

# “College degree supply, productivity spillovers and occupational allocation of graduates in Central European countries”

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## Non-technical Summary

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It is well known that both over- and undersupply of college seats could result in efficiency losses for the society. Thus, we should understand the forces shaping the demand for skilled labor to inform policy decisions concerning provision of higher education.

This paper uncovers one of the determinants of the demand for skilled labor by analyzing the relationship between the number of college graduates available in the labor market and the fraction of them working in "noncollege" occupations. "Noncollege" occupations are those which do not value college-gained skills and thus pay none or very little wage premium to college graduates. In other words, in "noncollege" occupations college and high school graduates earn similar wages.

Allocation of college and high school graduates across "college" and "noncollege" occupations is modeled following the simple demand-supply framework proposed by Gottschalk and Hansen (2003). The novelty of this paper is allowance for the productivity spillovers from high concentration of college graduates, i.e. accounting for the fact that regions with higher share of the college educated in the labor force are more attractive for technically advanced companies and thus offer more and/or better workplaces for college graduates.

Using worker-level data from NUTS-4 regions of the Czech Republic, Hungary and Slovakia in the year 2001, this paper finds that the above-mentioned spillovers are indeed present in the economies of Central Europe. This implies that increasing the educational attainment of the local population could be used to attract advanced technologies and thus offer better work opportunities for college graduates.

**Keywords:** productivity spillovers, occupational allocation, college education, demand for skills