

Job Polarization, Skill Mismatch and the Great Recession

Riccardo Zago

Banque de France - College de France, France

r.zago87@gmail.com

Abstract

Much has been written on job polarization, but little is known about its effects on the reallocation of skills and skill demand across jobs. This paper aims to fill the gap. Herein, I introduce a model generating an endogenous mapping between skills and jobs that allows to track workers across occupations, their job opportunities and the quality of skill-to-job match over time. I estimate the parameters of the model to match solely occupational dynamics for periods around the Great Recession in the U.S, a major episode of polarization. Yet, this is sufficient for the model to explain well the different reallocation patterns of workers on the job ladder and the skill-to-job mismatch dynamics observed in the data. In particular, it predicts that (i) 1pp decline in routine employment –as explained by routine biased technical change– leads to a rise in skill-mismatch by 0.35pp (0.39pp in the data); (ii) any wage loss from mismatch is decreasing in skills; (iii) 2/3 of skill-to-job mismatches are efficient and necessary for routine employers to keep routine jobs alive. The predictions of the model are validated across states, with the effects of job polarization magnified for local markets that experienced a sharper decline in routine employment during the Great Recession.

Keywords: Job Polarization, Business Cycle, Skill Demand and Supply

JEL Codes: E24, E32, J21, J24, J62, O33