

EC1B5 | Macroeconomics

Chapter 7

Economic Growth

Additional Practice Questions:

Book Question 2

Currently, some of the fastest growing countries in the world remain desperately poor. For example, of the top five fastest-growing economies in 2016, three—Iraq, Burma, and Nauru—had real per capita GDP that were 101st, 162nd and 112th in the world, respectively. (Source: CIA Factbook estimates for 2016, PPP basis.) This seems like something of a contradiction. Using the equations for growth given in the chapter, explain why a country that has a very low real per capita GDP can also have a very high growth rate.

Book Question 7

The concept of diminishing returns to a factor of production applies not only to physical capital but to labor as well. Use the concept of diminishing returns to labor to explain and illustrate why there was no sustained growth in living standards prior to the Industrial Revolution. Draw a graph to illustrate the relationship between population and real GDP, where population is measured on the x-axis. Explain how your graph changes after the Industrial Revolution.

Book Question 8

In Question 8, we discussed the Malthusian cycle prediction. Under what conditions might the Malthusian cycle be a reality as it was in the preindustrial age?

Book Appendix Question 1

Use a diagram to represent the Solow growth model using the aggregate production function and the relationship between the physical capital stock and aggregate saving.

- Which point in the figure represents the steady-state equilibrium? Why?
- Use the diagram to show the impact of an increase in human capital on GDP.

Book Appendix Question 2

In 2016, Guinea topped the list of countries registering the lowest national savings, with savings forming –14.9 percent of GDP. This, however, does not mean that the economy doesn't have good prospects of potential growth given various internal positive components. Does this logic fit the Solow model? (Source: World Atlas, <https://www.worldatlas.com/articles/countries-with-the-least-savings-in-the-world.html>, April 25, 2017)