

Productive Consumption and Population Dynamics in an Endogenous Growth Model:

The Demographic Trend and Human Development Aid in Developing Economies

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Abstract

We find that by *endogenizing* population growth rate, a growth model under the productive consumption hypothesis (PCH) is more tractable than has been considered and has interesting implications for population dynamics. In the zero-saving phase, *multiple* saddle point stable steady states may exist, and the population growth rate may rise or decline along a transition path. In the positive-saving phase, such a steady state uniquely exists, and the population growth rate declines if the PCH effect is strong enough. With the phase switching, the population growth rate may exhibit an inverted U-shaped curve. We examine the consistency with the recent demographic trend and the effects of foreign aid.

JEL Classification: J11,O11,O41

Keywords: endogenous growth, population dynamics, productive consumption

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