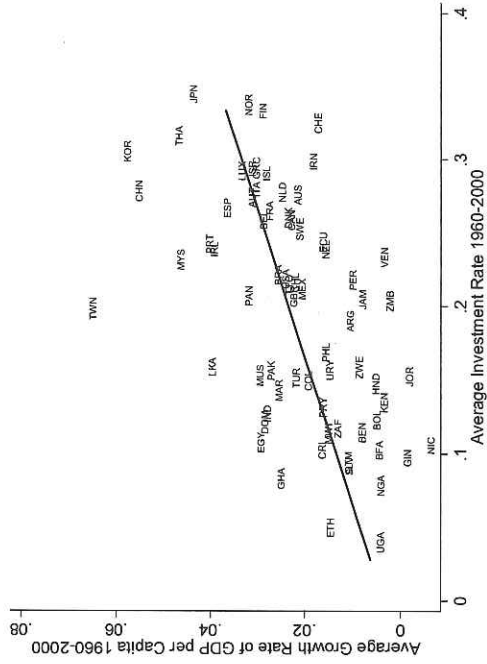


Correlates of Economic Growth



Courtesy of Princeton University Press. Used with permission.
 Figure 1.15 in Acemoglu, Daron. *Introduction to Modern Economic Growth*.
 Princeton, NJ: Princeton University Press, 2009. ISBN: 9780691132921.

Figure: Average investment to GDP ratio and economic growth.

From Correlates to Fundamental Causes

- We can think of the following list of potential fundamental causes:
 - luck (or multiple equilibria)
 - geographic differences
 - institutional differences
 - cultural differences
- An important caveat should be noted: discussions of geography, institutions and culture can sometimes be carried out without explicit reference to growth models or even to growth empirics. But it is only by formulating parsimonious models of economic growth and confronting them with data that we can gain a better understanding of both the proximate and the fundamental causes of economic growth.

From Correlates to Fundamental Causes

- Correlates of economic growth, such as physical capital, human capital and technology, will be our first topic of study.
- But these are only *proximate causes* of economic growth and economic success:
 - why do certain societies fail to improve their technologies, invest more in physical capital, and accumulate more human capital?
- Return to Figure above to illustrate this point further:
 - how did South Korea and Singapore manage to grow, while Nigeria failed to take advantage of the growth opportunities?
 - If physical capital accumulation is so important, why did Nigeria not invest more in physical capital?
 - If education is so important, why our education levels in Nigeria still so low and why is existing human capital not being used more effectively?
- The answer to these questions is related to the *fundamental causes* of economic growth.

Solow Growth Model

- Develop a simple framework for the *proximate* causes and the mechanics of economic growth and cross-country income differences.
- Solow-Swan model named after Robert (Bob) Solow and Trevor Swan, or simply the *Solow model*
- Before Solow growth model, the most common approach to economic growth built on the Harrod-Domar model.
- Harrod-Domar model emphasized potential dysfunctional aspects of growth: e.g. how growth could go hand-in-hand with increasing unemployment.
- Solow model demonstrated why the Harrod-Domar model was not an attractive place to start.
- At the center of the Solow growth model is the *neoclassical aggregate production function*.

The Economic Environment of the Basic Solow Model

- Study of economic growth and development therefore necessitates dynamic models.
- Despite its simplicity, the Solow growth model is a dynamic general equilibrium model (though many key features of dynamic general equilibrium models, such as preferences and dynamic optimization are missing in this model).