

Optimal environmental policy in developing economies

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Abstract

We investigate the optimal policy in a green-Solow-type model in which the government can allocate the tax revenue between productive capital formation and pollution abatement. It is shown that it is optimal to appropriate the tax revenue exclusively to productive capital accumulation in the transition to the long-term optimum, starting with poor productive capital and pristine environment, and that the tax revenue will be allocated to pollution abatement as well as capital formation at the long-term optimum. The Environmental Kuznets Curve, although inverse-V shaped in the present model, may reflect the optimal development and environmental policy.

Keywords: Green Solow Model; Environmental Kuznets Curve; Pollution abatement; Public investment

JEL Classification: E62; O13; O21; Q28

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