THE USE OF EU-SILC FOR LABOR FLOWS ANALYSIS: METHODOLOGY AND SOME FIRST RESULTS

Vladislav Flek
Metropolitan University Prague

Martina Mysíková
Institute of Sociology of the Academy of Sciences, Prague

In our proposed conference contribution we offer the methodology and some first results of using the EU-SILC for labor market flows analysis. Movements of working-age population between various labor market states (i.e., between employment, unemployment and inactivity) are usually referred to in the literature as gross labor market flows and serve as one of commonly accepted proxies for labor mobility approximations. These flows involve mobility channels such as new entries into labor market, separations from employment, or exits from unemployment.

To our knowledge, there has not been any attempt to use longitudinal EU-SILC data for labor market flows analysis. In Europe labor flows analyses are conventionally based on quarterly Labour Force Surveys. Although both EU-SILC and EU-LFS are designed as rotational panels and could serve as bases for longitudinal datasets, Eurostat does not make the international longitudinal datasets of EU-LSF available for research purposes. This potentially gives the EU-SILC a unique advantage for labor flows analysis, as it enables international comparisons based on longitudinal data. Therefore, we propose to analyze labor market flows and unemployment in the Czech Republic, Slovakia and Poland based on EU-SILC data.

We use a longitudinal EU-SILC 2008 dataset which is designed as a four-year rotational panel survey. It includes a monthly economic activity covering the period 1/2004–12/2007 for the initial four-year sample. The sample design allows us to follow the development in the monthly labor market status (employed, unemployed, or inactive) of individuals from the initial rotational group who were surveyed for 48 consecutive months, i.e., for the maximum period. However, EU-SILC data as an annual survey includes only a retrospective question on monthly economic activity for a previous calendar year. The way of organizing the data properly thus requires more detailed technical explanation which will be provided in our proposed conference contribution. The data might also suffer from various biases (time-aggregation bias, non-response or attrition bias, etc.), and the methods of coping with them form another part of our proposed contribution. In general, we argue that the monthly frequency of flow data is less prone to biases than the commonly used quarterly one.

After discussing the issues related to the appropriate organization of the data, we offer an introductory analysis common to any standard labor market flows research. This involves quantifying gross flows in countries covered by our analysis and establishing the probabilities for a working-age individual to move from one labor market status to another. Then we proceed to an empirical examination of how labor market flows are linked with unemployment dynamics. We analyze their link with net changes in unemployment, and, subsequently, we demonstrate how they affect the evolution of unemployment rates in central European countries. Finally, we deal with labor market flows decomposition of working-age population according to gender, education and age, and investigate the impact of labor mobility on unemployment rates in each of these groups in the Czech Republic, Slovakia, and Poland.

Our findings show that a relatively modest share of working-age population (between 1–2 per cent) is involved in monthly gross labor market flows in central Europe. In addition the fairly low degree of mobility in central European labor markets is confirmed by the analysis of transition probabilities
(hazard rates). The analysis of net changes in unemployment confirms the decisive role the unemployment-employment mobility channel (i.e., the net flow of workers from unemployment to employment) plays in the dynamics of unemployment in central Europe: In the Czech Republic and Slovakia this labor mobility channel alone is fully responsible for cutting down the number of unemployed.

The net flow of workers from unemployment to employment further needs to be taken into account when analyzing the factors behind changes in the unemployment rate. In fact, this net flow is decisive for unemployment rate evolutions in all central European countries. It also explains the majority of cross-country differences in unemployment rate dynamics. For instance, this net flow alone would diminish the unemployment rate in Poland more than twice as fast as in the Czech Republic.

Our results also indicate that the Czech Republic is lagging behind in relative terms with respect to creating enough job opportunities for unemployed men, and even more so for unemployed least qualified and elderly individuals. Only in this country more primary education/elderly workers had lost their jobs and entered the pool of unemployed compared to the amount of those who had left unemployment and moved into employment.