The Limited Power of Socioeconomic Status to Predict Lifespan: Implications for Pension Policy¹

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Abstract: Differences of life expectancy across socioeconomic status are well-documented and many economists argue that they should be taken into account when designing pension systems. This paper analyses the relevance of using socioeconomic characteristics to differentiate the retirement age. First, we simulate the lifespan distribution both within and across socioeconomic status for the United States, based on the mortality rates assembled by Chetty et al. (2016). Second, we assume that the objective of the social planner is that each individual spends the same percentage of time in retirement. With perfect foresight, the social planner would be able to set the appropriate retirement age to each individual, perfectly indexed on his lifespan. However, this is clearly not realistic because it requires to know in advance the lifespan of each individual. As a consequence, our social planner will set an unique retirement age or differentiate the retirement age based on tags to infer the lifespan of individuals. We develop a "gap index", measuring the sum of the gap between the "individualized" retirement age and the one(s) set by the social planner. The aim of the index is to show the (in)capacity of using socioeconomic status to predict the lifespan of individuals. Third, using Chetty et al. (2016) data for the US, we simulate the reduction of the gap index that could be achieved by moving away from an unique retirement age policy. A key finding is that differentiating the retirement age by state, sex and income quartile reduces the gap index by only 5 %; primarily due to enormous lifespan dispersion within each socioeconomic group. This finding is robust to several specifications of the index, which suggests that "tagging" has limited power for pension policy.

Keywords: Pension policy, Pension progressivity, Lifespan, Tagging

JEL Codes: D63, H55, J14, J18

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