Duration Dependence and Labor Market Conditions: Theory and Evidence from a Field Experiment

Kory Kroft
University of Toronto

Fabian Lange
McGill University

Matthew J. Notowidigdo
University of Chicago

September 2012

Abstract

This paper studies the role of employer behavior in generating "negative duration dependence" – the adverse effect of a longer unemployment spell – by sending fictitious resumes to real job postings in 100 U.S. cities. Our results indicate that the likelihood of receiving a callback for an interview significantly decreases with the length of a worker's unemployment spell, with the majority of this decline occurring during the first eight months. We explore how this effect varies with local labor market conditions, and find that duration dependence is stronger when the labor market is tighter. We develop a theoretical framework that shows how the sign of this interaction effect can be used to discern among leading models of duration dependence based on employer screening, employer ranking, and human capital depreciation. Our results suggest that employer screening plays an important role in generating duration dependence; employers use the unemployment spell length as a signal of unobserved productivity and recognize that this signal is less informative in weak labor markets.

JEL Code: *J64*
Keywords: *Duration dependence, screening, business cycle, skill depreciation*