

Growth and the World Economy

ECON 3133

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Problems

1. Suppose that the production function for both India and the United States is $Y/N = A \times (K/N)^{1/2}$. If capital per worker, K/N , is \$2.25 million in the United States, technology, A , is 10 in both countries, and output per worker, Y/N , is 15 times larger in the United States than in India, what would be the capital per worker in India?
2. Describe briefly how each of the following changes would affect the steady-state growth rate of an economy:
 - a. A government policy designed to increase investment.
 - b. A new free trade agreement.
 - c. An increase in secondary school enrollment rates.
 - d. An increase in the population growth rate.
3. The Solow model predicts that countries with less capital per worker will see increased investment in capital until they catch up to countries with higher initial levels of capital per worker. Evidence does not always support this prediction. Explain what factors might cause this prediction to fail.