

Week 8: Economic Growth and the Productivity Curve

Directions: Answer the questions below. Note that to address some problems that may result in changes in investment in equilibrium, you need to first analyze the effect on the loanable funds market, then describe the implications on the productivity curve model. As a rule of thumb, anytime you demonstrate a change in long-run output per worker arising from a change in capital per worker, it will be necessary to use the loanable funds market to illustrate how and why capital stock changes.

1. Suppose the government finds efficiencies to cut costs, allowing for a decrease in government expenditures while maintaining the same level of taxes and the same quality of services and support for its citizens. Describe and illustrate the long-run impact on output per worker. Hint: Use both the loanable funds market and the productivity curve to answer this question.

2. Suppose Apple introduces a new device called the iPeed that will revolutionize cloud-based business collaboration and communication, improving business productivity for a large range of industries. Describe and illustrate the impact on the long-run level of output per worker. Hint: Use both the loanable funds market and the productivity curve to answer this question.

3. Suppose consumers behaviors are trending toward greater amounts of debt and borrowing relative to their incomes. Describe and illustrate the long-run impact on output per worker. Hint: Use both the loanable funds market and the productivity curve to answer this question.
4. Suppose a country dedicates more of its resources to building infrastructure such as roads, electrical lines, and communication infrastructure, all of which businesses more productive. Describe and illustrate the impact this may have on long-run output per worker. Hint: Use both the loanable funds market and the productivity curve to answer this question.

5. Suppose while maintaining a balanced budget, the government increases availability of subsidized loans and grants to support people getting two-year and four-year college degrees. Describe and illustrate the impact this may have on long-run output per worker. Hint: It is sufficient to use only a productivity curve to answer this question.

6. Suppose while not changing the government budget deficit, a government increases its support for people to get routine health care services which have been shown to improve long-run health outcomes for most adults. Describe and illustrate the impact on the long-run impact on output per worker. Hint: It is sufficient to use only productivity curve to answer this question.

7. Suppose a country reduces its legal barriers to foreign direct investment, which makes it more profitable for foreign companies to develop manufacturing and service facilities in a country. Describe and illustrate the impact on the long-run impact on output per worker. Hint: Use both the loanable funds market and the productivity curve to answer this question.

8. Dutta and Maus (2021) identified a global trend that when more women were elected into parliaments, health and educational outcomes improved in the country for both men and women. Describe and illustrate the impact on the long-run impact on output per worker. Hint: It is sufficient to use only productivity curve to answer this question.