

Labor Market Conditions, Skill Requirements and Education Mismatch

Fraser Summerfield
(University of Guelph)

April 2014

Abstract

This paper shows that changes in the skill requirements of jobs are one way by which economic downturns affect job match quality. In doing so this paper makes two contributions to the literature. The first contribution is to document a stylized fact about the cyclical nature of skill requirements (tasks) for newly formed jobs. Relating local unemployment rates in Canadian data, to skill requirements generated from the Occupational Information Network (O*NET) database, I show that the demand for manual skill requirements is countercyclical. This stylized fact is shown to be consistent with the predictions of a job search model with heterogeneous workers and vacancies. In this framework, firms increase the share of manual job vacancies during downturns because they are less costly to post and fill. The second contribution is to show that the cyclical nature of skill requirements, rather than economic conditions themselves, contribute to the incidence of overeducation. Estimates using various measures of overeducation confirm that changes in the skill requirements of newly formed jobs can account for much of the relationship between labor market conditions and job match quality. This empirical finding is also consistent with the model, where the share of overeducated workers varies with economic conditions partially because of corresponding changes in the type of job vacancies.

Keywords: Mismatch, Job Search, Overeducation, Skill Demand, Business Cycles
JEL Codes: E24; E32; J24; J63; J64