

# Growth Theory

Abdon Morales  
The University of Texas at Austin  
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Wayne Geerling

Building, roads, mosquito nets, and other capital are not the key to economic growth.

If we look around the world, it is easy to spot high-income nations and low-income nations. Rich, developed nations have impressive capital, including highways, factories, office buildings, and laboratories. Poor, underdeveloped nations have fewer modern factories and buildings, and their roads and other infrastructure are often in disrepair. Think of North and South Korea, as we saw in the last chapter, where one can literally see the difference from outer space. Clearly, wealth and physical capital go hand in hand, and it is tempting to conclude that physical capital is the *source* of wealth: if poor nations can just acquire more and better tools, they too, can be wealthy.

However, correlation does not prove causation; physical capital does contribute to growth, but it is less important than you might think. Often, physical capital is the result of growth, rather than the cause of it. Institutions, not infrastructure, are the real key to economic vitality; in the last chapter we saw in concrete terms how institutions matter. This chapter now provides the theoretical backbone of growth analysis; we begin with a brief description of how economic theories develop. After that, we consider the evolution of growth theory, starting with the growth model created by the American economist Robert Solow. The Solow model formed the foundation for growth theory beginning in the 1950s. After discussing the theory and implications of the Solow model, we consider New Growth Theory and its implied policy prescriptions.

Important note!

The sum of incremental changes is the net change

$$\int_a^b dI = I_b - I_a \text{ or } I(b) - I(a) \quad (1)$$