

Optimal Progressivity with Age-Dependent Taxation

Jonathan Heathcote

Federal Reserve Bank of Minneapolis and CEPR

Kjetil Storesletten

University of Oslo and CEPR

Giovanni L. Violante

New York University, CEPR, and NBER

JULY 29, 2016

Abstract

This paper studies how the optimal degree of progressivity of the tax- and transfer system would be affected if one introduced a potentially important form of tagging: letting taxes differ across age groups. We analyze this question in an overlapping generations model incorporating a number of salient trade-offs the government faces when choosing taxes. On the one hand, tax progressivity provides insurance against individual shocks and heterogeneity that missing markets fail to deliver and may promote efficiency through facilitating social mobility. On the other hand, taxes distort labor supply and human capital investments. The model is solved analytically and incorporates general equilibrium effects of tax progressivity. The optimal age-varying system has the feature that the tax system should become increasingly progressive with age, while average tax rates should fall with age. Such a system makes it possible to provide good public insurance against life-cycle shocks, which generate increasing inequality with age, without discouraging skill investment at younger ages. Using a calibrated version of the economy we document that the welfare gains from making the tax system age-dependent are quantitatively large.

Keywords: Age-Dependent Taxation, Tagging, Tax Progressivity, Income Distribution, Skill Investment, Labor Supply, Partial Insurance, Government Expenditures, Welfare

JEL Codes: D30, E20, H20, H40, J22, J24