The Role of Skills and Sorting in Explaining Wage Inequality

Paul Diegert*

Job Market Paper

October 14, 2022
Click here for the latest version

Abstract

A large literature argues that technological change since the 1980’s altered the demand for workers’ skills, increasing wage inequality and polarization. By estimating a model of occupational choice using panel data from the Survey of Income and Program Participation (SIPP), I find that changes in the supply of workers’ skills were also major driving factors in increasing inequality and polarization. Specifically, I find that (1) as tasks in high-skill jobs have become increasingly complex, the distribution of workers’ ability to perform those tasks has become more dispersed, (2) workers’ ability to perform low-skill work tasks has become more homogeneous, and (3) workers have increasingly sorted into occupations by skill level, even if this does not maximize their income. These results suggest that skill formation has been a key channel through which long run changes in the nature of work have affected wage inequality. Finally, to obtain my estimates I prove a new identification result in a multi-dimensional potential outcome model and show how to robustly estimate it semiparametrically adapting results from mixture models.

JEL classification: J24; J31; O33; C33; C14

Keywords: Wage inequality; labor market polarization; occupational choice; skills; job tasks

*Department of Economics, Duke University. Email: paul.diegert@duke.edu. Address: 213 Social Sciences, 419 Chapel Drive, Box 90097, Durham, NC 27708-0097 USA.