Labour market programmes and the equity-efficiency trade-off

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ABSTRACT

This paper studies optimal labour market policy in a society where differently gifted individuals can invest in training to further increase their labour market productivity and where the government seeks both efficiency and equity. Frictions in the matching process create unemployment and differently skilled workers face different levels of risk of unemployment. We show that in such an environment, training programmes that are targeted at the disadvantaged workers complement passive transfers (UI benefits), unlike general training subsidies. Combining passive subsidies with a training subsidy conditioned on the individual being unemployed (for a period) – the typical Active Labour Market Programme – creates a favourable trade-off between equity and efficiency and this encourages high spending on training.

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1. Introduction

Active labour market policies were adopted by most advanced countries during the 1990s. The announced purpose of such policies is to protect workers who are exposed to negative employment shocks due to changing market conditions. The objectives are to reduce skill loss during extended periods of unemployment and to redirect the skills of those that are left idle by new technology or increased international trade. Countries differ with respect to the emphasis they put on the active programmes, but they share the outcome of having limited success with the programmes in terms of increasing the employment prospects and job quality of the average programme participants relative to non-activated unemployed workers. The outcomes of the programmes are surveyed by Martin (2000), Heckman et al. (1999) and OECD (2003).

Despite the problems with documenting a direct effect of the active programmes, countries continue with the policy. Assuming that this is not just policy failure, the governments must have objectives beyond the micro level of the programmes. For instance, governments might in fact look at the active policy as education that increases the productivity of disadvantaged workers but at the same time acknowledge that increasing equity through this policy comes at some costs in terms of reduced efficiency: the increase in productivity of disadvantaged workers might not fully off-set the dead weight loss of training some of the wrong types of worker plus the effect of the distortion – of the advantaged workers' behaviour – caused by the taxes that are needed to finance the policy. Thus, there could be an effect at the macro level – e.g., less inequality – if it is the more disadvantaged workers who gain productivity from the programmes. This is conceivable, as Martin (2000), Heckman et al. (1999), Kluve et al. (2007) and OECD (2004) also conclude that some programmes have significant effects for some groups of individuals. In OECD (2003) it is also suggested that activation programmes have reduced poverty rates in some European countries. See also Blundell (2004)

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This suggests that the potential value of an active labour market policy (ALMP) might not be fully recognised. At least it is important to consider heterogeneous effects, and yet, it is probably not enough to focus on the direct post-programme effects for programme participants. Training is often related to specific occupations in which case it is important that the participants take up a relevant occupation subsequently for the programme to be counted as a success. If, furthermore, it is a precondition for a positive effect to be recognised that an individual continues with this occupation for some time and periodically updates the training, then it becomes hard to distinguish the treated from the non-treated in the data. In this case, the recognition of the existence of jobs in certain occupations becomes conditioned on a commitment to training by the individual employees concerned, and the timing of training activities corresponding to wage increases will look less causal in the data and the effects will be harder to identify.

In general, it is not likely that short training courses can raise an individuals' productivity immediately. A short course might be the beginning of a path to success, but it will take a lot more in terms of practice on the job and further training to induce a real jump in the person's productivity. Identification of an isolated effect of programme participation becomes almost impossible in such a case. Yet there could still be an important effect, but one would have to look for it at a more aggregated level.

In this paper we study ALMP from a macro perspective assuming the existence of a government that is concerned both with equity and efficiency. Moreover, we study the impact of different social preferences on the optimal characteristics of labour market policy, active programmes and passive programmes. To do this, a specialized competitive search equilibrium model[1] is developed: firms make irreversible investments in vacancies, and workers are paid wages and choose to invest in skills. In this environment, the optimal labour policy addresses the social concern that some workers have less ability than others to use and acquire the skills needed by employers.

The focus of our policy analysis is to answer three questions: Are active programmes substitutes for or complements to passive programmes within an optimal policy? What is the best active scheme, an education subsidy scheme for all or a training subsidy targeted at the least able workers? And if the latter, should the scheme be dependent on the duration of unemployment? These questions, in particular the one concerning the timing of the subsidy, have not been addressed by the fast advancing literature on how to organize unemployment policy (time-varying policy in our terminology).[2]

We find that our model can explain the main features of labour policy across the OECD countries. In particular, our model explains why some countries spend significant amounts on both active and passive labour programmes while others do not. Consistent with this observation is the fact that high-spending countries appear to have better records on income redistribution than low-spending countries. Moreover, we are able to replicate these features about labour market policy even though we assume risk-neutral agents and a competitive search equilibrium. Therefore, neither borrowing constraints nor wage inefficiencies are needed for establishing our results. And in contrast to the economics of education literature, we focus on a government's potential equity concerns as the factor which drives policy decisions. For instance, there are no externalities in our model to make training subsidies desirable from an efficiency point of view. But there could be an equity-motivated case for a training subsidy in situations where the advantaged workers experience little unemployment and the disadvantaged workers experience high unemployment.

The paper is organized as follows. In Section 2, we present some background factors and motivates the issues taken up in this paper. In Section 3, we introduce a simple directed search model with a government that wishes to maximize a social welfare function using a number of policy instruments. In Section 4, we solve the equilibrium of the model with general versus targeted training, whereas Section 5 is concerned with the equilibrium when training is both targeted and also time-varying. In Section 6, we offer some concluding remarks.

2. Background and motivation

We are interested in two related empirically relevant questions. The first is whether active and passive policies are substitutes or complements, and the second is whether labour market policy can reconcile the equity-efficiency trade-off.

Are Active and Passive Policies Substitutes or Complements within an optimal policy? Passive programmes are traditional unemployment insurance schemes and active programmes are training activities targeted at unemployed individuals as opposed to, for instance, a general training or education subsidy. Active programmes may involve education aiming at upgrading the unemployed workers' skills or employment programmes intended to prevent skill loses during periods of unemployment.

Fig. 1 illustrates the patterns of how public funds are spent on passive and active programmes among selected OECD countries. A stylized appears to emerge for the developed countries, namely that active and passive policies seem to be complements. The apparent complementary pattern is also found in following a given country over time, as illustrated in Fig. 2 (the lines are simple OLS predictions country by country). In this case major reforms are visible as structural shifts. In fact, it

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[1] This is in line with the model of competitive labour auctions with coordination frictions (Julien et al., 2000; Shimer, 2005).

[2] This literature is surveyed in Fredriksson and Holmlund (2006). One of the more complex contributions to this literature, following on from the seminal paper by Shavell and Weiss (1979), is the recent study by Pavoni and Giovanni (2007) who characterize the optimal sequence of different elements of labour market policies during an unemployment spell. Their main conclusion is that the timing of the various elements – passive as well as active – of a targeted policy is very important for the effectiveness of the overall policy.