

Health and Longevity Insurance: Interaction between Incomplete Market and Imperfect Information

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Abstract

This paper examines the impact of the absence of an insurance market for one risk on the insurance purchase decision for another risk. Specifically, we assume that an individual is facing two risks, longevity (the risk to survive financial resources) and illness (the risk to incur medical expenditures), and belongs to one of two possible profiles: one with high life expectancy but low probability of illness, and one with lower life expectancy but higher illness probability. Under perfect information, one result is the desire for overcoverage on one risk when insurance is absent for the second risk; the substitution effect follows from the possibility of simultaneous occurrence of both risks. Then we examine the consequences of antiselection and find that the usual reduction in coverage caused by the revelation mechanism, as established by Rothschild and Stiglitz (1976), may be attenuated by the distortion caused by the absence of coverage on the other risk. Finally, in a situation of complete market, we argue that an insurer who bundles both risks within a unique contract would exploit the negative correlation between these risks to reduce the information externality on each coverage. Given that antiselection is an important reason of the high annuity cost for most individuals, as documented by Mitchell and al. (1999), Brown (2001), etc, an application of our study would result in an annuity pricing aligned on the risk profile of each individual, which would improve the affordability of this protection to more people.