

Abstract:

This paper investigates how the increasing labor supply of fresh graduates with modern IT (information technology) skills impacts the careers of incumbent workers during periods of fundamental technological change. To identify the causal effect within a difference-in-difference framework, we exploit a regulatory change in a mandatory German apprenticeship training regulation that obligated fresh graduates of a large manufacturing occupation to acquire modern IT skills. The paper shows that fresh graduates with modern IT skills crowd incumbent workers out of their jobs and occupations. As a result, even young incumbent workers, who lack modern IT skills, experience long-lasting earnings reductions. The earnings effects prevail for more than 20 years and incumbent workers are more likely to leave their occupation or to become unemployed.