

Public Research Spending in an Endogenous Growth Model

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Abstract

This paper constructs a variety expansion growth model with public research spending, where public researcher has a positive externality to private sector R&D. The government finances public spending by the revenue of taxes on asset income, consumption and corporate profit. To maximize the growth and welfare, the government should not levy corporate profit and finances the spending through asset income and consumption taxation. The paper also analyzes the stability of the steady state. When government bonds, consumption and profit tax are sufficiently small and asset income tax is sufficiently large, the balanced growth path is indeterminate.

Keywords: Public expenditure, Endogenous growth, Innovation

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