Does Biological Aging Moderate the Effect of Chronological Aging on Risk Aversion?

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Objective

This study analyses the relationship between aging and risk aversion in the context of cognition. Specifically, this study examines 1) whether chronological aging is associated with the risk preference, 2) whether biological aging is associated with the risk preference 3), and whether the biological aging moderates the relationship between chronological aging and risk preferences.

Significance

Studies have established a systematic relationship between risk attitudes and age (Dohmen et al., 2011; Donkers et al., 2001). However, whether the observed relationship between age and risk attitude is actual age effect or whether other factors that are associated with changes with age cause this effect, has mostly been overlooked. Cognition is a factor related to biological aging, which declines with chronological age, and affects the risk preferences (Benjamin et al., 2013; Burks et al., 2009). Since the distributional shift in risk-taking behavior might produce a wide range of economic, social, and policy relevant outcomes, it is worth knowing how age brings a shift in the risk paradigm through cognition functioning.

Method

This study uses the 2016 wave of the Health and Retirement Study (HRS), a national representative survey of the American population aged 51 and older that includes detailed information on the willingness to take risk, and cognitive skills for individuals. Multiple linear regression are used to analyze the data. The study uses risk aversion as the dependent variable, and age as a predictor variable. Cognition will be used as a moderating variable. Other control variables used in the model include gender, marital status, education attainment, self-reported health status, race, ethnicity, income, financial wealth, and housing equity.

Results and implications

We expect the cognition to affect the relationship between age and risk aversion. Our results will have policy implications. The findings from our study will add to the literature on decision making under risk and uncertainty, affecting the financial market, labor market, and consumer market decisions of households. Thus, understanding the relationship between risk preference, aging and cognitive decline will assist in designing effective long-term policies that nurture a high level of cognition at older ages.

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