Public capital, and Debt policy rule

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Abstract

We construct an endogenous growth model with productive public capital and government debt. In this model, the government sets the target level of government bonds relative to the size of the economy. We derive an unique transition path. we also find that if the initial level of public capital is sufficiently small, the economy falls into the development trap. In order to escape from this, the government in the developing process had better use tax finance rather than bond finance. In the developed countries, an increase in the target level of public bonds reduces economic growth whereas the growth rate can be maximized by setting tax rate at a certain level. We obtain the target level of public bonds which maximizes welfare level at the steady state if the income tax level is relatively high. In the transition, increasing in bond finance may leads to welfare improvement when the target level of government debt is sufficiently small, but loss unless that.

JEL classification:
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