How can the transfer system affect the working behavior of low skilled men?
Evidence from a dynamic structural life cycle model

Abstract:
In this paper we develop a dynamic structural life cycle model of labor supply behavior which explicitly accounts for the effect of income taxation and the transfer system. Moreover, we model the demand-side driven rationing risk that prevents agents from realizing the labor supply state which is optimal according to life cycle maximization. This allows us to distinguish between voluntary and involuntary unemployment. This framework provides the possibility to rigorously evaluate life-cycle employment effects of tax reforms as it reveals structural estimates of preferences, a detailed depiction of the tax and transfer system and of potential welfare reforms and allows for constraints which might affect the optimal life cycle paths of employment.

The estimation is based on panel data from the Socio Economic Panel (SOEP) for the years 2000 - 2006. In the empirical analysis we will focus on low- or no-educated men in working age (25-59) a group which is in particular affected by involuntary unemployment. Moreover the low and no-educated are strongly dependent on the transfer system and in the political debate there exists numerous suggestions for welfare reforms targeted in particular to this group.

We use this framework to study the employment effect of transforming a traditional welfare state, as currently in place in Germany, towards a more Anglo-American system which explicitly transfers a large amount of transfers to the working population. The results indicate that an employment bonus – consisting of subsidizing social security contributions for low wage workers – has a clearly positive impact on the labor supply of low skilled individuals. A myopic version of the model underestimates this effect, which underlines the importance of modeling labor supply in a life-cycle model.

Keywords: Life cycle labor supply, Involuntary unemployment, In-work credits