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Abstract

This paper is on compulsion in active labour market programs (ALMP). When an unemployed worker has to participate in a programme order to remain eligible for benefits there are two separate effects. First, there is the treatment effect, i.e. the program makes the worker more attractive for a potential employer or makes search more efficient thus helping the unemployed worker to find a job more quickly. Second, there is the compulsion effect, i.e. because the worker has to attend the program his value of being unemployed drops and he is stimulated to find a job more quickly. So, both effects induce the worker to find a job more quickly. The difference between the treatment effect and the compulsion effect concerns the quality of the post-unemployment job. The treatment effect improves the quality; the compulsion effect lowers the quality of post-unemployment jobs.

Keywords: compulsion, active labour market policies

JEL-codes: J64, J68

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1: Introduction

Recent surveys of the effectiveness of active labour market policies indicate that most of the programs have at most limited effects. Kluve and Schmidt (2002) survey about 50 recent evaluation studies to conclude that programs with a large training content most likely improve employment probability. Furthermore, both direct job creation and employment subsidies in the public sector almost always fail. Kluve (2006) follows up on this and presents an analysis of about 100 evaluation studies of active labour market policy programs in Europe, most of them operating after 1990. He finds that the effectiveness of programs is quite independent of contextual factors such as labour market institutions and macroeconomic environment. Training programs appear to have at most a modest effect on transitions from unemployment to work. Direct employment programs in the public sector are rarely effective and frequently detrimental for the employment prospects of participants. A rational unemployed worker reading the evaluation literature might be tempted to take the results at face value and hence decide that it is better not to attend a training programme. However, both Kluve and Schmidt (2002) and Kluve (2006) conclude that providing job search assistance and counselling and monitoring accompanied by appropriate sanctions for non-compliance are effective and they are often found to be quite cost-effective because of their rather inexpensive nature. So, the rational unemployed worker may conclude that it is beneficial to attend a job search assistance programme. But, of course, it may be that it is not the job search assistance itself that speeds up job finding. Instead, it could be the monitoring that is an indistinguishable part of job search assistance which forces unemployed to search more intensively. Perhaps it is this compulsory element of the job search program that is driving the result.

This paper discusses compulsion in active labour market programmes. It does not provide new empirical evidence. The aim is to present and discuss in a systematic way how compulsory elements in ALMP affect the behaviour of unemployed workers. To structure the thinking a simple search-matching model is presented that distinguishes between a treatment effect and a compulsion effect. Compulsion in labour market programmes is not the exclusive domain of active labour market policies. Also in the provision of benefits there are compulsory elements. For example, when unemployment insurance benefits expire an unemployed worker faces a drop in income either because after expiration of the benefit he is not entitled to any benefit or because he will receive a lower unemployment assistance benefit. To avoid this drop in income he is “forced” to find and accept a job offer. Another

element of compulsion in unemployment insurance refers to the eligibility criteria. In order to remain entitled to unemployment insurance benefits the worker has to fulfil certain duties like looking for a job, accepting suitable job offers etcetera. If the worker fails to do so he may be punished, get a benefit sanction imposed and face a lower benefit for some time. So, compulsion comes from financial consequences of not behaving according to certain rules. Compulsion is not synonymous to coercion. Unemployed workers always have the opportunity to refuse looking for suitable jobs and to let benefits expire. However, if they do so they face a penalty because they may lose their benefits. This is also how compulsion in ALMP works. Workers can refuse to attend a program even if it is thought to be beneficial for them. But, if they do so they run the risk of losing their benefits.

This paper is set-up as follows. In the next section a simple search-matching model is presented to illustrate how ALMP affect the functioning of labour markets. The basic assumption in the theoretical model is that ALMP have two different types of effects. First, they may have a treatment effect, i.e. they may be beneficial to the unemployed worker in terms of the speed of job finding. Second, they may have a compulsory element, which also speeds up job finding but has negative effects on the quality of post-unemployment jobs. The differences between the two types of effects are illustrated by showing the results of simulation exercises. Section 3 gives an overview of empirical studies, which are grouped in three categories of studies: on unemployment insurance benefits, in particular potential benefit durations, on benefit sanctions and on ALMP with a compulsory element. Unemployment insurance benefits and benefit sanction don't have any treatment effects but their effects on behaviour show to what extent compulsion effects affect the labour market. ALMP often have a combination of treatment effect and compulsion effect. Many studies on job search assistance – counselling and monitoring – show that compulsion effects are very important even to the extent that they may be more important than the treatment effects. Section 4 concludes.

2: Compulsion – theoretical framework

2.1: A search-matching model¹

To illustrate how compulsion in ALMP affects labour market behaviour of individual unemployed and thus the functioning of the labour market a simplified search-matching model of the labour market is

¹ This section is an extension of the search-matching model presented in Boone and Van Ours (2006).

used. The compulsion effect is considered to be identical to a decrease in the utility of unemployment; the treatment effect is equivalent to an increase of search effectiveness (the probability to get a job offer conditional on a contact). So the compulsion effect will increase the search intensity while the treatment effect will increase the acceptance probability because it makes the worker more attractive for a potential employer or make search more efficient, i.e. less costly. The two effects are observationally equivalent but may have different implications.

Workers are assumed to be risk-neutral and cannot save; hence they consume all their income each period. This assumption rules out the possibility that agents save to insure themselves against the loss of income due to unemployment. Once a worker becomes unemployed, he receives an unemployment benefit that is constant over the unemployment spell. For simplicity it is assumed that labour is homogeneous, i.e. all jobs offer the same wage w net of taxes while unemployed workers receive unemployment benefits bw , with $b \in \langle 0,1 \rangle$ being the replacement rate. Unemployed workers are looking for job offers and as soon as they get one they will accept it. Thus the unemployed have only one instrument of search, their search intensity. An unemployed worker is assumed to search for a job with search intensity $s \geq 0$. The disutility of searching at intensity s equals $\gamma(s)$, such that $\gamma(s) = \frac{1}{2} \gamma s^2$, with $\gamma > 0$. So the disutility of search increases with the search intensity with an increasing marginal disutility. The search for jobs generates a flow of job offers, which follow a Poisson process with arrival rate μs . The arrive rate consists of two parts, μ which is determined by the state of the labour market i.e. the number of vacancies and unemployed and s which is determined by optimising the behaviour of the unemployed worker. To illustrate the effects of compulsion in ALMP it is assumed that all unemployed workers have to attend a job search assistance programme that last from the beginning of the unemployment spell until the worker finds a job. The job search programme affects the unemployed worker in two ways. First, learning increases the effectiveness of search the job search program reduces his search costs with a fraction $\sigma \in \langle 0,1 \rangle$. Second, the job search program reduces the utility derived from the flow of benefits with a fraction $p \in \langle 0,1 \rangle$. In other words the job search program has the same effect as a penalty on unemployment benefits. Now the following Bellman equation can be derived for the unemployed workers, with V_u denoting the expected discounted vale of being unemployed:

$$\rho V_u = \max_s \{ (1-p) b w - (1 - \sigma) \gamma(s) + \mu s (V_e - V_u) \} \quad (1)$$

where V_e is the value of being employed and ρ is the discount rate. The flow value of unemployment consists of two parts: the flow of utility during unemployment (utility of benefits minus search costs) and the expected flow of additional income after the job is found. The optimal search intensity s^* follows directly from differentiating equation (1) and is given by $(1 - \sigma) \gamma'(s^*) = \mu (V_e - V_u)$ from which it is easy to derive that

$$s^* = \frac{\mu (V_e - V_u)}{(1 - \sigma) \gamma} \quad (2)$$

So, the optimal search intensity increases with the difference between the values of employment and unemployment – and thus with the size of p – and with the job search subsidy σ . Furthermore optimal search intensity is higher when costs are lower and the labour market is more tight. For the employed workers the following Bellman equation holds:

$$\rho V_e = w + \delta (V_u - V_e) \quad (3)$$

where V_e is the expected discounted value of being employed and δ is the job separation rate, which is assumed to be exogenous. Equation (3) says that the flow value of being employed for a worker equals the utility from the wage he receives each period plus the probability δ that the match is dissolved, in which case he becomes unemployed and receives V_u instead of V_e . The value for the firm of employing a worker is denoted by J_e and the value of posting a vacancy by J_v . These values satisfy the following Bellman equations:

$$\rho J_e = y - (1 + \tau) w + \delta (J_v - J_e) \quad (4)$$

$$\rho J_v = -c + (\mu/\theta) (J_e - J_v) \quad (5)$$

where y denote the per-period value of output of the worker-firm combination, τw the taxes paid by the firm, c is the per period cost of posting a vacancy and θ denotes labour market tightness. The labour market tightness, equal to the ratio of vacancies to the effective number of unemployed workers (v/s_u) is endogenised in the macro part of the model, i.e. in the matching process where unemployed and

vacancies meet. The probability that a firm is matched with a worker equals $\mu/\theta = \mu s_u/v$, i.e. the ratio of the unemployment outflow to the number of vacancies. Equation (4) shows that the value for a firm of employing a worker equals the value of output minus total wage costs plus the probability δ that the match is dissolved and the firm has to post a vacancy. The value for the firm of posting a vacancy equals minus the cost of posting a vacancy plus the probability that the firm is matched with a worker, in which case it receives J_e instead of J_v . Assuming free entry into the job-creation business, the value of posting a vacancy $J_v = 0$. The wage is determined using the Nash bargaining solution. The bargaining power of the firm is denoted by $\beta \in (0,1)$ and the bargaining power of the worker by $1 - \beta$. Then, the net wage w solves

$$\max_w (V_e - V_u)^{1-\beta} (J_e - J_v)^\beta \quad (6)$$

Assuming that the unemployment benefit level is defined on the economy-wide average wage, the individual worker's choice of wage w does not affect the unemployment benefit he will receive when he becomes unemployed. So, in the Nash bargaining function $\partial V_u / \partial w = 0$. Since from (3) it follows that $(\rho + \delta)(V_e - V_u) = w - \rho V_u$ and from (4) it follows $(\rho + \delta)(J_e - J_v) = y - (1 + \tau)w$, the first-order condition for w can be written as

$$\beta (1 + \tau) (w - \rho V_u) = (1 - \beta) [y - (1 + \tau) w] \quad (7)$$

or equivalently

$$w = \beta \rho V_u + (1 - \beta) y / (1 + \tau) \quad (8)$$

So, through the effect on the value of unemployment a change in the optimal search intensity affects the wage.² The higher the worker's bargaining power, the higher his share of the after-tax surplus $y/(1 + \tau)$. In case the worker has full bargaining power ($\beta = 1$), the wage is equal to the total after-tax surplus. In case the employers have full bargaining power, the wage is such that the utility derived from it equals the discounted value of unemployment.

² In the theoretical paper of their paper Van den Berg and Van der Klaauw (2006) ignore wage bargaining but model the wage effect of counselling directly by introducing a wage distribution and reservation wages.

In the labour market unemployed workers and vacancies meet and match. Assuming a Cobb-Douglas type matching function, the flow of matches equals

$$m = A (s u)^{1-\eta} v^\eta \quad (9)$$

with A and $\eta \in \langle 0,1 \rangle$ are the parameters of the matching function. The parameter μ in equation (1) is based on the matching process: $\mu = m/(su) = A \theta^\eta$. Normalising the size of the labour force such that $e+u = 1$, for a steady state labour market in which inflow into unemployment equals outflow from unemployment it holds that $\delta e = \mu s u$, from which we can derive equilibrium unemployment:

$$u = \delta / (\delta + \mu s) \quad (10)$$

The steady state unemployment rate increases with the job separation rate and decreases with the job finding rate. Finally, the costs of the ALMP are assumed to be negligible and the marginal tax rate is assumed to be exogenous. So on the one hand the costs of the program are ignored and on the other hand potential benefits in terms of reduced unemployment benefits are also ignored.

2.2: Simulating ALMP in a search-matching model

To illustrate the way compulsion effects and treatment effects in ALMP affects the functioning of the labour market some simulations are performed, using equations (1) to (11). In the baseline model compulsion and treatment in ALMP is ignored ($p = \sigma = 0$). The simulations have been performed with the following parameter values: The replacement rate $b = 0.7$, the value of the discount rate ρ is set to 0.025, which in a quarterly set-up would imply a discount rate of 10% on an annual basis. The parameter γ of the search cost function is set to 0.5. The parameter η of the matching function is set to its usual value of 0.5, which implies that unemployment and vacancies have a similar effect on the flow of filled vacancies. The parameter A of the matching function is set to be equal to 1. This value is chosen in order to have a plausible unemployment duration. The parameter β of the wage negotiation process is set equal to 0.5. Not only is this a very common assumption, it also implies that the parameter of the wage negotiation process is equal to the parameter of the matching function so that the

efficiency condition of Hosios (1990) is fulfilled. The value of production y is set to 1, so the value of related variables like wages and vacancies costs are normalized. The vacancy costs c are set to 2, implying that in every period the costs for having a vacancy are twice the value of production. Of course, the total cost of a vacancy also depends on the average vacancy duration. Finally, the job destruction rate δ is set to 0.04, which if the time period is thought as quarter implies that on an annual basis 16% of the jobs are destroyed. The marginal wage tax τ is set at 0.3.

The simulation results of the baseline model are shown in the first column of Table 1. The unemployment rate is 8.7% and the vacancy rate is 1.9%. The average vacancy duration (θ/μ) is about 6.6 weeks, so that the cost per vacancy is about 1.0. This means that the costs of a vacancy are about one quarter of production value. The average unemployment duration ($1/\mu$) is about 2 quarters. Under these conditions the net wage is equal to 0.75. Taking the taxes into account this means that the wage costs are equal to 0.97, which is quite high compared to the value of production. The main reason for this is the free entry condition $J_v = 0$. This implies that employers only need to cover the wage costs and the expected cost of opening a vacancy. Should we have included capital in the production process the employers would need a larger share of the value of production in order to cover their investment in capital. However, the basic results of our simulations would not change because of this.

The second column of Table 1 shows the simulation results if there is an ALMP that reduces the search costs of unemployed workers with 25% ($\sigma = 0.25$). The search intensity goes up from 0.828 to 0.968. Because of this the unemployment rate drops from 8.7% to 8.0%. Because of the reduced search costs the value of being unemployed goes up, which strengthens the bargaining position of the workers and increases their wage. This causes the vacancy rate to drop.

The third column of Table 1 shows the simulation results if the ALMP only has a compulsion effect i.e. the programme does not help unemployed to find a job but has a 'threat effect' because of the time involved in attending the program ($p = 0.1$). Now the search intensity goes up from 0.828 to 0.936. The unemployment rate goes down. Because of the compulsory part of the labour market program the value of unemployment goes down. Because this weakens the bargaining position of the workers the wage drops which causes the vacancy rate to go up.

The fourth column of Table 1 shows the simulation results if the unemployed have to attend a labour market program which both helps them to find a job more quickly and reduced their value of being unemployed ($\sigma = 0.25$; $p=0.10$). Now search intensity goes up a lot causing the unemployment rate to drop substantially. The wage effects cancel out leaving the wage at the same level as the wage

without the labour market program.

Figure 1 illustrates the treatment effects of ALMP for a range of values of σ . As shown with an increase in σ – a reduction in the search costs – the search intensity goes up at an increasing rate, as does the wage. As the search costs diminish search intensity rises more and more. Figure 2 illustrates the compulsion effects of ALMP. Here too, search intensity goes up with the perceived penalty, but at a diminishing rate. Because of the weakening of the bargaining position the wage goes down.

All in all, the way ALMP affect the behaviour of unemployed workers is twofold. First there is an effect on search intensity and thus unemployment duration. Second there is an effect on the wage i.e. the quality of the post-unemployment job. The compulsory part makes the state of unemployment more expensive to be in; in other words the unemployed worker derives less utility from being unemployed. The drop in the value of being unemployed increases the search intensity but lowers the post-unemployment wage. The treatment part lowers the costs of search and therefore increases the search intensity. However, due to lower search costs the value of unemployment increases causing an increase in the post-unemployment wage.

The parameter values are chosen to reflect a real-life labour market but they do not represent a particular country. The replacement rate of 0.7 represents average workers in countries like France, The Netherlands, Spain and Switzerland. It may be high for countries like the U.K., Austria or Italy where the replacement rate is about 0.5. If the model simulations would have been based on this lower value of the replacement rate search intensity would be higher, but the effects of the reduction in search costs and the “penalty” on the search intensity would be very similar. In the same way the choice of the job destruction rate is arbitrary but again the general pattern of the results wouldn’t change with other parameter values. Finally the marginal tax rate of 0.3 is low but again increasing the value doesn’t change the qualitative results.

3: Reviewing the literature – empirical studies on compulsion

After unemployment benefits expire unemployed workers may collect lower unemployment assistance benefits or no benefits at all. If there is maximum unemployment benefit duration, workers will anticipate the end of the benefit period and behave accordingly, i.e. search intensity goes up or

reservation wages go down to find a job more quickly and avoid running out of unemployment insurance benefits. The incentives from the drop in benefits are comparable to the incentives created by the compulsory nature of some ALMP. Also, in anticipation of the drop in benefits unemployed workers may change their behaviour. This too, is similar to what might happen to an unemployed worker who is informed that he has to attend a labour market program. He may perceive the programme as a punishment because participation reduces leisure time and the announcement of the program may induce him to search for a job more intensively. Because of these similarities the first part of this section discusses studies on unemployment insurance benefits with a focus on the effects of potential benefit durations. If a worker perceives a labour market program as a punishment, then having to go to a programme resembles getting a benefit sanction imposed. To avoid such a benefit sanction or to avoid having to go to a programme, the unemployed worker may search more intense. Once a benefit sanction is imposed or the unemployed worker attends the programme, the value of unemployment has gone down and therefore search intensity is increased. Because of these similarities the second part of this section presents studies on benefit sanctions. Finally, in the third part of this section studies of the effectiveness of ALMP are discussed, focussing on studies that distinguish between the compulsory and treatment elements of the programmes.

3.1: Unemployment insurance benefits

If ALMP have both a treatment and a compulsion effect, studying compulsion effects in isolation may be helpful. The characteristics of the UI insurance generate compulsion effects only. In theory, unemployment insurance provides a disincentive for job seeking, which is affected both by the level of benefits (relative to the expected wage) and by the potential benefit duration (PBD). The greater the level of benefits, the less costly the period of the job search, so workers tend to search for jobs less intensely and tend to remain unemployed longer. Putting a limit on the duration of benefits tends to affect search behaviour. In the theoretical model from the previous section introducing such a limit implies that the utility of being unemployed is reduced. The threat of benefit expiration speeds up the job search.

In line with theoretical predictions, empirical studies confirm the link between the PBD and the duration of unemployment insurance benefits. Katz and Meyer (1990), for example, estimate that a

one-week increase in PBD increases the average duration of unemployment insurance recipients by about one day. Card and Levine (2000) report a disincentive effect of about 0.5 day per additional week of PBD, also based on U.S. data. Lalive and Zweimüller (2004) report a disincentive effect of about 0.4 day for Austrian benefit recipients. The PBD affects not only the duration of unemployment but also the pattern of the exit rate. As the date approaches when benefits will expire, unemployed workers tend to increase the intensity of their job search and reduce their reservation wage so the rate of job finding increases. Thus, the exhaustion of benefits creates a "spike" in the exit rate from unemployment. Indeed, many studies find a sharp increase in the exit rate from unemployment just before benefits expire (Katz and Meyer (1990), Card and Levine (2000), and Addison and Portugal (2004) find such "spikes" for U.S. benefit recipients. Carling, Edin, Harkman and Holmlund (1996) find spikes for Sweden in both the job-finding rate and the exit rate from unemployment to labour market programs. Roed and Zhang (2003) find end-of-benefit spikes for Norway, while Lalive and Zweimüller (2004) and Lalive, Van Ours, and Zweimüller (2004) find spikes in unemployment exit rates shortly before benefits expire for Austria. Nevertheless, after reviewing all the evidence Card et al. (2007) conclude that the size of the spike may be limited; they attribute a large part of the spikes to be the result of measurement error because many studies only follow unemployed workers as long as they collect benefits.

Concerning the effect of unemployment benefits not only the duration of unemployment is relevant, but also the quality of post-unemployment jobs. Several studies have investigated the effects of unemployment insurance on the duration of post-unemployment jobs. One recent study finds that while the occurrence of unemployment severely reduces the duration of subsequent job tenure, the duration of unemployment has no deleterious impact – in fact, longer durations of unemployment are rewarded by longer job tenures, presumably because a longer period of job search improved worker-job match (Böheim and Taylor, 2002). But Portugal and Addison (2003) find no evidence that unemployment benefits facilitate entry into stable jobs in Portugal. Belzil (2001) using Canadian data finds a negative correlation between unemployment duration and subsequent job duration, but this correlation is mostly explained through the negative correlation between individual heterogeneity of the job finding rate and the job separation rate. Other studies include Jurajda (2002), who uses U.S. data and finds that eligibility for UI reduces workers' employment durations, and Tatsiramos (2006), who uses data for ten European countries and finds that post-unemployment jobs last longer in countries with relatively generous UI. Using U.S. data, Centeno (2004) finds that a more generous

unemployment insurance (UI) system is positively related to post-unemployment job tenure. Moreover, Card et al. (2006), using Austrian data, find that extending the duration of potential benefits lengthens the spell of unemployment but has little or no effect on the quality of subsequent job matches. Van Ours and Vodopivec (2007) investigate whether greatly shortening the potential duration of unemployment benefits in Slovenia affected the quality of post-unemployment jobs. If reducing the potential duration of benefits forces unemployed workers to accept lower-quality jobs, their post-unemployment jobs would be less likely to be permanent and more likely to be temporary, low in pay, and short-term. But no evidence of such an impact is found. Reducing the potential duration of benefits did not affect the likelihood of a worker taking a temporary rather than a permanent job, had hardly any effect on job separation rates (the likelihood of losing a post-unemployment job within a year), and did not affect post-unemployment wages.

From these studies on the effect of potential benefit duration it is clear that shorter durations increase the job finding rate while the quality of post-unemployment jobs seems to remain unaffected. The first finding is in line with theory in which a reduction of the value of unemployment stimulates unemployed workers to find a job more quickly. The second finding is somewhat surprising from a theoretical point of view. The reduction in the value of unemployment should have reduced the quality of the post-unemployment jobs. This not being the case suggests that benefit recipients might have behaved opportunistically and did not spend additional time on job search at all.

3.2: Benefit sanctions

Benefit sanctions are easy to introduce in the theoretical model presented in the previous section. The compulsory part of ALMP (p) could also be read as an actual penalty imposed on workers. The reduction of benefits increased search intensity. To capture the full effects of benefit sanctions the theoretical model would have to be expanded with a monitoring part because the unemployed worker will only get a benefit sanction imposed if search intensity is too low (see Boone and Van Ours (2006) for details).

There are a couple of empirical studies that investigate the effects of benefit sanctions. Abbring et al. (2005) analyse how in the Netherlands benefit sanctions affected the transition out of unemployment. According to the Dutch UI law there are three categories of infringements for which

workers can have benefit sanctions imposed: lack of effort to find a job (search intensity too low, declining job offers), administrative infringements (reporting too late), and other infringements (fraud, inaccurate information). UI agencies were authorized, but not obliged, to impose a sanction on a UI claimant who did not comply with the rules. The sanction is a temporary or a permanent full or partial reduction of the benefit level. In practice, the temporary partial reduction of the benefits ranged from 5% during 4 weeks to 25 or 30% during 13 weeks. Abbring et al. find that re-employment rates are significantly and substantially raised by imposition of a benefit sanction. Van den Berg et al. (2004) analyse the effects of sanctions on the behaviour of Unemployment Assistance (UA; sometimes referred to as welfare benefits) recipients in Rotterdam. A recipient of UA has similar obligations as a UI recipient in order to remain eligible for a benefit. The duration and size of the reduction depend on the nature of the infringement ranging from 5% during 1 month to 20% during 4 months. It turns out that a benefit sanction raises the transition rate from welfare to work by more than 140%, so the job finding rate more than doubles. The benefit sanction itself is temporary, but the effects turn out to be long lasting. Even after the sanction period expires the transition rate from welfare to work is higher than before the sanction was imposed. From an analysis of Swiss data on benefit sanctions Lalive et al. (2005) conclude that by imposing a benefit sanction the unemployment duration decreases by roughly three weeks. From these studies on benefit sanctions it is clear that reducing benefits speeds up job finding. There are no studies that investigate whether shorter unemployment durations induced by benefit sanctions affect the quality of post-unemployment jobs.

Benefits sanctions refer to temporary or permanent reductions in benefits. They affect the behaviour of unemployed workers in two ways – through an ex ante and through an ex post effect. The ex ante effect refers to the optimal search intensity of unemployed workers who did not yet received a benefit sanction but who are aware of the possibility that they might be confronted with a benefit sanction. Then the optimal search intensity is higher than it would be if workers would not face the possibility of getting a sanction imposed. The ex post effect refers to the effect on search of having lower benefits once a sanction is imposed. Boone and Van Ours (2006) who study benefit sanctions from a theoretical point of view find that a system with monitoring and sanctions represents a welfare improvement relative to other alternatives. The effect of benefit sanctions goes beyond the direct effects of workers searching more intense. The increase in search intensity may also stimulate employers to open up new vacancies. Boone and Van Ours (2006) show that this macro spill over effect may be an important mechanism to reduce unemployment in addition to the micro behavioural

effect of increased search intensity that reduces unemployment duration. Boone et al (2006) analyse the design of optimal unemployment insurance in a search equilibrium framework where search effort among the unemployed is not perfectly observable. They examine to what extent the optimal policy should involve monitoring of search effort and benefit sanctions if observed search is found insufficient. Their results suggest that the introduction of a system with monitoring and sanctions represents a welfare improvement.

3.3: Compulsory elements in ALMP

Labour market programs often consist of a combination of treatment and compulsion³. The treatment concerns help to the unemployed worker in building up human capital through for example training or work experience programs or help through advice on job search strategies. The compulsion concerns an increase of cost of being unemployed either through mandatory activities that are time consuming. It could also be that workers increase their job finding rate because of a “threat effect”, i.e. they want to avoid having to enter a labour market program. Evaluation of the effectiveness of ALMP is not easy because of potentially selectivity in the inflow into ALMP. Although there are several possibilities to account for this potential selectivity the most straightforward way is to use a controlled experiment. There are a couple of studies that have an experimental set-up.

Dolton and O’Neill (1996) present an analysis of the British “Restart programme” which consisted of a series of compulsory six-monthly interviews for unemployed workers starting after having been registered as unemployed for 6 months. During this mandatory interview the counsellor assessed the recent unemployment history of the worker and offered advice on search behaviour, training courses and sometimes initiated direct contact with employers. Unemployed were randomly assigned to the treatment group and the control group, who were eligible but did not have to attend the first interview. Those that were assigned to the treatment group were faced with the possibility of having their benefits reduced if they didn’t attend the Restart interview or if they were considered not to be making sufficient effort in finding a job. Dolton and O’Neill find that the Restart interviews significantly decrease the unemployment durations. Some individuals leave the unemployment

³ Kreiner and Tranæs (2005) show that in a situation in which job search is unobservable it may be optimal to introduce workfare, i.e. requiring unproductive activities in exchange for UI benefits. Workfare allows for a distinction in incentives between voluntary and involuntary unemployed.

registers without having found a job; this is common among women and other groups “who are most likely not to be genuinely available for work”. This type of outflow from unemployment is particularly high around the timing of the first Restart interview, which indicates a threat effect. However, measured over a period of 18 months also the exits to a job are significantly different for the treatment group and the control group. In a follow-up paper Dolton and O’Neill (2002) investigate the long-run effects of the Restart programme finding that the Restart interviews reduced the male unemployment rate five years later by 6 percentage points, as compared to a control group for whom participation in the first six-monthly interview took place six months later.

Klepinger et al. (2002) present the results of an experimental evaluation of alternative work-search requirements imposed on unemployment benefit recipients in Maryland (USA). Assignment to control and treatment groups was – randomly – based on social security numbers. The control group of unemployed workers had the standard obligation to contact 2 employers per week and report those contacts in order to remain eligible for unemployment benefits payments. The Maryland experiment distinguished four treatment groups who were informed about their duties within one week after registering for a benefit claim.⁴ The first group had to make four employer contacts per week, the second group was informed that they had to search actively without specifying the number of contacts they had to make, the third group had to attend a four day job search workshop – lasting 16 hours – early in the unemployment spell. The fourth group was informed that their claimed employer contacts would be verified. As discussed extensively in the previous sections there are two effects of increased work-search requirements. First, the treatment effect: unemployed may make more job contacts, which increases the job finding rate. Second, the compulsion effect: the additional requirements raise the non-monetary costs of remaining unemployed, which leads to more intense job search and a reduction in reservation wages (or both). By comparing the four groups enabled Klepinger et al. tried to make a distinction between the two effects. The non-monetary costs of imposing additional search requirement turned out to be important for the duration of benefit claims. Increasing the required weekly number of employer contacts from two to four and indicating that employer contacts would be verified reduced the duration of unemployment benefit spells with almost a week, which is a substantial effect since the average unemployment benefit duration was about 12 weeks. Also, eliminating a specific number of

⁴ In order to investigate whether information about the experiment affected the results of the experiment two control groups were distinguished. One group was informed about the experiment; the other wasn’t. This was done to check for the so called Hawthorne effect, which refers to the outcome of an experiment being caused by individuals that change their behaviour not because of the treatment they receive but because they realized they were under study (see also Meyer, 1995). The authors find that the two control groups did not behave differently, so the Hawthorne effect is absent.

required contacts increased the unemployment benefit duration. Finally, also the obligation to attend a job search workshop reduced unemployment benefit duration. This was at least partly due to the compulsion effect because many unemployed left unemployment shortly before their search workshop was planned. It is not clear whether in addition to the compulsion effect there was also a treatment. The effect of the treatments on the quality of post-unemployment jobs – in terms of employment and earnings – are small or absent.

Black et al. (2003) present an analysis of an experiment from Kentucky. Unemployed are ranked in 20 categories according to a profiling score based on the expected unemployment duration. Local budgets available for reemployment services are allocated to the unemployed according to profiling scores, starting with highest score, i.e. the longest expected duration. In case there is insufficient budget for all unemployed and the marginal group cannot be covered completely either, there is a random allocation of reemployment services to the unemployed in the marginal group. By comparing the treated with the non-treated Black et al. find that the reemployment services stimulate workers to leave unemployment more quickly; those that leave unemployment quickly do not earn lower wages, which suggests that there is “no long-term harm from the treatment provided by the program”. The main action caused by the mandatory reemployment services is in the beginning of the unemployment spell, i.e. unemployed that were notified of their obligations to attend the reemployment service program left unemployment quickly to avoid having to enter the programme. In other words, the threat effect is driving the results. Apparently, many unemployed consider the reemployment service programs as sanctions that they prefer to avoid.

Van den Berg and Van der Klaauw (2006) analyse the outcome of a small-scale experiment on counselling and monitoring in the Netherlands. They distinguish between two types of job search, formal and informal job search. Formal job search concerns search through personnel advertisements and public employment offices. Informal job search refers to direct contacts with employers and search through friends, relatives or employed workers. They argue that counselling and monitoring only concerns formal job search. Monitoring leads to a substitution of effort from informal to formal search, which reduces the effectiveness of monitoring. At the time of the experiment in the Netherlands at the start of the unemployment spell unemployed were classified into one of four types based on objective characteristics and subjective evaluation. Type 2-4 unemployed are offered assistance to find a job while Type 1 unemployed are expected to have sufficient skills to find a job without assistance. The experiment was limited to Type 1 unemployed who were randomly assigned to a treatment group and a

control group. The control group had to report on search activities every week while in addition to this requirement the treatment group unemployed had regular meetings with counsellors during which initially quality of application letters and resume were examined and a plan was made while during follow-up meetings plans from previous meetings were evaluated and a planning for the next period was made. If the unemployed did not comply he could be punished with a benefit sanction – a reduction of the UI benefits with 10% for a period of 2 months. In their baseline estimate Van den Berg and Van der Klaauw find no significant treatment effect, i.e. counselling and monitoring doesn't help the unemployed to find a job more quickly. However, they also find that counselling and monitoring affects the type of search, unemployed that are subject to counselling and monitoring shift their search from informal to formal channels. Van den Berg and Van der Klaauw (2006) conclude that focusing of monitoring on unemployed with less favourable characteristics may make more sense since these individuals have less scope for substituting informal for formal search channels.

Graversen and Van Ours (2006) analyse data from a Danish experiment that on the basis of birth date randomly assigned unemployed to control and treatment groups. The treatment group of unemployed was confronted with mandatory activities whereas the control group was not. The unemployed in the treatment group were informed by letter about their duties within 1 to 2 weeks after becoming unemployed. The letter gave a short description of the activities contained in the program. After 5 to 6 weeks of unemployment individuals had to participate in a job search program that lasted 2 weeks. After the program the individuals had to attend meetings once a week or once every second week. The purpose of the meetings was to assist individuals in their job search and to monitor job search efforts. The individuals could also receive job offers mediated by the PES. Before individuals were unemployed for 4 months they had to receive an offer to participate in an activation program with a duration of at least 3 months. Longer classroom training courses (with a duration of more than 3 months) could not be offered at this stage. Individuals who did not find a job after 6-7 months had to participate in a longer meeting with a caseworker and a new job plan was made. The job plan contained a description of the activities to improve the chances of finding a job. All available active measures could be used at this stage including longer education programs. The services offered to the control group during the early stage of the unemployment period were much less intensive than the services offered to the treatment group.⁵ Individuals in the control group typically would have to participate in

⁵ Unemployed workers of the control group could voluntarily participate in some these activities but this did not happen frequently.

an activation program after one year of unemployment. The job search programs, which typically started after 5 to 6 weeks gave an overview of available courses and educations, general knowledge about the labour market and specific knowledge about the possibilities to find particular jobs. The participants were also assisted in their job search, and they are trained in job search techniques. Graversen and Van Ours find that already before the start of the job search program the job finding rate in the treatment group is higher than in the control group. Figure 3 presents the survival functions separately for the treatment group and control group. As shown the treatment group leaves unemployment more quickly than the control group. After 3 months 47% of the control group and 54% of the treatment group have left unemployment. After 6 months 28% of the control group is still unemployed while only 21% of the treatment group is still unemployed. The difference between both survival functions increases up to 13 weeks of unemployment, stays constant until 26 weeks and declines after that. Figure 3 also shows that the median unemployment duration for the control group is about 14 weeks while for the treatment group this is 11.5 weeks. Clearly there is a substantial treatment effect. From difference in job finding rates early on in the unemployment spell it is clear that there is a compulsion effect. Some workers who are faced with the prospect of having to attend a job search program are stimulated to leave unemployment quickly. Graversen and Van Ours conclude that positive treatment effects related to the job search programs cannot be ruled out but very likely the compulsion effect is more important.

. Blundell et al. (2004) and Geerdsen (2006) present recent non-experimental evaluations of the nature of particular ALMP. Blundell et al. (2004) study the impact of the British labour market programme “New Deal for the Young Unemployed”, which was compulsory and directed to unemployed aged between 18 and 24. The programme consisted of initial intensive job search assistance followed by various subsidized options including wage subsidies to employers. Blundell et al. focus on the enhanced job search assistance, which also included meeting with a “personal advisor” who the unemployed meet at least once every two weeks to encourage/enforce job search. Blundell et al. do not have experimental data but they exploit area-based piloting and age-related eligibility rules to identify treatment effects. They find that the programme increased the job finding rate of young men but they also indicate that it is unclear whether the “carrot” of job assistance drives this positive effect or the “stick” of the tougher monitoring of job search. Geerdsen (2006) identifies the threat effect of Danish labour market programs by exploiting legislative changes in the length of the period in which individuals can receive UI benefits without having to participate in a labour market program. The threat

effect results in an almost 100 per cent increase in the job finding rate.

4: Concluding remarks

ALMP may affect the job search process directly by providing job search assistance or indirectly by affecting the human capital of participants and making unemployed more attractive for potential employers. However, building up human capital is not an easy task. Returns to schooling estimates show that it takes a year of schooling to increase a persons' wage with 6-9 percent. With a similar rate of return to training, a 1 month training program will lead to an increase of 0.6-0.75 percent, too small perhaps to be noticed. If human capital is built up so slowly it is not difficult to imagine that the job finding rate is not much affected by short training courses. Long training courses may not help much either. If a course takes a long time a worker may get “locked-in”, i.e. he or she will reduce search intensity to compensate for the time spent in the course.

An important question is whether administrators should force unemployed workers to attend a program if the effectiveness of such a program is not obvious. Even if the program does not increase the human capital of the workers that attend the program it will increase the costs of being unemployed and therefore reduce disincentive effects related to high level or long lasting benefits.⁶

The potential drawback of compulsion is that although it may reduce the duration of unemployment spells it could also have a negative effect on the quality of post-unemployment jobs. However, recent research indicates that one shouldn't worry too much. The bottom line is that ALMP have positive effects on the job finding rates thus reducing unemployment duration. There are two effects which potentially responsible for this: a treatment effect and a compulsion effect both of which work in the same direction. Search intensity goes up as does the acceptance probability and the efficiency of search. Both effects increase the job finding rate and are usually observationally equivalent. Concerning the quality of the post-unemployment jobs the effects work in opposite direction. The treatment effect increases the quality, the compulsion effect reduces the quality. In empirical studies on for example mandatory job search programs often no effect is found on the quality of post-unemployment jobs. This could be because both the treatment and the compulsion effect matter and cancel out. Surprisingly little research is done on the elements of compulsion in ALMP, in

⁶ Note that in some countries participation in ALMP affects the eligibility for or renewal of unemployment benefits.

particular on the way compulsion affects the quality of post-unemployment jobs.

It may be that some policies work for all groups of unemployed workers but these are more activation policies than active labour market policies. A policy that seems to work for a wide range of unemployed workers and labour market conditions is counselling and monitoring accompanied by benefit sanctions. Clearly individuals have at least some influence on their labour market career. If they decide to search more intense for their job or lower their reservation wage they are likely to find that job sooner. Such a policy is merely an activation device since it does not improve the human capital of individual workers and does not help them to identify successful search strategies. As long as it is not clear as to why some programs work and other don't, until we find evidence contradicting that compulsion brings back unemployed to work more quickly all ALMP should include an element of compulsion.

References

- Abbring, J.H., G.J. van den Berg and J.C. van Ours (2005) The effect of unemployment insurance sanctions on the transition rate from unemployment to employment, *Economic Journal*, 115, 602-630.
- Addison, J.T. and M.L. Blackburn (2000) The effects of unemployment insurance on post-unemployment earnings, *Labour Economics*, 7, 21-53.
- Belzil, C. (2001) Unemployment insurance and subsequent job duration: job matching versus unobserved heterogeneity, *Journal of Applied Econometrics*, 16, 619-636.
- Black, D.A., J.A. Smith, M.C. Berger, and B.J. Noel (1999) Is the threat of training more effective than training itself? Experimental evidence from the UI system, *Research Report*, No. 9913, University of Western Ontario Research Report.
- Black, D.A., J.A. Smith, M.C. Berger and B.J. Noel (2003) Is the threat of re-employment services more effective than the services themselves? Evidence from random assignment in the UI system, *American Economic Review*, 93, 1313-1327.
- Blundell, R., M. Costa Dias, C. Meghir and J. Van Reenen (2004) Evaluating the employment impact of a mandatory job search program, *Journal of the European Economic Association*, 2, 569-606.
- Böheim R. and M.P. Taylor (2002) The search for success: do the unemployed find stable employment?, *Labour Economics*, 9, 717-735.
- Boone, J., P. Fredriksson, B. Holmlund, and J.C. van Ours (2006) Optimal unemployment insurance with monitoring and sanctions, *Economic Journal*, 117, 399-421.
- Boone, J. and J.C. van Ours (2006) Modeling financial incentives to get unemployed back to work, *Journal of Institutional and Theoretical Economics*, 162, 227-252.
- Card, D., R. Chetty and A. Weber (2006) Cash-on-hand and competing models of intertemporal behaviour: new evidence from the labour market, *Working Paper*, NBER 12639.
- Card, D., R. Chetty and A. Weber (2007) The spike at benefit exhaustion: leaving the unemployment system or starting a new job, *Working Paper*, IZA, 2590.
- Centeno, M. (2004) The match quality gains from unemployment insurance, *Journal of Human Resources*, 39, 839-863.
- Dolton, P. and D. O'Neill (1996) Unemployment duration and the restart effect: some experimental evidence, *Economic Journal*, 106, 387-400.
- Dolton, P. and D. 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, 381-

Geerdsen, L.P. (2006) Is there a threat effect of labour market programs? A study of ALMP in the Danish UI system, *Economic Journal*, 116, 738-750.

Gorter, C. and G.R.J. Kalb (1996) Estimating the effect of counselling and monitoring the unemployed using a job search model, *Journal of Human Resources*, 31, 590-610.

Graversen, B.K., and J.C. van Ours (2006) How to help unemployed find jobs quickly; experimental evidence from a mandatory activation program, *Discussion Paper*, 06-126, CentER, Tilburg University.

Jurajda, S. (2002) Estimating the effect of unemployment insurance compensation on the labour market histories of displaced workers, *Journal of Econometrics*, 108, 227-252.

Hosios, J.J. (1990) On the efficiency of matching and related models of search and unemployment, *Review of Economic Studies*, 57, 279-298.

Klepinger, D.H., T.R. Johnson, and J.M. Joesch (2002) Effects of unemployment insurance work-search requirements: the Maryland experiment, *Industrial and Labour Relations Review*, 56, 3-22.

Kluve, J. and C.M. Schmidt (2002) Can training and employment subsidies combat European unemployment? *Economic Policy*, 35, 411-448.

Kluve, J. (2006) The effectiveness of European active labour market policy, *Working Paper*, no. 2018, IZA, Bonn.

Kreiner, C.T., and T. Tranæs (2005) Optimal workfare with voluntary and involuntary unemployment, *Scandinavian Journal of Economics*, 107, 459-474.

Lalive, R., J.C. van Ours, and J. Zweimüller (2005) The effects of benefit sanctions on the duration of unemployment, *Journal of the European Economic Association*, 3, 1386-1417.

Meyer, B.D. (1995) Lessons from the U.S. unemployment insurance experiments, *Journal of the Economic Literature*, 33, 91-131.

Portugal, P. and J.T. Addison (2003) Six ways to leave unemployment, *Discussion Paper*, no. 954, IZA, Bonn.

Tatsiramos, K. (2006) The effect of unemployment insurance on unemployment duration and subsequent employment stability, *Discussion Paper*, IZA, Bonn.

Van den Berg, G.J. and B. van der Klaauw (2006) Counselling and monitoring of unemployed workers: theory and evidence from a controlled social experiment, *International Economic Review*, 47, 895-936.

Van der Klaauw, B., G.J. van den Berg and J.C. van Ours (2004) Punitive sanctions and the transition rate from welfare to work, *Journal of Labour Economics*, 22, 211-241.

Van Ours, J.C. (2006) Leaving “Hotel California”: how incentives affect flows of benefits in the Netherlands, *Quarterly Journal of Economic Research*, 75, 186-207.

Van Ours, J.C. (2006) Has the Dutch miracle come to an end? in: Werding, M. (ed.), *Structural Unemployment in Western Europe: Reasons and Remedies*, Cambridge MA, London UK: MIT Press, 133-158.

Van Ours, J.C. and M. Vodopivec (2006) How shortening the potential duration of unemployment benefits affects the duration of unemployment: evidence from a natural experiment, *Journal of Labour Economics*, 24, 351-378.

Van Ours, J.C. and M. Vodopivec (2007) Does reducing unemployment insurance generosity reduce job match quality? *Journal of Public Economics*, forthcoming.

Table 1: Results of simulations

		(1)	(2)	(3)	(4)
Subsidy search costs	σ	0	0.25	0	0.25
Compulsion effect	p	0	0	0.1	0.1
Search intensity	s	0.828	0.968	0.936	1.093
Unemployment rate	u	0.087	0.080	0.073	0.067
Vacancy rate	v	0.019	0.018	0.020	0.019
Duration unemployment	T_u	1.97	2.10	1.85	1.98
Duration vacancy	T_v	0.51	0.48	0.54	0.51
Wage	w	0.747	0.750	0.744	0.747
Flow value of unemployment	ρV_u	0.694	0.701	0.688	0.695

Figure 1: Effect of search cost subsidies on search intensity and wages

Figure 2: Effect of ALMP compulsion on search intensity and wages

Figure 3 The effects of a Danish ALMP experiment on the survival function of unemployed workers

Source: Graversen and Van Ours (2006)