

# Worker Heterogeneity and the Asymmetric Effects of Minimum Wages

Jose Luis Luna-Alpizar\*

CERGE-EI

April 2019

## Abstract

This paper explores the notion that minimum wages affect different low-skilled workers asymmetrically due to productivity differences. In a search model with worker heterogeneity, a rising minimum wage lowers the employment and labor force participation of the least productive workers by pricing them out of the market, while having the opposite effect on other low-skilled workers that remain hireable. CPS data supports these predictions; a rise in the minimum reduces the employment and labor force participation of teenagers with less than high school education, but has the opposite effect on prime-age workers with high school attainment. The calibrated model requires small firm surpluses to match these observations. If firm surplus is small due to high nonmarket activity values, a moderate rise in the minimum improves aggregate welfare even when the worker's bargaining weight is high.

**Keywords:** Minimum Wages, Search and Matching, Unemployment, Worker Heterogeneity

**JEL Classification:** E24, J08, J38, J64, J68

---

\*CERGE-EI, a joint workplace of Charles University and the Economics Institute of the Czech Academy of Sciences, Politických veznu 7, 111 21 Prague, Czech Republic, email: [jl.luna.alpizar@gmail.com](mailto:jl.luna.alpizar@gmail.com). I thank Guillaume Rocheteau, William Branch, Eric Swanson, David Neumark, and the participants at the UCI Macroeconomics Workshop for their invaluable advice and support. I also thank Nicolas Petrosky-Nadeau, Pascal Michailat, and all the participants of the 2015 West Coast Search and Matching Meeting at the Federal Reserve Bank of San Francisco. I benefited from the helpful inputs of Christopher Flinn, Pierre Cahuc, Moritz Kuhn, and all the participants of the IZA/CREST/Bonn University Workshop: Employment Policies and Heterogeneity in the Labor Market. Special thanks to the participants at the CERGE-EI Macroeconomics Seminar and the FAU/IAB Macroeconomics and Labor Markets Seminar. All errors are my own.