Abstract

The presented habilitation thesis represents a comprehensive and mutually connected approach to the methodological and empirical aspects of the efficiency, flexibility, and labour market dynamics in the Visegrád countries. The main goal of the thesis is to evaluate the efficiency and flexibility of the aggregate and regional labour markets in the Visegrád countries, to identify the heterogeneity among the regions, and to reveal the possible structural changes and the most influential factors standing behind the dynamics of investigated labour markets. Research questions and hypotheses are thus focused on quantifying labour market flexibility at both aggregate and regional level, as well as at quantifying the efficiency of the matching process, including the factors influencing this efficiency.

The efficiency of the labour markets is defined as the efficiency of the matching process. The flexibility of the labour markets is treated as the sensitivity of the unemployment rate to the economic growth (described by the Okun's law), and as the elasticity of the unemployed to unfilled job vacancies (as implied by the Beveridge curve). The flexibility of labour markets within the framework of the Okun's law, and the Beveridge curve is evaluated using the regression models with asymmetry and structural breaks. Panel data models and the stochastic frontiers models are used to quantify the efficiency of the matching process at the regional levels and its distribution among the regions. The dynamics, flexibility, and efficiency of the labour markets at the aggregate levels are evaluated by formulating and identifying the dynamic stochastic general equilibrium model with search and matching frictions, the wage bargaining mechanism, and time-varying parameters. This approach allows revealing the structural differences of the labour markets in the Visegrád countries.

The models are estimated using the monthly and quarterly regional and macroeconomic data for the period from January 1999 to June 2019. The results show that the flexibility implied by the Okun's law does not necessary (in general) correspond with the flexibility concept defined by the Beveridge curve. This feature is especially evident in the periods of excessive economics growth where the Okun's law loses its validity and significance. The estimates of the Beveridge curve prove the conclusion that the decrease of the labour market efficiency is accompanied by the rising flexibility defined within the Beveridge curve framework. This evidence is in accordance with Pater (2017), who emphasizes the effect of the long-term impacts of the economic recession and the return to the equilibrium. High inefficiency of the matching process does not necessarily mean a low unemployment rate, especially when considering the regional heterogeneity and specificity. Similar evidence has been mentioned by Barrett, Södersten a Sodersten (1975) who observed the periods of the high efficiency and high unemployment rates in the United States.

The labour markets of the Visegrád countries exhibit unstable Okun's coefficients and the parameters of the Beveridge curve (at the regional and aggregate levels). There are significant asymmetries and big differences in the local labour markets. The empirical results proved robust evidence that the rising efficiency of the matching process (i.e. matching dynamics) led to the decreasing unemployment rates. On the other hand, a decrease in efficiency is not accompanied by rising unemployment when the labour market tightness increases. From the methodological point of view, stochastic frontier models with the fixed effects provided the most reliable estimates of the efficiency. Omitting the regional heterogeneity causes the systematically biased (overestimated) estimates of the labour market efficiency.