Markov Perfect Equilibria with Public Debt in a Political Economy

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Abstract

We consider an overlapping generations economy in which the level of public good and public debt are determined in a repeated voting game. The government finances the cost of public good provision by issuing public debt. We adopt the concept of Markov perfection and investigate the characteristics of the politico-economic equilibria. Unlike the existing literature, we focus on the effect of public debt on physical capital accumulation. It is shown that the level of public good is not only decreasing in the level of public debt but also increasing in the level of physical capital, and that there is an incentive to keep down the issuance of public debt: when voting, individuals take into account the fact that additional issuance of current public debt retards physical capital accumulation, increases the stock of public debt, and will decrease the level of public good in the next period. Furthermore, we explicitly analyze the interaction between the politically implemented debt policy and economic development.

JEL Classification: D72, H41, H63, O43.

Key Words: Public debt, Repeated Voting, Markov Perfect Equilibrium, Economic Growth.

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