

The Solow Growth Model with a CES Production Function and Declining Population*

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Abstract

This study investigates the relationship between per capita output growth and population growth using the Solow growth model when population growth is negative. When the Cobb-Douglas production function is used, the per capita output growth rate is positive even if the technological progress rate is zero. In contrast, when the CES production function is used, the per capita output growth rate is zero if the technological progress rate is zero.

Keywords: Solow growth model; negative population growth; CES production function

JEL Classification: E13; E23; O41

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