

Regional Unemployment and Human Capital in Transition Economies

High wage floors support the high regional unemployment disparities

Stepan Jurajda and Katherine Terrell

Why are differences in regional unemployment in post-communist economies so large and persistent? For example, in 2001 the Czech district of Most was facing a 20% unemployment rate, while the nearby Kladno district had 10% unemployed and Prague-West, which neighbors on Kladno, had less than 5% of the economically active population jobless. In existing research, institutional deficiencies, such as underdeveloped housing markets, have been typically blamed for the finding of weak labor migration's ability to equilibrate cross-regional unemployment differences.

We search for a different explanation motivated by two observations. First, the transition from central planning to markets is occurring in an era of skill-biased technological change. Indeed, recent cross-country and cross-industry research suggests that global shifts in labor demand towards skilled labor are important for national unemployment levels in post-communist economies. Second, transition economies inherited large regional differences in human capital endowments.

Regional Variations Increased Over Time

Our study starts by pointing out that regional variations in skill endowments in transition countries are wide in com-

parison to developed European economies and have increased over time. There are large differences among local areas in the share of college-educated workers (see Graph). In any country, one would expect to find an inordinately high share of college-educated individuals in the capital city, given the concentration of universities, cultural amenities valued by the highly educated, and public institutions staffed with a highly educated labor force. However, we find an extensive variation in the share of the college educated population even outside the capital city. For example, in 2001 in Bulgaria, the share of the adult population with a college education ranged between 7% and 17% outside of the capital city, and in Ukraine, between 9% and 19%. Moreover, the increase in the share of college educated workers was faster in areas that began the transition with more college-educated workers.

This pattern could reflect a dynamic that explains the persistent dispersion of regional unemployment rates. Complementarities between skilled workers and between capital and skills could motivate skilled labor and capital to flow to regions where skilled labor is plentiful, rather than where it is scarce. Skilled-biased labor migration could reinforce and exacerbate regional differences in unemployment, explaining the lack of

equilibrating migration found in other studies.

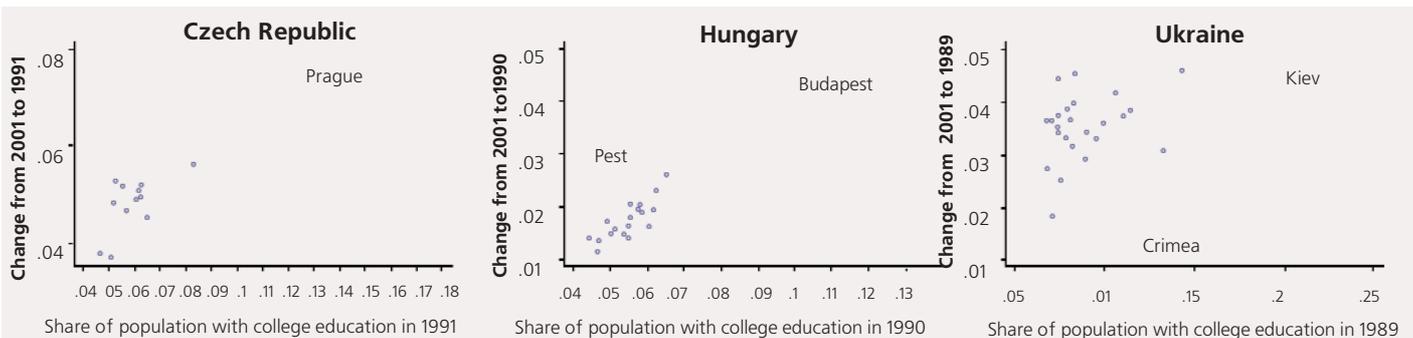
Alternatively, the early-transition regional distribution of skills could be related to initial regional shocks to labor demand. When local demand for labor collapses, low-skilled workers may be less likely to migrate and hence more likely to remain unemployed than high-skilled workers, whose opportunity cost of not working is higher. This would exacerbate the level of unemployment of the unskilled in areas with a large share of unskilled workers, creating more dispersion in the unemployment rates of regions.

Skilled Migration Higher Than Non-Skilled One

To explore these mechanisms, we use regional (NUTS-3 level) and worker-level data from the Czech Republic, Hungary, Bulgaria and Ukraine to measure the explanatory power of regional skill endowments for regional unemployment. We also study the related capital and labor flows and potential skill complementarities.

First, variation in regional human capital explains the lion's share of the variation in regional unemployment rates in transition economies. This is not only because of the national unemployment differences across skill groups, but

Divergence in Regional Shares of College Educated at NUTS3 Level



Note: Data is at the NUTS-3 regional level. NUTS are the Nomenclature of Territorial Units for Statistics, level 3 corresponds to counties/regions/districts

also because the unemployment rate among the least skilled workers is substantially lower in regions endowed with high shares of college-educated workers. We also show that the persistence of regional unemployment over time is especially strong among the low-skilled.

Next, we study cross-region migration by skill using the data from the 2001-2003 labor force surveys. We find that low skilled workers are less likely to migrate than high skilled workers, who tend to migrate to regions with a relatively high concentration of skilled people and low unemployment. Similarly, we find that foreign direct investment tends to flow to regions with high skill levels, although this evidence is weaker when capital cities are excluded.

We then ask about the two potential mechanisms that could explain these labor and/or capital flows and the patterns of regional unemployment by education groups: (i) the presence of complementarities and (ii) differences in the response of skilled and unskilled individuals to regional demand shocks, which

may be driven in part by centralized labor market institutions.

We find little evidence for complementarities using an identification strategy recently employed in US research, which relies on the historical location of colleges to identify exogenous variation in regional skill endowments.

The Role of Labor Market Institutions

Do labor market institutions contribute to the lack of migration of unskilled workers and lack of convergence of regional unemployment rates? The social safety net with its minimum guaranteed income level (effective minimum wage) may discourage work in regions affected by negative productivity shocks and lower the variance of the wage of less skilled workers across regions, lowering the benefits from migration. Consistent with this argument, we find that in the more developed labor markets of Central Europe the regional variance of the wages of low skilled workers is much lower than the

variance of the wages for high skilled workers. On the other hand, unemployment among the highly educated varies much less across regions than unemployment of the least skilled workers. This comparison is less stark in Bulgaria and Ukraine, where social safety nets are less comprehensive.

Thus, high wage floors in Central Europe seem to lower the incentives for less skilled workers to migrate and support the high regional unemployment disparities.

Stepan Jurajda is Associate Professor and a member of the Executive and Supervisory Committee of CERGE-EI, Prague. Katherine Terrell is Professor at the Stephen M. Ross School of Business and the Gerald R. Ford School of Public Policy, University of Michigan, USA. Full text of the paper can be accessed at: home.cerge-ei.cz/jurajda/RegionalHC_Nov-07.pdf (CERGE-EI Working paper No. 345). The research has been supported under the EBRD project C14116/JAP-2003-07-01/43 "Unemployment in Central and Eastern Europe: Why is it so high today?" within the Japan-Europe Cooperation Fund. **BT**

Employment Trends in Non-EU ECA Countries

The rather good economic performance seems to finally impact on employment-to-population ratios. The downward trend, observed ever since the breakdown of the Soviet system, finally stopped and a slight increase of the ratio has been observed in recent years. The male employment-to-population ratio in 2007 was 0.4 percentage points higher than ten years ago, at 63.8%. Women's ratio in 2007 was 0.5 percentage points higher than ten years ago at 45.6%. Employment-to-population ratios for young people also seem to have reached a turning point with an upward trend in recent years, but they are still only at the same level as ten years ago, a rather low 36%.

Unemployment rates continue to be high with only a very slow downward trend which, of course, further discourages people to participate in labor markets. The unemployment rate for the whole region was 8.5% in 2007, unchanged from the previous year. The youth unemployment rate was at 17.3 per cent in 2007. The region has traditionally not seen big differences in unemployment for women and men, and for the overall unemployment situation women actually have a lower unemployment rate than men. But, in the youth cohort, women face a higher unemployment risk than men, which was not the case right after the transition took place. This should be seen as a warning sign that gender equality in labor markets has started to deteriorate.

The main tasks for Central & South-Eastern Europe (non-EU) & CIS countries are to reverse high unemployment and low employment rates so that there is better use of the potential offered by the working age population. This will only be possible if macroeconomic policies are launched that boost investment and decent job creation and if labour market and social policies contribute to the inclusion, especially of young people, and to poverty reduction. Given that economic growth, so far, has neither led to considerably lower unemployment nor to less risky employment situations, it is not surprising that the region faces big emigration flows. The level of migration is of increasing concern because of the exodus of well-skilled nationals, which may reduce the capacity for long-term economic development. This is particularly troubling given that the youth share in the working-age population, which was already very low in comparison to other countries, will further decrease. If not identified as a major concern the ageing and decreasing of societies will turn into a constraint for further development in the region. The challenges for labour markets, social security systems, pension policies, health care, savings and consumption patterns are enormous.

Source: Global Employment Trends-2008, the International Labour Organization, http://www.ilo.org/global/What_we_do/Publications/lang--en/docName--WCMS_090106/index.htm **BT**