Abstract

We explore how health externalities to labor productivity affect efficiency and optimal policies in a lifecycle-dynastic model with endogenous fertility, labor and longevity. The health externalities decrease health spending, labor productivity, longevity, savings and labor but increase fertility from the socially optimal levels. Public health subsidies through universal public health insurance or private health subsidies through employer-based health insurance increase the marginal benefit of health spending and the marginal cost of childrearing. Taxes on income and consumption reduce the benefit of health spending and the cost of childrearing. Appropriate taxes and subsidies, such as age-specific health subsidies and age-specific labor income taxes, can fully internalize the health externalities to achieve the social optimum. Without such taxes, private health subsidies alone cannot achieve the social optimum. Calibration results suggest a larger welfare gain of optimal policies in the US with private health subsidies for workers than in Australia with universal public health subsidies.