Efficiency in Spatially Disaggregated Labour Market Matching[*]

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Abstract

We analyse the efficiency in a labour market matching process. We understand efficiency as a share of the mean number of matches (conditional on given covariates) in the number of matches that would occur if search and matching was optimal, bearing in mind that, contrary to the production function, being unemployed or vacant is not freely chosen or changed. We apply a stochastic matching frontier for random, job queuing and stock-flow models. We use data for Poland, a country with a highly regionally diversified unemployment rate. We contribute to the literature by comparing different spatial aggregation levels – NUTS-1 to NUTS-4 in monthly and annual perspectives. We analyse whether and how the efficiency changes over time. We find spatial and temporal heterogeneity in the labour market. Thus, various policy measures should be designed to improve labour market matching efficiency at certain regional levels.

Keywords: matching function, matching efficiency, spatial aggregation, stochastic frontier
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