Change in self-efficacy as a source of state dependence in labor market dynamics?

Extended Abstract

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Recently, labor economists got more and more interested in the importance of non-cognitive skills on the labor market. There is overwhelming evidence that non-cognitive skills are crucial for labor market success of individuals. A positive effect of non-cognitive skills like self-efficacy may be explained by a better performance on the job or during job search because "(...) *expectations of personal efficacy determine whether coping behavior will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and aversive experiences*" (Bandura, 1977, p. 191). On the other hand, labor market success could influence non-cognitive skills of individuals. For instance, self-efficacy may be enhanced by good labor market performance or reduced by disappointing periods in labor market history as individuals use information on past outcomes in order to assess own productivity (Bandura, 1977). This study investigates the reversal relationship between labor market transitions and self-efficacy. We use the first four waves of the "*Panel Study Labour Market and Social Security*" (PASS).

So far, there is clear evidence that non-cognitive skills have an impact on labor market success (Heckman and Rubenstein, 2001; Heckman et al., 2006; Almlund et al., 2011). However, as stated by Almlund, Duckworth, Heckman, and Kautz (2011, p. 204), most studies on the effect of labor market outcomes on non-cognitive skills provide correlational evidence. One exception is the study by Gottschalk (2005). Using data on a randomized experiment he studies the effect of a subsidy to work on locus of control. Individuals who received the subsidy had higher wages and more working hours than workers from the control group. The workers of the treatment group had a significantly higher locus of control three years after treatment.

In this study we measure the effect of being employed on self-efficacy. Although we do not have access to data from experiments, we identify the partial effect of being employed on the probability of having a high level of self-efficacy by estimating the probability of being employed and having a high, middle or low level of self-efficacy jointly as dependent risks. We circumvent problems arising from reversed causality by modelling the relationship of self-efficacy and employment as a joint dynamic process (see Haan and Myck (2009) for a similar model on the relationship between health and employment).

When there is a reversal relationship between self-efficacy and employment this will cause state dependence in labor market dynamics. If, for instance, the incidence of unemployment leads to a lower level of self-efficacy and a low level of self-efficacy leads to a lower probability to find a job, the incidence of unemployment in present will lead to a higher probability of unemployment in future (see Heckman (1981) for discussion of state dependence).

For active labor market policy it is important to know if self-efficacy can be

altered by events in the labor market history of individuals and if it plays a role for the chances of job-seekers to get employed. Enhancing self-efficacy may then be an aim of training programmes for unemployed workers.

References

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