Social insurance for long-term care with deductible and linear contributions

Justina Klimaviciute* and Pierre Pestieau

1Universite de Liege – Belgium
2Center of Operation Research and Econometrics [Louvain] (CORE) – Belgium

Abstract

With the rapid increase in Long-Term Care (LTC) needs, the negligible role of the market and the declining role of informal family care, one would hope that the government would take a more proactive role in the support of dependent elderly, particularly those who cannot, whatever the reason, count on assistance from their family. The purpose of this paper is to analyze the possibility of designing a sustainable public LTC scheme that would meet a widespread concern, that of going bankrupt and being unable to bequeath any saving to one’s children. We argue that such a scheme could be based on Arrow’s (1963) theorem on insurance deductibles. In an earlier paper, Klimaviciute and Pestieau (2016), we show that optimal social LTC insurance indeed features a deductible as long as there are loading costs. In that paper, we study a non-linear policy allowing for the deductibles to differ between the individual types and the states of nature. In the present paper, we want to explore a more restricted policy in which the government is constrained to use linear instruments and the same deductible for all types and in both dependence states of nature. We consider thus a social insurance scheme that consists of a linear payroll tax and a 100% coverage of LTC risks above a deductible. Another feature of this paper is that besides the heterogeneity in income we consider the reasonable hypothesis that there is a negative correlation between the income levels and the probability of dependence.

Keywords: theory