Wage Risk and the Skill Premium

Ctirad Slavík and Hakki Yazici*

December 2017

The skill premium has increased significantly in the United States in the last five decades. During the same period, individual wage risk has also increased. This paper proposes a mechanism through which a rise in wage risk increases the skill premium. Intuitively, a rise in uninsured wage risk increases precautionary savings, thereby boosting capital accumulation, which increases the skill premium due to capital-skill complementarity. Using a quantitative macroeconomic model, we find that the rise in wage risk observed between 1967 and 2010 increases the skill premium significantly. This finding is robust across a variety of model specifications.

JEL classification: E25, J31.

Keywords: Skill premium, wage risk, capital-skill complementarity, precautionary savings.

^{*}Ctirad Slavík, CERGE-EI. A joint workplace of the Center for Economic Research and Graduate Education, Charles University, and the Economics Institute of the Czech Academy of Sciences. Politických vězňů 7, Praha 1, 111 21, Czech Republic. Email: ctirad.slavik@cerge-ei.cz.

Hakki Yazici, Sabanci University. Orta Mah. Universite Cad. No:27 34956, Orhanli, Istanbul, Turkey. Email: hakkiyazici@sabanciuniv.edu.

We would like to thank Árpád Ábrahám, Paul Klein, Per Krusell, Alex Ludwig, Roberto Pancrazi, Kjetil Storesletten, seminar audiences at the Federal Reserve Bank of Cleveland, the Federal Reserve Bank of St. Louis, the Istanbul School of Central Banking, Carnegie Mellon University, the University of California Santa Barbara, Goethe University Frankfurt, CERGE-EI, the European University Institute, the Universidad Carlos III de Madrid, the University of York, Cardiff University, the University of Warwick, the University of Cologne, the University of Manchester, the University of Edinburgh, Max Planck Institute for Research on Collective Goods in Bonn, as well as participants at the 2^{nd} African Search and Matching Workshop, the 2015 Nordic Macroeconomic Symposium, the 2015 World Congress of the Econometric Society, the 2016 ASSA Annual Meeting, the 2016 Mini-Conference on Heterogeneous Agents Macroeconomics in Zurich, the 2017 Swiss Macro Workshop, the 2017 North American Summer Meeting of the Econometric Society, the 2017 Exel Conference in Umag, the XII REDg Conference in Barcelona and the 2017 EEA Annual Meeting for valuable comments and discussions. We are especially thankful to Jay H. Hong, Byoung Hoon Seok, and Hye Mi You for sharing the details of their wage risk estimation. A version of this paper previously circulated under the title "Determinants of Wage and Earnings Inequality in the United States." Slavik acknowledges support from the Czech Science Foundation (grant project 17-27676S).