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ARE PROGRESSIVE FISCAL RULES STABILIZING ?

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Abstract

This paper studies how income-based, progressive taxes and transfers may reduce aggregate volatility by protecting the economy against expectation-driven business cycles. Eliminating "local" sunspots that are arbitrarily close to an indeterminate steady state requires, for sensible parameter values, strong levels of progressivity so as to make labor supply close to inelastic. However, progressive taxes and transfers are shown to be *ineffective* to rule out stable deterministic cycles (and the associated "global" sunspots) that are located close to a *determinate* steady state.

Our results are formalized within two benchmark models and show how the efficiency of progressive fiscal schemes as local automatic stabilizers depends on the fiscal base. In the first setting with heterogeneous agents and segmented asset markets in which wage income mostly finances consumption, we show that progressive taxes and transfers should be made dependent on *labor* income, so as to rule out local indeterminacy. On the contrary, progressive fiscal rules should be applied to *capital* income in an overlapping generations economy where consumption comes from savings income. Incidentally, the latter results suggest that capital income taxes may be desirable, when progressive, to make local expectation-driven fluctuations less likely. In both frameworks, key to the results is the property that progressive fiscal rules provide insurance in the presence of imperfect capital markets.

Keywords: progressive taxes and transfers, business cycles, sunspots, endogenous cycles.

Journal of Economic Literature Classification Numbers: D33, D58, E32, E62, H24, H30.

1 Introduction

Income-dependent taxes and transfers have been proposed as efficient automatic stabilizers since, at least, Musgrave and Miller [27] (see also Vickrey [37, 38], Slitor [34], Friedman [15]). In recent years, the development of dynamic general equilibrium models has proved useful to study in a precise manner how, in particular, *progressive* fiscal schedules may stabilize the economy's aggregate variables. This strand of literature specifically allows to evaluate the level of social insurance provided by given fiscal schemes in the presence of various shocks. In particular, Guo and Lansing [19], Guo [17], Guo and Harrison [18], Dromel and Pintus [12] have shown that progressive income taxes can rule out local indeterminacy and restore saddle-path convergence.

The present paper also studies how income-based, progressive taxes and transfers may reduce aggregate volatility by protecting the economy against expectation-driven fluctuations (e.g. sunspot or cyclical equilib-