

Does health status matter to people's retirement decision in Japan?: An evaluation of
“justification hypothesis” and measurement errors in subjective health

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This study has two objectives. First, we evaluate health effects on retirement behavior. Second, we identify the significance of the endogeneity biases in the estimated health effects. We address the biases that arise from the following two causes: (1) a tendency of those who are not working to justify their leaving labor force (e.g. early retirement) by false poor health, and (2) measurement errors in the health variables.

In order to validate the effects of health status on people's choice whether or not they continue to be in labor force after the retirement, we compare the estimation results of two empirical approaches: (1) not-instrumented, and (2) instrumented regressions. The following three indicators might be appropriate as IVs: body mass index in 30 years old, the habit of working out in 30 years old, and the number of clinics in each sphere. Compared to being not-instrumented, instrumented health effects will be smaller if people actually justify their unemployed status and short working hours by poor health, and larger if the attenuation bias of measurement errors is a serious problem in the model. Also, we can evaluate the significance of endogeneity bias by comparing the results between objective (number of chronic diseases and disease score calculated by principle component analysis) and subjective health measures.

First, this study finds that healthy people are more likely to delay their retirement and work for more hours than those in poor health. Second, we cannot evaluate the severity of endogeneity problems only from the results in this paper because our instruments may be weak. Specifically, first stage regression in 2SLS fails to satisfy the rank condition; moreover, standard errors of health measures are much larger in all IV regressions than not-instrumented ones. Therefore, we conclude that further careful evaluations on the property of self-assessment health measures are inevitable for understanding health effects on people's retirement choice.