



## Labour Markets and Social Policy

### **International Experience with Worker-side and Employer-side Wage and Employment Subsidies, and Job Search Assistance Programmes: Implications for South Africa**

**C. Smith**

April 2006



**INTERNATIONAL EXPERIENCE WITH  
WORKER-SIDE AND EMPLOYER-SIDE WAGE  
AND EMPLOYMENT SUBSIDIES, AND JOB  
SEARCH ASSISTANCE PROGRAMMES:  
IMPLICATIONS FOR SOUTH AFRICA**

**Christopher Smith**

**Poverty Action Lab**

**Massachusetts Institute of Technology**

**April 2006**



**employment growth & development initiative**

## **Human Sciences Research Council**

April 2006

**Produced by:** Christopher Smith, under the guidance of David Autor and Abhijit Banerjee, Poverty Action Lab: Massachusetts Institute of Technology

**Contact:** Dr Miriam Altman  
Executive Director, EGDI  
**E-mail:** maltman@hsrc.ac.za  
**Tel:** +27 12 302 2402

## Contents

Tables.....	4
Figures.....	4
1. Introduction.....	5
1.1 Active labour market programmes in an international context.....	5
1.2 Differences between firm-side subsidies, worker-side subsidies, and job search assistance programmes: a theoretical benchmark.....	7
1.3 Structure of this review.....	9
2. Employer-side wage and employment subsidies.....	11
2.1 Untargeted subsidies.....	12
2.2 Targeted subsidies, employer-initiated.....	12
2.3 Youth-targeted subsidies.....	15
2.4 Targeted subsidies, public job postings: Australia and Germany.....	17
2.5 Targeted subsidies in Eastern European Countries: Slovakia, Hungary, Poland and Romania.....	18
2.6 Targeted subsidies, worker-initiated.....	19
2.7 Employer-side subsidies: lessons for South Africa.....	21
3. Worker-side wage and employment subsidies.....	23
3.1 Re-employment bonuses.....	23
3.2 Worker-side wage subsidies.....	24
3.3 Worker-side wage and employment subsidies: implications for South Africa.....	31
4. Job search assistance programmes.....	33
4.1 Experimental evidence.....	33
4.2 Non-experimental evidence in Eastern Europe.....	38
4.3 Job search assistance programmes: lessons for South Africa.....	39
5. Summary of results and conclusions for South Africa.....	41
5.1 Implications for South Africa.....	42
References.....	45

## **Tables**

Table 1 – Cited references on comparisons of international experiences with wage subsidies, employment subsidies, and job search assistance programmes.....	52
Table 2 – Employer-side wage and employment subsidies, references .....	53
Table 3 – Worker-side wage and employment subsidies, references .....	55
Table 4 – Job search assistance programmes, references.....	56

## **Figures**

Figure 1 – Theoretical effects of a worker-side and firm-side wage subsidy.....	50
Figure 2a, 2b – ‘EITC-like’ wage subsidy .....	51
Figure 3a, 3b – ‘WFTC-like’ wage subsidy .....	51
Figure 4a, 4b – ‘No phase-out’ wage subsidy.....	52

## **1. Introduction**

The purpose of this international policy review is first to provide a summary of international experience with labour market interventions that were developed with the intention of improving employment, particularly among disadvantaged job seekers. The specific interventions that will be considered here are firm-side wage and employment subsidies, worker-side wage and employment subsidies, and job search assistance programmes. A second purpose is to assess which policies are particularly relevant for application to South Africa's unique labour market situation. Because many countries have become increasingly interested in providing active support for unemployed individuals to encourage rapid re-employment, there are numerous recent policy examples from which South Africa can learn.

In fact, over the past few decades, a broad range of labour market policies targeted to poorer, less-skilled unemployed workers has been introduced internationally under the heading of "active labour market policies" (ALMPs). In this time, many countries have fundamentally altered the nature of their support for unemployed individuals or those out of the labour market, as active labour market policies have been developed and integrated with existing "passive" support for the non-employed. The exact nature – and perceived effectiveness – of these programmes vary significantly from country to country.

This paper will discuss the design and purpose of these programmes, and explore which have been most successful in recent history, and which are likely to be most beneficial for improving the labour market prospects of South Africa's large unemployed population.

### **1.1 Active labour market programmes in an international context**

The shift from passive to active programmes is one of the more notable recent changes in countries' support for the unemployed. "Passive" labour market policies refer to the provision of support for unemployed individuals, with little attempt to monitor the job search process or provide resources to assist with job search or skills retraining. So, for example, unemployment insurance is generally considered a passive labour market programme, since (in most countries) it provides a cash payment to the unemployed with little attempt to assist their job search, encourage their rapid return to work, or make them more employable through training or education.

"Active" labour market programmes, on the other hand, intend to directly affect the employment prospects of the unemployed by encouraging (or forcing) participation in activities and workshops that teach job search skills and provide retraining. The most

common forms of ALMPs include: employment subsidies (cash bonuses or tax incentives given to either firms or workers contingent upon employment), job search assistance programmes (counselling on how best to conduct job search and the development of a personal search plan, workshops on resume and interviewing skills, guidance on the use of job search resources), retraining and education programmes (either provided directly by public employment service offices, or provided privately and subsidised with public funds), public employment opportunities, and self-employment assistance.

Exact reasons for the adoption of active labour market policies is often country-specific, but in general these policies began growing in popularity throughout OECD nations around the mid-1970s amid rising unemployment and the recognition that more could be done to encourage and help the unemployed find work (for a fuller discussion, see Dar and Tzannatos 1999 or Betcherman *et al.* 2004). In the United States, for instance, elements of active labour market programmes were introduced on a state-by-state basis, through innovations to unemployment insurance and welfare systems, as an attempt to reduce the length of time that benefit recipients remained unemployed or out of the labour force.

In 2001, on average about .8% of GDP was spent on ALMP programmes by OECD nations (Betcherman *et al.* 2004). This ranged from a low of .15% (for the United States) to a high of 1.75% (for the Netherlands). Over the past ten years, the level of public spending on ALMPs has risen, but has remained largely stable as a percentage of total GDP. Meanwhile, spending on passive labour market programmes have plummeted as a fraction of GDP, although the level of passive labour market programme expenditure is always greater than ALMP expenditure in most OECD countries. Job search assistance (through public employment service offices) and training/education are the largest ALMPs in terms of overall expenditure - in 2001, on average around 30% of OECD nations' expenditure on ALMPs was spent on each of these two services, while around 20% was spent on worker or firm subsidies. Similar statistics are harder to obtain for transition or developing countries, but Betcherman *et al.* (2004) report that Eastern European and Russian spending on ALMPs in 1998 as a fraction of GDP was much lower than that in OECD nations (ranging from 0.02% of GDP in Russia to 0.32% of GDP in Slovakia).

In addition to ALMPs, wage subsidies for lower income workers are quickly becoming a key policy for encouraging labour market participation and reducing poverty. Two notable examples of this are the Earned Income Tax Credit (EITC) in the United States and the Working Families' Tax Credit (WFTC) in Britain. These programs, and others like them, are intended to encourage labour force participation by raising the returns to work through the use of tax credits that are functions of labour supply or labour earnings. The perceived success that these systems have had in improving employment and poverty rates among the poor encouraged the development of similar systems in at least 10 other OECD countries – and so a discussion of their design and impact will also be presented.



## **1.2 Differences between firm-side subsidies, worker-side subsidies, and job search assistance programmes: a theoretical benchmark**

This paper focuses on three of these interventions which our working group wishes to investigate for possible implementation in South Africa: employment subsidies for firms, employment subsidies for workers (both cash bonuses for finding employment and EITC-like programmes that provide wage subsidies conditional upon labour supply), and job search assistance programmes intended to assist job seekers in finding and applying for employment.

In the context of a simple supply and demand model of the labour market, the theoretical effects from a wage subsidy are identical regardless of whether the subsidy is given to workers (by increasing their after-tax wage) or firms (by providing a subsidy for all labour hired) – provided that the amount of the subsidy is the same in each case. For a graphical depiction of this idea, see Figure 1. A worker-side subsidy increases employment due to an increase in the aggregate supply of labour to the economy, because more workers are willing to work at any given pre-subsidy wage. A firm-side subsidy increases employment due to an increase in the aggregate demand for labour in the economy, because firms are willing to hire more workers at any given pre-subsidy wage. This is a powerful theoretical concept, as it implies that the post-subsidy level of employment and the effective wage for workers will be equivalent regardless of which party actually receives the subsidy. It is also a useful benchmark from which to organise thinking about the distinctions between these programmes, as in the absence of any market frictions or additional costs associated with the subsidy, equilibrium effects from worker-side subsidies should be identical to those from a firm-side subsidy of the same amount.

In fact, the international evidence reviewed in sections II and III will demonstrate that firm-side subsidies appear much less effective at encouraging additional employment. Some reasons why the employment responses from firm-side subsidies could differ from worker-side subsidies include:

1. **Administrative burden.** As implemented in most countries, the administrative burden for firm-side subsidies can be significant – and these costs generally fall upon the firm. This is because most firm-side subsidies are targeted towards specific types of individuals (i.e. economically disadvantaged job seekers, like welfare recipients), and the firm must confirm eligibility with the government (usually by sending information about the job seeker to local labour offices). Because confirmation of eligibility takes time, firms may be uncertain of a job seeker's eligibility status when making hiring decisions – and because filing for the subsidy requires sending the government information about the job seeker, the process is potentially costly. On the other hand, the administrative costs of worker-side subsidies are generally borne by the government. For instance, EITC-like wage subsidies are usually administered through the tax system, and

therefore represent very little additional cost to workers who must file taxes anyhow.

2. **Uncertainties about eligibility.** Since firm-side subsidies are generally targeted towards specific types of workers, there might be uncertainty during the hiring process about whether the worker is eligible for the subsidy or not. If this uncertainty takes time to resolve, then the employment effects of the subsidy may be lessened. This seems less of a concern for worker-side subsidies, since job seekers are probably better judges of their own eligibility, and unemployment insurance or welfare offices may directly notify them of their eligibility - although the concerns may still be relevant for subsidies that are determined as functions of *annual* income. International evidence suggests that the combination of administrative costs and uncertainty regarding eligibility status strongly discourage firms from taking subsidy eligibility into account when hiring workers.
3. **Knowledge of the subsidy and subsidy details.** Even if subsidies are available, their aggregate employment effects will be dampened if firms or workers are unaware of the subsidy or unclear about its details. For instance, some evidence suggests that many smaller firms in the United States were unaware about the presence and structure of targeted wage subsidies, resulting in low take-up rates even among employers who hired eligible workers.
4. **Subsidies may affect the hiring of different types of workers.** The workers encouraged to increase their labour supply due to a worker-side subsidy may be different from those that firms are encouraged to hire due to a firm-side subsidy. For instance, a wage subsidy for workers may induce additional job search and work effort from particularly motivated job seekers and workers, with little effect on the labour supply of the unmotivated. Firm-side subsidies may induce additional hiring for all types of workers – or, if only certain types of firms respond to firm-side subsidies (perhaps because some firms are more likely to learn about the subsidy, such as larger firms or those in certain sectors of the economy), the subsidy would most affect employment for the sorts of worker hired by those firms.

The combination of evidence on firm-side and worker-side subsidies, which will be presented in sections II and III, suggests that the administrative burden, and uncertainty about eligibility, significantly dampen the hiring incentives from firm-side subsidies. Worker-side subsidies, which increase aggregate employment by increasing the aggregate amount of labour that is supplied to the economy, appear more favourable in comparison.

Additionally, the ease of subsidy implementation likely varies between firm-side and employer-side subsidies, depending on the nature of pre-existing taxation and transfer institutions. For instance, worker-side employment bonuses are easy to implement in countries with more heavily used unemployment insurance or welfare systems, since unemployed workers are easily located and targeted. If the interventions under consideration are expected to help both formal and informal employment in South

Africa, implementation issues are especially crucial, as it would be especially difficult to verify informal sector work history. As will be discussed, for implementation reasons, job search assistance programmes (rather than wage or employment subsidies) are the recommended intervention if increasing employment rates for informal employment is a key goal.

Also, the evidence that outlined in section IV will suggest that this third type of intervention – job search assistance programmes – is often quite effective at increasing an individual’s likelihood of employment. Job search assistance programmes include any interventions which assist a job seeker in finding employment by either increasing their knowledge about job search techniques and available employment, or directly subsidising job search (for instance, through transportation or child care subsidies).

If job search frictions such as labour immobility, lack of knowledge about local job markets, or lack of knowledge about skills necessary for job search exist, then job search assistance programmes may be more effective at increasing aggregate employment than either firm-side or worker-side subsidies. Additionally, these programmes may also increase employment for participants simply by motivating greater intensity in the job search process.

### **1.3 Structure of this review**

Ideally, this review would be focused mainly on programmes in developing or transitional economies – as such evidence would be most directly relevant for South African considerations. However, information on the details of these policies in non-developed countries is scarce, and the information that does exist suggests that the programmes are much less extensively provided than in developed nations. Furthermore, the most convincing evaluations of these labour market programmes come from randomised experiments – and this evidence is mostly limited to the United States, Canada, and the United Kingdom.

As a result, when describing international variety in the structure of these programmes, particular attention will be paid to developing and transitional economies wherever possible – but when discussing the evaluation of such programmes, the focus will necessarily be on the developed nations that have more accurate labour market statistics or utilised randomised trials when first introducing the programmes. Tables 1-4 provide information on the sources cited in this review, organised by type of intervention and country of implementation.

Section II describes international experience with employer-side employment subsidies, section III describes experience with worker-side employment subsidies, and section IV focuses on the use of job search assistance programmes. Each section includes a comparison of institutional details across countries, a discussion of findings from the evaluations of these programmes, and concludes by discussing the relevance

of international experience for possible implementation in South Africa. Section V concludes this review by synthesising the previous three sections into a recommendation for which policies should be most strongly considered.

## **2. Employer-side wage and employment subsidies**

Employer-side employment and wage subsidies provide financial incentives for firms to hire workers by reducing hiring and employment costs for some length of time. The structure of employer-side wage subsidies varies significantly from country to country (much more so than do worker-side subsidies, as will be discussed in Section III). A key reason for this is that employer-side wage subsidies tend to be targeted at specific groups of workers (for instance, the long-term unemployed, current welfare recipients, or the young), and countries tailor these criteria to meet the particular characteristics of their unemployed population.

These subsidies generally reimburse employers for a fraction of the newly hired worker's wages and/or training costs for a period of time (usually ranging from six months to three years). They may also involve one-time bonuses upon the hiring of an eligible worker. The subsidies are often contingent upon the employment relationship lasting for a minimum length of time (often three to six months), and can be implemented by giving job seekers a certificate that they show to firms to declare their eligibility, or by requiring firms to apply for a subsidy if they hire a worker they believe is eligible.

Unlike worker-side subsidies (for which randomised experiments were conducted in the US and Canada), there are few examples of randomised experiments using employer-side subsidies, and so evaluations of existing policies are necessarily less precise. The lack of randomisation trials is likely partly because randomisation is easier at the worker level than the firm level (because the population of unemployed workers is easily targeted through the UI system). In fact, the randomised trials of employer-side subsidies that do exist are designed by randomly giving some job seekers certificates to present to potential employers, which indicate that the employer would receive a subsidy upon hiring. Additionally, employer-side subsidies are often included in a menu of employment services available to unemployed workers (including job search assistance or retraining programmes), and so it is difficult to separately identify the effects of these various components. Despite these problems, many evaluations do exist for employer-side subsidies (generally using covariate matching to compare outcomes for those who took part in labour programmes that provided employer-side subsidies to those that did not).

Employer-side subsidies can be classified as either targeted subsidies (which apply only to specific types of job seekers, such as the young or welfare recipients) or untargeted subsidies (which usually apply to all new hires that were “hired in response to the subsidy” – i.e. for all employment growth above some function of previous employment growth). Targeted subsidies tend to be more common, although there are a few notable examples of economy-wide untargeted subsidies. A government can

implement targeted subsidies by requiring firms to determine the eligibility of new hires and send confirmatory information themselves, or by giving workers certificates which alert firms to their eligibility – the latter have been found to be much less successful at improving employment, and sometimes actually detrimental to the employment prospects of job seekers (because of the stigma associated with being labelled as a member of a class of eligible workers). Each of these categories will be explored below, and separate emphasis will be given to youth-targeted programmes and programmes that directly match workers to subsidised employment opportunities.

## 2.1 Untargeted subsidies

### 2.1.1 *United States: New Jobs Tax Credit (NJTC)*

The only example of a pure untargeted employer-side wage subsidy uncovered in this policy review process is the New Jobs Tax Credit, which existed in the United States from mid-1977 to 1978. It was introduced as an effort to encourage new employment by subsidising firms' employment growth: it provided a tax credit of 50% for the first \$4,200 of wages per employee for all employment at least 2% above the previous year's level (Katz 1998). Its overall effects on inducing significant additional employment are questionable, however, since the total amount of tax credits that any firm could receive were capped at \$100,000 – so the NJTC did not present marginal hiring incentives for larger firms that were already planning to expand. Because the programme was implemented nationally, and applied to all firms, it is difficult to estimate how effective it was at encouraging additional hiring<sup>1</sup> - although it was claimed by over 50% of firms and subsidised almost 4 million workers (as cited in Hemersma 2003).

## 2.2 Targeted subsidies, employer-initiated

Although one purpose of employer-side wage subsidies is to increase aggregate employment in the economy, most subsidies are implemented specifically to improve the employment prospects of a target group of workers (such as the long-term unemployed or welfare recipients). Untargeted subsidies may subsidise the employment of short-term individuals who would have quickly found employment anyhow in the absence of a subsidy; targeted subsidies are potentially attractive because they offer a way to both encourage additional employment growth while limiting subsidisation to a disadvantaged group of job seekers. While this is an understandable goal, international experience demonstrates that targeted subsidies in practice are often ineffective at increasing marginal employment for the target population. Some reasons for this are that determining the eligibility of potential hires

---

<sup>1</sup> Katz reports that some studies conclude firms that knew about the subsidy grew faster than those that did not, even after controlling for observables – but he notes these are not terribly convincing, since knowledge of the program could be related to unobserved characteristics that are related to firm growth.

(and submitting proof of eligibility to the government) is administratively burdensome for firms, the subsidy amounts are often too small to induce firms to hire risky workers for whom the subsidy is targeted (because the subsidies generally require an employment commitment for at least a few months – and such commitments are potentially risky given the targeted population), and targeting stigmatises the targeted job seekers (employers are less likely to hire a job seeker when they learn that the applicant is a member of a targeted class of workers).

### *2.2.1 Canada: Employment Tax Credit Programme (ETC)*

Encouraged by the United State's introduction of the NJTC, Canada implemented the Employment Tax Credit Programme (ETCP) in 1978, which lasted through 1981 (Gera 1987). The purpose was similar to that of the NJTC – to provide incentives for new employment growth – but the crucial difference between the NJTC and the ETCP is that the ETCP credit applied only for new hires that had been unemployed for eight weeks or more. In this way, the ETCP was targeted to medium-term unemployed workers, whereas the NJTC applied to *all* new hires regardless of worker characteristics. The ETCP provided a subsidy of \$1.50 to \$2.00 (in 1978 Canadian dollars) per hour for eligible new hires, provided that the employment “was in response to the credit,”<sup>2</sup> that the new hire was retained for at least three months, and that the new hire worked at least 35 hours per week. Initially, the subsidy was granted for up to nine months of employment.

In its first year, take-up was substantially lower than predicted. This was attributed to the fact that the subsidy amount was not generous enough to compensate for the hiring and retention (for at least three months) of potentially risky workers. In response, the subsidy was extended to all new hires who have been unemployed for at least two weeks, and the maximum duration of the subsidy was extended to a year. This revised programme was potentially more effective at encouraging additional employment (or, at least, was successful in subsidising more jobs) as over 65,000 jobs were subsidised while the programme was in effect. No convincing evaluation of the ETCP could be found, but Canada's experience with the programme is instructive because it demonstrates the difficulty in designing a successful targeted subsidy: targeted subsidies are by definition intended to encourage the hiring of disadvantaged workers, but since firms perceive these workers to be risky, the subsidies may need to be quite generous to be effective.

### *2.2.2 United States: Targeted Jobs Tax Credit (TJTC) and Work Opportunities Tax Credit (WOTC)*

The TJTC replaced the NJTC, and was available from 1978 to 1994, when it was replaced by the WOTC (which still exists). The purpose of both the NJTC and the

---

<sup>2</sup> In practice, this apparently meant that employment growth needed to exceed some function of the previous week's employment.

WOTC was to encourage the hiring of disadvantaged workers. The TJTC originally applied to “economically disadvantaged” youth, poor Vietnam Veterans, handicapped people receiving vocational training, Supplemental Security Income recipients, and welfare recipients. The WOTC applies to essentially the same groups. It also added a separate subsidy for welfare recipients - the Welfare-to-Work tax credit – that applied to new hires who had received welfare for 9 of the last 18 months. If a firm hired a worker from these groups, the TJTC originally subsidised 50% of their wages (up to a maximum credit of \$3,000) for the first year, provided they worked at least 90 days in the year, and 25% of their wages (with the same maximum amount) in the second year. The second year tax credit was eventually removed, and the subsidy rate for the first year was lowered to 40% (Hollenbeck and Willke 1991). After 1994, the WOTC replaced the TJTC, and the subsidy rate remained at 40% for workers who work 400 hours or more per year, but was lowered to 25% for those working between 120 and 400 hours. The Welfare-to-Work subsidy is considerably more generous, subsidising 35% of earnings (up to \$10,000 of wages, for a maximum credit of \$3,500) in the first year, and 50% of wages (again, up to \$10,000 of wages) in the second year (Hamersma 2003). Under either programme, workers could be certified as eligible by either receiving a voucher at a local Employment Service office which they could present to the hiring employer, or a hiring employer could send a request to the local Employment Service office requesting that the eligibility status of the new potential hire be confirmed.

Take-up from both programmes was quite low. According to Katz (1998), the TJTC subsidised only .4% of all private employment at its peak (in 1985), and it appears that less than 10% of hired workers who were eligible for the subsidy were actually certified and claimed by their hiring firm (Hamersma 2003). Similarly, the WOTC is also not widely claimed – in 1999, slightly more than .1% of corporations claimed the tax credit. For the WOTC, firm surveys suggest that underutilisation is due to lack of knowledge of the credit on the part of firms, the small benefit that the subsidy provides relative to the risk in hiring these targeted job seekers, and because it is administratively burdensome for firms to confirm the eligibility of job seekers (GAO 2002). Of those firms who know about the credit, less than half take eligibility into consideration when making hiring decisions<sup>3</sup>. Companies that do claim the credit tend to be in industries that hire a larger share of the target population (such as firms in the retail and the hotel and service sectors). Also, larger firms are more likely to use the credit, probably because they hire enough workers that it is financially worthwhile to confirm eligibility (GAO 2002). Hence, American experience with targeted wage

---

<sup>3</sup> Take-up is even low for temporary employment service firms, despite that they often hire a significant portion of their workforce from the subsidy-eligible population. In a survey of 101 Wisconsin temporary help firms, Hamersma and Heinrich (2005) found that 60% of these firms claimed WOTC credits. However, only 1 of all surveyed firms indicated that the eligibility status of job seekers influenced its hiring decisions. For the rest of the firms, money from the subsidy was treated as a “bonus” that was realized after the hiring decision – without influencing the hiring decision at all. Additionally, over half of the surveyed firms who did not use the credit said that the administrative burden of applying for credits outweighed the savings from filing. Hence, employment tax credits are rather ineffective even at inducing new hiring for firms who regularly hire from the eligible population.



subsidies suggests that it is difficult to use them to induce additional hiring for disadvantaged populations<sup>4</sup>.

## **2.3 Youth-targeted subsidies**

### *2.3.1 United Kingdom: “New Deal” for Youth Employment*

A number of countries, faced with high youth unemployment, have chosen to use employer-side subsidies to target unemployed youth. The British New Deal for Youth Employment (introduced nationally in April 1998) is a comprehensive attempt at reducing youth unemployment. One of its components is an employer subsidy for the hiring of unemployed youth aged 18-24 (Van Reenen 2004). The New Deal applies to youth who have been unemployed and receiving UI for six months. After six months, if they wish to continue receiving UI, they must enter a four-month “Gateway” period, during which time they are assigned a personal job search counsellor who provides them individualised assistance with job search. The job search is initially limited to unsubsidised employment, but if no suitable such employment can be found, then subsidised employment is sought. The subsidy is provided for up to six months of employment, at a rate of £60 per week (which, in 1998, was slightly half of wage income from a full-time minimum wage job). Additionally, the employer must provide at least one day of training per week, and receives an additional training subsidy of £750, spread over six months. If no employment is found after the Gateway period, then the unemployed individual is *required* to accept one of four options in order to keep receiving UI: one year of subsidised full-time education or training, continued job search for subsidised employment, six months of employment in the voluntary (non-profit) sector, or employment with the government Environmental Task Force (40% of participants choose the year of education and training, and 20% choose to search for subsidised employment).

Hence, the New Deal is a combination of efforts intended to improve the employment prospects of unemployed youth. It contains elements of job search assistance, retraining, subsidised employment, and public employment, all guided through a local employment office to find the best choice of employment policies for each individual. Van Reenen (2004) provides a rough estimate of the effects of the employer subsidy on reemployment rates, by focusing on reemployment at the end of the Gateway period. Because the New Deal was implemented in a number of pilot areas prior to rolling the programme out nationally, 18-24 year olds in non-pilot areas can serve as controls for 18-24 year olds in the pilot areas. Similarly, since 25-30 year olds are not eligible for the New Deal programme, they can serve as controls for 18-

---

<sup>4</sup> This is not to say that the subsidies are completely inconsequential for their target population. For instance, Katz (1998) exploits a change in TJTC policy in 1989 which lowered the age range of eligibility for economically disadvantaged youth from 24 to 22. He calculates this to have reduced employment for economically disadvantaged 23 and 24 year olds by 3.4 percentage points.

24 year olds in evaluating the effects of the national roll-out. Calculating differences-in-differences estimates with these separate control groups, Van Reenen concludes that the employment rates of eligible 18-24 year olds are around 5 to 11 percentage points higher at the end of the four-month Gateway period due to the New Deal. He suggests that about half of this programme effect is due to the subsidisation of employment.

### 2.3.2 *Youth Programmes in South America: Chile, Argentina, and Uruguay*

During the early-to-mid 1990s, Chile, Argentina, and Uruguay all adopted a wage subsidy and training subsidy scheme for unemployed youth (Marshall 1997). Although these are not pure employment subsidies (because they also include a training subsidy) and have not been extensively evaluated, they are a notable example of subsidies in transitional and developing countries – and so their programme details will briefly be discussed.

Chile introduced the first programme, Chile Joven, in 1991. Initially, firms that were willing to hire and train unemployed youth (aged 15-24) received a subsidy to cover the direct and indirect costs of training, and participants received subsidies to cover transportation costs during a period of classroom training and additional subsidies while engaging in on-the-job training (after 1995, the on-the-job training subsidy was received by the firm rather than the worker). Although there appears to be no intensive study of the programme's effectiveness, Marshall cites some encouraging evidence: at least half of programme participants remained employed 90 days after training, 55% had a job related to their training, and between one-third to one-half of participants were still employed by the firm that gave them on-the-job training. Over the first five years, 115,000 young people participated in the programme.

Argentina introduced Proyecto Joven in 1993 to increase employment among the low-income, uneducated youth. Proyecto Joven is more accurately a training subsidy rather than an employment subsidy, however, as the government fully subsidises six months of training at a participating firm (provided the firm retains the trainee for an additional six months of work practice). Participation is significant: in 1996 alone, for instance, 24,000 youth began participating in the programme. Projoven, instituted in 1996 in Uruguay, is structured in a similar manner and subsidises training and additional work practice in private firms (although, in contrast with Chile Joven and Proyecto Joven, Projoven only subsidises employers' social security contributions during the work practice period).

As noted by Marshall (1997), extensive evaluations of these practices apparently do not exist. Government statistics, however, suggest that employment prospects after participation are good: at least 50% of participants found employment soon after participation in Proyecto Joven and Projoven. Additionally, Betcherman *et al* (2004) note that Peru also has youth employment subsidies modelled after Chile's programme – and they note that some positive employment effects were identified from evaluations of programmes in Chile, Peru, and Uruguay.

## **2.4 Targeted subsidies, public job postings: Australia and Germany**

Rather than requiring the eligible unemployed to seek subsidised employment on their own, some countries have tried facilitating the matching process between subsidised employment and eligible workers. They do this by requiring firms to post vacancies for jobs they wish to fill with subsidised workers to local employment service offices. In Australia, the Jobstart system (in effect since 1985) subsidises employment for the long-term unemployed, homeless, disabled, ex-offenders, and the elderly (Knight 2002). Subsidy amounts vary depending on which of these characterise the individual worker, and subsidy amounts also depend on the amount of time the worker was unemployed. Initially, employment was required to be full-time and last for at least 26 weeks, but in 1995 the subsidy scheme was altered such that subsidies were provided if employment lasted even just 13 weeks - and additional subsidies were available for employment over the following 26 weeks, and at the end of a year of employment. Firms interested in hiring eligible workers would post vacancies at the Commonwealth Employment Service. The CES would then refer “job ready” candidates to the vacancy listing, which they could then scan for suitable employment opportunities. Employer response, however, was not as enthusiastic as anticipated, as the significant required length of employment (in combination with strict Australian dismissal laws) made hiring eligible workers a risky venture. Nonetheless, Knight reports a number of evaluations (which all use a covariate matching strategy to compare outcomes from eligible workers who participated to those who did not) which estimate that programme participation boosted employment rates of participants by at least 30 percentage points after the subsidisation period ended. In addition, she reported that this subsidised employment was found to be more effective than other Australian labour market programmes, such as retraining. On the other hand, positive employment effects for participants should not be surprising, since programme participation is defined as being matched with employment in the first place.

Germany introduced the Public Employment Programme (PEP) as one component of a larger series of labour market interventions in East Germany following reunification (Eichler and Lechner 2000). The programme subsidised a portion of the wage that a participating employer would pay, as well as a portion of up-front training costs. The subsidy was available to public employers, non-profits, and private firms, and subsidised employment was required to last a year or until the worker found non-subsidised employment. The subsidy was targeted towards those under 25 without a college degree, the long-term unemployed, the disabled, and the elderly – and recipients were required to have been unemployed and eligible for UI for 6 of the previous 12 months. Employers who were interested in hiring eligible workers would post vacancies at the local labour office, but the *labour office* would decide which job seeker received which job – so apparently neither the firm nor the worker could influence the matching process. Eichler and Lechner find that the unemployment rate for PEP participants is 25% lower than for similar non-participants six months after PEP participation ended, but again positive employment results should be expected

since the PEP intervention involved directly assigning participants to subsidised employment.

## **2.5 Targeted subsidies in Eastern European Countries: Slovakia, Hungary, Poland, and Romania**

Eastern European countries have included targeted employer subsidies as components of ALMP reform since the 1990s. In the early-to-mid 1990s, for instance, Slovakia provided subsidies to private employers through the Socially Purposeful Jobs (SPJ) programme (Lubyova and Van Ours 1998). Interested employers would notify labour offices, which would then announce the employment opportunity to the registered unemployed. A subsidised employment position was required to last two years, although if the subsidised worker was fired or quit, the position could be filled by another registered unemployed job seeker within 30 days without penalty. According to Lubyova and Van Ours, 25,000 jobs were subsidised by this system in 1992 alone.

Hungary offered a wage subsidy programme targeted to the long-term unemployed (those unemployed longer than six months) throughout the mid-to-late 1990s (O’Leary 1998a). The subsidy amount was 50% of wages, and was available for a year. The employer was required to retain the worker for at least the length of time that the worker spent in subsidised employment after the subsidy period had ended, however, or the firm was required to repay the full amount of the subsidy. In 1996, over 12,000 workers were employed in subsidised work. Using covariate matching, O’Leary 1998a finds essentially no difference in employment rates between subsidised workers and similar non-subsidised workers months after the subsidisation period.

Poland’s employment subsidy is called Intervention Works (IW), and was established along with other ALMPs in 1990. Local labour offices can refer unemployed job seekers on UI to private employers willing to hire these individuals at a subsidised rate. For the first six months of employment, the subsidy amount is equivalent to the worker’s UI benefit. For the next six months of employment, the subsidy rises to the level of the minimum wage (around 15% higher than UI benefits) and the government pays the firm’s social security contributions for the worker in every second month. If the firm retains the worker past 12 months, it can receive an additional bonus equal to 150% of the average wage in the economy (Puhani 1998). Kluge *et al* (2001) use covariate matching to compare outcomes of IW participants to similar non-participants, and find that, if anything, IW participation has a negative effect on employment outcomes. They argue that this is likely due to labour offices referring workers with poorest employment prospects (those likely to otherwise become long-term unemployed) to subsidised employment – because the subsidised employment period resets their UI eligibility, so that they can again receive the maximum duration of UI benefits after the subsidised employment ends. In other words, they argue that Poland uses subsidised employment to prevent the long-term unemployed population from exhausting UI benefits.

Finally, Romania introduced a unique form of wage subsidisation beginning in 1992. Employers who hire individuals directly after high school or college graduation can receive a subsidy for up to nine months, in the amount of the UI benefits the graduate would get if they were instead unemployed. By 1995, 20% of total graduates were hired under this subsidisation scheme, although Earle and Pauna (1998) suspect that in fact little of this is incremental hiring due to the programme.

## **2.6 Targeted subsidies, worker-initiated**

Another potential, although less common, method with which to implement employer-side wage subsidies is by giving vouchers or certificates to eligible workers that they then display to potential employers during the job search process. The voucher would explain the structure of the subsidy that the firm would receive were it to hire the worker, and would explain the conditions of the arrangement. A subsidy administered in this manner would remove the burden of eligibility verification from the employer – potentially reducing the administrative costs associated with applying for and receiving the subsidy.

Randomised experiments with employer-subsidy vouchers have been implemented on at least two occasions in the United States. In 1980, the U.S. Department of Labour ran an employment-subsidy voucher experiment in Dayton, Ohio (Burtless 1985). A group of 800 UI and welfare recipients were randomly divided into two treatment groups, and one control group. All groups were exposed to two weeks of job search training. The control group experienced no additional intervention. The first treatment group received certificates that they could give potential employers, describing that the job seeker was eligible for the Targeted Jobs Tax Credit. The second treatment group received certificates that explained that the hiring firm would receive a direct cash rebate (instead of a tax credit) for hiring the job seeker – the value of the cash rebate was identical in value and structure as the one that would be received under the TJTC. The intended purpose of the two different treatments was to see if employers responded differently to cash rebates relative to tax credits.

In fact what happened was that after eight weeks of job search, the employment rate for the control group was 20% - but it was only 13% for each of the treatment groups. Burtless attributes the *negative impact* of the vouchers to stigma resulting from their use. This could be because a brochure was included with the voucher which explained the purpose of the programme, thus highlighting to the potential employer that the job seeker was classified as a “disadvantaged worker.” Additionally, less than one-quarter of the employers who hired job seekers from the treatment groups actually redeemed the vouchers, suggesting it was either burdensome for the firm or the worker failed to show the employer the certificate. This experiment has been widely cited as an example of the potentially *negative* employment effects from targeted employment subsidies if the subsidies are structured such that they stigmatise the job seeker.

Experimental results from an additional US experiment, and from the Proempleo experiment in Argentina, illustrate how employment-subsidy vouchers may improve employment outcomes not by affecting employer incentives, but by encouraging extra job search effort from job seekers. In 1984-1985, the Illinois Department of Employment Security conducted a randomised experiment to understand the effects of worker-side employment subsidies versus employer-side employment subsidies. Select UI recipients in northern and central Illinois were randomly assigned to either of two treatment groups, or the control group. The first treatment group received a voucher entitling them to a \$500 bonus if they found a job (providing at least 30 hours of work per week) within 11 weeks, and held it for four months. The second treatment group received a voucher entitling the hiring *employer* to a \$500 bonus if they hired the job seeker within the 11-week window and employment fulfilled the same conditions as for the worker bonus.

Woodbury and Spiegleman (1987) report that employment effects of the worker-side bonus were large and positive (the first treatment group had a 5% higher employment rate after 11 weeks than the controls), but effects of the firm-side bonus were much more modest (resulting in only a 3% higher employment rate) – the worker-side bonus also resulted in a significant reduction in yearly UI benefits paid and yearly weeks of unemployment relative to the control group, while there were no significant impacts from the firm-side bonus. Interestingly, only 3% of the firm-side treatment group that was hired within 11 weeks actually had their vouchers redeemed by their hiring firms. That is, the modestly positive employment effects from the employer-side vouchers are possibly due to inducing additional search effort from job seekers rather than from improving hiring incentives for firms.

Experiments with employer vouchers in Argentina in 1998-2000 (the “Proempleo Experiment”) illustrate a similar point. Proempleo targeted two towns experiencing large increases in unemployment due to the closing of large firms. The experimenters gathered subjects by contacting unemployed individuals on temporary work assistance, and randomly dividing interested subjects (over 900 in all) into a control group and two treatment groups. The first treatment group received a voucher that they could display to prospective employers, informing employers that by hiring the worker, he would receive a wage subsidy equivalent to between \$100 and \$150 per month for 18 months, depending on the worker’s age (the monthly minimum wage at the time equivalent to \$200). The firm was also required to register the worker as formally employed and therefore make social security payments (equivalent to 30% of the worker’s salary). The other treatment group received the same voucher, and also received job search assistance through a three-day job search workshop. They also received a training voucher good for 200-300 hours of free skills training. After 18 months, the voucher treatment group reported 6% higher employment rates than the control group. However, only three employed individuals in the treatment group were actually registered formally by their employer, and thus had their vouchers submitted to the government for reimbursement. Galasso *et al* (2002) interpret this as evidence that the vouchers’ positive effects may operate through improving supply-side search incentives rather than from improving demand-side hiring incentives. That

is, simply having the voucher and believing that it would increase the probability of employment induced additional job search in the treatment population<sup>5</sup>.

## **2.7 Employer-side subsidies: lessons for South Africa**

This section has summarised international experience with untargeted and targeted wage subsidies. Overall, the international experience described here suggests that employer-side subsidies, however popular, are generally ineffective at encouraging new employment. This parallels conclusions from other analysts. For instance, Dar and Tzannatos (1999) carried out a similar international review and concluded that most hiring subsidised through employer subsidies would have occurred anyhow, or that the positions would have been filled by non-subsidised workers if not for the subsidies – and that, in the end, aggregate employment effects from employer subsidies tend to be small. Similarly, Betcherman *et al* (2004) note that evaluations of employer subsidies in transitional countries are particularly not encouraging. As noted in this section, low take-up rates have plagued U.S. and Canadian experiences with widespread targeted wage subsidies, evaluations of Eastern European employer-side subsidies have not found positive effects, and experimental evidence suggests that either employers are less likely to hire eligible workers due to the stigmatising effects of the subsidy or that subsidies only affect supply-side incentives.

The American and Canadian experience suggests that take-up rates tend to be low because subsidy amounts are too small to compensate employers for the risks associated with hiring from inherently risky populations and committing to lengthy employment relationships for the purpose of receiving the subsidy. Take-up rates for untargeted subsidies (like the NJTC) are likely to be higher, but this is probably due to three reasons: untargeted subsidies apply to some amount of *all* new employment (thus subsidising employment for workers that firms do not need additional incentives to hire), they are more likely to be widely advertised such that firms are more aware of the existence of the credit, and they apply to a larger share of firms' workforces (making it more valuable for firms to apply for the credit in spite of its costly administrative burden). However, since it is difficult to reward firms for incremental hiring (i.e. hiring *specifically* due to the subsidy incentives), much of the benefit likely subsidises employment that would have occurred already. This is potentially a problem with targeted subsidies as well, as firms hire the most able of the target population (i.e. "cream skimming" from the target population – hiring workers that are most likely to have found work anyhow) even though this is not necessarily the group of targeted workers that the government wishes to help (although, if the local labour office *matches* subsidised employment opportunities to workers, as in Australia and Germany, then this is not necessarily the case).

---

<sup>5</sup> Of course it's also possible that since the outcomes were measured from a survey conducted by the experimenters, the treatment subjects may have falsely reported having employment in hopes of receiving future vouchers.

Targeted subsidies seem particularly ineffective, and (as demonstrated in one specific case) potentially *detrimental* to a job seeker's employment prospects. And, in retrospect, this should probably not be a huge surprise. Targeted subsidies are generally used to increase employment incentives among a particularly un-employable subset: welfare recipients, the long-term unemployed, and so on. Given that most subsidies require the hiring firm to retain the worker for a significant period of time, it is perhaps not surprising that firms fail to take the subsidy into consideration when making hiring decisions. The administrative burden associated with determining worker eligibility and applying for the subsidy – and the uncertainty associated from waiting for eligibility confirmation – also dampen the potential hiring incentives from employer subsidies. On the other hand, allowing workers to approach employers to announce their subsidy-eligibility, instead of placing the burden of eligibility determination on employers, appears to either encourage employment through a *supply-side* effect or actually stigmatise job seekers and therefore reduce their employment chances.

Thus, the accumulation of current international evidence from employer-side subsidies is not promising. However, there are some reasons why employer-side subsidies might be more effective in South Africa than elsewhere. First, the target population in South Africa may be broader, and less specific or “targeted,” than are target groups in other countries. For instance, it may be desirable for South African employer-side subsidies to target *all* unemployed low-income individuals - and targeted subsidies would be less stigmatising if a larger percentage of the population is targeted. Also, a widely targeted subsidy would reduce the administrative burden of eligibility confirmation, and reduce the uncertainty about whether a potential applicant is eligible or not. On the other hand, broader subsidies will subsidise a greater amount of hiring that would have already occurred in the absence of the subsidy. Also, employer-side subsidies are much easier to design for targeting formal sector employment rather than informal sector employment, because formal employment is easier to verify and less subject to gaming. In comparison with the positive evidence of success with worker-side subsidies and job search assistance programmes (presented in the next two sections), the meagre success of employer-side subsidies in an international context makes it hard to recommend similar interventions for South Africa.



### **3. Worker-side wage and employment subsidies**

Worker-side employment subsidies are subsidies to individuals contingent upon working. They can be one-time cash re-employment bonuses that the unemployed receive upon finding a job, or they can be continuous wage subsidies that are in some way a function of labour supply or labour earnings. State experiments in the United States tested the effectiveness of the first, but Japan and Korea are the most notable examples of countries that have implemented one-time bonuses on a national scale. As mentioned previously, wage subsidies of the second variety are more commonly used and gaining in popularity (in direct response to the perceived effectiveness of the U.S. EITC), and are a key labour market programme in the United States, the United Kingdom, and many other OECD nations.

#### **3.1 Re-employment bonuses**

##### *3.1.1 United States: unemployment insurance re-employment bonus experiments*

Throughout the 1980s, at least four states (Illinois, New Jersey, Washington, and Pennsylvania) experimented with the use of employment subsidies for unemployed individuals (Meyer 1995). These experiments were designed and implemented through the State Unemployment Insurance Office and intended to test whether providing cash bonuses for finding employment within a certain time frame (generally around 10 weeks) would induce a more rapid return to the labour force, and result in cost savings for the State. Although paying reemployment bonuses is costly, the policy could theoretically be cost-saving if it induced individuals to quickly become re-employed – thus saving the State from paying additional Unemployment Insurance (UI) benefits. The re-employment bonuses ranged in generosity from two to six times the weekly benefit amount that the unemployed individual would receive while unemployed<sup>6</sup>.

All four States implemented the bonuses by randomly selecting a treatment group from the pool of unemployed individuals who applied for UI. Because the control and treatment groups were randomly selected, the causal impact of reemployment bonuses on individuals' unemployment durations and employment rates can be assessed. In a review of the four experiments, Meyer reports that the bonuses did encourage faster exit from unemployment, but not by much: the bonuses reduced the number of weeks that an individual remained on UI by one half of a week to one week (the average length of UI reciprocity is around fifteen to twenty weeks). There was generally no programme impact on earnings once employed, suggesting that the

---

<sup>6</sup> Weekly benefit amounts tend to be around 50% of an unemployed individual's previous weekly wage earnings.

offered bonus did not induce individuals into lower quality employment. However, there was no strong evidence that the *amount* of the bonus induced faster exit from unemployment. From the perspective of the UI office, the benefits from fewer UI payments exceeded the sum of the costs (the sum of the amount of the re-employment bonus and administrative expenses) in a few instances.

Re-employment benefits were initially greeted enthusiastically and contemplated for widespread use, because the outcomes from the first experiment (in Illinois) indicated that they were significantly cost effective. The results from experiments in subsequent states were not as positive, discouraging plans for further and permanent implementation.

### 3.1.2 *Japan and Korea: re-employment bonuses*

Japan and Korea offer re-employment bonuses to unemployed workers in a similar manner, which is rather unique in an international context<sup>7</sup>. As in most OECD nations, UI is provided to unemployed individuals with sufficient work experience, and is provided until the unemployed either find a job or exhaust their benefits (by remaining unemployed longer than the maximum benefit duration). Japan and Korea offer unique incentives for re-employment: if an individual receiving UI finds suitable employment of at least twenty hours per week before exhausting some fraction of their benefits (one-half of total benefits in Korea, two-thirds in Japan), the individual receives a re-employment bonus equal to a fraction of their remaining benefits (one-half in Korea, three-tenths in Japan). In this way, rapid re-employment is encouraged, and the UI system saves money over what it would have spent if the unemployed individual had exhausted his benefits. To my knowledge, however, a convincing evaluation of the effectiveness of these re-employment bonuses in reducing unemployment duration does not exist.

## 3.2 Worker-side wage subsidies

More common than one-time re-employment bonuses (and increasing in popularity among OECD countries) is the use of worker-side wage subsidies. Worker-side wage subsidies are subsidies – usually implemented as tax credits - that are determined as a function of either labour supply (hours worked per week or per month) or labour income. In some countries (such as the United States), a subsidy is available as long as a family's labour income is positive and below some threshold, regardless of actual labour supply provided. For these countries, the total subsidy amount is usually an increasing function of labour income for low levels of income, and a declining function of labour income for higher levels of income (so that high income earners receive no subsidy). In most other countries, the subsidy is available only if the worker works a specific number of hours per week (usually between 15 and 20) and has earnings below a threshold. Under this structure, a large subsidy is granted for

---

<sup>7</sup> See OECD Social Policy Division 2004a for Japan, and OECD Social Policy Division 2004b for Korea.

working the minimum weekly or monthly requirement, and declines as a function of labour supply after the minimum is reached.

Wage subsidies gained in popularity since the early 1990s, partly due to the belief that the expansion of the American EITC in the mid-1990s resulted in higher employment rates and lower poverty rates for the low income population – as well as because of similar beliefs about the effectiveness of the Working Families Tax Credit in the United Kingdom (Verbist, De Lathouwer, and Roggeman 2005). According to the OECD, twelve OECD nations were operating a form of worker-side wage subsidy by 2002<sup>8</sup> (OECD 2004).

### *3.2.1 Structure of wage subsidies*

In most countries with a wage subsidy, the benefit is provided as a tax credit or deduction<sup>9</sup>. In some systems, the credit is refundable, and in some it is non-refundable<sup>10</sup>. In most countries, the credit applies only to low-income individuals with children, as it is phased out at higher income levels so that high-income individuals do not receive the credit.

Since most wage subsidies are structured in a similar manner, a review of common terminology may be useful. The relevant and universal parameters that define the structure of most wage subsidy programme are: the *phase-in rate*, the *maximum subsidy amount*, the *maximum earnings before benefits are phased out*, and the *phase-out rate*. The *phase-in rate* refers to the amount that the subsidy increases as labour earnings increase from zero. For instance, a phase-in rate of 40% means that the subsidy amount increases by \$0.40 for every dollar increase in labour earnings. In many wage subsidy systems, there is no phase-in rate, and instead the maximum subsidy amount is available once the worker works a certain number of hours in a week or a month. The *maximum subsidy amount* is the value of the subsidy once it is fully phased in – that is, the maximum subsidy amount that an individual can receive. The *maximum earnings before benefits are phased out* refers to the amount of labour earnings that one can receive before he is no longer eligible for the maximum subsidy amount. The *phase-out rate* is the amount by which benefits are reduced for additional labour income above the maximum earnings amount. So a phase-out rate of 20% means that the subsidy amount is reduced by

---

<sup>8</sup> These nations are: Australia, Belgium, Canada, Finland, France, Germany, Ireland, Japan, the Netherlands, New Zealand, the United Kingdom, and the United States.

<sup>9</sup> Tax credits reduce the amount of taxes owed by the amount of the credit; deductions reduce the amount of taxable income on which tax is owed by the amount of the deduction.

<sup>10</sup> A refundable (or non-wastable) tax credit means that if the amount of tax owed is less than the value of the credit, the excess amount of the credit is payable in cash to the recipient – so a large enough tax credit could yield net payments from the tax system to individuals. If the tax credit were instead non-refundable (or wastable), and credits exceeded the amount of tax owed, then the recipient's net taxes owed would be reduced to zero – and no additional reimbursement would be owed by the government.

\$.20 for every dollar in labour earnings above the maximum earnings amount. With a non-zero phase-out rate, once the individual earns enough in labour income, the subsidy is entirely phased out, and the benefit is zero. In some wage subsidy systems, the benefit is never phased out so that even high-income earners receive the subsidy.

Figure 2a provides an example of a typical wage subsidy that features a positive phase-in rate, and figure 2b demonstrates how the presence of this subsidy affects to the earner's total after tax income schedule. Figures 3a and 3b demonstrate what the subsidy and after tax income schedule look like when the subsidy is contingent upon a certain number of weekly work hours (i.e. with no phase-in rate), but the benefit is phased out once enough is earned in wages. Figures 4a and 4b illustrate a subsidy scheme which does not phase out benefits, so that even high earners can receive the maximum subsidy amount.

The purpose of a positive phase-in rate is to increase the returns to working by raising the effective (after-tax) wage, and hence encourage at least minimal labour market participation among marginal participants. Making the subsidy contingent upon working a certain weekly or monthly amount may encourage somewhat greater participation among those who participate. In either case, by raising the returns to minimal amounts of work, wage subsidy schemes have theoretically unambiguous positive effects on labour force participation. As will be discussed, these theoretical predictions about labour force participation seem to be accurate in describing what happens in practice.

The purpose of phasing the subsidy out is to prevent high-income workers from receiving the subsidy, as these wage subsidies are generally intended as poverty reduction measures. However, by phasing out the subsidy, the system *reduces* the marginal wage faced by individuals whose earnings place them in the phase-out region (i.e. the total benefit – wage plus subsidy amount - received by those in the phase-out region from an additional hour of work is declining in the amount of hours worked). This is because phasing out benefits necessarily reduces the returns from additional labour supply (because an additional hour of work provides positive wage income, but reduces the amount of the subsidy). As a result, it is possible that implementation of wage subsidy systems such as these may actually *reduce* aggregate labour supply - or at least the labour supply of higher earners. This might also be true if higher earners reduced their labour supply in order to be eligible for the subsidy. Although hypothetically possible, evidence suggests that the introduction of these subsidies *does not* reduce aggregate labour supply, however<sup>11</sup>.

---

<sup>11</sup> Saez (2002) notes that designing an optimal wage subsidy system requires understanding the responsiveness of labour supply on both the intensive margin (i.e. the responsiveness of an individual's number of hours worked to changes in his effective wage) and extensive margin (i.e. the responsiveness of an individual's decision on whether to work at all to changes in the wage). American experience with the EITC expansion, however, suggests that the EITC affects labour supply on only the extensive margin, and not the intensive margin – so that negative incentive effects from the expansion or introduction of an EITC-like system may not be a concern after all. For instance, EITC expansions have been consistently shown to have increased labour force participation rates while having no negative effects on aggregate labour supply (Meyer 2002).

### 3.2.2 *United States: Earned Income Tax Credit (EITC)*

The EITC began in 1975 as a tax credit for low-income families with children to offset a portion of worker contributions to the Social Security payroll tax. It has always provided a refundable tax credit that is an increasing function of labour income for lower levels of income, is a decreasing function of labour income for higher income levels, and is eventually phased out for high enough labour income. In other words, figures 2a and 2b are graphical representations of the structure of an EITC-like wage subsidy. It was expanded in 1987 by increasing the phase-in rate slightly and decreasing the phase-out rate. The more significant changes occurred in the mid-1990s, as the EITC was expanded even more dramatically over a three-year period, beginning in 1994. It was expanded by raising the phase-in rate to 40%, increasing the maximum subsidy amount to \$3,556<sup>12</sup>, and raising the phase-out rate slightly to 21%. At the present, there are now 20 million EITC recipients, and the EITC is the largest cash programme for working families (Blundell and Hoynes 2004).

Evaluations of the EITC's effectiveness at both increasing labour force participation and reducing poverty are universally positive. Since changes in the EITC occur at the national level, and the policy has never been tested through experimental trials, researchers have analysed the effects of EITC expansion by comparing changes in employment outcomes for a control group that is plausibly unaffected by the EITC to a treatment group that is affected. Because the EITC is available only for individuals with children, researchers have applied this estimation method by comparing differences in the change in labour force participation for single women with children (the treatment group, since they are eligible for the EITC at low enough income levels) to single women without children (the control group)<sup>13</sup>. Using this methodology, it has been calculated that expansions in the EITC were responsible for sixty percent of the ten percentage point increase in single mother labour force participation between 1984 and 1996 and thirty percent of the ten percentage point increase between 1992 and 1996 (Meyer and Rosenbaum 2001)<sup>14</sup>.

### 3.2.3 *The United Kingdom: Working Families' Tax Credit (WFTC)*

The Working Families' Tax Credit was introduced in 1999 and fully implemented by April 2000<sup>15</sup>. Like the EITC, the WFTC provided a tax credit contingent upon the

---

<sup>12</sup> For comparison, the federal minimum hourly wage was \$4.75 in 1996.

<sup>13</sup> i.e., the "differences-in-differences" empirical approach.

<sup>14</sup> Eissa and Leibman (1996) estimate that the 1986 EITC expansion raised labour force participation rates by 4 percentage points (or 8%) over four years, accounting for most of the increase in labour force participation for eligible women between 1986 and 1990.

<sup>15</sup> The WFTC was replaced in 2003 by the Working Tax Credit and Child Tax Credit, but given their recent introduction, a comprehensive examination of the result of their changes has not yet been published. The way in which their structure differs from the WFTC will be noted later in this section.

amount of labour supplied for wage earners with children. The WFTC differs from the EITC along a number of dimensions, however: the credit was only available if one earner in the family works at least 16 hours per week (and the credit was then phased out as the person works additional hours), and the credit was paid by the employer through an increase in monthly or weekly after-tax take home pay (and the employer was reimbursed by the government) instead of through the annual income tax. The maximum weekly credit was £ 55, which was about 15 times the hourly minimum wage in 1999<sup>16</sup> (and represented a maximum annual benefit amount almost double that provided by the EITC), and the benefit was reduced at a rate of 55% for additional labour earnings above 16 hours of work. An additional small benefit was provided if the worker worked at least 30 hours per week as well. Graphically, the WFTC is most similar to the wage subsidy examples in Figures 3a and 3b, except that it provides an additional slight benefit increase at 30 hours of weekly work.

The labour supply effects of the WFTC have been estimated using techniques similar to those discussed for evaluation of the EITC: comparing changes in labour force participation before and after WFTC implementation for those eligible for the WFTC (low-income families with children) to those ineligible (either high income families, or households without children). Blundell *et al* 2005 use this approach to estimate that by the summer of 2002, the introduction of the WFTC had increased the labour force participation rates of single men with children by 4.6 percentage points, and participation rates of single women with children by 3.6 percentage points, accounting for virtually all of the increase in labour force participation for these groups while the WFTC was in effect<sup>17</sup>.

The WFTC was replaced in 2003 by another new wage subsidy scheme: the Working Tax Credit (WTC) and the Child Tax Credit (CTC). The combined effects of the two

---

<sup>16</sup> The credit also provided a childcare credit, available to single parents who worked at least 16 hours per week as well as to couples for which both parents worked at least 16 hours per week. The credit reimbursed 70 percent of child care costs, up to £ 100 per week for one child, or £ 150 per week for more than one child.

<sup>17</sup> These estimates are likely underestimates of the true effects, since a number of other simultaneous reforms to social program likely had negative impacts on the labour force participation of single earners with parents. Also, as noted by Blundell and Hoynes (2004), although there were positive employment effects from the WFTC, they are smaller in magnitude than those experienced in the US from the EITC. In fact, since the 1980s recession, employment levels – and employment growth – for single parents in the UK have been low relative to US levels and growth, despite the introduction of the Family Credit (a precursor to the WFTC) and the WFTC. Blundell and Hoynes argue that one reason is because WFTC credits are counted when determining benefit eligibility and benefit amounts for other transfers (such as Housing Benefits) – thus dulling the effect of increased work incentives from the WFTC, because additional WFTC benefits reduce the amount of other transfers. Additionally, other out-of-work transfer programs were declining in generosity in the U.S. during EITC expansion (such as changes from welfare reform), while such programs were stable or increasing in generosity in the U.K. – hence, returns to work were increasing in both countries due to the tax credits, but the value of remaining unemployed was falling in the U.S. while it was stable or rising in the U.K.

programmes provide incentives similar to those of the WFTC, so details are relegated to a footnote below<sup>18</sup>.

### *3.2.4 Other OECD nations: experiences with wage subsidies*

As previously mentioned, wage subsidies similar to the EITC and WFTC are becoming increasingly common among OECD nations, so some of the more unique ones are discussed below. However, most of these subsidy systems have only been recently implemented, and so they have not been as extensively evaluated as the EITC and WFTC have been. For this reason, this discussion of other international experiences with wage subsidies is limited to a description of their design.

**Belgium:** The Low Wage Tax Credit (LWTC) was introduced in 2002 (Verbist et. al. 2005). As with the EITC, the LWTC is calculated based on annual pre-tax income, and has a phase-in rate of 40% and a phase-out rate of 13% (but similar to the WFTC, the subsidy is only available once a minimum amount of annual labour income is earned). Unique to Belgium and the Netherlands, the credit applies to the *individual* rather than the family – so two earner families can receive higher subsidy amounts than one-earner families. Even so, however, the maximum benefit amount that an individual can receive is quite modest (roughly a quarter of the maximum amount available under the EITC), and so most analysts assume that the labour supply and poverty reduction effects of the LWTC are also rather small.

**Finland:** The Earned Income Allowance (EIA) provides an individual tax deduction rather than a tax credit (i.e. the subsidy provides a financial benefit by reducing the amount of income subject to taxes), using a phase-in rate of 20% and a phase-out rate of around 3%. Because the subsidy is provided as a deduction rather than a credit - and because the deduction is not that large - the maximum subsidy an individual could receive is in fact lower than that from Belgium (calculations based on Gradus and Julsing 2000).

**Ireland:** The Family Income Supplement (FIS) is similar in structure to the WFTC, as it provides a family subsidy only if an individual in the family works a minimum of 19 hours per week (i.e. no phase-in). The phase-out rate is 60%. Instead of providing the

---

<sup>18</sup>The WTC provides a maximum weekly credit of £ 29 if a family has a child and one earner works at least 16 hours per week. This benefit is reduced at a rate of 37% for additional labour earnings (HM Treasury 2002). Additionally, everyone who works at least 30 hours per week (regardless of whether they care for a child or not) receives £ 12 per week, which is reduced at the same rate. Extra benefits are also provided to families with children. Once labour earnings are large enough, these child credits are reduced at a rate of 7%. A subsidy for childcare expenditures similar to that in the WFTC is also built in to the WTC. So the combination of the WTC and the CTC results in a subsidy structure quite similar in nature to the WFTC. One of the biggest differences, however, is that even some low-income earners without children are now eligible for a small WTC subsidy for working at least 30 hours per week.

subsidy as a tax credit, however, Ireland offers the subsidy as a cash payment: eligible families receive their subsidy in cash from the Post Office (Gradus and Julsing 2000).

**The Netherlands:** The Employment Tax Credit (ETC) was introduced in the Netherlands in 2001. As in Belgium, the ETC applies to the individual rather than the family. It phases in immediately at a rate of around 2% once labour income is earned, and the phase-in rate increases to 12% once labour earnings further increase<sup>19</sup>. The maximum annual individual credit is about twice that in Belgium, but unique to the Netherlands, there is no phase out of the subsidy – so that even high wage earners enjoy the maximum amount from the ETC. Graphically, this is similar to figures 4a and 4b.

**New Zealand:** New Zealand provides a host of tax credits contingent upon the number of children, income levels, and the age of the child. Their work-contingent tax credit is called the Family Tax Credit (FTC), and is structured to guarantee a minimum after-tax income for couples with children who work a combined least 30 hours per week or more, or single parents who work 20 hours more per week or more. Since this is intended only to guarantee a minimum income, the tax credit is phased out at a rate of 100% (Nolan 2002).

### 3.2.5 *Canada: The Self-Sufficiency Project (SSP)*

The only experimental evidence on the effects of a wage subsidy programme is from evaluations of the Canadian Self-Sufficiency Project. The SSP was a weekly wage subsidy offered to single parents who had been on income assistance for at least a full year. The subsidy was only available if the individual worked at least 30 hours per week, and was phased out at a rate of 50%. It provided strong incentives for working: for instance, a participant who earned the minimum wage and worked 35 hours per week would earn about \$12,000 in annual labour earnings and \$12,000 in annual subsidies from the SSP (Michalopoulos et. al. 2002).

In contrast to the previous evidence reviewed, the SSP was run as a true social experiment, and 6,000 single parents who were receiving government income assistance were randomly assigned to control and treatment groups. The experiment ran from 1992 to 1996, and was designed to study the effects of substantial wage subsidies on labour force participation, wage earnings, and child outcomes. The short-run effects of the wage subsidy were significant: labour force participation rates for the treatment group were twice those for the control group by the end of the first year, and there was no significant difference in the wage levels of the jobs taken by the control and treatment groups (so there is no evidence that the subsidy induced participants to take lower quality jobs). Programme effects diminished as time went on, due to continually increasing labour force participation by the controls and diminishing participation by the treated. After the end of the subsidy period (three years after initial eligibility), labour force participation rates were virtually identical for

---

<sup>19</sup> Calculations based on program parameters presented in Gradus and Julsing 2000 and Nekkers et. al. 2004.



the control and treatment groups. Hence, providing a large financial incentive to enter full-time work significantly hastened the speed at which welfare recipients re-entered the workforce without detrimental effects to long-term earnings potential<sup>20</sup>.

### **3.3 Worker-side wage and employment subsidies: implications for South Africa**

This section summarised international experiences with one-time employment bonuses, and larger scale wage subsidy schemes that raised the returns to labour force participation. Both experimental and quasi-experimental analyses of wage subsidy programmes indicate that improving work incentives for low-income individuals through wage subsidisation is an effective way to increase labour force participation for the low-income population. Although the subsidy schemes implemented in OECD nations mostly function through tax credits and deductions, it is conceivable that similar wage subsidies could be constructed that function outside of the tax system (through weekly or monthly subsidies that are paid through local government offices, for instance). In comparison to firm-side subsidies, worker-side subsidies look particularly favourable. A key reason for this is that incentives from worker-side subsidies are not as negatively impacted from burdens and uncertainty associated with applying for the subsidy (which seems to be an important drawback from firm-side subsidies). This is because the subsidy is generally granted directly by the UI administration, or through the tax system, so there is little additional effort needed on the part of workers to apply for the benefit. In essence, the administration costs of worker-side subsidies are more heavily borne by the government, while firms bear the larger share of employer-side subsidy costs.

A drawback to both firm-side and worker-side subsidies, however, is that it is very difficult to use them to target *informal* employment. The subsidies discussed above were implementable because they exist in countries for which most labour income is reported to the tax authorities, thus allowing subsidy amounts to be accurately computed. In the developing country context, for which a greater share of labour income comes from the informal sector, a wage subsidy scheme targeting only the formal sector (where labour income is necessarily reported) may be less effective at increasing labour force participation and reducing poverty for the lower income population.

---

<sup>20</sup> Part of the initial employment effect in the first year was likely because eligibility over the entire three-year experimental period was contingent on first finding employment within twelve months. Once eligible, the recipient could become unemployed and re-employed, and remain eligible for the SSP subsidy. Hence, there were extra incentives to find full-time employment during the first year of the experiment, since doing so made the participant eligible for the wage subsidy for the subsequent two years.

It is not immediately clear how either a wage or employment subsidy programme for targeting informal sector labour could be structured, as accurately collecting and verifying the required wage and labour data would be difficult. At the very minimum, a wage subsidy system requires being able to confirm that applicants engaged in actual work during the week or month. Since the informal sector is defined by the fact that its firms are not required to report revenue or expenses to a central authority, trying to accurately confirm an employment history in informal employment would be tricky<sup>21</sup>.

From the benchmark of the traditional labour supply and demand framework, wage subsidies for firms and wage subsidies for workers of the same amount will have equivalent effects on post-subsidy employment and after-tax wages. However, the comparison of international evidence regarding these subsidies suggests that factors such as the cost and uncertainty of determining eligibility may reduce the impact of employer-side subsidies more than worker-side subsidies. For this reason, if increasing formal employment is to be a goal of the intervention, international evidence suggests that worker-side subsidies are a more effective way of doing so.

Job search assistance programmes, on the other hand (discussed in the next section), can provide assistance for job search regardless of the sector – so that the effects of a job search assistance intervention need not be limited to the formal sector. Additionally, worker-side and firm-side subsidies are partly designed to solve the problem of high reservation wages, so if reservation wages are in fact rather low, wage subsidies cannot be the only solution. If factors such as limited geographic mobility, or incomplete information about job vacancies or job search techniques are a contributing factor to unemployment, then wage subsidies can only be partially successful, and job search assistance may be a more appropriate intervention.

---

<sup>21</sup> A one-time employment bonus would require less information, since it requires confirmation only of employment, rather than of an accumulation of labour income. However, even if it were possible to verify that informal employment occurred by asking for employer confirmation, the subsidy system would still be ripe for gaming. For instance, one person can claim to hire another and pay his wage; that worker can then claim to hire the person who just hired him and repay him the same wage; even if no labour actually occurred, if they each received the wage subsidy, then they would both receive a benefit without actually doing any work. Gaming of this nature is presumably more difficult in formal sector employment, as wage data is likely reported to a central authority and subject to audit.

## 4. Job search assistance programmes

Job search assistance programmes are perhaps the most common form of ALMPs. These are generally implemented by either requiring UI recipients to receive personalised job search assistance on a regular basis, or by providing resources at a local labour office that job seekers can voluntarily access. The first option can involve regular meetings with a job counsellor (who monitors the job search process, advises on job search by suggesting employment opportunities or teaching how to use job search resources, and refers the job seeker to additional job search workshops or training courses), or attendance at job search workshops. Hence, this may incorporate elements of information provision as well as more rigorous monitoring of the job search process. The second option is more passive (in particular, it lacks an enforcement mechanism, and involves less monitoring), but may also involve offering optional job search workshops. In a few instances, monetary assistance is also provided for the job search process, in the form of transportation or moving subsidies.

International experience with job search assistance programmes suggests that these programmes reduce the duration of unemployment, and are quite cost-efficient at doing so. However, one of the reasons they are so effective is because they are integrated within countries' UI systems – such that individuals wishing to receive UI are required to take part in these programmes. Also, multiple elements of job search assistance are usually introduced at once, making it hard to discern how much of the positive programme impact is due to increased monitoring of the job search process (i.e. ensuring that active search is taking place), and how much is due to the improved flow of information to job seekers about job search skills and tips. Both of these concerns may limit the relevance of international experience for considerations of implementation in South African.

A large volume of experimental evidence on the effectiveness of job search assistance programmes exists (for instance, there have been over 50 randomised trials in US Welfare-to-Work experiments alone). This section begins by discussing experimental evidence from the US, UK, Canada, and the Netherlands. Then, non-experimental evidence from Eastern European nations will be presented.

### 4.1 Experimental evidence

#### 4.1.1 *United States: UI job search assistance experiments*

In the United States, to receive UI, the unemployed worker must demonstrate that he or she is actively engaged in employment search. This is usually done through periodic, brief reviews with job counsellors at the UI office (or in some cases over the

phone). A series of state experiments (administered by the Department of Labour) throughout the late 1970s and 1980s sought to understand the effects of additional monitoring and job search assistance on unemployment durations for those receiving UI. These are summarised by Meyer (1995).

The Charleston, North Carolina experiment (1983) divided 6,000 subjects into a control and three treatment groups. The first treatment involved one additional, intensive job counselling interview above that required for regular UI reciprocity. The second required two interviews, and the third required two interviews as well as participation in a three-hour job search workshop (which provided information on “basic search and interviewing strategies”). The first two treatments were found to reduce the duration of unemployment by one-half of a week, while the third reduced the duration of unemployment by .7 weeks. Because the treatments were not very costly, reduced UI payments to the treatment group, and resulted in participants receiving wage income sooner than the control group, the job search assistance treatments were concluded to be quite cost effective.

The New Jersey UI experiment (1986-1987) tested three separate treatments on UI recipients: job search assistance (to remain eligible for benefits, attendance at a one-week job search workshop was required), job search assistance with subsidised training and relocation assistance (same as the first treatment, except the treatment group was informed about training opportunities, and offered a relocation subsidy of between \$300 and \$400<sup>22</sup>), and job search assistance with a reemployment bonus (same as the first treatment, except individuals would receive employment bonuses equivalent to one half of their remaining UI if they found employment before their benefit duration expired) (Corson *et al.* 1989). The first and second treatments lowered duration on UI by half of a week relative to the control group, while the third treatment lowered duration by a full week. Corson *et al.* attribute the employment effects to constant contact with UI staff through the workshop and counselling sessions – but it is not known whether the positive employment effects are due to better monitoring and enforcement of the job search process, or due to the information and counselling on job search skills and techniques provided through the workshop and interviews. As with the Charleston experiment, this intervention was found to be quite cost effective.

The Tacoma, Washington experiments (1986-1987) utilised three separate treatments, but the most relevant for this discussion is the “intensive search” treatment, which required attendance at a two-day job search workshop, provided ten hours of phone bank usage for job search, and required individual follow-ups if the person continued to remain unemployed. Johnson (1991) concluded that this treatment reduced UI duration by half of a week, but only marginally increased the probability of employment. He suggests that the intensive search and participation requirements imposed by this treatment induced some UI recipients to quit claiming benefits while remaining unemployed.

---

<sup>22</sup> Only 1% of the training group treatment expressed interest in a relocation subsidy, and less than that took up – so the relocation subsidy had essentially no additional treatment effect.

Meyer (1995) also reports two non-Department of Labour administered experiments in Nevada (1977-1978) and Wisconsin (1983). The Nevada treatment involved weekly interviews and eligibility checks, while the Wisconsin treatment required attendance at 6-hour job search workshops. The Nevada experiment was found to reduce weeks of UI reciprocity by 4 weeks, and the Wisconsin treatment reduced weeks by about half of a week. As with the other experiments, the savings from additional UI benefits were found to exceed the administrative costs of the treatments.

In summary, the US job search assistance experiments demonstrate that job search assistance can reduce short-term unemployment, and is generally cost-effective in doing so (because the treatment reduces the total amount paid in UI benefits). However, it is difficult to discern how much of the treatment effect is due to enhanced monitoring of the job search, how much is due to educating the job seeker on job search skills and techniques, and how much is due to making additional UI receipt more unpleasant (by requiring job search assistance as a condition for additional UI receipt)<sup>23</sup>.

#### *4.1.2 United States: welfare-to-work experiments*

Throughout the mid-to-late 1980s, and especially the early 1990s, some states began experimenting with various “Welfare-to-Work” (WtW) policies to encourage welfare recipients back into the labour force. In order to change federally imposed reciprocity requirements, however, states were first required to apply to the federal government for a waiver (i.e. exemption from federal welfare rules). Often this waiver was granted on the condition that states implement their reform first on a randomised basis in a pilot study, in order for the employment effects of the policy to be properly evaluated, and so that other states could learn from the experience. As a result, between the early 1980s and 1996 (when the federal welfare structure was reformed) at least 20 randomised trials of WtW programmes were run in at least 50 different sites, comprising at least 60 distinct experiments (Ashworth et. al. 2003).

Many of these studies tested the effectiveness of job search assistance strategies, intending to quickly re-integrate the participant into the labour force by providing information on job availability, counselling about effective job search technique, and closely monitoring the job search process. These policies have been labelled “labour force attachment” programmes, or LFAs. In contrast, “human capital development” (HDC) programmes are intended to enhance the participant’s human capital stock

---

<sup>23</sup> Black et. al. (2003) conclude that much of the positive employment effects from a Kentucky job search assistance program came from the “threat effect” of mandatory job search assistance as a condition for continued UI receipt. This is because a large portion of the employment treatment effect from the Kentucky job search assistance experiment occurred *after* the treatment group was informed of mandatory job search assistance program participation, but *before* the job search assistance was actually provided. They note that similar spikes in reemployment for job search assistance treatment groups prior to the provision of actual assistance is evident from evaluations of many U.S. job search experiments, and from evaluations of the U.K. Restart program.

before re-integrating him or her into the labour force. So, for example, HDCs emphasise educational and vocational training and are thus intended to improve long-term employment prospects. One of the purposes of many WtW experiments was to test the relative efficiency of LFAs versus HDCs in improving the short and long-term employment outcomes for welfare recipients. Some trials involved only implementing an LFA or an HDC, some trials simultaneously treated some participants with one policy and some participants with the other, and other trials mixed their usage of the two.

Bloom and Michalopoulos (2001) and Ashworth *et al* (2003) summarise the results from all of these experiments in an attempt to draw policy recommendations from the various experimental results. Bloom and Michalopoulos analyse the programme effects on employment and earnings over time, and conclude that initially LFAs have a much larger positive employment impact than HCDs. While LFAs and HDCs both increase participant earnings in the first year relative to control groups, the earnings impact of LFAs is generally \$200 to \$400 above that from HDCs – although treatments that incorporated both LFAs and HDCs were generally most effective. Comparing the earnings impact of LFAs and HDCs in experiments that implemented both on separate treatment groups, the earnings effects of LFAs exceeded those of HDCs by at least \$200 in the first year – but after three years, there was virtually no difference in earnings effects (and annual labour earnings were still at least \$400 above those of the control group). Ashworth *et al* attempt to combine all programme estimates into a single estimate of the effects of job search assistance and training (using a “meta-analysis” methodology, by weighting programme estimates by their precision and controlling for characteristics of the area in which the treatment occurred), and conclude that job search assistance has a significant and positive earnings impact, while training may actually have a *negative* impact on participant earnings<sup>24</sup>. The consensus appears to be that LFAs are much more effective at improving short-run employment prospects, but that HDCs have approximately the same labour market effects as LFAs after three years<sup>25</sup>. However, since LFAs are much less expensive, they are seen as the more cost-effective intervention.

---

<sup>24</sup> However, Ashworth *et al.*(2003) pool earnings impacts across years after intervention, rather than considering separate earnings impacts at specific intervals after intervention, as Bloom and Michaelopolous (2001) did, and so their results obscure identification of differing short-term and long-term impacts.

<sup>25</sup> Hotz, Imbens and Lerman (2006) provide evidence that HCDs are actually *more effective* than LFAs at increasing employment percentages in the very long-run. They reconsider evidence from California’s Greater Avenues to Independence Programs (GAIN), which were a series of randomized trials throughout California in the late 1980s. In the experiments, the emphasis on LFAs versus HCDs varied across sites, and in the end it turned out that the treatment in the most successful intervention (Riverside) heavily emphasized LFAs. The results from this led California to encourage all counties to adopt Riverside’s LFA-centric approach. The California experiments encouraged other states to adopt similar strategies, as well. However, Hotz, Imbens, and Lerman criticize this conclusion because it unfairly compares treatment outcomes across counties in which the target population or economic climate could have been significantly different. They reanalyze the results by trying to control for differing county characteristics, and find that HDCs have positive employment effects seven years after treatment - whereas the positive employment effects of LFAs disappear after such a long time horizon.

#### *4.1.3 UK: the Restart experiment*

In April of 1987, The United Kingdom introduced a new programme, Restart, which was intended to re-integrate the long-term unemployed (those receiving UI for more than six months) into the labour force. In order to continue to receive UI, the long-term unemployed were required to participate in a 15-25 minute interview at a local Employment Service Job Centre, at which time the individual received job search counselling (guidance on the availability of training courses and other job-search resources, and information about available employment in the area). Additional interviews were required every six months. In 1989, a national sample of 9,000 UI recipients who had been unemployed for six months were chosen for participation in a randomised trial on Restart effectiveness. The control group was not required to attend Restart interviews, while the treatment group was required to participate in the six-month Restart interviews along with the rest of the long-term unemployed population. Dolton and O'Neill (2002) report a few interesting results from their evaluation of this programme. First, significant differences in employment outcomes exist long after the first treatment, with the treatment group having a 5% higher employment rate four years later. Second, significant employment differences do not develop until a year after treatment (the treatment effect appears to influence longer-term rather than short-term outcomes). Third, they find some evidence of a "threat effect" of the treatment – 20% of the treatment group never attended a Restart interview, yet displayed significantly higher short-run employment rates than the control group. Dolton and O'Neill suspect that simply receiving a letter informing the recipient of required interviews was enough to induce additional job search for these people.

#### *4.1.4 Canada: SSP plus*

As mentioned previously, between 1992 and 1996, the Canadian Self-Sufficiency Project provided strong employment incentives (a substantial cash bonus for 30 hours of work per week) to a randomly assigned group of welfare recipients – and found large short-run employment effects that diminished after the subsidy was removed. The SSP included a second treatment called "SSP Plus" which, in addition to the cash benefit provided in the regular SSP treatment, provided employment services for interested participants. These services included guidance in forming an employment plan and writing resumes, workshops on job search techniques, and postings of job openings. Services were voluntary, but the support staff periodically called participants and reminded them of available services. Participation was significant: virtually all participants completed an employment plan with staff assistance, and over half of the treatment group used at least one of the other services as well. Employment percentages for the SSP Plus group were virtually identical to those for regular SSP participants until the subsidised employment period expired (after four years). At that point, employment percentages for the SSP Plus participants *continued* to improve such that 5-10 percentage point employment differences relative to the control group existed six months after subsidised employment ended (recall that after the subsidy

was removed, there was no employment difference between regular SSP participants and controls).

#### 4.1.5 *The Netherlands: job counselling experiments*

The Netherlands has conducted two recent job search assistance experiments. The first, carried out between November 1989 and January 1990 at seven UI offices around the country, targeted unemployed individuals who were determined to have significant barriers to re-employment. UI recipients in the Netherlands are usually required to attend regular meetings with UI staff to discuss job search progress anyhow, but meetings with treatment group members were longer and more intense: staff members spent a longer time discussing job search progress and clarifying the job search evidence presented by the participant. Gorter and Kalb (1996) find that this experiment significantly reduced unemployment durations for the treatment group, and this was due mainly to an increase in the number of jobs applied for, rather than the probability of being hired from any one application.

The second experiment targeted unemployed individuals *without* significant barriers to reemployment (those with “sufficient skills to find a job”). Treatment group members were required to attend monthly job assistance meetings immediately after the beginning of UI reciprocity. During the meetings, job search activity was evaluated, and additional job search plans were discussed. The experiment was conducted for six months in 1998 in two Dutch cities. As a result, the sample size was quite small (around 400). van den Berg and van der Klaauw (2001) determine that there were no significant differences in employment probabilities between the treatment and control groups. They attribute this to the low-intensity of the monitoring and job search assistance process, as well as the nature of the group targeted (i.e. programme effects should be smallest for the group least requiring search assistance). However, they do find that the treatment groups shift their reported search effort from informal methods of search (friends and family) to formal methods (local UI offices and commercial employment agencies) – presumably because the latter techniques are more verifiable by the UI office.

## 4.2 Non-experimental evidence in Eastern Europe

As part of the recent introduction of ALMPs into Eastern European countries, there exists some non-experimental evidence on the effectiveness of job search assistance programmes in Romania, Hungary, and Poland.

In 1997, Romania introduced the Labour Redeployment Programme (LRP), which introduced a collection of ALMPs: Employment and Relocation Services (which included job search assistance, job counselling, and up to the equivalent of \$500 in relocation assistance), training, and direct public employment services. Participation in any of the programmes appears to have been voluntary. A very preliminary evaluation by Rodriguez-Planas and Benus (2005) uses a form of covariate matching (via a propensity-score methodology) to compare outcomes for those who participate in Employment and Relocation Services (ERS) to those who do not – and find that even



after two years, participation in an ERS-related activity increases the probability of employment by five percentage points.

Hungary and Poland also provide voluntary Employment Services at local labour offices. Each offers job counselling, skills assessment, job search training, interview and resume preparation, and referrals to employers who have notified the ES of vacancies (in each country, this last option is the most commonly used). Because participation is voluntary, non-experimental evaluations of programme impact are merely suggestive (as is also true of the evaluation for Romania's programme above). Nonetheless, programme estimates from covariate matching (which compare outcomes between participants to similar non-participant) suggest that ES usage in Hungary improves the probability of being employed at survey date by 10 percentage points (O'Leary 1998a), while ES usage in Poland improves employment probabilities by 5 percentage points over those who use other ALMPs (O'Leary 1998b).

### **4.3 Job search assistance programmes: lessons for South Africa**

The international evidence described in this section presents a favourable evaluation of job search assistance programmes. In most cases, job search assistance programmes improve employment outcomes for participants relative to non-participants, and for participants relative to participants in other ALMPs. The experimental and non-experimental evidence all suggest that the combination of increased monitoring of the job search process, and the availability of job counselling, job search workshops, and other job search resources reduces short-run unemployment for participating individuals. Further, because job search assistance programmes like the ones mentioned here are inexpensive (relative to other ALMPs), they are usually found to be cost effective. On the other hand, the *long run* effects are less frequently studied, and when they are, training and re-education programmes sometimes appear more favourable with respect to employment outcomes.

Due to international success with job search assistance programmes, interventions which enhance existing job search assistance programmes, provide additional access to these programmes, and provide incentives for their use should be considered for implementation in South Africa. At the same time, however, the structure of programmes encouraging the use of job search assistance would necessarily differ from international examples for a few reasons. First, most of the job search assistance interventions reviewed here integrate additional monitoring of the job search process (to confirm that job search is actually occurring) with the provision of job search counselling, workshops, or resources – so it is hard to know exactly how much of the employment effects are due to stronger enforcement of job search activity, and how much is due to assistance in the development of effective job search skills. In South Africa, it may be easier to provide incentives for the use of job search assistance

programmes (by providing financial rewards for participation) than providing incentives through job search monitoring.

For instance, one way to use job search monitoring to improve employment outcomes would be to provide compensation contingent on evidence of job search (i.e. direct evidence of contact with a hiring employer, such as a signed confirmation of interview). However, evidence of job search may be difficult to verify, especially for informal employment. Second, many of the programmes reviewed here *impose* job search assistance as a requirement for UI reciprocity.

In South Africa, where UI reciprocity is quite low and few other social transfers exist for the unemployed, a similar enforcement mechanism for job search assistance may not exist. This should not be a strong concern, however, because job search assistance could instead be encouraged through positive incentives for its use – financial incentives could be provided for job search assistance participation by rewarding participation in these programmes or rewarding the act of job search (if verifiable). Job search assistance programmes can overcome barriers to employment that wage subsidies would not necessarily address: poor transportation and hence limited labour market mobility (through job search or transportation subsidies), lack of information about job availability or job search techniques (through financial incentives for participation in job search workshops or use of resource centres), and lack of motivation for job search (by rewarding the act of job search or preparing for job search). Additionally, job search assistance programmes need not target only formal employment. This is an important difference from wage subsidy programmes, which cannot easily target informal employment. For these reasons, and because of positive international experience with job search programmes, we believe it is worthwhile to consider strengthening job search assistance programmes in South Africa and experiment with providing incentives for their use.

## **5. Summary of results and conclusions for South Africa**

This review has summarized international experiences with worker-side wage subsidies, employer-side wage subsidies, and job search assistance programmes. International evidence suggests that the most effective of these interventions in encouraging additional employment for the low-income population have been worker-side wage subsidies and job search assistance programmes.

Basic economic theory predicts that the employment effects of worker-side and firm-side subsidies should be similar under certain circumstances. The available evidence, however, suggests that this is not so. For instance, both quasi-experimental evidence from the United States and the United Kingdom, and experimental evidence from Canada suggest that worker-side wage subsidies successfully increase labour force participation rates by increasing the returns to work. Based on this success, a number of other OECD countries have adapted these programmes for their own use, although similar quasi-experimental evaluations of their effectiveness have apparently not yet been conducted.

Evaluations of employer-side subsidies are less convincing, as they are usually not conducted within an experimental framework. However, the accumulation of available evidence is discouraging – the evaluations reviewed here suggest any of the employment effects from firm-side subsidies that do exist are small. This is not a new conclusion, as similar reviews by other researchers concluded that employer-side subsidies are cost-inefficient because they subsidise hiring that would have occurred anyhow – and if the subsidy is targeted towards workers of specific characteristics, it may simply induce substitution by the employer from untargeted to targeted workers. Additionally, Canadian and U.S. experience with national targeted subsidies indicate that only a small percentage of firms ever apply for the benefits. This seems to be because the value of the subsidy is small relative to the combination of the potential costs from hiring risky workers (so that the subsidy fails to encourage additional hiring from the target population) and because the administrative burden associated with confirming eligibility and applying for the subsidies is significant (so much so that firms that hire eligible workers fail to take eligibility into consideration when making hiring decisions).

On the other hand, job search assistance programmes are almost universally found to reduce unemployment durations. The programmes are generally imposed as a requirement for additional UI receipt, and combine elements of strengthened job search monitoring (to confirm that the unemployed individual is actively searching for employment) and actual job search counselling. Since most programmes evaluated here introduced a combination of these two, it is not well understood whether the positive employment effects are due to job search activity monitoring or due to

helping the job seeker improve his or her ability to effectively job search. On the whole, job search assistance programmes are found to be quite cost effective. This is because they reduce unemployment durations with little additional cost – the savings result from paying less unemployment insurance benefits for those recipients who more rapidly enter the labour force.

A fundamental drawback from much of the results discussed here is that it is difficult to know how applicable they are regarding wide-spread programme implementation. For instance, programmes that increase employment for a treatment group relative to controls in a single experimental setting may have insignificant aggregate employment effects if extended to the entire population, because individuals eligible for the programme may find employment at the expense of ineligible job seekers. That is, the economy-wide effects from a programme may be quite different from what experimental results would otherwise suggest. On the other hand, the implications of evidence from the review of EITC-like wage subsidies do not suffer from this criticism, since these programmes were implemented on a national scale. The EITC (and, to a lesser extent, the WFTC in the U.K.) have been convincingly shown to increase aggregate levels of labour force participation and employment. That is, subsidised workers are increasingly employed due to these wage subsidies, and the employment gains do not come entirely at the expense of other workers' employment.

## 5.1 Implications for South Africa

International experience with job search assistance programmes and worker-side subsidies is significantly more positive than experience with employer-side subsidies. Even though the theoretical impacts should be similar, the administrative costs and uncertainty associated with employer-side subsidies limit their effectiveness relative to worker-side subsidies. For these reasons, worker-side subsidies are recommended over employer-side subsidies.

Neither firm-side subsidies nor worker-side subsidies are easily targeted to informal employment, however, and presumably unemployment in the informal sector is a concern that any intervention should target. Job search assistance programmes overcome this concern, as the interventions can be designed to apply to both formal and informal employment. These programmes can also directly address additional market frictions (such as lack of information about job availability and job search techniques), which is not necessarily true of subsidies. Therefore, we advocate job search assistance interventions, such as further development of job search resource centres and additional financial incentives for their use, subsidies for transportation for job search, and incentives for the demonstration of job search activity.

One possible critique of the conclusions we've formed from this international review is that the success of job search assistance programmes and worker-side subsidies may be dependent upon institutional and economic characteristics of the countries that used them – and hence international experience may not directly translate to South Africa. For instance, one might note that job search assistance programmes have usually been implemented by *mandating* participation. This requirement is enforceable

because UI benefits can be withheld for non-participation. That is, the nature of social assistance in many countries builds in natural enforcement mechanisms for job search assistance programmes through the provision of UI and welfare benefits – which, on the surface, seems incompatible with the structure of assistance in South Africa. On the other hand, programme participation in South Africa could be induced by providing *positive* financial incentives for participating. Individuals could receive financial rewards for participating in a certain number of job counselling sessions, for participating in job search workshops, or for providing evidence of active job search. If a system of local job search assistance centres already exists and are under-utilized, then providing financial incentives for their use may be a worthwhile intervention.

A second critique of our conclusions is that worker-side wage subsidy schemes, as structured in those countries which use them today, depend critically upon accurate reporting of wage and employment histories. Wage subsidies like the EITC require accurate governmental knowledge of labour income. Re-employment bonuses like those used in Japan and Korea require accurate information about unemployment durations, which requires accurate information regarding when the previous employment relationship dissolved. These programmes could be implemented in South Africa for targeting *formal* employment, but it is harder to imagine designing wage subsidy schemes that can increase the returns to informal employment as well. This is because there is presumably no reporting mechanism in place for informal wage and employment history. If one of the goals of a labour market intervention is to target informal employment, a method to verify informal employment information would be required. Of course, this will be a concern with employer-side subsidies as well. Of the three interventions under consideration, job search assistance programmes are most easily targeted towards informal employment, since there is nothing constraining such programmes from providing assistance in the search for informal employment.

To be fair, there are some reasons why employer-side subsidies may be more effective in South Africa than international experience suggests. Internationally, employer-side subsidies are usually targeted to specific types of workers. The subsidies often require substantial employment commitments (six months or longer, in many cases), the eligibility of job seekers is often uncertain during the hiring process (so that firms need to confirm eligibility with the local labour office), and the application for subsidies are sometimes administratively difficult. As a result, even subsidies approaching 50% of wage expenditures may not be significant enough to induce employment. These concerns can be somewhat mitigated by broadening the target population (say, to the entire low income population, or to all young workers below a certain age) – this would limit uncertainty about the eligibility during the initial hiring process, for instance. Also, to the extent that targeted subsidies hinder the employment chances of the targeted population by stigmatizing eligible job seekers in the eyes of the employer, a much broader targeted population would limit this concern (if an employer can easily verify eligibility during the hiring process, then finding out that the worker is subsidy-eligible would not provide additional stigmatizing information). This is potentially relevant in South Africa, where the target

population is likely much broader than the population targeted in most countries that use targeted subsidies. On the other hand, broadening the target population necessarily increases the likelihood of subsidizing employment that would otherwise have occurred. Also, even if employer-side subsidies are more effective in South Africa than international evidence would otherwise suggest, the fact remains that (in the absence of differing administrative costs or other concerns) a subsidy given to workers should have the same employment effects as a subsidy of the same amount given to firms. Since all available evidence demonstrates that the administrative costs and eligibility uncertainty are important limits specifically to the effectiveness of firm-side subsidies, we advocate worker-side subsidies over firm-side subsidies.

The final choice and design of interventions require consideration of institutional constraints regarding feasibility of intervention implementation, a clearer understanding of frictions in the South African job search process (as well as information about the accessibility and use of existing job search resource centres), and a decision regarding whether interventions must also target informal employment. Given the volume of international evidence regarding the success of job search assistance programmes, and given the other concerns discussed above, an expansion of job search assistance programmes (and perhaps also providing financial incentives for their use) may be a relatively inexpensive solution with high likelihood of success - and therefore, our choice as a first-step intervention (although if targeting formal employment is also a specific goal, we advocate worker-side subsidies, in addition, rather than firm-side subsidies). To proceed further with this idea, it will be helpful to know the extent to which job search assistance centres exist, what services they provide, how extensively they are used, and how widely the low-income population is aware of their services. It will also be important to understand the extent to which barriers such as high transportation costs and limited information about job availability impact the effectiveness of job search.

## References

Ashworth, Karl et. al. 2004. "Meta-evaluation: Discovering What Works Best in Welfare Provision," *Evaluation* 10(2), 193-216.

Betcherman, Gordon, Karin Olivas, and Amit Dar. 2004. "Impacts of Active Labour Market Programmes: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries," Social Protection Discussion Paper no. 0402, January. The World Bank. Washington, D.C.

Black, Dan et. al. 2003. "Is the Threat of Reemployment Services More Effective than the Services Themselves? Evidence from Random Assignment in the UI System." *American Economic Review*, 93(4), 1313-1327.

Bloom, Dan and Charles Michalopoulos. 2001. "How Welfare and Work Policies Affect Employment and Income: A Synthesis of Research." Manpower Demonstration Research Corporation, May 2001.

Blundell, Richard, Mike Brewer, and Andrew Shephard. 2005. "Evaluating the Labour Market Impact of Working Families' Tax Credit Using Differences-in-Differences," Institute for Fiscal Studies. June 2005.

Blundell, Richard and Hilary Hoynes. 2004. "Has 'In-Work' Benefit Reform Helped the Labour Market?" In Seeking a Premier Economy: The Economic Effects of British economic Reforms, 1980-2000, David Card, Richard Blundell, and Richard Freeman, eds. The University of Chicago Press, Chicago. 411-460.

Burtless, Gary. 1985. "Are Targeted Wage Subsidies Harmful? Evidence from a Wage Voucher Experiment." *Industrial and Labour Relations Review*, 39(1), 105-114.

Carson, Walter et. al. 1989. The New Jersey Unemployment Insurance Employment Demonstration Project. Unemployment Insurance Occasional Paper 89-3, U.S. Department of Labour Employment and Training Administration. Washington, D.C. April 1989.

Dar, Amit and P. Zafiris Tzannatos. 1999. "Active Labour Market Programmes: A Review of the Evidence from Evaluations," Social Protection Discussion Paper no. 9901, January. The World Bank. Washington, D.C.

Dolton, Peter and Donal O'Neill. 2002. "The Long-Run Effects of Unemployment Monitoring and Work-Search Programs: Experimental Evidence from the United Kingdom," *Journal of Labour Economics*, 20(2), 381-403.

Earle, John and Catalin Pauna. 1998. "Long-term Unemployment, Social Assistance and Labour Market Policies in Romania," *Empirical Economics* 23, 203-235.

Eichler, Martin and Michael Lechner. 2000. "Some Econometric Evidence on the Effectiveness of Active Labour Market Programmes in East Germany." Working Paper Number 318, June 2000.

Eissa, Nada and Jeffrey Liebman. 1996. "Labour Supply Response to the Earned Income Tax Credit." *Quarterly Journal of Economics*, 111(2), 605-637.

Galaso, Emanuela, Martin Ravallion, and Agustin Salvia. "Assisting the Transition from Workfare to Work: A Randomized Experiment." Working paper, April 2002.

General Accounting Office. 2002. "Business Tax Incentives: Incentives to Employ Workers With Disabilities Receive Limited Use and Have an Uncertain Impact," Report to Congressional Committees, December 2002.

Gera, Surendra. 1987. "An Evaluation of the Canadian Employment Tax Credit Program." *Canadian Public Policy*, 13(2), 196-207.

Gorter, Cees and Guyonne Kalb. 1996. "Estimating the Effect of Counseling and Monitoring the Unemployed Using a Job Search Model," *Journal of Human Resources*, 31(3), 590-610.

Gradus, R.H.J.M. and J.M. Julsing. 2003. "Comparing Different European Income Tax Policies Making Work Pay." Research Centre for Economic Policy (OCFEB) mimeo, September 2003. <https://ep.eur.nl/handle/1765/823>.

Hamersma, Sarah. 2003. "The Work Opportunity and Welfare-to-Work Tax Credits: Participation Rates Among Eligible Workers," *National Tax Journal* 56(4), 725-738.

Hamersma, Sarah and Carolyn Heinrich. 2005. "Temporary Help Service Firms' Use of Employer Tax Credits: Implications for Disadvantaged Workers' Labour market Outcomes," mimeo, October 2005.

HM Treasury. 2002. "The Child and Working Tax Credits: The Modernisation of Britain's Tax and Benefit System." April 2002.  
[http://www.hm-reasury.gov.uk/media/8D5/BD/new\\_tax\\_credits.pdf](http://www.hm-reasury.gov.uk/media/8D5/BD/new_tax_credits.pdf)

Hollenbeck, Kevin and Richard Willke. 1991. "The Employment and Earnings Impacts of the Targeted Jobs Tax Credit," Upjohn Institute Staff Working Paper 91-07. February 1991.

Hotz, V. Joseph, Guido Imbens, and Jacob Klerman. 2006. "Evaluating the Differential Effects of Alternative Welfare-to-Work Training Components: A Re-Analysis of the California GAIN Program." NBER Working Paper 11939, January 2006.



*International experience with worker-side and employer-side wage and employment subsidies, and job search assistance programmes: Implications for South Africa*

---

Johnson, Terry et. al. 1991. Evaluation of the Impacts of the Washington Alternative Work Search Experiment. Unemployment Insurance Occasional Papers 91-4, U.S. Department of Labour, Employment and Training Administration. Washington, D.C. January 1991.

Katz, Lawrence. 1998. "Wage Subsidies for the Disadvantaged." In Generating Jobs: How to Increase Demand for Less-Skilled Workers, Richard Freeman and Peter Gottschalk, eds. Russel Sage Foundation, New York.

Kluge, Jochen, Hartmut Lehmann, and Cristoph Schmidt. 2001. "Disentangling Treatment Effects of Polish Active Labour Market Policies: Evidence from Matched Samples." Institute for the Study of Labour (IZA) Discussion Paper No. 355, September 2001.

Knight, Genevieve. 2002. "Evaluation of the Australian Wage Subsidy Special Youth Employment and Training Program, SYTEP." PhD Thesis, School of Economics and Political Science at the University of Sydney.

Lubyova, Martina and Jan van Ours. 1998. "Effects of Active Labour Market Programs on the Transition Rate From Unemployment Into Regular Jobs in the Slovak Republic." Working paper.

Marshall, Adriana. 1997. "State Labour Market Intervention in Argentina, Chile and Uruguay: Common Model, Different Versions." Employment and Training Papers: 10, Employment and Training Department of the International Labour Office. Geneva.

Meyer, Bruce. 1995. "Lessons from the U.S. Unemployment Insurance Experiments." *Journal of Economic Literature*, 33(1), 91-131.

Meyer, Bruce. 2002. "Labour Supply at the Extensive and Intensive Margins: the EITC, Welfare, and Hours Worked." *American Economic Review*, 92(2), 373-379.

Meyer, Bruce and Dan Rosenbaum. 2001. "Welfare, the Earned Income Tax Credit, and the Labour Supply of Single Mothers." *Quarterly Journal of Economics*, 116(3), 1063-1114.

Michalopoulos, Charles et. al. 2002. "Making Work Pay: Final Report on the Self-Sufficiency Project for Long-Term Welfare Recipients." Social Research and Demonstration Corporation, July 2002.

Nekkers, G.J.A., W.B. Roorda and J.H.L. van der Waart. 2004. "Changing Perspectives in Dutch Labour Market Policy." *tln.net: Managing Social Risks through Transitional Labour Markets Working Paper*, Conference Paper. Amsterdam.

Nolan, Patrick. 2002. "New Zealand's Family Assistance Tax Credits: Evolution and Operation." New Zealand Treasury Working Paper 2/16, September 2002.

OECD. 2004. "Benefits and Wages: OECD Indicators." Paris.

OECD Social Policy Division, Directorate of Employment, Labour and Social Affairs. 2004a. "Country Chapter – Benefits and Wages: Japan 2004." <http://www.oecd.org/dataoecd/52/13/36220121.pdf>

OECD Social Policy Division, Directorate of Employment, Labour and Social Affairs. 2004b. "Country Chapter – Benefits and Wages: Korea 2004." <http://www.oecd.org/dataoecd/52/14/36220131.pdf>

O'Leary, Christopher. 1998a. "Evaluating the Effectiveness of Active Labour Programs in Hungary." Upjohn Institute Technical Report No. 98-013. November 1998.

O'Leary, Christopher. 1998b. "Evaluating the Effectiveness of Active Labour Programs in Poland." Upjohn Institute Technical Report No. 98-012. June 1998.

Puhani, Patrick. 1998. "Advantage Through Training: A Microeconomic Evaluation of the Employment Effects of Active Labour market Programmes in Poland." Centre for European Economic Research, Discussion Paper No. 98-25. September 1998.

Rodriguez-Planas, Nuria and Jacob Benus. 2005. "Evaluating the Effectiveness of Active Labour market Programs in Romania." (Preliminary) Working Paper, July 2005.

Saez, Emmanuel. 2002. "Optimal Income Transfer Programs: Intensive Versus Extensive Labour Supply Responses." *Quarterly Journal of Economics*, 117(3), 1039-1073.

van den Berg, Gerald and Bas van der Klaauw. 2001. "Counseling and Monitoring of Unemployed Workers: Theory and Evidence from a Controlled Social Experiment." Office of Labour Market Policy Evaluation (IFAU), Swedish Ministry of Industry, Employment, and Communications. Working Paper 2001:12.

Van Reenen, John. 2004. "Active Labour Market Policies and the British New Deal for the Young Unemployed in Context." In *Seeking a Premier Economy: The Economic Effects of British economic Reforms, 1980-2000*, David Card, Richard Blundell, and Richard Freeman, eds. The University of Chicago Press, Chicago. 461-496.

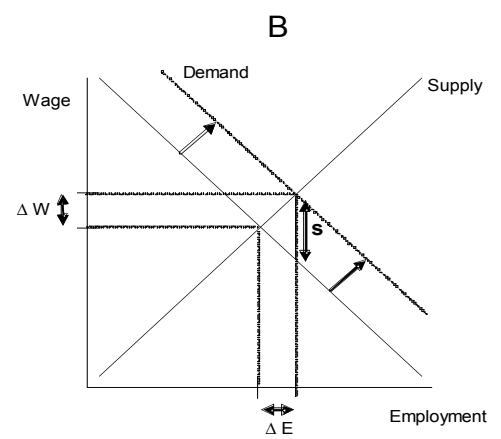
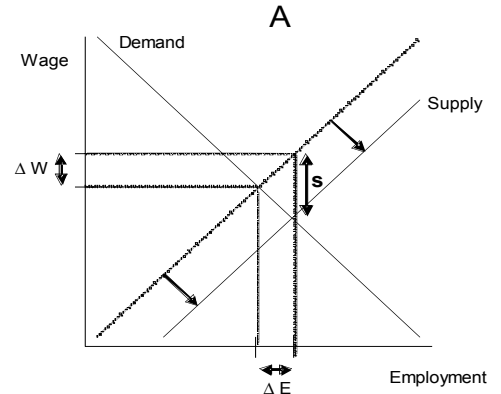
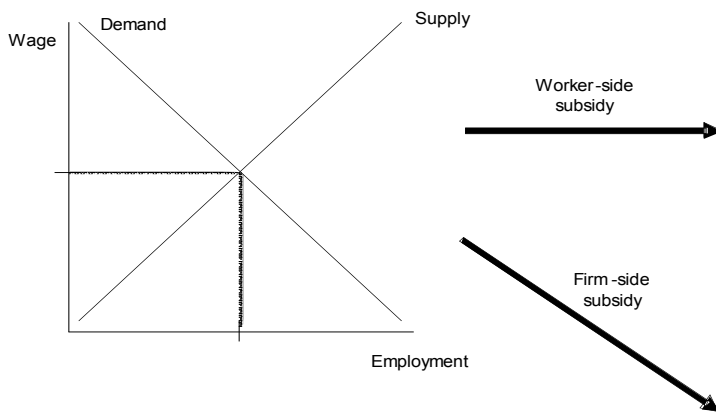
Verbist, Gerlinde, Lieve de Lathouwer, and Annelies Roggeman. 2005. "Labour Market Activation Policies: A Comparison of the Use of Tax Credits in Belgium, the UK, and the US." *tlm.net: Managing Social Risks through Transitional Labour Markets Working Paper*. Amsterdam.

*International experience with worker-side and employer-side wage and employment subsidies, and job search assistance programmes:  
Implications for South Africa*

---

Woodbury, Stephen and Robert Spiegelman. 1987. "Bonuses to Workers and Employers to Reduce Unemployment: Randomized Trials in Illinois." *American Economic Review*, 77(4), 513-530.

**Figure 1 - Theoretical effects of a worker-side and firm-side wage subsidy**



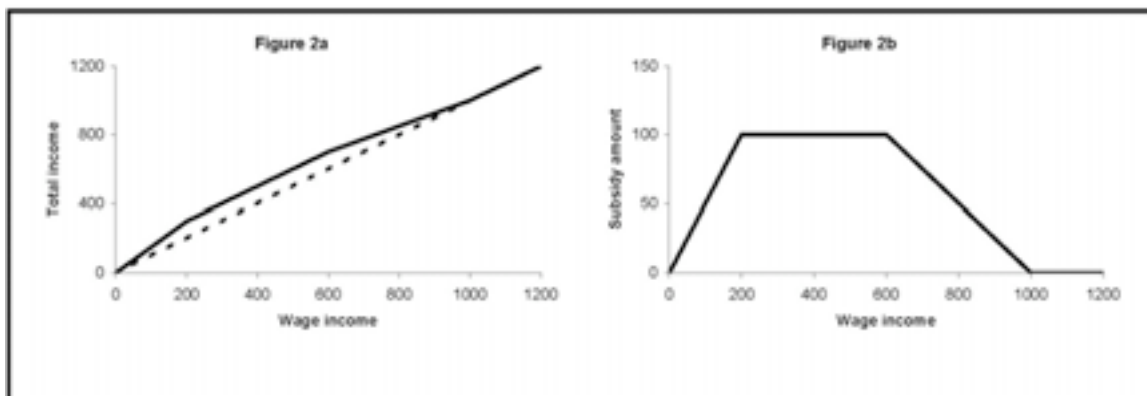
$\Delta W$ : change in worker's effective wage due to subsidy

$\Delta E$ : change in employment due to subsidy

Panel A demonstrates the effect of a worker-side wage subsidy of amount  $s$ .  
 Panel B demonstrates the effect of a firm-side wage subsidy of amount  $s$ .

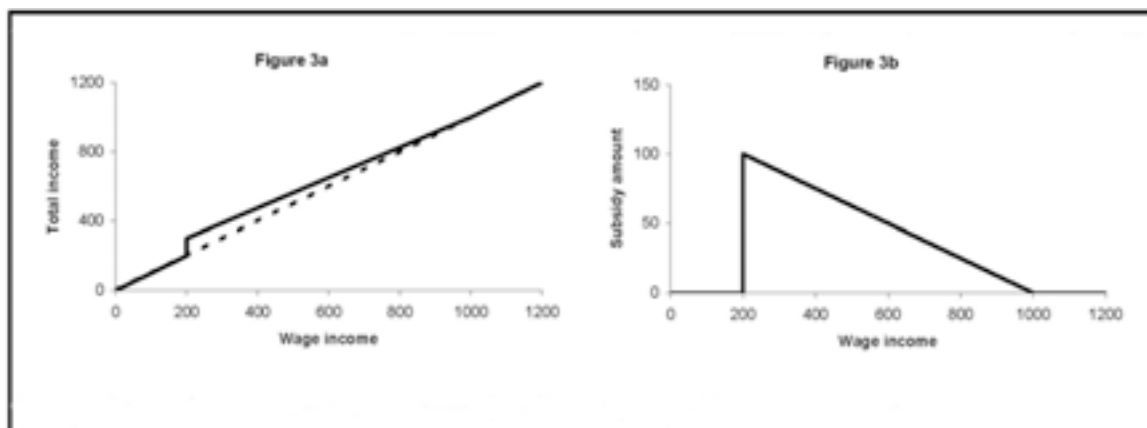
Note that the change in the amount the worker gets for an hour of work, and the change in employment are equivalent regardless of which party receives the subsidy (i.e.  $\Delta W$  and  $\Delta E$  are equivalent in panels A and B).

**Figure 2a, 2b – ‘EITC-like’ wage subsidy**



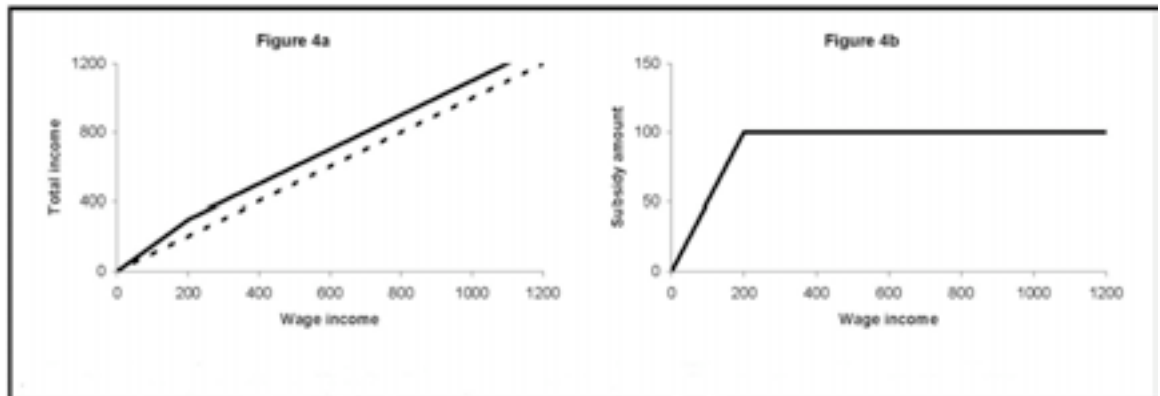
Phase-in rate: 50%. Phase-out rate: 25%. Maximum benefit amount: 100. Maximum earnings before phase out: 600. Dotted line in 2a: total income schedule ignoring subsidy. Solid line: total income schedule including subsidy.

**Figure 3a, 3b – ‘WFTC-like’ wage subsidy**



Phase-in rate: 100%. Phase-out rate: 12.5%. Maximum benefit amount: 100. Maximum earnings before phase out: 200. Dotted line in 3a: total income schedule ignoring subsidy. Solid line: total income schedule including subsidy.

Figure 4a, 4b – ‘No phase-out’ wage subsidy



Phase-in rate: 50%. Phase-out rate: 0%. Maximum benefit amount: 100. Maximum earnings before phase out: NA. Dotted line in 4a: total income schedule ignoring subsidy. Solid line: total income schedule including subsidy.

**Table 1 – Cited references on comparisons of international experiences with wage subsidies, employment subsidies, and job search assistance programmes**

---

Betcherman, Gordon, Karin Olivas, and Amit Dar. 2004. "Impacts of Active Labour Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries," Social Protection Discussion Paper no. 0402, January. The World Bank. Washington, D.C.

---

Dar, Amit and P. Zafiris Tzannatos. 1999. "Active Labour Market Programs: A Review of the Evidence from Evaluations," Social Protection Discussion Paper no. 9901, January. The World Bank. Washington, D.C.

---

*International experience with worker-side and employer-side wage and employment subsidies, and job search assistance programmes: Implications for South Africa*

---

**Table 2 – Employer-side wage and employment subsidies, references**

<b>Untargeted subsidies</b>		
<b>Country</b>	<b>Programme</b>	<b>References</b>
United States	New Jobs Tax Credit	Katz, Lawrence. 1998. "Wage Subsidies for the Disadvantaged." In <i>Generating Jobs: How to Increase Demand for Less-Skilled Workers</i> , Richard Freeman and Peter Gottschalk, eds. Russel Sage Foundation, New York.
<b>Targeted subsidies, employer-initiated</b>		
<b>Country</b>	<b>Programme</b>	<b>References</b>
Canada	Employment Tax Credit	Gera, Surendra. 1987. "An Evaluation of the Canadian Employment Tax Credit Program." <i>Canadian Public Policy</i> , 13(2), 196-207.
United States	Targeted Jobs Tax Credit	Katz, Lawrence. 1998. "Wage Subsidies for the Disadvantaged." In <i>Generating Jobs: How to Increase Demand for Less-Skilled Workers</i> , Richard Freeman and Peter Gottschalk, eds. Russel Sage Foundation, New York.
United States	Work Opportunities Tax Credit	General Accounting Office. 2002. "Business Tax Incentives: Incentives to Employ Workers With Disabilities Receive Limited Use and Have an Uncertain Impact," Report to Congressional Committees, December 2002.
		Hamersma, Sarah. 2003. "The Work Opportunity and Welfare-to-Work Tax Credits: Participation Rates Among Eligible Workers," <i>National Tax Journal</i> 56(4), 725-738.
		Hamersma, Sarah and Carolyn Heinrich. 2005. "Temporary Help Service Firms' Use of Employer Tax Credits: Implications for Disadvantaged Workers' Labour market Outcomes," mimeo, October 2005.
		Hollenbeck, Kevin and Richard Willke. 1991. "The Employment and Earnings Impacts of the Targeted Jobs Tax Credit," Upjohn Institute Staff Working Paper 91-07. February 1991.
<b>Youth-targeted subsidies</b>		
<b>Country</b>	<b>Programme</b>	<b>References</b>
United Kingdom	'New Deal' for Youth Employment	Van Reenen, John. 2004. "Active Labour Market Policies and the British New Deal for the Young Unemployed in Context." In <i>Seeking a Premier Economy: The Economic Effects of British economic Reforms, 1980-2000</i> , David Card, Richard Blundell, and Richard Freeman, eds. The University of Chicago Press, Chicago. 461-496.
Argentina	Proyecto Joven	Marshall, Adriana. 1997. "State Labour Market Intervention in Argentina, Chile and Uruguay: Common Model, Different Versions." <i>Employment and Training Papers: 10</i> , Employment and Training Department of the International Labour Office. Geneva.
Chile	Chile Joven	Marshall, Adriana. 1997. "State Labour Market Intervention in Argentina, Chile and Uruguay: Common Model, Different Versions." <i>Employment and Training Papers: 10</i> , Employment and Training Department of the International Labour Office. Geneva.
Uruguay	Projoven	Marshall, Adriana. 1997. "State Labour Market Intervention in Argentina, Chile and Uruguay: Common Model, Different Versions." <i>Employment and Training Papers: 10</i> , Employment and Training Department of the International Labour Office. Geneva.
<b>Targeted subsidies, public job postings</b>		
<b>Country</b>	<b>Programme</b>	<b>References</b>
Australia	Jobstart	Knight, Genevieve. 2002. "Evaluation of the Australian Wage Subsidy Special Youth Employment and Training Program, SYTEP." PhD Thesis, School of Economics and Political Science at the University of Sydney.
Germany	Public Employment Programme	Eichler, Martin and Michael Lechner. 2000. "Some Econometric Evidence on the Effectiveness of Active Labour Market Programmes in East Germany." Working Paper Number 318, June 2000.

<b>Targeted subsidies in Eastern European Countries</b>		
<b>Country</b>	<b>Programme</b>	<b>References</b>
Hungary	Wage subsidy to long-term unemployed	O'Leary, Christopher. 1998. "Evaluating the Effectiveness of Active Labour Programs in Hungary." Upjohn Institute Technical Report No. 98-013. November 1998.
Poland	Intervention Works	Puhani, Patrick. 1998. "Advantage Through Training: A Microeconomic Evaluation of the Employment Effects of Active Labour market Programmes in Poland." Centre for European Economic Research, Discussion Paper No. 98-25. September 1998.  Kluve, Jochen, Hartmut Lehmann, and Cristoph Schmidt. 2001. "Disentangling Treatment Effects of Polish Active Labour Market Policies: Evidence from Matched Samples." Institute for the Study of Labour (IZA) Discussion Paper No. 355, September 2001.
Romania	Wage subsidies for hiring recent graduates	Earle, John and Catalin Pauna. 1998. "Long-term Unemployment, Social Assistance and Labour Market Policies in Romania," <i>Empirical Economics</i> 23, 203-235.
Slovakia	Socially Purposeful Jobs	Lubyova, Martina and Jan van Ours. 1998. "Effects of Active Labour Market Programs on the Transition Rate From Unemployment Into Regular Jobs in the Slovak Republic." Working paper.
<b>Worker-initiated targeted subsidies</b>		
<b>Country</b>	<b>Programme</b>	<b>References</b>
Argentina	Proempleo	Galaso, Emanuela, Martin Ravallion, and Agustin Salvia. "Assisting the Transition from Workfare to Work: A Randomized Experiment." Working paper, April 2002.
United States	Illinois UI experiment	Woodbury, Stephen and Robert Spiegelman. 1987. "Bonuses to Workers and Employers to Reduce Unemployment: Randomized Trials in Illinois." <i>American Economic Review</i> , 77(4), 513-530.
United States	Ohio UI experiment	Burtless, Gary. 1985. "Are Targeted Wage Subsidies Harmful? Evidence from a Wage Voucher Experiment." <i>Industrial and Labour Relations Review</i> , 39(1), 105-114.



*International experience with worker-side and employer-side wage and employment subsidies, and job search assistance programmes: Implications for South Africa*

---

**Table 3 – Worker-side wage and employment subsidies, references**

<b>Re-employment bonuses</b>		
<b>Country</b>	<b>Programme</b>	<b>References</b>
Japan	Re-employment bonus	OECD Social Policy Division, Directorate of Employment, Labour and Social Affairs. 2004a. "Country Chapter – Benefits and Wages: Japan 2004."
Korea	Re-employment bonus	OECD Social Policy Division, Directorate of Employment, Labour and Social Affairs. 2004b. "Country Chapter – Benefits and Wages: Korea 2004."
United States	State Unemployment Insurance experiments	Meyer, Bruce. 1995. "Lessons from the U.S. Unemployment Insurance Experiments." <i>Journal of Economic Literature</i> , 33(1), 91-131.
<b>Wage subsidies</b>		
<b>Country</b>	<b>Programme</b>	<b>References</b>
Belgium	Low Wage Tax Credit	Verbist, Gerlinde, Lieve de Lathouwer, and Annelies Roggeman. 2005. "Labour Market Activation Policies: A Comparison of the Use of Tax Credits in Belgium, the UK, and the US." <i>tln.net: Managing Social Risks through Transitional Labour Markets Working Paper</i> . Amsterdam.
Canada	Self-Sufficiency Project	Michalopoulos, Charles et. al. 2002. "Making Work Pay: Final Report on the Self-Sufficiency Project for Long-Term Welfare Recipients." <i>Social Research and Demonstration Corporation</i> , July 2002.
Finland	Earned Income Allowance	Gradus, R.H.J.M. and J.M. Julsing. 2003. "Comparing Different European Income Tax Policies Making Work Pay." <i>Research Centre for Economic Policy (OCFEB) mimeo</i> , September 2003.
Ireland	Family Income Supplement	Gradus, R.H.J.M. and J.M. Julsing. 2003. "Comparing Different European Income Tax Policies Making Work Pay." <i>Research Centre for Economic Policy (OCFEB) mimeo</i> , September 2003.
The Netherlands	Employment Tax Credit	Gradus, R.H.J.M. and J.M. Julsing. 2003. "Comparing Different European Income Tax Policies Making Work Pay." <i>Research Centre for Economic Policy (OCFEB) mimeo</i> , September 2003.  Nekkers, G.J.A., W.B. Roorda and J.H.L. van der Waart. 2004. "Changing Perspectives in Dutch Labour Market Policy." <i>tln.net: Managing Social Risks through Transitional Labour Markets Working Paper</i> , Conference Paper. Amsterdam.
New Zealand	Family Tax Credit	Nolan, Patrick. 2002. "New Zealand's Family Assistance Tax Credits: Evolution and Operation." <i>New Zealand Treasury Working Paper 2/16</i> , September 2002.
United Kingdom	Working Families' Tax Credit	Blundell, Richard and Hilary Hoynes. 2004. "Has 'In-Work' Benefit Reform Helped the Labour Market?" In <i>Seeking a Premier Economy: The Economic Effects of British economic Reforms, 1980-2000</i> , David Card, Richard Blundell, and Richard Freeman, eds. The University of Chicago Press, Chicago. 411-460.  Blundell, Richard, Mike Brewer, and Andrew Shephard. 2005. "Evaluating the Labour Market Impact of Working Families' Tax Credit Using Differences-in-Differences," <i>Institute for Fiscal Studies</i> . June 2005.  HM Treasury. 2002. "The Child and Working Tax Credits: The Modernisation of Britain's Tax and Benefit System." April 2002.
United States	Earned Income Tax Credit	Eissa, Nada and Jeffrey Liebman. 1996. "Labour Supply Response to the Earned Income Tax Credit." <i>Quarterly Journal of Economics</i> , 111(2), 605-637.  Meyer, Bruce and Dan Rosenbaum. 2001. "Welfare, the Earned Income Tax Credit, and the Labour Supply of Single Mothers." <i>Quarterly Journal of Economics</i> , 116(3), 1063-1114.  Meyer, Bruce. 2002. "Labour Supply at the Extensive and Intensive Margins: the EITC, Welfare, and Hours Worked." <i>American Economic Review</i> , 92(2), 373-379.

**Other cited resources on wage and employment subsidies**

OECD. 2004. "Benefits and Wages: OECD Indicators." Paris.

Saez, Emmanuel. 2002. "Optimal Income Transfer Programs: Intensive Versus Extensive Labour Supply Responses." Quarterly Journal of Economics, 117(3), 1039-1073.

Verbist, Gerlinde, Lieve de Lathouwer, and Annelies Roggeman. 2005. "Labour Market Activation Policies: A Comparison of the Use of Tax Credits in Belgium, the UK, and the US." tlm.net: Managing Social Risks through Transitional Labour Markets Working Paper. Amsterdam.

**Table 4 – Job search assistance programmes, references**

Experimental evidence		
Country	Programme	References
Canada	Self-Sufficiency Project Plus	Michalopoulos, Charles et. al. 2002. "Making Work Pay: Final Report on the Self-Sufficiency Project for Long-Term Welfare Recipients." Social Research and Demonstration Corporation, July 2002.
The Netherlands	Job counselling for those with 'barriers to reemployment'	Gorter, Cees and Guyonne Kalb. 1996. "Estimating the Effect of Counseling and Monitoring the Unemployed Using a Job Search Model," Journal of Human Resources, 31(3), 590-610.
	Job counselling for those without 'barriers to reemployment'	van den Berg, Gerald and Bas van der Klaauw. 2001. "Counseling and Monitoring of Unemployed Workers: Theory and Evidence from a Controlled Social Experiment." Office of Labour Market Policy Evaluation (IFAU), Swedish Ministry of Industry, Employment, and Communications. Working Paper 2001:12.
United States	UI Job Search Experiments	Meyer, Bruce. 1995. "Lessons from the U.S. Unemployment Insurance Experiments." Journal of Economic Literature, 33(1), 91-131.
	Kentucky	Black, Dan et. al. 2003. "Is the Threat of Reemployment Services More Effective than the Services Themselves? Evidence from Random Assignment in the UI System." American Economic Review, 93(4), 1313-1327.
	New Jersey	Carson, Walter et. al. 1989. The New Jersey Unemployment Insurance Employment Demonstration Project. Unemployment Insurance Occasional Paper 89-3, U.S. Department of Labour Employment and Training Administration. Washington, D.C. April 1989.
	Washington	Johnson, Terry et. al. 1991. Evaluation of the Impacts of the Washington Alternative Work Search Experiment. Unemployment Insurance Occasional Papers 91-4, U.S. Department of Labour, Employment and Training Administration. Washington, D.C. January 1991.
United States	Welfare-to-Work Experiments	Ashworth, Karl et. al. 2004. "Meta-evaluation: Discovering What Works Best in Welfare Provision," Evaluation 10(2), 193-216.
		Bloom, Dan and Charles Michalopoulos. 2001. "How Welfare and Work Policies Affect Employment and Income: A Synthesis of Research." Manpower Demonstration Research Corporation, May 2001.
		Holtz, V. Joseph, Guido Imbens, and Jacob Klerman. 2006. "Evaluating the Differential Effects of Alternative Welfare-to-Work Training Components: A Re-Analysis of the California GAIN Program." NBER Working Paper 11939, January 2006.
United Kingdom	Restart	Dolton, Peter and Donal O'Neill. 2002. "The Long-Run Effects of Unemployment Monitoring and Work-Search Programs: Experimental Evidence from the United Kingdom," Journal of Labour Economics, 20(2), 381-403.

*International experience with worker-side and employer-side wage and employment  
subsidies, and job search assistance programmes:  
Implications for South Africa*

---

<b>Non-experimental evidence</b>		
<b>Country</b>	<b>Programme</b>	<b>References</b>
Hungary	Voluntary Employment Services	O'Leary, Christopher. 1998. "Evaluating the Effectiveness of Active Labour Programs in Hungary." Upjohn Institute Technical Report No. 98-013. November 1998.
Poland	Voluntary Employment Services	O'Leary, Christopher. 1998. "Evaluating the Effectiveness of Active Labour Programs in Poland." Upjohn Institute Technical Report No. 98-012. June 1998.
Romania	Employment and Relocation Services	Rodriguez-Planas, Nuria and Jacob Benus. 2005. "Evaluating the Effectiveness of Active Labour market Programs in Romania." (Preliminary) Working Paper, July 2005.