A Dynamic Game Model of Endogenous Growth with Consumption Externalities[*]

Katsuhiko Hori[†]and Akihisa Shibata[‡]

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Abstract

This paper introduces consumption externalities into an endogenous growth model of common capital accumulation and characterizes balanced growth equilibria. Contrary to the common argument in previous studies, we show that the growth rate in a feedback Nash equilibrium can be higher than that in an open-loop Nash equilibrium if agents strongly admire others' consumption.

Keywords: differential game, consumption externalities, endogenous growth, open-loop Nash equilibrium, feedback Nash equilibrium