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## A VAR evaluation of classical growth theory\*

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### Keywords

Classical Growth Theory, Demographic Transition, Malthusian Trap, Unified Growth Theory, Vectorautoregression

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### Abstract

*Over the past two decades, there have been numerous attempts in economic theory to model the historical regime of a Malthusian trap as well as the transition to growth in one coherent framework, or in other words, a unified growth theory. However, in most of these models, an important effect suggested by Malthus has been frequently omitted. By including what he had called “the great preventive check” in the traditional Malthusian model which is based on the principle of population, the principle of diminishing returns and the principle of labour division, the transition can be modelled in a very simple dynamic macroeconomic framework.*

*The aim of this paper is to first construct and calibrate the suggested classical model and to eventually employ a conventional VAR-Method to provide evidence of the above principles using country-specific annual historical data on crude birth rate, crude death rate and GDP per capita growth rate. As a result, it is argued that emerging economies follow a universal macroeconomic pattern of development. A decreasing death rate is succeeded by a decreasing birth rate which at the same time induces GDP per capita to rise sustainably. The correspondingly advanced microeconomic theory suggests that increasing life expectancy tends to create a demographic structure that is much less prone to overpopulation. This reduction of mortality will certainly raise the population pressure on the upcoming generation for some time and correspondingly increase poverty. However, so far no instance has been observed in which decreasing fertility and increasing GDP per capita was not preceded by such a transitional period*

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