

ECON3102-005  
CHAPTER 7: THE SOLOW GROWTH MODEL  
AND GROWTH CONVERGENCE

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- There is sustained growth over time.
- There is a positive correlation between the rate of investment and output per worker across countries.
- There is a negative correlation between the population growth rate and output per worker across countries.

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- We concluded that total factor productivity (technological progress) was the one that allowed us to grow over time.

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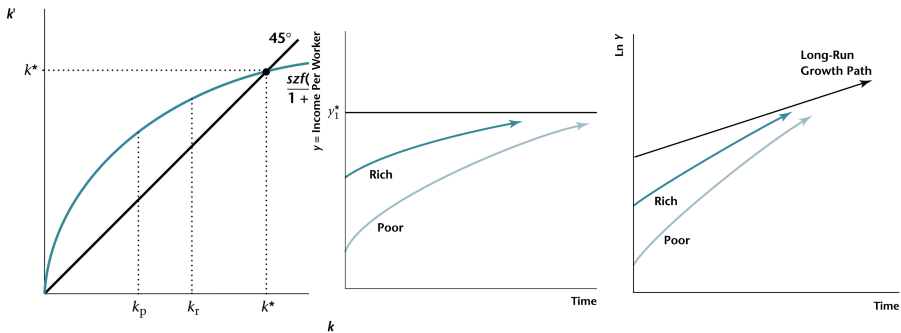
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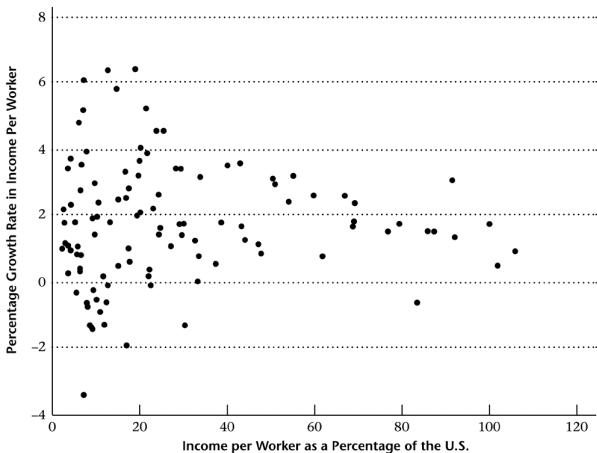
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- Assumptions:
  - We have two identical countries (same TFP, labor force growth rate, and savings rate).
  - The “rich” country initially has a higher level of capital per worker relative to the “poor” country (consequently a higher output per worker).

# CONVERGENCE OCCURS IN THE MODEL.

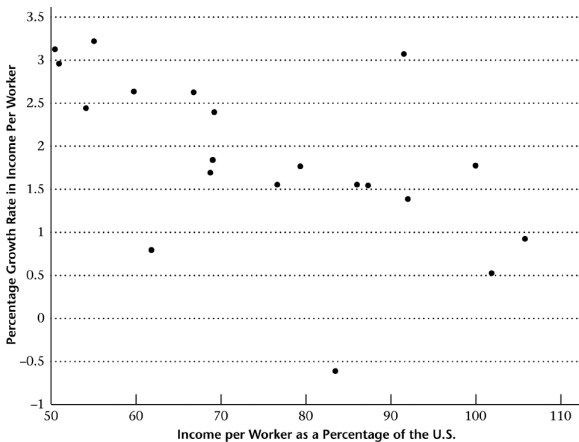


# CONVERGENCE DOES NOT OCCUR ACROSS ALL COUNTRIES.



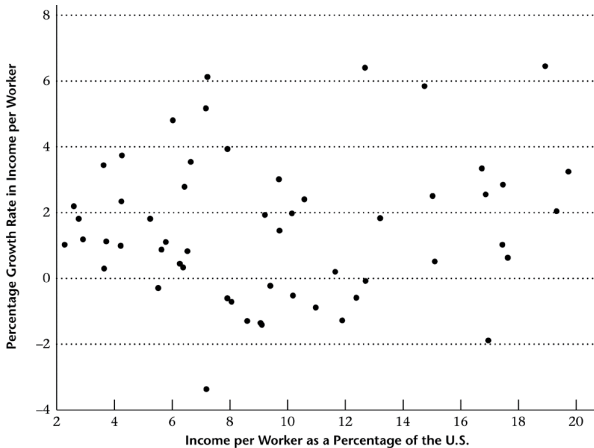
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# CONVERGENCE OCCURS AMONG RICH COUNTRIES TO SOME EXTENT.



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# CONVERGENCE DOES NOT OCCUR AMONG POOR COUNTRIES.



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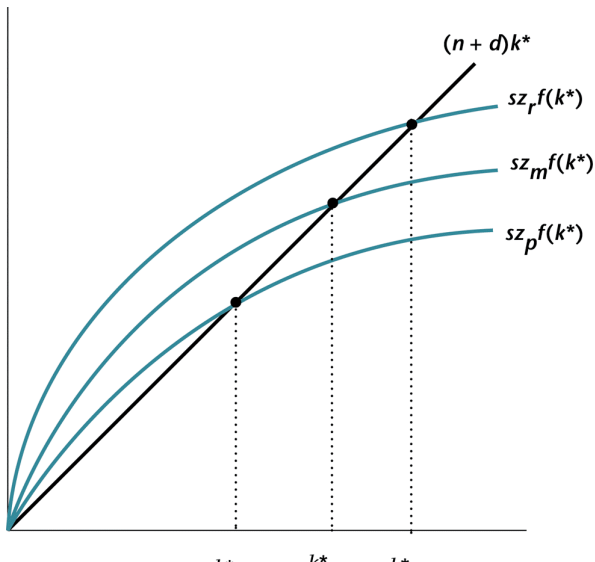
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- Think of government intervention. For example, laws that give unions bargaining power and thus could make firms unable (or even fearful) of introducing new technologies which are not “approved” by unions.
- Think again of government intervention. For example, barriers to international trade to “protect” the domestic industry, which also won’t allow the domestic industry to get technologies from abroad.

## IF THIS IS THE CASE,

TFPs for different countries are no longer the same, and we have multiple steady states across a sample of countries:



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- promote greater competition among firms: absence of monopolies creates the incentive to innovate. (Do not confuse with the R&D / patent monopolies)
- promote free trade
- do selection privatization: eliminate government ownership when there is no clear benefit of having a public enterprise instead of a private one.