Social insurance with competitive insurance markets and risk misperception

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Abstract

This paper considers an economy where individuals differ in productivity and in risk. Rochet (1991) has shown that when private insurance markets offer full coverage at fair rates, social insurance is desirable if and only if risk and productivity are negatively correlated. This condition is usually shown to be satisfied for many health risks, but it appears to be violated for the old age dependency risk (mainly because longevity in turn is positively correlated with productivity). We examine the role of uniform and nonuniform social insurance to supplement a general income tax when neither public nor private insurers can observe individual risk and when it is positively correlated with wages. Consequently, a Rothschild and Stiglitz (1971) equilibrium emerges in the private insurance market and low-wage/low-risk individuals are not fully insured. We show that even when social insurance provided to the poor has a negative incentive effect, it also increases their otherwise insufficient insurance coverage. Social insurance to the rich produces exactly the opposite effects. Whichever of these effects dominates, some social insurance is always desirable. Finally, we introduce risk misperception which exacerbates the failure of private markets. The insurance term now reflects the combined failure brought about by adverse selection and misperception. Now the low-risk individuals are not only underinsured, but also pay a higher than fair rate. However, and rather surprisingly, it turns out that this does not necessarily strengthen the case for public insurance.

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