The relationship between accessibility and individuals’ outcomes in the labor market

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Extended abstract

In this paper we will present an empirical model of the relationship between accessibility and transitions between different “states” in the labor market; i.e. transitions between employment, unemployment and out-of-the labor force. It is sometimes argued that investments in the transport infrastructure have effects that are not included in the conventional cost-benefit analysis. One specific argument pertains to increases in accessibility to jobs that may have matching effects in the labor market. The idea seems to be that the better the accessibility to jobs, the easier will it be to obtain a good match between employee and employer. A good match in the model of Jovanovic (1979) is characterized by high wage and low probability of job mobility. Hence, if accessibility to jobs affects matching in the labor market, places with good accessibility would be characterized by relatively high wages and low job mobility. It could, however, be the case that good accessibility reduces the cost of search in the labor market. In this case a place with good accessibility would be characterized by relatively large job mobility and a related faster wage growth than other areas. So eventually wages may be higher in those areas even in the absence of matching effects. Another potential effect might be that spells of unemployment are shorter if higher accessibility reduces costs of search. This could, in turn, also affect the probability of transitions in and out of the labor force.

We use a “non-parametric” model of accessibility to jobs by using geographic coordinates (squares of 1 kilometer or 250 meters) and count the number of jobs at different distances from the individuals’ place of living. This measure of accessibility is subsequently used in a model of the probabilities for transitions between the aforementioned states in the labor market (including job-to-job transitions) where we pay specific attention to wages, duration dependence and a rich set of individual specific characteristics to control for potential...
confounders in the analysis. The analyses are based on an instrumental variables framework to address the issue of accessibility being endogenous to outcomes in the labor market.

Finally, the accessibility to jobs will be visualized using Geographical Information System (GIS). Further, visualization will be done for different states of the labor market as well as for transitions between different states. Doing so, possibilities of spatial clustering could be further analyzed. To complement the spatial visualization of spatial distribution measures of spatial distribution will be used.

The analyses are based on a large employee-establishment matched data set derived from the administrative registers of Statistics Sweden. The data pertains to the years 1990-2008. Results will be ready in due time for the conference.