PAPER

Title: Just reallocated? Robots, displacement, and job quality

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Subject area: S06 – Artificial intelligence, creative industries and robotics

Abstract: Concerns over widespread technological unemployment are often dismissed with the argument that human labor is not destroyed by automation but rather *reallocated* to other tasks, occupations, or sectors. When focusing on pure employment levels, the idea that workers are not permanently excluded but ``just'' reallocated might be reassuring. However, while attention has been devoted to the impact of automation on employment levels, little has been said about the *quality* of new job matches for displaced workers. Using an administrative longitudinal panel covering a large sample of Spanish workers from 2001 to 2017, we investigate the short- and medium-term re-employment prospects of workers displaced from sectors with an increasing density of industrial robots. Furthermore, we examine the role of reallocation to other sectors or local labor markets as an adjustment mechanism. Our analysis suggests that exposed middle- and low-skilled workers are more likely than non-exposed workers to remain unemployed six months after displacement. Among those who find a new occupation, an additional robot per 1,000 workers increases the probability of being re-employed in a lower-paying job by about 2 percentage points for middle- and low-skilled workers, with significantly higher penalties for those who relocate to a different sector. Moreover, these workers tend to face a qualification downgrading in the new job and are more likely to be re-employed through temporary employment agencies. High-skilled workers are less negatively affected by exposure, although they can also incur a penalty when changing sectors.

Keywords: *Automation, Inequality, Reallocation*

JEL codes: J24, J31, I31, O33