## The Influence of Early-life Economic Shocks and Genetic Diversity on Long-term Outcomes: Evidence from the U.S. Great Depression<sup>1</sup>

Valentina Duque University of Sydney

Lauren L. Schmitz University of Michigan

March 2019

## Abstract

We show that physical health, psychological well-being, and productivity around retirement age varies with exposure to economic conditions in early life. Using state-year-level variation from the most severe and prolonged economic downturn in American history—the Great Depression— and the subsequent government relief efforts resulting from the New Deal, combined with restricted micro-data and genotype data from the Health and Retirement Study, we find that changes in employment at the year-of-birth induced significant changes in economic well-being, metabolic syndrome, depressive symptoms, and limitations in performing activities of daily living around age 60. The effects of the economic shock varied substantially across demographic groups, however we find little evidence that these effects varied by genetic risk. In the context of an aging population, identifying the degree to which early-life factors influence health and economic well-being is informative for policies that seek to raise long-term productivity and reduce healthcare costs at later stages in life.

Vellore Arthi, and participants at the ASHEcon 2018 conference for valuable feedback. Katrin Gurvich provided excellent research assistance. Funding for this project was generously provided by the Marshall Weinberg Endowment (G002832) through the PSC at the University of Michigan, and from the National Institute on Aging (NIA) (P30 AG012846 and K99 AG056599). This study is covered by University of Michigan IRB approval HUM00122253. Restricted data from the Health and Retirement Study was received under contract 2015-031. Any errors are our own.

<sup>&</sup>lt;sup>1</sup> Contact information: Duque, School of Economics, <u>valentina.duque@sydney.edu.au</u>; Schmitz, Survey Research Center (SRC), Institute for Social Research, <u>lschmitz@umich.edu</u>. We would like to thank Josh Hausman, Janet Currie, Atheendar Venkataramanı, Pablo Ottonello, Hoyt Bleakley, Rodrigo Soares,