Dynamic Impacts of Trade Liberalization: In the Framework of Endogenous Growth with Productive Public Capital

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Outline

- Question: Does trade liberalization have no negative impacts?
- Twin Models: RCK type growth vs endogenous growth with productive public capital
- Key Assumptions: perfect foresight, perfect competition, complete international capital market
- Model Dimension: 3 regions, 3 sectors, 50 periods
- Simulations: liberalize trade between high- and middle-income economies (5 periods ahead)
Features

- Production Function:

\[ Y_{jrt} = \phi_{jr} K^{\alpha_{jr}} (J_{rt} L_{jrt})^{1-\alpha_{jr}} \]

- Government’s Optimization: choose a time path of public investment that maximizes the household’s welfare.
Simulation Results: Public Investment
Simulation Results: Fiscal Deficit (Lump-Sum Tax)
Simulation Results: Private Investment

![Graphs showing simulation results for private investment with time periods T1, T11, T21, T31, T41 and ratios R01, R02, R03. The graphs illustrate the changes in ratio across different time periods, with a reference run set at 1.00.](image-url)
Simulation Results: Private Consumption

![Graphs showing private consumption data over time periods T1 to T41 for different scenarios R01, R02, R03. The graphs compare the reference run (1.00) with varying ratios ranging from 0.85 to 1.10.](image-url)
Simulation Results: Per Capita GDP Growth

(Reference Run = 1.00)