to quasi-experimental techniques. Factoring in the high costs of setting up such experiments, and the fact that the labor market programs which need to be evaluated are often already in place, randomized evaluations should perhaps be the last alternative. Within quasi-experimental techniques, selectivity-correction may not add much, especially when information is available for a considerable number of observable individual and

⁶ Heckman (1992) documents other limitations of this technique when applied to social experiments that arise due to selectivity biases, as randomization may differentially affect the decision of people to participate in such programs. For example, relatively risk-averse persons may decide not to enroll for randomized experiments, preferring instead to enroll in private training.

labor market characteristics (education, age, sex, household wealth, and region of residence). Besides being cumbersome and somewhat unintuitive, this method often gives arbitrary results depending on the selectivity-correction specification used.

This leaves the matched pairs and the regression-adjusted techniques. Between the two, the matched pairs technique is preferred for the following reasons: First, the procedure is less arbitrary because, since the observable differences between the treatment and comparison group are minimized, functional form assumptions become less important. Second, because program impact measures are a simple difference of means of the variables of interest (re-employment probabilities and wages) between the control and treatment groups, they are easier to interpret by non-statisticians.

A weakness shared by both the experimental as well as non-experimental evaluations is that they do not take into account displacement effects of the retraining program. Thus, for example, in countries where demand for labor is constrained, retrainees may simply "bump" or displace previously employed workers so that aggregate unemployment may not change despite the size of the program. In general, displacement implies that the social benefits - from higher re-employment probabilities due to the retraining program - are lower than indicated by the evaluation, however well done.

B. THE IMPORTANCE OF CONSIDERING COSTS

For the purposes of informing policy decisions, an evaluation is not complete until one considers the costs of both the ALMP and its alternatives. As Box 4.3 illustrates, a program may be effective in a statistical sense, but when costs are taken into account, it may not be effective economically. Similarly, if training is shown to be twice as costly as job search assistance to the unemployed, but only as effective as job search assistance in facilitating access to jobs and wage gains, then job search assistance is twice as cost-effective as retraining even though the two are equally effective. At least at the margin, this would constitute a case for reallocating resources from training to job search assistance. Unfortunately, costs appear to be the least analyzed aspect of these programs in OECD countries.

Even the most careful impact evaluations of ALMP's cannot be used for *social* cost-benefit analysis. The main reason is that retraining programs may simply result in displacement of previously employed workers by the retrainees, so that aggregate unemployment rates remain unaffected by the intervention. But when done correctly, evaluations are good guides for *private* cost-benefit analysis, which policymakers can use to institute cost-recovery in public programs and to promote private provision. Evaluations may also help in deciding whether ALMPs programs contribute to reduced budgetary expenditures by moving people off unemployment benefits into productive employment, or whether are a net drain in spite of being effective in doing so.⁷

⁷ Evaluators in Russia have proposed another simple, though less precise, way to compute the cost-effectiveness of their ALMPs - comparisons of costs of employment programs with potential tax revenues from actual placements. For example, the cost of Russia's Job Vacancy Fairs was Rb. 3.1 billion as compared to *potential* tax revenues of Rb. 160 billion from those who were employed as a result of their fairs.

Box 4.3: Statistically Significant And Economically Insignificant?: An Example

Let us assume that a country with an annual per capita income of \$20,000 institutes a retraining program that costs \$10,000 per individual trained. The true impact of the program is to reduce job search/unemployment duration by three days for men and two days for women and increase post-unemployment earnings by \$5/month for men and \$1 for women.

An effect can be statistically insignificant in a small sample ...

If this retraining program was initially evaluated using small samples (for example, 50 men and women), the indicated gender impact may be large or small (and can be wrongly found to negative) but most likely will be statistically insignificant: the standard errors are large because of the smallness of the sample.

but can become significant as sample size increases ...

As the sample size is expanded (to 500 men and 500 women for example), the impact of training becomes increasingly statistically significant, and the results show that indeed the program reduces job search/unemployment duration by three days for men and two days for women and increase post-unemployment earnings by \$5/month for men and \$1/month for women.

still, this does not mean that the effect is economically significant.....

This will depend on the duration of unemployment and average wages. If the average duration of unemployment for both women and men were 10 days, the impact of the program on men is significantly greater than that on women (by 50%). However, there will be no practical difference if the duration of unemployment was six months. Similarly, the impact on wages will depend on whether the beneficiaries of the retraining program were low-paid workers (e.g. a monthly income of \$250) or higher paid workers (e.g. with a monthly income of \$1000). In the former case the increase in earnings is two percent for men and 0.4 percent for women while in the latter case the impact is 0.5 percent for men and 0.1 percent to women.

or efficient.....

Now compare the group of individuals who have been trained with a control group who were not trained. Assume that the training has a statistically significant impact on the probability of employment of 10 percent. Thus, if 60 percent of the control group is employed, 70 percent of the treatment group manage to find jobs after completion of their training. This implies that 100 individuals need to be trained to place 10 extra trainees in jobs. The cost of training 100 people will be \$1,000,000, and the cost per placement will then be \$100,000. Given that this is five times the per capita income of the country, the program is unlikely to be economically desirable even though it results in a positive impact on employment.

V. AN INTERPRETATION OF EVALUATION RESULTS

The remainder of this paper presents *our reading* of the evaluative evidence (mainly from OECD countries)⁸ of active labor market programs. In various appendices we have included summaries of the studies upon which our synthesis is based. The reader is encouraged to refer to them for a more objective presentation of individual studies.

A. PUBLIC WORKS PROGRAMS/PUBLIC SERVICE EMPLOYMENT

Public works programs are one of the most heavily funded ALMPs in OECD countries. Expenditures on public works programs range from insignificant (close to zero percent of GDP in U.K. and the U.S.) to about 0.5 percent of GDP (Belgium and Ireland) in OECD countries. On average, OECD countries spend about a quarter of all expenditure on ALMPs on public works programs. These programs have generally been instituted in times of economic slowdown, and participants are provided jobs in various sectors of the economy, e.g. construction, health, welfare and municipal government.

Public works often serve a dual objective; they provide temporary employment and act as a short-term safety net. Although most countries target the displaced and the long-term unemployed (“the hardest to place groups”), youths in some countries also participate as a way to introduce them to the world of work. For example, in Sweden, they have been used as a safety net for the young unemployed (Forslund and Krueger, 1994). In other cases, such as Benelux countries, public works have come to be used as an almost permanent means of employment for those who would not find jobs elsewhere (OECD, 1993).

We summarize the results of thirteen evaluations of public works programs, nine of which are quasi-experimental and four of which are non-scientific (see Appendix 5.1). Among industrialized countries, the evaluations point to some general conclusions.

First, non-experimental evaluations show some desirable short-run effects in the form of employment increase/unemployment decline. Second, some scientific evaluations suggest displacement effects which can reach 100 percent (as they did in Sweden; Skedinger, 1995). Third, participants have a smaller probability of being employed in a non-assisted job after participation in the program, and are likely to earn less than their counterparts in the control group.⁹ Finally, these programs do not seem to have a significant impact on reducing long-term unemployment in the economy.

Among transition economies, Fretwell, Benus and O’Leary (1998) provide the following summary picture of the impact of public works (called “public service employment programs”) in the Czech Republic, Hungary and Poland (Table 5.1¹⁰). In Hungary, these evaluations (O’ Leary, 1998(a)) show that those who participated in the program are over 20 percent less likely to be employed and earn about \$15/month less than individuals in the control group after program completion. While results for Poland (O’ Leary,

⁸ The World Bank is in the process of completing a four-country study (Hungary, The Czech Republic, Poland and Turkey) which uses state of the art quasi-experimental techniques to evaluate active labor market programs. Some of the preliminary results of this evaluation (for Hungary and Poland) are included in this paper. See Fretwell, Benus and O’Leary (1998).

⁹ In many countries in the former Soviet Union, public works programs cater mainly to those individuals who want to participate temporarily in the labor force (e.g. women with young children) and hence the issue of post-program comparison with a control group is meaningless.

¹⁰ In this table initial employment and earnings refer to the probability that an individual in the treatment group is employment relative to someone in the control group - just after completing the program and at a later survey date respectively. Similarly, initial earnings and current earnings refer to the relative wage difference between treatment group and control group participants - just after completing the program and at a later survey date respectively. The unemployment compensation refers to the difference in unemployment compensation paid to individuals the control group relative to individuals in the treatment group.

1998(b)) are less negative, they also point to the lack of general effectiveness of these programs. While data on program costs are available, it is unnecessary to undertake a cost-benefit analysis: the ineffectiveness of the intervention suggests that it is unlikely to be cost-effective.

Table 5.1
Overall Impact of Public Service/Community Employment Programs in Transition Economies

Indicator	Czech Republic	Hungary	Poland
Initial employment	No impact	Negative	Negative
Current employment	Negative	Negative	Negative
Initial earnings	n.a.	Positive	n.a.
Current earnings	No impact	negative	Non impact
Unemployment compensation	Negative	No impact	Positive
<i>Memo items</i>			
1. Cost per participant (US\$)	625	1200	800
2. Cost per participant (PPP\$)	1578	1867	1543
3. Per capita GDP (\$US)	4740	4340	3230

Note: 1) Costs are per participant, not per year. For example, in the Czech Republic, the duration of participation is 6 months which implies that annualized program costs were twice those reported.

2) The Purchasing Power Parity (PPP) conversion factor is defined as the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

Source: Constructed from Fretwell, Benus and O'Leary (1998) (WDR 1997, 214-5)

These findings suggest that there can be some short-lived decline in unemployment as a result of individuals joining the program, but there are no longer term "multiplier" effects in the sense of helping reduce the rate of unemployment through re-integrating or increasing labor force attachment of the unemployed.

This conclusion is to a large extent predictable: unlike other ALMPs, such as training, retraining and support program for self-employment, public works provide mainly current benefits (temporary safety net) and are only escape routes from unemployment. Irrespective of the merits of public works, an economist's first impression is that public works can be generally expensive (Table 5.2) and are not an effective instrument if the objective is to get people into long-term gainful employment.

Table 5.2
Annual Cost of Job Creation in Public Works

	Egypt	Honduras	Nicaragua	Madagascar	Bolivia	Senegal	Ghana
1. Cost/job (US\$)	1401	2120	2580	786	2700	5445	2122
2. Cost/job (PPP)	7212	9759	14302	3620	9388	12100	10610
3. Per capita GDP (US\$)	790	600	380	230	800	600	390
4. Ratio (1/3)	1.77	3.53	6.79	3.42	3.38	9.08	5.44

Source: Adapted from Subbarao (1997); WDR 1997

However, public works can be a short-run anti-poverty intervention (Box 5.1). That's why some developing countries have used them extensively in periods of hardship, such as in Botswana, where 21 percent of the labor force was employed in public works in 1985-6, in Chile (13 percent in 1983) and Honduras (5 percent between 1990-3). In other cases, such as the Maharashtra Employment Guarantee Scheme in India, year-round employment is guaranteed. However, the wage rates have been set very low, so that only the poorest are targeted.¹¹ In Korea public works were extensively used, then were gradually phased out as the country industrialized, and were introduced again following the 1997 financial crisis.

Box 5.1: What Makes a Public Works Program in a Low-Income Country?

Good design features include:

- The wage rate should be set at a level no higher than the prevailing market wage for unskilled manual labor in the setting in which the scheme is introduced.
- Restrictions on eligibility should be avoided; the fact that one wants work at this wage rate should ideally be the only requirement for eligibility.
- If rationing is required (because demand for work exceeds the budget available at the wage set) then the program should be targeted to poor areas, as indicated by a credible "poverty map". However, flexibility should be allowed in future budget allocations across areas, to reflect differences in demand for the scheme.
- The labor intensity (share of wage bill in total cost) should be higher than normal for similar projects in the same setting. How much higher will depend on the relative importance attached to immediate income gains versus (income and other) gains to the poor from the assets created. This will vary from setting to setting.
- The projects should be targeted to poor areas, and should try to assure that the assets created are of maximum value to poor people in those areas. Any exceptions -- in which the assets largely benefit the non-poor -- should require co-financing from the beneficiaries, and this money should go back into the budget of the scheme.
- Performance in reducing poverty should be monitored using careful evaluations.

Source: Ravallion (1998)

B. JOB SEARCH ASSISTANCE/EMPLOYMENT SERVICES

Expenditures on these programs range anywhere from five percent of active labor market program budgets (in Denmark) to over 70 percent (in the Czech Republic). On average, OECD countries spend about a quarter of their active labor market program budgets on these programs. It should be noted here that this expenditure is often not used solely to finance job search assistance programs, but also to finance the administration of the unemployment benefit system, as well as the administration and costs of the other active labor market programs.

Job search assistance is often justified on the grounds that are especially benefit the disadvantaged - while the private sector provides core labor exchange services successfully to some segments of the labor force, for example, the employed, skilled and the white collar workers, public employment services are beneficial for the poor, semi-skilled and long-term unemployed workers (Fretwell and Goldberg, 1994).

¹¹ Recent evaluations of this scheme have showed that, due to a significant increase in the wages, the self-targeting nature of the program has been somewhat compromised.

In the evaluations examined, these programs aim at assisting a varied group of unemployed and job seekers - including the long-term unemployed in the U.K., women on welfare in the U.S., individuals laid off as a result of industrial restructuring in Canada, and the youth in Holland. Economic conditions in countries that have instituted these programs also vary significantly - a steep decline in unemployment rates in the U.K. in the late 1980s as compared to a sharp rise in unemployment in Canada in 1989-1991 (Fay, 1996). Job seekers are usually provided a wide range of services. In Hungary and Poland in the mid 1990s, for example, they were provided with job referrals, job counseling, skills assessment, job search training, resume preparation and job clubs (O' Leary, 1998(a), 1998(b)). In New Zealand they were assisted through a job screening interview, workshops, follow-up interviews and personal case management (NZ DOL, 1995). In Australia they were helped in resume writing and interviewing techniques (Fay, 1996).

Of the 18 evaluations we examined, all except one are scientific. Six of the scientific evaluations are experimental and 11 are quasi-experimental (Appendix 5.2). The evaluations suggest that job-search assistance is in some sense one of the most successful active labor market programs: in the general case, it costs little to provide and the program is not any less effective than alternative ALMPs. It is, therefore, the low cost that drives this conclusion. However, as argued below, much depends on whether the economy is growing or in a recession (as far as effectiveness is concerned) and on the availability of public funds (which can be scarce during a recession).

More specifically, while some evaluations yield "negative" results, most studies indicate positive results, and in a few cases large ones.¹² Less successful programs are generally associated with periods of recessions and rising unemployment rates. For example, job search assistance to those laid off *en masse* in Canada in the late 1980s did not raise their probability of employment or earnings (as compared to a control group) at a time when unemployment was rising. In fact, participants who had been laid off *en masse* spent a significantly greater amount of time searching for jobs than their counterparts who did not use this service (Fay, 1996). On the other hand, the effectiveness of job search assistance seems to increase when economic conditions improve; that is, when new jobs are generated. During the decline in unemployment rates in the Netherlands in the mid-to-late 1980s, program participants were more likely to be employed than those in the control group (OECD, 1993). Similarly, as the U.S. economy was growing in the mid-to-late 1980s, program participants (usually female AFDC recipients) were four percent more likely to get jobs and earn 20 percent more than the control group (Gueron, 1990). Evaluations in Hungary and Poland also show that while the overall effectiveness of this intervention is not significant in terms of increasing probability of employment, if the economy is improving, some subgroups of program participants - particularly women - fare significantly better than non-participants (O' Leary, 1998(a), 1998(b)). However, several of the evaluations show that job search assistance had no beneficial impact on youth irrespective of general economic conditions (Fey, 1996).

Job search assistance is also supposed to be one of the most-cost effective of the active interventions. Leigh (1995) summarizes his findings of selected programs: job search assistance measures cost less than training and retraining (two to four times), but appear equally effective. This of course does not mean that job-search assistance is a substitute for training - it is possible, for example, that those who use job search assistance are more "employment-ready" than individuals who get training. Hence, substitution of one program for the other will only be the case if job search assistance and training programs cater to roughly the same clientele.

¹² Deadweight loss is rarely measured in these evaluations. It may happen that those who benefit from these services are those who would have got jobs anyway because they were the most motivated in looking for jobs.

Other evidence also seems to point in the direction of greater cost-effectiveness of job search assistance programs. One of the most extensive evaluations of these programs was an experimental demonstration carried out in the U.S. at five test-sites in Charleston, New Jersey, Washington, Nevada and Wisconsin during the 1970s and the 1980s. These evaluations showed a significant decline in the number of weeks of unemployment insurance claimed by program participants. They also showed that post-program participants' earnings were likely to be higher than those of individuals in the control group. A cost-benefit analysis of these experiments showed that these employment effects (post-program reduction of duration of search among participants from 0.5 to 4 weeks) were associated with a reduction in unemployment benefits paid out to participants (Meyer, 1995).¹³

Overall, the evidence suggests that job search assistance can have some positive effects and is usually cost-effective (relative to other ALMPs). There does seem to be a positive correlation between the likelihood of success of a program and local labor market conditions. Programs that have not yielded positive results are generally associated with rising unemployment rates, while economic conditions have been generally favorable in the case where programs have succeeded. However, job search assistance - like other interventions - does not seem to improve either the employment prospects or wages of youth significantly as compared to a control group of their peers.

C. TRAINING PROGRAMS

Training (and re-training) generally accounts for the largest share of expenditures on ALMPs ranging between 40% to 60% and reaching 77 percent (Denmark). Spending on training can reach many different groups, and in our summary of the review below, we concentrate on (i) retraining programs geared towards those laid off *en masse*; (ii) training and re-training programs for the long-term unemployed; and (iii) training programs geared towards youth. We discuss the results of evaluations of these programs in turn.

(i) *Training Programs for the Long-Term Unemployed*

We reviewed 23 studies - six experimental, 13 quasi-experimental and four non-scientific (see Appendix 5.3). A few of these studies are longitudinal, so it is also possible to study the long term impact of the programs.

Though there is no generally agreed definition of what constitutes long-term unemployment, the term usually refers to those who have been unemployed for more than 12 months (OECD, 1993). This group tends to consist of "older" workers who used to be employed in what turned out to be a declining industry or region. But significant variation exists among them in terms of age, skills, and education, especially if unemployment is the result of regional depression. For example, New Jersey's retraining program in 1986-87 included mainly workers in their 50s (Anderson, Corson and Decker, 1991), while half of the long-term unemployed workers in Germany's who participated in retraining programs were less than 35 years old (Johanson, 1994). In similar programs in Hungary and Poland, trainees ranged mid-20s to 50 years old (O'Leary, 1998(a), 1998(b)).

Compared to scientific evaluations, nonscientific evaluations usually provide an inflated picture of the effects of training and retraining programs on the long-term unemployed.¹⁴ Scientific evaluations suggest

¹³ In a study by White and Lakey (1992) the duration of search of non-participants was on average 8 weeks longer than those of program beneficiaries.

¹⁴ In many former Soviet countries, for example, participants in public training programs are still guaranteed a job after completion. With placement rates reaching close to 100 percent in these cases, non-scientific evaluations tend to show that these programs are highly successful.

that the programs for the long-term unemployed can have a positive impact but this is not always the case, and the impact is usually small. Evaluative evidence of some retraining programs for the long-term unemployed in the U.S. shows that these programs are also more expensive than job search assistance programs (approximately by a factor of two) (Leigh, 1995).

The success of programs for the long-term unemployed tends to be heavily dependent on the business cycle: programs have performed better when they were instituted at times when the economy was expanding. A good example of this is Hungary, where training outcomes seem to have improved over time as the economy started to grow (O' Leary (1995, 1998(a)). In general, programs seem to be more effective for women (Friedlander et. al., 1997; Goss, Gilroy et. al., 1989). Longitudinal studies indicate mixed results - while in some cases the positive effects dissipated within a year or two after program completion, in a couple of cases the impacts persisted. For example, in Sweden, labor market training provided to the unemployed raised their earnings in the short-term but the long-term impact (over two years) was somewhat negative (Meager and Evans, 1998). Conversely, long-term unemployed provided training as part of the New Jersey Reemployment Demonstration project in the mid 1980's were earning more than the control group more than two and a half years after program completion (Anderson, Corson and Decker, 1991). In most cases, retraining programs are generally no more effective than job search assistance in increasing either re-employment probabilities or post-intervention earnings. For example, evaluations of the Texas Worker Adjustment Demonstration (WAD) program indicate that participants were likely to be employed more quickly than non-participants. However, by the end of the first year after program completion, employment opportunities for male participants were no better than those for non-participants, or for those who only got job search assistance (Bloom, 1990).

Costs, when known, vary between \$900 and \$12,000 per person. In *most* cases the costs are found to be so high compared to the benefits of the program that, even if the effects persisted for 10 years, the social return of the program could remain negative (especially for males) (Friedlander et. al., 1997).¹⁵ The U.S. JTPA program appears to be a rare exception - both male and female participants were doing significantly better than the control group and the training program was relatively inexpensive (Box 5.2).

¹⁵ The social return is based on a comparison of measurable economic costs and benefits and does not take into account possible externalities associated with the reintegration of the long-term unemployed into the labor force or of reducing high levels of unemployment in specific regions.

Box 5.2: The U.S. Job Training Partnership Act Evaluation

The Job Training Partnership Act (JTPA) provided for programs which are national in scope and is targeted at disadvantaged adults (aged 22 and older) and youth (16 to 21 years old). Various activities are undertaken by local service delivery areas (SDAs). SDAs provide specific employment and training services either directly through their own staffs or by contracting with other local service providers (e.g. community colleges or community based organizations). The specific training services offered generally fall into one of two categories - classroom training and on-the-job training (other services provided were: job search assistance, basic education and work experience). Classroom training includes both occupational skills training in fields like clerical, food service, electronics, or home health care, as well as training in basic academic skills. On-the-job training consists of subsidized training that usually takes place as part of a paying job, generally in the private sector. The program pays half of the wages for up to six months, but the job is supposed to be permanent. At the time the evaluation was done, the net cost of training per participant averaged approximately \$1200 for adults and over \$2000 for youth - making it one of the least expensive training programs in the U.S..

The evaluation of the training program was experimental in nature, and the research team undertook extensive sensitivity analysis to examine possible underreporting bias and survey non-response bias in the follow up surveys - these two being threats to the internal validity of experimental research. The experiment was carried out at 16 sites.

Evaluation results show that the JTPA's effects on earnings are significant for men and women (an increase of over 10 percent), with short-term classroom training having the least beneficial effects while on-the-job training was more beneficial. While evaluations of some other programs have also shown a positive effect of training on women, the findings for men represented a break from the results of other evaluations which have generally reported insignificant effects for men. Extended follow up data show that effects for adults continued over five years of follow up, although the later year effects are smaller and statistically insignificant. Like most other evaluations, the JTPA did not have a significant effect on increasing the employment or earnings prospects of youth.

Cost-benefit analysis suggests that the societal rate of return for JTPA is over 50 percent for adults (the rate of return is negative for youth), making it one of the few cost-effective adult training programs instituted in the U.S. However, in spite of the positive results, the evaluators caution that the aggregate effects of JTPA are likely to be modest, both on the target population and on the labor force as a whole. This is because the effects diminish over time, and there is bound to be some substitution effect (whose magnitude was not captured in the evaluation). Further, it is unclear whether the high rates of return would still be observed if the scale of participation was substantially increased. Unfortunately, little evidence exists on this issue.

One of the major implications emerging from the analysis is that training should not be seen as a panacea for reducing unemployment - it usually does not work, especially if the economy is not growing. The evidence shows that programs aimed at the long-term unemployed, usually established in periods when the economy is doing better, are somewhat more effective (at least in the short-run). Evaluations also show that small-scale tightly targeted on-the-job training programs, usually aimed at women and other disadvantaged groups among the long-term unemployed, often offer the best returns. While rigorous cost-benefit analyses of these programs are seldom carried out, where done, the evidence shows that the real rate of return of these programs is rarely positive and these programs are not cost-effective - they are no more successful than job

search assistance programs in terms of post-program placement and wages while they cost anywhere between 2-4 times as much. It needs to be stressed here again that this does not mean that job-search assistance programs are substitutes for training programs - these programs may be serving different groups of the unemployed and hence cannot be directly compared on the basis of cost-benefit analysis.

(ii) *Retraining Programs for Those Laid off En-Masse*¹⁶

We summarize the results of eleven studies, five quasi-experimental, five non-scientific, and one which used a variety of techniques (Appendix 5.4). The studies relate to retraining programs for workers displaced through mass layoffs as a result of significant enterprise restructuring or plant closures. Unfortunately, none of the evaluations was longitudinal, so they do not really provide insights into the dynamics of the labor market and longer-term benefits of retraining programs.

The retraining programs under consideration were offered mainly to workers in the automobile, shipbuilding, mining, steel and pulp industries. The number of workers who lost their jobs vary from about 500 to 3,000 per plant. Generally, these losses occurred during periods of high or rising unemployment economy-wide, or contraction of the manufacturing. Most of the training provided was classroom-based, and was generally accompanied by job search assistance.

Evaluations of three retraining programs for US auto workers show the contrast between scientific and nonscientific techniques: in San Jose, a nonscientific evaluation indicated high placement rates, while in Buffalo and Michigan - during the same period - scientific evaluations showed that these programs were ineffective. More generally, nonscientific evaluations indicate that these programs are very effective with high placement rates of participant workers in jobs following completion of the program (Alfthan and Janzon, 1994).

The more reliable quasi-experimental evaluations challenge this optimism: though they find that some retraining programs *may* result in some modest increase in re-employment probabilities, this result is often statistically insignificant (Corson, Long and Maynard, 1985). The results for post-program earnings are more discouraging: wage effects on participants (compared to control group workers) are rarely positive and in most cases negative (OECD, 1991). In all, we conclude that, from an economic perspective and based on the evidence of employment/wage impacts, retraining must have high deadweight cost. These results compare unfavorably to the effects of programs for the long-term unemployed where there is some evidence of positive impacts.

Evaluations seldom report the full costs of retraining but, when known, direct costs - usually measured as total recurrent program costs - vary between \$3,500 and \$25,000 per participant (Dar and Gill, 1998). This makes retraining programs between two and four times more expensive than, say, job search assistance (JSA). For example, in Buffalo the cost of JSA per participant was \$850, while that of retraining was \$3,300. Combined with the finding that retraining and JSA have roughly similar impact, this implies that JSA can be more cost-effective in assisting displaced workers than retraining. Some researchers have gone as far as claiming that there is no evidence of any incremental effect above that of job search assistance for retraining programs (Corson, Long and Maynard, 1985). As before, it needs to be stressed here that these programs may be serving different groups of the unemployed and hence may not be direct substitutes for one another.

OECD experience of retraining programs for workers displaced en masse may be useful in designing assistance programs in transition countries and other economies that expect large scale labor redundancies.

¹⁶ This section is taken from Dar and Gill (1998).

The evidence on the lack of effectiveness and cost-effectiveness of these programs suggest that they should not be the principal source of support to assist individuals to move to gainful employment. If these programs are to be used, they should be small scale and targeted towards those subgroups who can benefit the most from them.

(iii) Training Programs for Youth

The most rigorous evaluations of training programs geared towards youth have been conducted in North America and Scandinavia. We have examined seven evaluations: five experimental and two quasi-experimental (see Appendix 5.5).

These training programs usually aim at assisting school dropouts (often paying special attention to youngsters who drop out prior to completing upper secondary education) or youth who come from severely disadvantaged families. The assisted individuals are typically below the age of 20. The evaluations examined different aspects of training assistance for the youth, such as classroom training, on-the-job training and, in one case, job search assistance.

Evaluations results for youth training are the most discouraging of all (that is, compared to training programs for the long-term unemployed and those laid-off en masse), even though the programs examined here were often introduced in periods of relatively stable or declining youth unemployment. They show that training rarely has an effect on earnings or employment probabilities of program beneficiaries compared to their counterparts in some control groups. In almost all cases, participants did no better than the control group either in enhancing their post-training employment probability or their earnings (Fay, 1996; DOL, 1995). A more mixed, and more promising, picture arises from the evaluation of the Canadian Job Entry Program. Though a quasi-experimental evaluation of the program showed that youth who only undertook classroom training did no better than their comparators, those who undertook enterprise training did significantly better than the control group (OECD, 1993). This positive effect was attributed to youngsters staying-on with the training firms. Still, enterprise training seem to be more effective for young men, with little effects on young women.

Cost-benefit analysis of several of the youth training programs suggests that the social rates of return to these programs are typically negative both in the short- as well as the long-run (Friedlander et. al., 1997). The evidence suggests that it is very difficult to correct what appears to be a failure of the education system during the previous 5-10 years of the youth's life with some kind of training which is usually short in duration and takes place relatively late in life.

D. MICRO-ENTERPRISE DEVELOPMENT (SELF-EMPLOYMENT) SCHEMES

We have summarized the results of thirteen evaluations of programs aimed at helping unemployed individuals start up their own businesses: two of the evaluations are experimental, five are quasi-experimental and the rest are non-experimental (see Appendix 5.6). These programs come under a variety of names such as micro-enterprise schemes or self-employment schemes but below we generically refer to them as "micro-enterprise development assistance" (MEDA).

MEDA attracts limited funds compared to other active labor market policies: no OECD country spends more than 10 percent of expenditures on ALMPs on such programs. In general, these programs are not targeted at any particular group. For example, such assistance has been given to the newly unemployed (such as in Massachusetts, U.S., in the early 1990s), to those who have been unemployed for at least five months (such as in Denmark in the 1980's) and those who were laid-off in Hungary and Poland in the

1990's. Similarly, they are available under varied economic conditions. In Ireland, for example, these programs were instituted in the mid 1980s at a time when unemployment rates were high (around 15 percent) and rising. In Australia, on the other hand, they became more common in the late 1980s when unemployment rates fell from eight to six percent.

Program conditions also vary, for example; participants may receive assistance to set up their businesses as a lump-sum payment or periodic allowances. Often there is "screening", that is, potential beneficiaries undergo a rigorous assessment which evaluates their likelihood of success (for example, in Germany) but in other countries, such as the US, screening is more cursory (Wilson and Adams, 1994). In most cases participants may also receive post-startup business advisory services and business counseling.

Though theoretically the idea that someone who cannot get a job as an employee will be inclined to become self-employed makes sense, very few among the unemployed are tempted to take up opportunities for self-employment. Generally, the take-up rate among the unemployed hovers at no more than five percent in OECD countries (Wilson and Adams, 1994). One explanation for this may be that individuals are generally risk averse, and given a choice between getting unemployment benefits or money to start up a - possibly unsuccessful - venture, prefer to get the unemployment benefits.

As usual, non-scientific evaluations provide more encouraging results than scientific evaluations. Still, there is general agreement that MEDA programs have high deadweight loss. Estimates of deadweight losses vary from about 30 percent in the self-employment experiments in Massachusetts and Washington State in the late 1980's and early 1990's (Fay, 1996) to over 50 percent in Canada's self-employment assistance program in 1992-93 (Graves and Gauthier, 1995) and Denmark's enterprise startup grant in the late 1980's (Balakrishnan, 1998). In Ireland, the estimated 50 percent deadweight loss seems to have been accompanied by a 30 percent displacement effect – this led to a small net employment impact of 20 percent (OECD, 1993).

Evaluations show that businesses are short-lived – typically one-third to half of MEDA created businesses close down in the first year of their operation.¹⁷ For example, in Denmark, the failure rate of business is 60 percent in the first year and in Australia it is more than 70 percent in the first two years. Results are more encouraging in Canada where a crucial feature of this scheme is that individuals contribute up to 25 percent of the start up costs of the business: there, the first year's failure rate is only 20 percent. In France

¹⁷ We do not have data on failure rate of small businesses who did not take part in MEDA programs. However, anecdotal evidence seems to suggest that usually these rates are similar to those of that of MEDA businesses. Thus, while MEDA created businesses do no worse in terms of survival rates than businesses which did not benefit from the program, they do not appear to do any better.

the failure rate is 50 percent but over a period of five years (Table 5.3). Evidence seems to show that businesses assisted through mentoring and business counseling are more likely to succeed.

Table 5.3
Failure Rates of MEDA businesses

Program	Failure Rate
Australia in the late 1980's (New Enterprise Initiative)	58% of businesses failed within first year and 71% within two years.
Canada in the early 1990's (Self-Employment Assistance Program)	20% of businesses failed within first year
Denmark in the mid to late 1980's (Enterprise Allowance Schemes)	60% of businesses failed within first 12 months
France in the early 1980's (Micro-Enterprise Development)	50% of businesses failed within 4.5 years.
Hungary in the mid 1990's (MEDA)	20% of businesses failed within first 15 months.
Netherlands in the early 1990's	50% of businesses failed within four years.
Poland in the mid 1990's (MEDA)	15% of businesses failed within first two years.
U.S. in Washington in 1990 (Self-Employment Experiment)	37% of businesses failed within the first 15 months

Source: Summarized from Appendix 5.6

While there are high deadweight losses and high rates of business failures, MEDA participants seem to fare reasonably well in terms of employment outcomes as compared to a control group. Scientific evaluations show that participants are more likely to be employed than individuals in the control group in almost all the programs for which such evaluations exist. However, this does not necessarily translate into higher earnings. For example, in the Washington self-employment experiment, while participants are more likely to be employed than the control group, they earn significantly less (Fay, 1996). In Hungary, participants were as likely to be employed as individuals in the control group, but earned \$30/month less (O'Leary, 1998(a)). In the case of Poland, on the other hand, participants were 25 percent more likely to be employed than the control group and earned significantly more (O'Leary, 1998(b)). In the Hungarian and Polish programs, women and older workers generally had better outcomes than individuals in other sub-groups.

Even in cases of businesses that survive, there is only a small multiplier effect. Most surviving businesses create, on average, half an additional job. In Hungary, each surviving enterprise created 0.3 additional jobs, in France, 0.5, and in Australia, during a period of declining unemployment, 0.7 (OECD, 1993; Wilson and Adams, 1994).

While there is some scattered data on costs, the cost-benefit issue has rarely been addressed. Where available, data indicate that the cost of starting up a small business vary from \$4500 (in France) to \$13,000-\$14,000 (in Canada and Denmark). The Canadian evaluation states that the long-term cost-effectiveness of these programs is uncertain, while preliminary analysis from Poland and Hungary indicate a loss to the unemployment insurance system with both the average duration and level of unemployment benefits paid to participants being greater than those paid to individuals in the control group. However, it would be premature to draw any conclusions on the cost-effectiveness of these programs on the basis of so little evidence.

In all, evaluations suggest that these programs work for only a small subset of the unemployed population (generally below five percent) and are associated with high deadweight and displacement effects rendering the “net” effects of these programs to be quite low. The failure rate of these businesses are quite high in most cases (though businesses assisted through mentoring and business counseling are more likely to succeed). As in the case of training, assistance targeted at particular groups - in this case women and older individuals - seems to have a greater likelihood of success.

E. WAGES/EMPLOYMENT SUBSIDIES

We examine eighteen interventions - one of which is experimental, 11 quasi-experimental and six non-scientific (see Appendix 5.7). Along with micro-enterprise development, wage/employment subsidies (WES) are among the least funded active labor market programs in OECD countries. In most OECD countries, they attract less than 10 percent of expenditure on active labor market programs - in fact, in both the U.S. and the U.K., funding for this program is negligible. Eastern European countries generally put greater emphasis on this intervention. In Hungary, expenditures on these subsidies account for 14 percent of spending on ALMPs, while Poland expends 25 percent of its ALMP budget on these programs.

Wage subsidy programs have been used for the long-term unemployed, those coming from severely disadvantaged areas (e.g. areas with high unemployment), and youth. They aim to reduce social exclusion, that is, to help these individuals regain contact with the world of work. They are instituted under varying economic conditions - in Australia during periods of falling unemployment in the mid 1980s (Mangan, 1988) as compared to Scotland where unemployment rates rose from six to 10 percent while the program was underway between 1989-1992 (NERA, 1995).¹⁸

WES typically is a payment to firms as a proportion of the wage in order to induce them to hire program participants, but the level and duration of these subsidies varies significantly between programs and countries. Thus, for example, under the U.S. Targeted Job Tax credit, firms are paid 50 percent of the individual’s wages for a period of up to two years, while the U.K. job subsidy program provides up to 100 percent of the wages (as well as paying for all training costs) for a period of six months.

Both non-scientific and scientific evaluations tend to agree that WES have high deadweight loss and substitution effects. In the extreme case of Ireland’s wage subsidy program, the deadweight and substitution losses combined totaled over 95 percent – alternatively, the net incrementality of the program was a meager four percent (OECD, 1993). Belgium’s program did not lag far behind, with the net employment impact of only 10 percent (Fay, 1996). Evaluations of similar programs in Australia, Holland and the U.K. also indicate high deadweight and/or substitution effects (Table 5.4)

Equally disappointing are evaluations which compared wages and employment outcomes of participants with those of a control group. For example, the U.S. Targeted Job Tax Credit program, which is a longitudinal study, saw earnings of participants significantly higher than those of individuals in the control group in the first year. This effect declined in the second year and disappeared after that - not surprisingly coinciding with the end of the subsidy when the employer could fire the worker and hire another subsidized worker -

¹⁸ In Japan, Employment Adjustment Grants are a form of wage subsidies which aim to lower unemployment by extending grants to employers who have offered temporary leave, provided education and training, or temporarily transferred employees to other companies due to unavoidable reductions in business activity attributable to business fluctuations and changes in the industrial structure. These grants cover part of the costs for temporary leave allowances, ordinary wages and wages for transferred employees. These grants are financed from the employment security fund which is accumulated from employer premiums. However, the effectiveness of these programs has rarely been evaluated.

thus maintaining a permanent subsidy (OECD, 1993). Similarly, evaluation results for Hungary show that participants were significantly less likely to be employed and earned less (though not significantly so) than those in the control group (O' Leary, 1998(a)).

Box 5.3: Quick Reemployment Bonuses: An Alternative to WES?

An interesting variation of the wage subsidy intervention was tried in the U.S. in experiments in four states (Illinois, New Jersey, Pennsylvania and Washington) in the 1980s where reemployment bonuses were provided to unemployed workers if they could find employment within a specified time period (Meyer, 1995). For example, in Illinois, an unemployed individual would receive a bonus of \$500 (four times the average weekly unemployment insurance (UI) benefit) if they found employment within 11 weeks of filing for UI and kept the job for at least four months. New Jersey's bonus offer also had a four month reemployment requirement, but had a 12 week qualification period and a bonus amount which decreased as duration of unemployment increased. Pennsylvania and Washington each conducted separate experiments (11 in all).

Evaluations showed that unemployment spells fell in all four experiments, and there were no significant declines in reemployment earnings. However, interestingly, in one treatment group in Illinois where the bonus was provided to employers (in effect a wage subsidy), the impact on earnings was insignificant as compared to the control group.

Due to the high costs of the programs, societal benefits varied. They were positive in Illinois and Pennsylvania (slightly) but negative in New Jersey and Washington. In 1994 and 1995, new mechanisms for early identification of UI beneficiaries were implemented in order to provide a *profile* for identifying UI beneficiaries most likely to exhaust their entitlements. Simulations suggest that targeting reemployment bonuses with profiling models - targeting reemployment bonuses to claimants with high exhaustion probabilities - may appreciably increase the cost-effectiveness of the bonus.

While the experiments yielded somewhat positive results, evaluations caution against the permanent adoption of such bonuses as they are usually not cost-effective and end up generating losses for the UI system. However, some recent evidence suggests that profiling may improve the cost-effectiveness of the bonuses. A reemployment bonus also makes filing for UI much more valuable, as claimants become eligible for a large payment if they file and then find a job within a short period. These effects may be significant.

Source: Meyer (1995), O'Leary (1998(c))

One exception to these results seems to be the U.S. Job Training Partnership act program, where employers were provided subsidies to hire workers in conjunction with on-the-job training. Evaluations of this program show that single mothers who are AFDC recipients benefit significantly from these subsidies, and males also benefited to some extent (Bloom, 1994).

While very few studies carried out a direct cost-benefit analysis, the high dead-weight losses and substitution effects associated with this program strongly suggest that WES are unlikely to have positive social returns in the way measured by economists, though they may contribute to some reduction in social exclusion among older workers and single mothers.

Table 5.4

Effectiveness of Wage Subsidy Programs

Country	Deadweight and Substitution Effects (%)	Additionality (%)
Australia in mid 1980s (Jobstart Program)	Deadweight=65%	35%
Belgium in the early 1990s (Recruitment Subsidy)	Deadweight=53% Substitution=36%	11%
England 1986-1990 (Training and Employment Grant)	Deadweight=69%	31%
England late 1980s (Workstart I)	Deadweight=45% Substitution=30%	25%
England mid 1970s (Small Firms Employment Subsidy)	Deadweight=70%	30%
England early 1980s	Deadweight=63% Substitution=10%	27%
Germany in mid 1970s (Wage Subsidy Scheme)	Deadweight=75%	25%
Ireland in the 1980's (Employment Incentive Scheme)	Deadweight= 70% Substitution=21% Displacement=4%	4%
Netherlands during early 1980s (Vermeend-Moor Act)	Deadweight=25% Substitution=50%	25%
Netherlands during the late 1980s (JOB scheme)	Substitution =80%.	20%
Scotland 1989-1992 (Employment Subsidy)	Deadweight=20%. Substitution and Displacement=55%	25%
U.S. in mid 1980s (Targeted Job Tax Credit)	Deadweight=70% Substitution=10%	20%

Note: Additionality is the net employment effect after accounting for deadweight, displacement and substitution effects.

Source: Summarized from Appendix 5.7

In summary, evidence indicates that these programs are unlikely to be effective; substantial deadweight and substitution effects are associated with them. Wage and employment outcomes of participants are also generally negative as compared to a control group. Careful targeting may be necessary to reduce substitution and deadweight effects - e.g. unemployed individuals could be targeted to work in industries/occupations where there is excess demand. However, individuals may not have requisite skills that make them attractive to employers; otherwise, they would have been hired in the absence of the subsidy, too. Further, controls are necessary in wage subsidy programs to ensure that firms do not misuse this program. Employers may refuse to hire the unemployed unless they receive a large subsidy and, in

effect, use the program as a permanent subsidy to the workforce. Monitoring of employer behavior is thus necessary.

VI. CONCLUSIONS

In this study we have examined close to 100 impact evaluations (some of which are summaries of a group of evaluations) - both non-scientific as well as scientific - of active labor market programs (training, public works, microenterprise development, job subsidies and job search assistance schemes) in an attempt to draw some lessons about the efficiency and cost-effectiveness of these schemes (Table 6.1). While the evidence covered is probably not exhaustive, this study has managed to look at most of the evidence available on different issues for these programs.

Table 6.1
Evaluations of Active Labor Market Programs

Type of Intervention	No. of Evaluations	Non-scientific	Experimental	Quasi-experimental
Public Works	13	4	0	9
Job Search Assistance	18	1	6	11
<i>Training</i>				
Long-term Unemployed	23	4	6	13
Laid off en masse	11	5	0	6
Youth	7	0	5	2
MEDA	13	2	6	5
WES	15	8	4	3

Source: Appendices 5.1-5.7

We should mention a few caveats that apply to the evaluations examined:

- First, even in the most thorough evaluations, issues relating to program design and implementation, staffing and other related institutional matters (i.e. process evaluations) have not been evaluated. These are important issues and will have an impact on the likelihood of the success of a program.
- Second, due to time and cost considerations, few evaluations are longitudinal in nature. They therefore miss a crucial aspect of the program - its long-term impact. Thus, for example, questions about the persistence of effects for programs that are successful in generating employment and raising earnings in the short-run are rarely answered.
- Third, cost-benefit evaluations usually fail to take into account savings from placements of those who obtain jobs (e.g., direct savings from reduced expenditures on unemployment benefits and social assistance schemes as well as indirect savings through societal benefits such as reduced crime, improved health outcomes etc.).

While the paucity of rigorous evidence on the costs and effectiveness of active labor market programs does not allow a definitive conclusion as to whether such interventions can be justified economically, the general conclusion is that large scale application of these programs should be avoided without knowledge of their effects. We draw the following general lessons from the experience in OECD countries (lessons for each program are summarized in Table 6.2).

Active labor market programs should take into account the general state of the economy and set the right objectives and expectations. One needs different programs if the cause of distress in the labor market is a cyclical downturn or a shock or a systemic transition: in most cases when great concern for labor is present, the cause is demand deficiency rather than seasonal, cyclical, frictional or even structural (say, lack of skills) factors (Sapsford and Tzannatos, 1993). And expectations should be modest: rarely can a program meet the two strict criteria of economic policy (efficiency and distribution) and also political considerations at the same time.

Sound impact evaluation techniques should be used to evaluate active labor market programs. Relying only on non-scientific evaluations may lead to incorrect policy conclusions. A good micro evaluation compares labor market outcomes for individuals who have gone through a particular program with those of a control group of their peers, and also utilizes data on program costs to attempt to answer the following questions: (a) what are the impact estimates of the program on the individual; (b) are the impacts large enough to yield net social gains; and (c) is this the best outcome that could have been achieved for the money spent.

Table 6.2
Overview of Active Labor Programs

Program	Appear to Help	Comments
1 Public Works Programs/Public Service Employment (13 evaluations)	Severely disadvantaged groups in providing temporary employment and a safety net.	Long-term employment prospects not helped: program participants are less likely to be employed in a normal job and earn less than do individuals in the control group. Not a cost-effective instrument if objective is to get people into gainful employment after program completion.
2 Job-search assistance/ Employment Services (18 evaluations)	Adult unemployed generally when economic conditions are improving; women may benefit more.	Relatively more cost-effective than other labor market interventions (e.g. training) - mainly due to the lower cost, youth do not benefit usually. Difficulty lies in deciding who needs help in order to minimize deadweight loss.
3. Training of long-term unemployed (23 evaluations)	Women and other disadvantaged groups generally when economy is improving.	These programs are no more effective than job-search assistance in increasing re-employment probabilities and post-intervention earnings and are 2-4 times more costly. However, job search assistance may not be a direct substitute as it may cater to a different groups of the unemployed.
4. Retraining in the case of mass layoffs (11 evaluations)	Little positive impact - mainly when economy is doing better.	These programs are no more effective than job-search assistance and significantly more expensive. Rate of return on these programs usually negative. However, job search assistance may not be a direct substitute as it may cater to a different groups of the unemployed.
5. Training for youth (7 evaluations)	No positive impact.	Employment/earnings prospects not improved as a result of going through the training. Taking costs into account - the real rate of return of these programs both in the short as well as the long run is negative.
6. Micro-enterprise Development Programs (13 evaluations)	Relatively older groups, the more educated.	Very low take-up rate among unemployed. Significant failure rate of small businesses. High deadweight and displacement effects. High costs - cost-benefit analysis rarely conducted but sometime show overall costs to UI budget higher than that of the control group.
7. Employment/ Wage subsidies (15 evaluations)	Long-term unemployed in providing an entry into the labor force. However, no long-term impact.	Extremely high deadweight and substitution effects. Impact analysis shows treatment group does not do well as compared to control. Sometimes used by firms as a permanent subsidy program.

Source: Appendix 5.1-5.7

Evaluations show that it is extremely difficult to address problems of large scale unemployment through active labor market programs - these programs may work for specific groups under specific circumstances -

hence, they have to be carefully targeted on the basis of evaluative evidence. It is clear that programs that work for one group in one country may not work for the same group in another country. It follows that these programs should not be examined in isolation, but in the context of the overall macro-framework as well as the institutional labor market framework.

Evaluations suggest that programs are generally most effective when the economy is growing and the programs are well-targeted. This is not surprising, as labor demand is bound to be a crucial determinant of the success of any ALMP. However, even under the best-case scenarios, payoffs are usually modest and cost-benefit analysis suggest that social rates of return to effective programs are also sometimes negative. Some evidence seems to suggest that programs delivered by private providers are more effective than programs delivered by public providers or through NGOs

Finally, if a country is going to institute active labor market programs, then evidence tells us that they should start off with modest programs, evaluate these programs rigorously using sound, scientific evaluation techniques, and then tightly target these programs to those for whom they are found most cost-effective.

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Appendix 5.1
Public Works Schemes

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Ongoing schemes in Sweden to provide short-term employment and safety net to the unemployed (Forslund and Krueger, 1994)	Changing over time due to large time period studied.	Individuals placed in short-term employment in the construction, health and welfare sectors.	Quasi-experimental	Displacement effect in construction sector is 69%. Displacement effect in health and welfare is insignificant.	Long-term evaluation using data from 1976 to 1990. At best, programs create no displacement. No data on costs. No evidence on value of assets created.
Providing short-term employment to the unemployed in Austria in the early 1990s (Meager and Evans, 1998)	Unemployment rate was fairly steady between 3-4%.	Individuals placed in short-term employment.	Quasi-experimental	Positive impact on subsequent employment and income levels compared with control group.	
Short-term employment provided to the disadvantaged in Denmark in the late 1980s (Meager and Evans, 1998)	Denmark spent about 0.2% of GDP on these programs. Unemployment rate around 7%	Individuals provided with short-term employment as well as subsidized jobs.	Non-scientific	Likelihood of leaving unemployment peaks after participation in temporary jobs. However such effects are not strong enough to compensate for reduced employment impact during period of scheme.	Participants finding subsequent jobs kept them longer than non-participants.
Unemployed individuals provided short-term employment in Ireland in the mid 1980s (Breen, 1991)	Unemployment rates over 15 percent. Expenditure on these programs rose from 0.09% of GDP in the mid 1980's to 0.25% by 1990.	Various temporary employment schemes provided.	Quasi-experimental	After controlling for unobserved differences, short-term and long-term impacts on employment are not significant.	If these differences were not controlled for, the short-term and long-term employment impacts are positive.

Appendix 5.1 (continued)
Public Works Schemes

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Unemployed individuals provided temporary employment in the U.K. in the early 1990s	Unemployment rates rose from 7% in 1990 to over 10% in 1993.	Employment Action programs.	Quasi-experimental	Reduced probability of getting a job after one year (by one percent), increased probability after three years (by 4%)	
Individuals provided temporary employment in Sweden (Meager and Evans, 1998)	Time period not known	Public works relief program	Quasi-experimental	Participants more likely to remain in unemployment as compared to non-participants	Some selection bias likely.
Ongoing schemes in Sweden to provide short-term employment and safety net to the young unemployed (Skedinger, 1995)	Changing over time due to large time period studied.	Youths placed in short-term employment in different sectors of the economy.	Quasi-experimental	Displacement effect is 100%. - a one percent increase through job creation schemes leads to a one percent decline in regular youth employment.	Long-term evaluation using data from 1976 to 1990. No data on costs. No evidence on value of assets created.
Provide employment for long-term unemployed adults and short-term unemployed youth in Finland in 1987 (OECD, 1993)	Unemployment rates at around 5% and rising. Finland spends about 0.4 percent of its GDP on public works schemes - more than on any other active labor programs.	Adults unemployed over a year and youth unemployed over three months placed in public work schemes.	Non-scientific	Positive short-term effect but increased re-inflow into unemployment in the longer term.	Participants became unemployed once again after the program was completed.
Aid unemployed gain short-term employment in Germany during 1987 and 1988 (OECD, 1993).	Unemployment rates were steady in Germany at around 7%.	NA	Non-scientific	Significant increases in flow out of short-term unemployment. However no significant impact on long-term unemployment.	Participants became unemployed once again after the program was completed.

Appendix 5.1 (continued)
Public Works Schemes

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Provide employment for the long-term unemployed in Holland in the late 1980's (OECD, 1993)	Unemployment rates fell from about 13 percent in the early 1980s to below 10 percent by the end of the decade. Holland spent less than 0.02 percent of GDP on these programs.	Long-term unemployed provided permanent jobs in the municipal governments.	Non-scientific	Deadweight effect=15% and substitution effect=15%	
Aid displaced and long-term unemployed workers to gain temporary employment in Hungary in 1992-93 (O'Leary, 1995)	Employment had fallen by over 20% during 1989-92. Unemployment rate rose from 0.5 in 1989 to 8% by 1992.	Individuals employed in public service employment including maintenance of public facilities, assistance to social welfare agencies.	Quasi-experimental	Matched pairs estimates show that, as compared to a control group, participants are 50% less likely to be in a normal job after participating in these programs. Earnings are not significantly different though.	Evaluation done in three counties. Using cost data along with effectiveness data shows that these programs are extremely cost-ineffective.
Assist displaced and long-term unemployed workers to gain temporary employment in Hungary in the mid 1990s (O'Leary, 1998(a))	Sharp rise in unemployment: from below one percent at the turn of the decade to 12 percent by 1994. After falling continuously for five years, real GDP started growing slowly. Of spending on active programs - 15 percent spent on public works.	Individuals employed in public service employment including maintenance of public facilities, assistance to social welfare agencies.	Quasi-experimental	After participating in the program, individuals are 29% less likely to be employed in a normal job and earn \$15/month less than those in the control group.	Evaluation done in 10 counties. Using cost data along with effectiveness data shows that these programs are extremely cost-ineffective.
Aid displaced and long-term unemployed workers to gain temporary employment in Poland in the mid 1990s (O'Leary, 1998(b))	GDP started growing slowly from 1994 but unemployment rate rose from 0% in 1989 to 16% by 1994, though it has declined since. In 1994, 35% of expenditures on active labor programs were expended on public works.	Individuals employed on projects organized by government agencies including municipal governments.	Quasi-experimental	After participating in the program, individuals are 8% less likely to be employed in a normal job. No significant difference in earnings.	Evaluations done in 8 Polish voivods. Using cost data along with effectiveness data shows that these programs are cost-ineffective.

Appendix 5.2
Job Search Assistance

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Help place job seekers through counseling assistance in Canada during mid 1980s (OECD, 1993)	Unemployment remained high but fell steadily from 12% in 1983 to 10% in 1987.	Canada's National Employment Service assists individuals (not necessarily unemployed) in finding jobs.	Non-scientific	No measurable impact of agency on employment in the labor market at large, nor on job-finding for persons whose general situation was relatively good. However, a relatively positive impact in communities that were the hardest hit.	72 districts surveyed. Job search services considered to have improved equity as the most disadvantaged benefited more.
Help place job seekers through counseling in Austria (Meager and Evans, 1998)	Time period not known	NA	Quasi-experimental	Positive impact on subsequent employment and income levels as compared to controls.	Follow-up conducted up to two years after program participation.
Job seekers provided job search assistance in Sweden (Meager and Evans, 1998)	Time period not known	Public employment services provided intensified job search assistance through counseling and interviews.	Experimental	Participants 11% more likely to be employed as compared to control group and also earning higher wages.	

<p>Help unemployment benefit claimants get information on employment or migrate to other programs in the U.K. in late 1980s (Meager and Evans, 1998)</p>	<p>Proportion of long-term unemployed in total unemployed declined from about 45% to 30%. Unemployment rates fell from 12% in 1986 to 6% in 1990. 0.1% of GDP spent on these measures.</p>	<p>U.K. Restart Program. Benefit claimants interviewed assistance given every six months to provide positive help and also act as a gateway to other government schemes. Attendance compulsory, with sanctions imposed on individuals not deemed to be actively seeking work.</p>	<p>Experimental</p>	<p>Different evaluations point to positive short run impacts (treatment group found employment 55 days quicker on average). Long-term effects are weaker with participants no more likely to get stable jobs (as compared to control).</p>	<p>Net impact not clear as many exits were not into unsubsidized jobs but into other government subsidized programs. Likelihood of randomization bias.</p>
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Appendix 5.2 (continued)
Job Search Assistance

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Unemployment insurance claimants, particularly single mothers provided job search assistance in the U.S. in the late 1980's (Balakrishnan, 1998)		Individuals provided job search assistance with the threat of compulsory unpaid work experience.	Quasi-experimental	Earnings gains lasted for up to three to four years, but participants did not enjoy greater job security than control group.	
Long term unemployed provided job counseling in U.K. in the late 1980s (OECD, 1993; Jackman and Lehmann, 1990)	Proportion of long-term unemployed in total unemployed declined from about 45% to 30%. Unemployment rates fell from 12% in 1986 to 6% in 1990. 0.1% of GDP spent on these measures.	Individuals unemployed and claiming unemployment benefits for at least six months provided job counseling.	Experimental	Likelihood of finding work improved but may come at the expense of those who are the short-term unemployed.	True effects may be understated as 25% of the control group were also provided some job counseling.
Provide job counseling and search assistance to women on welfare to get jobs in the U.S. in the mid 1980s (Gueron,1990)	Unemployment rates remained between 6-7% in the U.S.. 0.08% of GDP spent on these programs.	Clients of AFDC (Assistance for Families with Dependent Children) - mostly lone mothers - were provided job counseling and job search workshops and (in some cases) some work experience	Experimental	Significant impact on employment and earnings. Participants 4% more likely to be employed and earn over 20% more.	Program is less useful for those with recent work experience as well as those who had been on welfare for a long time.
Individuals in Australia assisted in their job search through job clubs in 1992 (Fey, 1996)	Unemployment rates in Australia were rising to over 10% over this period. Australia spent about 0.09% of GDP on these measures in 1992.	Individuals are assisted in resume writing and interviewing techniques as well as practical matters - provision of stationery, postage etc.	Quasi-experimental	Participants were 11 percent more likely to be employed. This service was more beneficial for less educated males.	Evaluation done 1 year after individuals had entered job club. Those who had gone through other labor market interventions prior to joining in the job club did not benefit.

Appendix 5.2 (continued)
Job Search Assistance

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Assisting individuals laid off as a result of industrial restructuring in Canada 1989-1991 (Fay, 1996)	After years of decline, a sharp rise in unemployment during this period from 8% to 11%. By 1990-91, Canada was spending about 0.2% of GDP of employment services and their administration.	The Industrial Adjustment Service. Job counseling provided to those laid off en masse. Other services e.g. retraining were also provided.	Quasi-experimental	Those who availed of the service spent more time searching for jobs (12 weeks) and lost income (\$7200).	Program hindered clients in their job search with no positive benefits.
Assisting youth in increasing their employability in Canada 1989-1992 (Fey, 1996).	After years of decline, a sharp rise in unemployment during this period from 8% to 11%. Youth unemployment rose from 12% to 16% during this period.	Job search assistance among a variety of services provided to help disadvantaged students in their school to work transition.	Quasi-experimental	No impact on raising probability of employment or earnings or participants as compared to control group.	Program did have a positive impact in raising education level of participants (0.3 years).
Assisting long-term Dutch unemployed through job counseling services in the mid to late 1980s (OECD, 1993)	Unemployment rates falling steadily from 8% to 5% during this period.	Persons who had been interviewed for three years or more were given job reorientation interviews/counseling.	Quasi-experimental	Small improvement in probability of employment (2-3%).	No information available on earnings gain.
Scheme to help youth find employment in Holland in the early 1990s (Fey, 1996)	Unemployment had fallen from 9% in the mid 1980s to 6% by 1991 but rose again to 9% by 1994. Youth unemployment remained fairly steady at around 11% during this period.	Provision of counseling and job search assistance for school leavers upto 20 years old.	Quasi-experimental	No impact on the probability of finding a job or increasing earnings for the treatment group as compared to the control group.	Program did not have any impact on likelihood of participants entering education or training either.

Appendix 5.2 (continued)
Job Search Assistance

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Scheme to help youth find employment in Holland in the early 1990s (Fey, 1996)	Unemployment had fallen from 9% in the mid 1980s to 6% by 1991 but rose again to 9% by 1994. Youth unemployment remained fairly steady at around 11% during this period.	Provision of counseling and job search assistance for school leavers upto 20 years old followed by subsidized temporary work.	Quasi-experimental	Counseling offered to youth had little impact on job chances. Temporary job placement (subsidized by government) appeared to lead to regular employment gains of 20%.	No information on earnings gain for participants.
Assisting the very long term unemployed gain employment in New Zealand in 1994 (NZ DOL, 1995)	Over 30% of the unemployed (10% of labor force) are long-term unemployed. Unemployment rates were fairly steady. Expenditures on these programs were about 0.12% of GDP.	For individuals employed for at least two years. Consisted of four elements: a job screening interview, a one week workshop, a follow up interview and case management.	Quasi-experimental	A moderate increase in full-time work (5%).	Evaluation done five months after individuals joined program. No information on wage gain of participants relative to control.
Assisting AFDC (Assistance to Families with Dependent Children) participants gain employable skills in the U.S. in the 1980s (Heckman, 1994)	Unemployment rates remained between 6-7% in the U.S.. 0.08% of GDP spent on these programs.	Participants - mainly women with young children - provided training in various skills. They also attend job search clubs for two weeks and then search for jobs.	Experimental	Participants earn 4% more than the control group.	Cost of training and job-search assistance combined is \$16,250 per recipient (most of the cost is for training), making the program highly cost-ineffective.
Get people off unemployment benefits and into employment in Charleston, New Jersey, Washington, Nevada and Wisconsin in the 1970s and the 1980s (Meyer, 1995)	Unemployment rates remained between 6-7% in the U.S.. 0.08% of GDP spent on these programs.	Varying length job search seminars. The seminars and personal visits with job search counselors exceed that of the control group.	Experimental	Significant decline in number of weeks of unemployment bonus claimed (between one and four weeks). Slight increase in re-employment earnings.	Experiments lasted from 6-12 months after which evaluation was conducted. Cost-benefit analysis tend to show that the UI system benefited from these interventions.

Appendix 5.2 (continued)
Job Search Assistance

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Job search assistance provided to the unemployed in Hungary in the mid 1990s (O’Leary, 1998(a))	Sharp rise in unemployment: from below one percent at the turn of the decade to 12 percent by 1994. After falling continuously for five years, real GDP started growing slowly. Hungary spent 0.15% of GDP on these programs.	Unemployed provided a full range of placement services including job referrals, counseling, skills assessment, job search training, resume preparation and job clubs.	Quasi-experimental	Participants seven percent more likely to be employed. However, no impact on earnings. Women benefit more than men.	Evaluation done in 10 counties. No significant difference in duration or amount of unemployment benefits received.
Job search assistance provided to the unemployed in Poland in the mid 1990s (O’Leary, 1998(a))	GDP started growing slowly from 1994 but unemployment rate rose from 0% in 1989 to 16% by 1994, though it has declined since. Poland spent 0.01% of GDP on these programs.	Unemployed provided a full range of placement services including job referrals, counseling, skills assessment, job search training, resume preparation and job clubs.	Quasi-experimental	Participants are 15% more likely to be employed than control group. They earn about \$5 month more (significant). Women benefit more than men.	Evaluation done in 8 counties. Treatment group was unemployed for almost 0.5 months more and drew \$24 more in unemployment compensation than control group

Appendix 5.3
Training for the Long-term Unemployed

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Improving skills and thus provide better access to jobs for the long-term unemployed in Tilburg, Netherlands since the early 1980's (OECD, 1993a).	Unemployment rates fell in Holland since the mid 1980's and were around 7 percent in 1992.	Training provided hands on experience through a simulated workshop. Emphasis was placed on technical skill development as well as well as instilling good work habits. Four main skill areas were: metal training, wood training, installation techniques and clothing. Courses ran from 4-10 months.	Non-scientific	In 1991, 82 individuals were enrolled in the course. 52 completed and 41 went onto a job or further education. Metal works program is the most successful in placing students.	Training was quite expensive as annual funding of the program was about \$7,500,000 (\$10,000 per trainee).
High regional unemployment levels in Germany in the late 1970s (OECD, 1991).	In 23 of the 142 regions in Germany unemployment levels were above 6 percent. Some firms in this region were also facing serious problems in adjusting to economic changes.	Among other interventions, training and retraining of unemployed in firms were provided. The firms who employed these trainees received a wage subsidy of 90 percent of wages for 24 months.	Non-scientific	Training reduced unemployment somewhat. However it is estimated that by 1981, over 40 percent of the hard-to place individuals had already left their jobs.	In light of the extremely high cost of training (around \$500 million for training and other interventions), results are very disappointing. No data on wages.
Provision of skills to the unemployed in Australia in the late 1980s and early 1990s through the Jobtrain program (Meager and Evans, 1998)	Australia's unemployment rate was declining from 8% in 1986 to 6% in 1988 but then rose sharply again to around 10% by 1991.	Individuals provided with classroom and on-the-job training	Quasi-Experimental	Individuals 12 percent more likely to be employed than control group. However, impact dissipated rapidly - after five months unemployed participants were as likely to find job as individuals in control group.	There is a possible selection bias in this study. Training is less effective than other interventions - e.g. job clubs. No evidence on program costs.

Appendix 5.3 (continued)
Training for the Long-term Unemployed

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Training provided to the unemployed in Ireland in the mid 1980s (Breen 1991)	Ireland had the highest unemployment rate among the OECD countries during this period (averaging about 15%)	Various short-term training measures provided to the unemployed.	Quasi-experimental	Participants are more likely to be employed in short-term (16%). After one year, participants only 7% more likely to be employed.	If unobservable characteristic differences are controlled for, participants no more likely to be employed.
Training provided to the unemployed to enhance their skills in Sweden (Meager and Evans, 1998)	Time period not known.	Labor market training provided to the unemployed.	Quasi-experimental	Short-term positive impact on earnings - 3% higher than control group after six months; however, long-term impact is somewhat negative (after two years).	Gains dissipate over time.
Unemployed individuals provided with training to enhance skills in the U.K. (Meager and Evans, 1998)	Time period not known.	Employment Training on-the-job	Quasi-experimental	Significantly increased probability of getting a job by 3% after a year and 22% after 3 years.	
Provision of skills to long term unemployed workers in Houston, Texas (1983-85). Individuals eligible were unemployment benefit recipients who had a low probability of returning to their previous occupation or industry (Bloom, 1990).	A decline in petrochemical industry led to layoff of workers. In the U.S., unemployment rates declined from 9.5 percent in 1983 to 7.4 percent in 1985 (and maintained this trend till the late 1980s). Employment in this industry increased slightly between 1983 and 1985	Texas WAD project. Displaced workers were provided with JSA or a mixture of JSA with classroom training.	Experimental	By end of first year after participation, no additional earning gain accrued from classroom training as compared to the JSA only sample.	Despite high costs of classroom training (twice as much as JSA) no additional gains accrued from this type of training.

Appendix 5.3 (continued)
Training for the Long-term Unemployed

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Provision of skills to long term unemployed workers in El Paso, Texas (1983-85). (Criteria same as above). Workers laid off from light manufacturing plants (Bloom, 1990).	In the U.S., unemployment rates declined from 9.5 percent in 1983 to 7.4 percent in 1985 (and maintained this trend till the late 1980s). Employment in manufacturing fell by close to 2 percent between 1982 and 1983 but rose by about 5 percent till 1985.	Texas WAD project. Displaced workers were provided with JSA or a mixture of JSA with classroom training.	Experimental	By end of first year after participation, while this program had no effect on male earnings it had a positive effect on increasing earnings for women.	Increase in earnings for women slightly exceeded program costs. However no beneficial effects for males.
Help the long term unemployed in New Jersey find employment (1986-87). In general, the unemployed were laid off from manufacturing, trade and services (Corson et. al., 1989; Anderson, Corson and Decker, 1991).	Unemployment rates in the U.S. fell from 7.1 percent in 1985 to 6.1 percent by 1987. While employment in manufacturing remained fairly steady between 1985 and 1988, trade employment increased by 7 percent and that in services by about 5 percent over this time period.	New Jersey UI Re-employment Demonstration project. Displaced workers were provided with a mixture of JSA, JSA followed by on-the-job training (OJT), JSA followed by classroom training (CT) or JSA followed by re-employment bonus.	Experimental	Focusing only on those who undertook training, over 10 quarters after the program, both CT and OJT significantly increased earnings relative to JSA recipients only. These individuals were also employed for greater amounts of time/quarter as compared to the JSA-only group.	The following caveats apply - these results may not apply for a random group of claimants; only 15 percent of those offered training accepted it; training benefited those who already possessed marketable skills. Cost-benefit analysis show that costs exceed expected benefits.
Increase the employability and earnings of the long term unemployed in Canada. (Goss, Gilroy et. al., 1989).	As compared to the U.S., unemployment rates have been fairly high in Canada. However they declined from 11.2 percent in the mid 1980s to 7.5 percent in 1989. Spurred by a growth of commerce and services, employment grew by about 3 percent annually over the time period.	The job development program has been in operation since 1985. Formal and on-the-job training are provided to the unemployed. Wages and direct cost of classroom training are subsidized. The wage subsidy helps employers cover the cost of on the job training.	Quasi-experimental	Employability of women goes up while that of males declines. Weekly earnings for females are insignificant relative to control group while they are lower for males.	In view of high program cost (around \$9300/participant) training is not cost effective, especially for men.

Appendix 5.3 (continued)
Training for the Long-term Unemployed

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
<p>Assist individuals either at the risk of becoming unemployed or those who were unemployed in Germany in the early 1980s (Johanson, 1994).</p>	<p>Unemployment rates remained fairly steady at just over 10 percent in the early 1980s.</p>	<p>Training individuals to be certifiable in one of the 375 apprenticeable trades. The program took up to two years. Contents and specification of retraining corresponded to those of initial vocational training.</p>	<p>Non-scientific</p>	<p>Results measured in terms of retention rates (those who complete the course); pass rate (those who pass exam); and employment rate (those who find jobs in occupations for which they are retrained). These rates were 70%, 85% and 90% respectively. Thus the overall success rate was 54 percent. Employment rates varied by age - for those over 45 unemployed over a year it was below 50 percent while for those 25-35 it was 86 percent.</p>	<p>No data on cost available. Dropout from employment was fairly high - two years after completing training only 60 percent of men and 66 percent of women were still employed.</p>
<p>Individuals at the risk of being unemployed in 1987-1988 in Germany (Johanson, 1994b)</p>	<p>Unemployment rates were steady in Germany between 1986 and 1988. They fell somewhat by 1990. Employment grew at slightly over 1 percent during this period.</p>	<p>This is an evaluation of four programs, two of which are training (one offering further training for employed and unemployed individuals while the other offered retraining for the unemployed).</p>	<p>Quasi-experimental</p>	<p>No type of training has any significant impact on the flows out of short-term or long-term unemployment nor on the flows into unemployment.</p>	<p>No information on wages or costs of training is available.</p>

Appendix 5.3 (continued)
Training for the Long-term Unemployed

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Aid long-term unemployed workers in the U.S. to find jobs (1988). Most workers were been laid off due to a plant closing (Leigh, 1992).	Unemployment rates in the U.S. fell from 7.1 percent in 1985 to 6.1 percent by 1987. While employment in manufacturing remained fairly steady between 1985 and 1988, trade employment increased by 7 percent and that in services by about 5 percent over this time period.	The Trade Adjustment Assistance Program was intended to develop skills in occupations different from occupations in pre-displacement jobs. Most of these skills were supplied by a vocational college or local community college in courses that were over a year long.	Quasi-experimental	Individuals who received training began earning significantly more (as compared to those who received extended income-maintenance benefits) by the 6th quarter and this difference continued to increase till the 12th (last) quarter reaching \$500 per quarter.	Analysis was only done for the manufacturing industry. While investment in training may have been effective in increasing earnings, the training was costly (each trainee was given a \$12000 training voucher).
Assist long term unemployed and welfare recipients gain employment in the U.S. between 1975-78 (Friedlander, 1997)	Unemployment rates fell sharply in the U.S. between 1975 and 1978.	Long-term AFDC recipients and ex-offenders were provided training as well as government-subsidized work experience in enterprises in this demonstration project.	Experimental	On average, participants earned \$420 more/annum than control group a year after participating in the program.	Cost of program over \$13,400 per participant. Hence, real rate of return even if mean effect lasted 10 years was negative.
Between the early 1960s and the mid 1970s, disadvantaged adults provided with training to enhance employability in the U.S. (Bloom, 1984)	Time period too long.	Participants provided with classroom training and on-the-job training.	Quasi-experimental	On average, male participants earned \$150 more per annum as compared to control group.	Evaluation done two years after participation. Cost of training per participant was over \$6000. If mean effect lasts 10 years, real rate of return will still be negative.

Appendix 5.3 (continued)
Training for the Long-term Unemployed

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
<p>Help disadvantaged and long-term unemployed adults gain employment between 1974 and 1983 in U.S. under the Comprehensive Employment and Training Act (CETA) (Friedlander et. al., 1997)</p>	<p>After falling in the late 1970s, unemployment rates rose to 10% by 1982.</p>	<p>Participants provided with on the job training, classroom training, government subsidized work experience as well as public service employment (public works programs).</p>	<p>Quasi-experimental</p>	<p>Males earned significantly less (over \$500/annum) compared to control group. However, women earned \$1800/annum more.</p>	<p>Evaluation done two years after participation. Cost of training about \$9000/participant. If effects persist for 10 years, rates of return will remain negative for males. However positive rate of return (15%) for women.</p>
<p>Help disadvantaged adults gain employable skills in the U.S. 1983-present under the Job Training Placement Act (JTPA) (Friedlander, et. al, 1997)</p>	<p>Time period too long.</p>	<p>National in scope. Participants provided with classroom training and on-the-job training.</p>	<p>Experimental</p>	<p>Both men and women increased earnings significantly (close to \$1000/annum).</p>	<p>Evaluation done two years after participation. Cost of training was around \$1200. Very high rate of return for both men and women (over 50%) if effect persists for over 10 years. On the job training was significantly more cost-effective than classroom training.</p>
<p>Help minority women gain skills under the Minority Female Single Parent (MFSP) program between 1982-1988 in the U.S. (Friedlander et. al., 1997).</p>	<p>There was a sharp decline in the unemployment rate from 9.5% to just over 5% during this time period.</p>	<p>Demonstration program under which participants (all women) were provided classroom training as well as on-the-job training.</p>	<p>Experimental</p>	<p>Participating women earned over \$700/annum more on average than non-participating women. However, this effect is not significant.</p>	<p>Evaluation done two years after participation. Training was fairly expensive (\$6,000/participant) and hence in the short-run real rate of return was negative. However, slightly positive rates of return if effect persists at least 10 years.</p>

Appendix 5.3 (continued)
Training for the Long-term Unemployed

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Help long term unemployed and displaced workers gain employment in England in 1980's (Addison and Siebert, 1994).	High unemployment rates (around 10-11 percent) persisted through much of the 1980s. Between 1983 and 1990 employment has risen by around 1.5 percent.	Community program. Targeted vocational training was provided by local authorities in conjunction with local colleges, central government and voluntary organizations. There was low private sector involvement.	Non-scientific	Little impact on flows from long-term unemployment.	Cost-effectiveness of these programs was likely to be negative.
Help adult unemployed and displaced workers gain better employment opportunities through access to training in Holland (OECD, 1994c).	Unemployment rates fell from about 13 percent in the early 1980s to below 10 percent by the end of the decade.	Centers for adult vocational training provided training to these workers.	Quasi-Experimental	Unemployed persons who did not undergo training found jobs as quickly as those who did. Even two years down the line the employment situation for the two groups was not significantly different.	No data is available on wages and costs. However, in terms of employability, training seems to have been ineffective.
Assist unemployed and at risk workers gain skills to become more employable in Hungary in the early 1990s (O'Leary, 1995; Gill and Dar, 1995).	Employment had fallen by over 20% during 1989-92. Unemployment rate rose from 0.5 in 1989 to 8% by 1992.	Largely classroom based-instruction	Quasi-experimental	Training raises the probability of finding employment by six percent. Earnings of participants no higher than those of the control group.	Training costs are \$900/participant. It would take over 30 years to recover costs of program based on reasonable assumptions about the durability of program effects.

Appendix 5.3 (continued)
Training for the Long-term Unemployed

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Assist displaced and long-term unemployed workers to gain skills in Hungary in 1996 (O'Leary, 1998(a))	Sharp rise in unemployment: from below one percent at the turn of the decade to 12 percent by 1994. After falling continuously for five years, real GDP started growing slowly.	On the job skills training. Participants receive a stipend that has a 10% premium over the unemployment compensation benefit.	Quasi-experimental	Trainees 10% more likely to be employed than the comparison group and earn significantly more. Women perform significantly better than men.	Evaluation done in 10 counties. These results pertain to individual retraining and not group retraining. No cost-benefit analysis.
Aid displaced and long-term unemployed workers to gain skills in Poland in the mid 1990s (O'Leary, 1998(b))	GDP started growing slowly from 1994 but unemployment rate rose from 0% in 1989 to 16% by 1994, though it has declined since.	On the job skills training. Participants receive a stipend that has a 15% premium over the unemployment compensation benefit.	Quasi-experimental	Trainees are 10% more likely to be employed and earn more than the comparison group. Women benefit more than men. Trainees have received close to \$40 more in unemployment compensation than the control group.	Evaluations done in 8 Polish voivods. From a societal perspective, training is not cost effective (net benefit to society is -140 dollars).

Appendix 5.4
Retraining in Cases of Plant Closures & Mass Layoffs

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Ford Plant Closure in San Jose, U.S. (1982). 2400 workers lost their jobs (OECD, 1993a)	A 25 percent decline in auto production between 1978 and 1980. Unemployment rates in the U.S. rose from 7.5 percent in 1981 to 9.5 percent in 1982 and 1983 and manufacturing employment declined by 5 percent during 1981-83.	Basic skills training as well as targeted vocational training in marketable skills.	Non-scientific	High success rate in placement.	Causes for perceived success were - adequate resource base (\$6000 grant/worker); high degree of coordination and assistance provided by Ford and government.
Shipyards closure in Storstrom county, Denmark (1986). 2000 people lost their jobs (OECD, 1993a).	High unemployment rates in regions, especially among women. National unemployment rates for men in 1986 and 1987 were 6.1 and 6.4 percent respectively while the corresponding numbers for women were 10.0 and 9.6 percent. Employment in manufacturing remained stagnant since the mid 1980s.	Program in training women entrepreneurs (1986-89) to help them start their own business. A total of 200 hours of introductory and specific business oriented training were provided.	Non-scientific	51 businesses were set up by 1989. Less than a third of participants opened up a full-time business and few hired any employees, thus generating low additional employment.	This program did not seem to have met with much success and was apparently quite costly (precise cost estimates unavailable).
Steel and Coal plant closure in Creusot-Loire, France (1984). 1230 people became unemployed almost immediately (OECD, 1993a).	Contracting steel sector. In mining industry, employment has fallen steadily throughout the 1980s - by close to 40 percent between 1980 and 1990. Unemployment rates rose from 8.1 percent in 1982 to 10.2 percent by 1985. Manufacturing employment fell by about 6 percent between 1983 and 1985.	Workers received 70 percent of their former salaries for 10 months during which they participated in retraining and job-search activities after which they were promised re-employment in different firms in the region. Training was provided in engineering courses, plastic molding, refrigeration etc.. Financial incentives were provided to firms to hire these workers.	Non-scientific	High success rate in placement.	No evidence of long term employment impact of program participation.

Appendix 5.4 (continued)
Retraining in Cases of Plant Closures & Mass Layoffs

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Closure of Pulp plant in Kramfors in Northern Sweden in 1977 (OECD, 1991).	Unemployment rates in Sweden rose from 1.6 percent in 1976 to 2.2 percent by 1978. Employment in manufacturing declined by 8 percent between 1977 and 1979.	Participants provided with classroom training.	Quasi-experimental	Upon completion, participants received lower weekly wages than those not receiving training. Drop in earnings are especially significant in the first year with no appreciable long-term gains.	No information provided on re-employment rates or costs. Benefits from retraining program were insignificant.
Over 3000 workers laid off due to auto and auto parts plant closures in Michigan (1980-83). The general profile of those laid off was experienced blue collar male workers who earned high wages (Leigh, 1994).	A 25 percent decline in auto production between 1978 and 1980. High unemployment rates in 1981/82 nationally (9.5 percent) which had fallen to 7.5 percent by 1984. Manufacturing employment rose by 5 percent between 1983 and 1984.	Workers were provided a mixture of job search assistance (JSA) and classroom training. These services were provided promptly after plant closures. Retraining was provided in occupations in which there was perceived to be growing demand. Training curricula provided instructions in blue collar trades.	Quasi-experimental	Classroom training (CT) did not significantly improve program participants post-program re-employment rate. Trainees did no better than those receiving JSA.	Earnings estimates varied (ranging from negative to significantly positive). Training did not seem to have been very effective, especially in light of fact that training cost twice as much as JSA.
Mass Layoffs due to auto and steel plant closures in Buffalo (1982-83). The general profile of those laid off was experienced blue collar male workers who earned high wages (Corson, Long and Maynard, 1985).	High unemployment rates in 1981/82 nationally (9.5 percent) which had fallen to 7.5 percent by 1984. Manufacturing employment rose by 5 percent between 1983 and 1984.	Displaced workers were provided with a mixture of JSA and either classroom or on the job training (OJT). Program services were provided after a fairly lengthy period of post-layoff unemployment.	Quasi-experimental	JSA only services were found to have a fairly large impact on earnings measured over the first six post-program months. However there was no evidence of any incremental effect above that of JSA for either classroom training or OJT.	Classroom training and OJT were ineffective. Cost of CT and OJT programs were around four times as much as JSA, implying that JSA was potentially the only cost effective program. No evidence was provided about employability of program participants.

Appendix 5.4 (continued)
Retraining in Cases of Plant Closures & Mass Layoffs

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Plant closures at 13 steel factories and mines in Canada in the early 1980s (Leigh, 1992).	Unemployment rates rose between 1980 and 1983. Employment in non-agricultural activities fell slightly over the time period.	JSA and training was provided to these workers.	Quasi-Experimental	Likelihood of worker having a job was seven percent higher than comparably displaced workers not in the program. This impact was attributed to training which was used by 28 percent of workers. However at two mining sites, the program had no impact.	Training seems to have had a greater impact than JSA. However, no information on costs. Job counseling had little impact in Canada as targeted job counseling is provided by Canada's Public Employment Service as a standard service to all unemployed.
445 workers were laid off due to automobile plant closure in Australia in 1984 (Leigh, 1992).	Unemployment rates rose steadily in Australia reaching a high of 9 percent in 1984 before falling to 8 percent for the next few years. Between 1980 and 1984 employment in manufacturing shrunk by 4 percent.	Labor Adjustment Training Arrangement. Provision of classroom training (average length 19 weeks) to meet retraining needs of workers. Main distinction between courses was whether they provided driver training or not.	Quasi-experimental	Over a nine month period, driver training increased the probability of re-employment. However, other training courses resulted in a decline in re-employment probabilities.	No indication of cost-effectiveness of different type of training courses. Self-selection problem arose as individuals who chose not to participate were included in the control group. Impact of longer training courses was negative.
Around 2000 workers laid off at the Uddevalla shipyard in Sweden in 1985 (Alfthan and Janzon, 1994).	Local economy was given a boost by decision of Volvo to establish a car manufacturing plant at Uddevalla. Unemployment rates were declining in this period while manufacturing employment was fairly steady.	A significant number of workers joined retraining programs several months prior to being laid-off. Courses of varying duration were offered in welding, engineering and control engineering. These retraining programs were provided by the state owned training board, municipal education institutions and other adult education institutions.	Non - scientific	By November 1987, over 90 percent of the workers who had completed training had found jobs or become self-employed - most of them in occupations they had trained for.	Two major factors accounted for the success of the training program - economy and labor market conditions were buoyant in the region throughout the phase out period; shipyard management, employment offices and training agencies worked in close cooperation.

Appendix 5.4 (continued)
Retraining in Cases of Plant Closures & Mass Layoffs

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
The Volvo plant at Goteborg, Sweden planned to lay off 1000 workers in 1992 associated with the phasing out of an older car model with a new model (Alfthan and Janson, 1994).	Volvo planned to recruit 800 workers to prepare for the production of the new line of cars. Unemployment rates were rising sharply - from 3.2 percent in 1991 to 5.9 percent in 1992. Manufacturing employment dropped by 9 percent in 1992. Total employment also fell by four percent.	Retraining program was proposed which would help the existing workforce to manage the change without job loss. The company accepted the proposal under the stipulation that the cost be shared by the government. The program is a broad competency raising program which includes specific training to prepare the participants for the production of the new automobiles.	Non-scientific	Not available as program too recent to be evaluated.	Program costs are expected to be about \$25 million (\$25000 per person) close to half of which will be paid by the government. In judging the cost-effectiveness of this program, it should be compared with the expected unemployment benefits of \$6.5 million the government would have to pay.
Sweden: 1980s and 1990s: general evaluation of public retraining programs for those laid off <i>en masse</i> (OECD, 1991)	Unemployment rose steadily over the period of study.	Various types	Various types	Retraining programs have become more ineffective over time - especially since the economy has begun deteriorating. Participants have greater difficulty in finding jobs than the openly unemployed.	Cost-effectiveness of training programs has declined both because effectiveness has fallen and costs have increased.

Appendix 5.5
Training Programs Geared Towards Youth

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Provide high school dropouts with skills to make them more employable in the U.S. during the 1990s (Fay, 1996)	There was a sharp decline in unemployment rates for youth from about 17% in the mid 1980's to about 11% by 1990. This had risen slightly over the next few years but held steady at around 12% since 1993.	Providing classroom training to disadvantaged youth.	Experimental	No significant impact on employment or earnings over a four year follow up period of program participants.	One site (San Jose) out of 13 had positive earning gains. Part of the reasons may have been because the training was closely linked to labor market needs.
Providing training (as well as other programs) to out-of-school youth in AFDC families in the U.S. (DOL, 1995)	Time period not known.	Youths provided with classroom training, on the job training and job search assistance.	Experimental	No statistically significant positive impact on out-of-school youth for any strategy.	No improvement in other indicators: youth crime or welfare receipts by youth.
Providing training to disadvantaged youth nationally in the U.S. from 1983 onwards (Orr, et. al., 1996; Friedlander, et. al., 1997)	There was a sharp decline in unemployment rates for youth from about 17% in the mid 1980's to about 11% by 1990. This had risen slightly over the next few years but held steady at around 12% since 1993.	The U.S. Job Training Partnership Act. Youths provided with classroom training and on-the job training	Experimental	No significant impact on earnings.	Costs=\$2000 per trainee. Taking into account costs, real rate of return if expected impact lasts 3 years or 10 years is negative for both.
High school dropouts provided with skills in the U.S. between 1985-1988 (Friedlander et. al., 1997)	There was a sharp decline in unemployment rates for youth from about 17% in the mid 1980's to about 11% by 1990. This had risen slightly over the next few years but held steady at around 12% since 1993.	Jobstart demonstration program. Youths provided with classroom training.	Experimental	Insignificant impact of program on youths earnings.	Expensive program (over \$6000/trainee). Hence real rate of return negative both in the short-run as well as in the long-run.

Appendix 5.5 (continued)
Training Programs Geared Towards Youth

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Training high-school dropouts with employable skills in Canada during the mid to late 1980s (OECD, 1993a)	Canadian youth unemployment rates fell from 22% to 14% during this period.	Providing some individuals with classroom training and others with classroom as well as enterprise training.	Quasi-experimental	Classroom training had no impact on earnings or employment probability. Enterprise training was relatively effective for young men - with significant increases in employment and earnings. No impact on young women.	
Provision of skills to severely disadvantaged youth in the U.S. in the late 1980's (OECD, 1993a)	There was a sharp decline in unemployment rates for youth from about 17% in the mid 1980's to about 11% by 1990. This had risen slightly over the next few years but held steady at around 12% since 1993.	Both classroom and workplace based training provided.	Experimental	Participants did no better than control group both in terms of earnings as well as employment.	Some improvement in social results - reduction of criminal activity.
Providing out-of-school youth with skills for the job market in Norway 1990-91 (Fay, 1996)	Youth unemployment rates had reached double digits and were slowly rising during this period.	Vocational training courses of varying duration provided to school dropouts.	Quasi-experimental	Those enrolled in longer courses were less likely to be employed than control group. Those enrolled in short courses were more likely to be employed.	Selection bias problem.

Appendix 5.6
Micro-Enterprise Development

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Aid provided to newly unemployed to help in starting up small business in Washington state in late 1980s (Fay,1994).	Unemployment rates remained between 6-7% in the U.S.. Expenditures on these programs in the U.S. was less than 0.01% of GDP.	Participants are eligible to receive a lump-sum financial payment to start up small business, or they can choose to receive a periodic allowance for up to 26 weeks. Participants provided optional counseling /advisory service for a short period after starting up business.	Experimental	Less than five percent of eligible population were interested in taking up program. Treatment group more likely to be employed than control group. No significant gains in total earnings. Deadweight effect = 27 percent.	Evaluation performed 15 months after participants left program. Overall costs to UI budget higher than that of the control group. Net cost-benefit effect indeterminate.
Aid provided to newly unemployed to help in starting up small business in Massachusetts in early 1990s (Wilson and Adams, 1994).	Unemployment rates were about 7% in the early 1990s. Expenditures on self-employment programs were negligible.	Participants receive a periodic payment (for 24 weeks) to start up their business and are required to attend an intensive business advisory service after start up.	Experimental	Less than five percent of eligible population were interested in taking up program. Treatment group 14 percent more likely to be employed than control group and earning significantly more. Deadweight effect = 30 percent.	Evaluation performed 13 months after participants left program. Overall costs to UI budget higher than that of the control group. Net cost-benefit effect not computed.
Assistance to individuals in starting up small businesses in the Netherlands (Meager and Evans, 1998)	Time period not known	Unemployed individuals given grants to start up their own enterprises.	Non-scientific	Survival rate of business=50% after four years. Better qualified and slightly older have higher survival rates.	No estimates of deadweight or displacement.
Assist individuals in starting up businesses in the U.K. from the 1970's onwards (Meager and Evans, 1998)	Time period too long	The U.K. Enterprise allowance scheme - unemployed individuals given allowances to start-up enterprises.	Non-scientific	Deadweight=50-70%, displacement is also high (about 50% depending on sector). Just 0.2 additional jobs created per business started.	

Appendix 5.6 (continued)
Micro-Enterprise Development

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Contracts awarded to six community development organizations in the U.S. to help unemployed start a business between 1991-93 (Fay, 1996)	Unemployment rates fell to 6.5% from 7.5% in 1992. Expenditures on self-employment programs were negligible.	Individuals with business plans were provided financial assistance and counseling on starting up businesses.	Non-scientific	Significant positive results recorded in job generation. However average earnings of participants lower than in sites which did not receive this assistance.	Evaluation performed almost two years after start up of business. Displacement/substitution/dead weight loss not estimated.
Beginning in 1985, financial assistance provided to those who have been unemployed for five months within the last eight months to start up their own enterprises in Denmark (Wilson and Adams, 1994)	Highest unemployment rates among the Nordic countries - around 9% which rose to over 11% by the early 1990s. Denmark spent 0.11% of its GDP on self-employment promotion in the early 1990s.	No screening used to approve assistance to participants. Periodic allowances provided for up to 3.5 years. However, participants are provided counseling on starting up a business.	Quasi-experimental	Two percent of unemployed participate in program. 60 percent of businesses failed within the first 12 months. Deadweight effect=56%.	Low screening and attractive program benefits lower probability of success and increase deadweight loss. Cost=\$14,000 per participant.
Beginning in 1979, providing aid to unemployed to start up their own enterprise in France (Wilson and Adams, 1994)	Average unemployment rate was close to 9.5% through the 1980's. It rose from about 8% in the early 1980's to about 10% later on in the decade.	Minimal screening used to approve assistance to participants. A lump sum payment given to entrepreneurs. Participants have to participate in post-entry training and business counseling.	Quasi-experimental	Below two percent of unemployed participated in program. Survival rates of businesses is 50 percent - lower than that of start-up businesses that did not receive this assistance. Half an additional job created for each surviving enterprise. Deadweight loss=60%	Evaluation done in early 1991 of 1986 entrants. Cost=\$4400 per participant.

Appendix 5.6 (continued)
Micro-Enterprise Development

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Assist unemployed individuals start up their own enterprises in Ireland during the mid 1980s (OECD, 1993)	Among the highest unemployment rates in Europe - averaging over 15% in the 1980s. Ireland spent about 0.02% of its GDP on these measures in the late 1980s.	Not available	Non-scientific	Survival rate after two years was 60%. Deadweight loss=50% and displacement=30%.	Including additional employees hired by these enterprises, "net" job creation was around 34%.
Assist unemployed to start own enterprises in Norway in 1989 and 1990 (Fay, 1996).	Unemployment rates of around 5% in Norway during this time.	Entrepreneurial grants provided to unemployed willing to start up their own business.	Non-scientific	50% businesses survived after four years. Young (below 25) as well as less educated entrepreneurs fared poorly as did those who were the long-term unemployed.	Deadweight losses and displacement effects not estimated.
Help unemployed start up their own enterprises in Australia during 1987 and 1988 (OECD, 1993)	Australia's unemployment rate was declining from 8% in 1986 to 6% in 1988 but then rose sharply again to around 10% by 1991.	Australia's New Enterprise Incentive. Participants provided a subsidy to start up enterprise as well as training and business counseling.	Non-scientific	Survival rate after one year was 42% and after two years was 29%.	Evaluation done in 1990-91. For each surviving enterprise about 0.7 additional jobs created.
Unemployment insurance and social assistance claimants given financial assistance to start up their own businesses in Canada in 1992-93 (Graves and Gauthier, 1995)	Canadian unemployment rates had risen from 8% in 1990 to 12% by 1993. By 1995, they had fallen again to around 10%.	Canada's Self-Employment Assistance Program. Participants receive 52 weeks of income support and contribute 25% out of their own pocket (up to \$4000) in cash or in-kind to start a full-time business venture.	Quasi-experimental	Over 80 percent of businesses surviving. Deadweight loss over 50%. Program participants earn significantly more than comparison group (about \$200/month) but work significantly longer hours (14/week) so no impact on hourly earnings.	Evaluation done within two years after program. Participants draw \$2000 less than comparison group from UI but this does not take into consideration the additional \$13000 that was spent on program. Long-term impact of program uncertain.

Appendix 5.6 (continued)
Micro-Enterprise Development

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
<p>Aid displaced and long-term unemployed workers to start up their own business in Hungary in the mid 1990s (O’Leary, 1998a)</p>	<p>Sharp rise in unemployment: from below one percent at the turn of the decade to 12 percent by 1994. After falling continuously for five years, real GDP started growing slowly. Of spending on active programs less than 5 percent spent on these schemes.</p>	<p>Self-employment assistance provided to individuals eligible for unemployment benefits. Assistance is provided in monthly payments equal to unemployment compensation for a period of up to 18 months. Business counseling and training are also provided.</p>	<p>Quasi-experimental</p>	<p>80 percent of enterprises survived 15 months. Participants 13 percent more likely to be employed than comparison group, but earning significantly less. Older participants and women do better.</p>	<p>Evaluation done in 10 counties. No measure of displacement or deadweight. Each surviving enterprise created 0.3 additional jobs.</p>
<p>Aid displaced and long-term unemployed workers to start up their own business in Poland in the early and mid 1990s (O’Leary, 1998b)</p>	<p>GDP started growing slowly from 1994 but unemployment rate rose from 0% in 1989 to 16% by 1994, though it has declined since. In 1994, below 0.5% of expenditures on active labor programs was expended on self-employment schemes</p>	<p>Self-employment assistance, up to 20 times the minimum wage, is provided to unemployed individuals. Loans’ principal is reduced by 50 percent if business survives two years.</p>	<p>Quasi-experimental</p>	<p>85 percent of enterprises had survived 24 months. Participants 30 percent more likely to be employed and earn significantly more than control group. Older participants and women do better.</p>	<p>Evaluation done in 8 counties. Program seems very successful. However, no measure of displacement or deadweight. Cost-benefit analysis points towards a societal “loss” of over \$1300.</p>

Appendix 5.7
Wage/Employment Subsidies

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Providing subsidies to hire long-term unemployed in Ireland in the 1980's (OECD, 1993)	Among the highest unemployment rates in Europe - averaging over 15% in the 1980s.	Employers paid between 30-60 Irish pounds/week for up to 24 weeks, contingent on worker remaining with firm. This is about 30-50% of gross wages.	Non-scientific	Deadweight loss=70%, substitution=21%, displacement=4%. Hence "net" effect=5%	400 firms who hired subsidized individuals interviewed. No information on cost available. Subsidies almost completely ineffective.
Employers given subsidies to hire long term unemployed in Australia in mid 1980s (Mangan, 1988).	Unemployment rates falling from 9% to 7% during this period. Australia spent about 0.03% of its GDP on these measures.	Employers paid up to AU\$200/week for up to 16 weeks (approximately 50% of gross wages) to hire the long-term unemployed	Non-scientific	Deadweight over 65 percent.	1000 workers who were subsidized, and firms in which they worked, were interviewed.
Increasing employability of long-term unemployed youth by providing wage subsidies in Holland during the late 1980s (Meager and Evans, 1998)	Unemployment rates falling from 9% to 7% during this period. Australia spent about 0.03% of its GDP on these measures.	The JOB scheme. Subsidies given to employers to hire youth who have been unemployed for two years or more.	Non-scientific	High deadweight loss about 22-30%. Very little evidence of net increase in total employment. Intervention does increase probability of employment of long-term unemployed youth, but by less than 10%.	No control group, hence no measure of net impact. Deadweight could be as high as 80% as another 50% of individuals may have found a job anyway.
Increase the employability of the long-term unemployed, providing wage subsidies to employers to hire them in Holland during the late 1980s (OECD, 1993)	Dutch unemployment rates were falling steadily from 8% to 5% during this period. Spending less than 0.03% of GDP on wage subsidies.	Subsidies given to firms to hire individuals who have been unemployed for two years (or ethnic minorities who have been unemployed a year).	Quasi-experimental	Substitution effect=80%.	Less than 20% of new jobs were additional to what would have been accomplished without the program.

Appendix 5.7 (continued)
Wage/Employment Subsidies

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Program to promote employment of disadvantaged urban population in the U.S. in the mid 1980s (OECD, 1993)	Unemployment rates remained between 6-7% in the U.S.. Negligible expenditures on these programs.	The U.S. Targeted Job Tax Credit. Employers paid up to 50% of eligible wages for two years. Employees either got vouchers that they took to firms, or employers got the money directly after submitting applications for workers they decided to hire.	Experimental	Significant impact on job earnings in first year relative to control; however, impact decreases in second year. No longer term impact once subsidy is removed.	Some studies have also suggested a negative impact on employment of targeted persons, perhaps resulting from a “stigmatizing” effect.
Increase employability of unemployed in Sweden (Meager and Evans, 1998)	Time period not known	A reduction in payroll taxes of employers who hire long-term unemployed.	Experimental	No positive impact of subsidy on employment	
Program to promote employment of disadvantaged workers in the U.S. (Bloom, 1994)	Time period too long	Under the U.S. Job Training Placement Act (JTPA) employers were provided subsidies to hire workers mainly to provide on-the-job training.	Experimental	Significant impact on earnings for women. However, impact on men only partly significant.	Single mothers who are on Assistance to Families with Dependent Children (AFDC) benefit most.
Program targeted at high unemployment areas to provide wage subsidies to the unemployed and those at risk in Scotland 1989-1992 (NERA, 1995)	U.K. unemployment rates rose from 6% in 1989 to 10% by 1992. However, expenditures on these programs remained negligible.	Wage grant offered for trainees varying, from 50% to 100% of the trainees wages for a period of 6 months, and entire training costs also covered. Employers had to employ individual in a full time job lasting at least one year.	Non scientific	Deadweight loss=20%. Additional jobs created over 25%	Displacement effect not estimated. Low deadweight loss may be due to employers being forced to declare at the outset that the job would not have been offered in the absence of a subsidy.

Appendix 5.7 (continued)
Wage/Employment Subsidies

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
Wage subsidy provided to the long-term unemployed to get them back into the labor force in England between 1986 and 1990 (NERA, 1995)	Proportion of long-term unemployed in total unemployed declined from about 45% to 30%. Unemployment rates fell from 12% in 1986 to 6% in 1990.	Subsidy given to employees. To get subsidy, participants had to earn below 90 pounds per week and work at least 35 hours/week. The job had to be at least three months in duration.	Quasi-experimental	Deadweight loss=69 percent. No significant earnings or employment impact.	Evaluation performed three months after subsidy ended. 30 percent of individuals had left/been let go by firms. Deadweight loss was inversely proportional to the subsidy.
Wage subsidies provided in the U.K. in the late 1980s (NERA, 1995). This was mainly targeted at the youth and long-term unemployed in high unemployment areas.	Proportion of long-term unemployed in total unemployed declined from about 45% to 30%. Unemployment rates fell from 12% in 1986 to 6% in 1990.	The Training and Employment Grant Scheme. Employers got between 50-60% of gross wages for up to six months and had to provide 200 hours of structured training.	Non-scientific	Deadweight loss=47% and substitution=23%. Additionality=27%	?????
Wage subsidies targeted at youth in the U.K. (Balakrishnan, 1998)	Time period not known	The Young Workers Scheme. Eligible employers paid 15 pounds/week for up to a year to hire young unemployed (under 18).	Non-scientific	Deadweight=63% and Substitution=10%. Additionality=27%	Targeting done on the basis of choice of eligible firms.
Wage subsidies given to small firms to hire unemployed workers in the U.K. in the early 1970s.	Unemployment rates at around 5%.	Any additional employees hired by small manufacturing firms in special development areas were subsidized up to 20 pounds/week for up to 26 weeks.	Non-scientific	Deadweight=60-75%. Additionality=25-40%	Substitution is zero by definition, as there was no untargeted group of workers who could be substituted against.

Appendix 5.7 (continued)
Wage/Employment Subsidies

Labor Market Problem	Relevant Indicators	Intervention Design	Type of Evaluation	Result	Comments
To enhance employment prospects of long-term unemployed, employers provided subsidies to hire them in Belgium in the early 1990s (Fay, 1996)	High and rising rates of unemployment - 9% in 1991 to 12% in 1993. Long-term unemployment over 60% of total unemployment. 0.05% of GDP spent on these measures.	Employers given a wage subsidy for a period of up to six months.	Non-scientific	Deadweight effect=53% and substitution=36%	Negligible net employment effect.
Have re-employment bonuses worked in getting people of UI benefits and into better jobs? An experimental study of the employment bonus experiments in Illinois (1984), New Jersey (1986-87), Pennsylvania (1988-89) and Washington (1988) (Meyer, 1995).	Unemployment rates generally stable in the U.S. during the periods of the experiments.	Unemployed workers provided bonuses if they could find work within a specified period. E.g. in Illinois, an unemployed individual would receive a bonus of \$500 (four times the average weekly UI benefit) if they found employment within 11 weeks of filing for UI and kept the job for at least four months.	Experimental	Weeks of benefit fell in all four experiments. Effect was strongest in Illinois where it fell by a week (average weeks of benefit received ranged from 15-20). Experiments also show no significant declines in re-employment earnings. In fact, in Illinois, the treatment group had slightly higher earnings than the control group.	Due to the high costs of the programs, societal benefits varied. They were positive in Illinois and Pennsylvania (slightly) but negative in New Jersey and Washington on the whole. Similar results found for Illinois by Woodbury and Spiegelman (1987). Only in one case was bonus provided to employers - in that case effect was insignificant.

<p>Employers provided subsidies to hire the long-term unemployed in Hungary mid-1990s (O'Leary, 1998a)</p>	<p>Sharp rise in unemployment: from below one percent at the turn of the decade to 12 percent by 1994. After falling continuously for five years, real GDP started growing slowly. Of spending on active programs, over 12 percent spent on these schemes.</p>	<p>Payment of up to 50% of wage made to employers to hire individuals who were previously unemployed for at least six months. If workers are not retained by firm after subsidy ends for a period as long as the subsidy was paid, employer must repay the subsidy.</p>	<p>Quasi-experimental .</p>	<p>Participants are 10 percent less likely to be employed, and earn significantly less, than control group in current job.</p>	<p>Evaluation done over year after program completion, in 10 counties.</p>
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