

Automation and Job Polarization: On the Decline of Middling Occupations in Europe

Vahagn Jerbashian*

Abstract

Using data from 10 Western European countries, I provide evidence that the fall in prices of information technologies (IT) is associated with a lower share of employment in middle wage occupations and a higher share of employment in high wage occupations. The decline in IT prices has no robust effect on the share of employment in the lowest paid occupations. Similar results hold within gender, age and education-level groups, with notable differences in these groups. For instance, the share of employment in high wage occupations among females has increased more than among males with the fall in IT prices. This is consistent with arguments that women hold a comparative advantage in communication and social skills, which are complementary to IT and in demand in high wage occupations.

Keywords: Job Polarization; Information Technologies; Gender; Age; Education-Level

JEL classification: J23; J24; O33

*Departament d'Economia and CREB, Universitat de Barcelona, and CERGE-EI. Correspondence address: Avenue Diagonal 696, 08034 Barcelona, Spain. E-mail: vahagn.jerbashian@ub.edu. Phone: +34934034890.

CERGE-EI, a joint workplace of Charles University and the Economics Institute of the Czech Academy of Sciences, Politických veznu 7, P.O. Box 882, 111 21 Prague 1, Czech Republic.