

Seminar on Economics: NON-EXPONENTIAL GROWTH THEORY



Prof. Ryo HORII

Professor,
The Institute of Social and Economic Research,
Osaka University

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SCAN FOR ZOOM



Abstract:

The per capita real GDP growth rate has been remarkably stable for many decades in most developed countries. To explain the balanced growth, however, existing endogenous growth theories typically need to assume a knife-edge degree of externality, which is not yet confirmed by micro-level observations. I argue that this puzzle occurs because sustained growth has been commonly understood as exponential growth either in the quantity, quality, or variety of outputs, which is hard to explain without strong assumptions. By explicitly considering the movements of price and quantity of individual goods after their introduction, this paper shows that the observed stability of the real GDP growth rate can be explained under much weaker conditions without relying on the exponential growth of any variable. In particular, I develop an endogenous growth theory where a constant number (not exponentially many) of new goods are introduced per unit time. Even without externality, a constant GDP growth rate is maintained when the expenditure for older goods shrinks over time so as not to inhibit the demand for newer goods.