Does robots' reach exceed their grasp? Differential impacts of robot adoption and spillover effects on workers in the Czech Republic

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Abstract

This paper uses a quasi-differences-in-differences approach to identify impacts of robotisation and exposure to robots owned by foreign competitors on labour market outcomes of Czech workers. Utilising employee-level data allows for identification of differential impacts on workers of different skill levels. We find that while robot adoption substantially increases demand for college-educated labour, demand for employees with an elementary and/or high school diploma decreases slightly. Exposure to robots owned by foreign competitors also seems to drive up the demand for college graduates and to suppress the demand for workers with lower qualifications.

Keywords: Automation, Differences-in-differences

JEL Codes: F61, J29

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