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The Dynamic Effects of Health on the Employment of Older Workers: Impacts by Gender, Country, and Race

Richard Blundell, Jack Britton, Monica Costa Dias, Eric French, and Weijian Zou*

Using representative data from the U.S. Health and Retirement Study (HRS) and the English Longitudinal Survey of Aging (ELSA), we estimate the impact of health on employment by country (U.S. and England), gender and race for the population ages 50 to 70. Using the same health measures across both countries, we create health indexes using both subjective as well as objective (e.g., diabetes, heart attacks) health measures. We estimate models of employment as a function of health.

Although employment rates of nonwhites are significantly lower in the U.S., in England racial differences in employment are modest. In both countries, nonwhites are on average in worse health. These racial differences in health are larger in the U.S. than in England. Furthermore, these racial differences in health are larger for women than men in both countries. These racial differences in health exist among both objective measures (such as diabetes, heart attacks) as well as when using more subjective measures of overall well-being. These racial differences in health largely explain differences in employment across races. In fact, once we condition on health and education, nonwhites have higher employment rates than whites in the U.S., with health explaining more than education. The impact of health shocks on employment is larger for nonwhites than for whites and is larger in the U.S. than England. For example, declining health can explain 13% (19%) of the employment decline for white (nonwhite) U.S. women, with very similar estimates for U.S. men. In contrast, declining health can explain only 4% (6%) of the employment decline for white (nonwhite) women in England.

Part, although not all, of racial employment differences are explained by the occupational demands of the jobs held by nonwhites and the association of these occupational demands with subsequent health declines. Among those working at jobs with high physical demands, the employment response to health shocks is only modestly larger than for

* **Richard Blundell** is the David Ricardo Chair of Political Economy at University College London. **Jack Britton** is a research economist at the Institute for Fiscal Studies (IFS). **Monica Costa Dias** is a senior research economist at IFS. **Eric French** is the Montague Burton Professor of Industrial Relations and Labor Economics at the University of Cambridge's Faculty of Economics. **Weijian Zou** is a research economist at IFS.This research brief is based on working paper MRDRC WP 2022-451, UM22-13. those working at jobs with low physical demands. However, those working at jobs with higher physical demands experience more rapid health declines and, thus, the impact of health on employment is larger. Because minorities tend to participate in more physically demanding jobs in the U.S. (but not England), the physical demands of jobs held by minorities can partly explain their lower employment.

Lastly, we develop a dynamic model of health and labor supply that allows for rich interactions between the two variables in order to capture the different paths leading to the long-term effects of health. To do so, our model extends those existing in the literature in several directions. First, we consider that past health may affect current labor supply, even after conditioning on current health. This may happen because health reduces opportunities for human capital investment, for example. Second, as for current shocks, we allow for the effects of past shocks to differ by the nature of the shock, whether persistent or transitory. And third, we control for person-specific heterogeneity in health, wages, and preferences, allowing for the possibility that health and labor supply are correlated not only because of the impact of health on labor supply, but because some people in good health have high wages and preferences for work, regardless of their health at a particular point in time. Put differently, we relax the assumption that the correlation between health and labor supply is exclusively driven by the effect of health on labor supply. We are currently in the process of estimating the structural model. \diamondsuit

Michigan Retirement and Disability Research Center Institute for Social Research 426 Thompson Street, Room 3026 Ann Arbor, MI 48104-2321 Phone: (734) 615-0422 Fax: (734) 615-2180 mrdrcumich@umich.edu www.mrdrc.isr.umich.edu

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