Optimal age-dependent income taxation in a dynamic extensive model: The case for negative participation tax on young people*

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Abstract

We consider an optimal age-dependent income taxation in a dynamic model where the labor–leisure choice is the extensive margin in each period, each household faces idiosyncratic shocks to labor productivity and a pecuniary cost to work, and there is no insurance market against the idiosyncratic shocks. We show that the well-known property of an optimal participation tax rate in the static model continues to hold in our dynamic economy, and that the participation tax rates for some income groups with low consumption are likely negative. In dynamic models, the optimal participation tax rate depends on age and on labor income. Our numerical simulations suggest that a negative participation tax should be restricted to young households.

JEL classification: H21, H23, J22
Keywords: Extensive margin; Age-dependent taxation; Labor income tax

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