

Economics 103, Economic Growth Module

Winter 2020

Bates College

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To complete this assignment, you should:

1. Watch the recorded lecture on Economic Growth. This will provide you with much of the necessary background.
2. Read this [background](#) on “what causes long-run economic growth” by Yi Chen from the St. Louis Fed.
3. Here is a [summary](#) of the literature on how education affects growth.
4. Finally, here is a brief [biography](#) of Robert Solow from the IMF which describes some of the background behind his model.

Instructions: Answer all parts of all questions. You are expected to independently craft your answers. Answers which incorporate current macroeconomic data are especially encouraged. The assignment is due by 11:59 PM on Monday, April 20.

To complete this assignment, you should:

1. True or False? A more generous welfare state (*e.g.* longer unemployment benefits, more sick and parental leave) reduces both potential output and societal welfare.
2. Why do countries with higher savings rates, all else equal, have higher levels of output in the long run?
3. How have Chinese and U.S. GDP growth rates compared over the past few decades?
4. Is it likely that Chinese growth will lead to its per-capita income to eventually exceed that of the United States?

5. Chen (2015) breaks growth down into three categories: total factor productivity, labor force participation, and capital. Which of these three factors drove the largest share of U.S. economic growth between 2008 and 2013?
6. If a country has previously experienced strong growth from one of the three factors discussed in Chen (2015), which source makes strong growth most likely to continue into the future?
7. How does a better educated population affect the capital stock, total factor productivity, and economic growth?
8. Does educational quantity (years of schooling) or educational quality (test scores) appear to have a bigger effect on economic growth?
9. Education and growth are correlated. Does this prove, or suggest, that higher levels of education cause higher rates of growth?
10. Why is total factor productivity also known as the “Solow Residual?”