

Homework Week 10: Dynamic General Equilibrium Model

For each of the following scenarios, describe and illustrate the short-run consequences on (a) consumption, (b) investment, (c) real GDP, (d) employment, (e) real wage, and (f) real interest rate.

1. Suppose global supply-chain processes are disrupted, which negatively affects productivity in the current period, but is expected to resolve in the future.

2. Suppose businesses expect new technology will improve productivity in the future.

3. Suppose a natural disaster leads to a significant destruction of capital stock.

4. Apple introduces a new product called the iPeed, available for sale immediately. The iPeed will revolutionize how people work and communicate, making it easier and more effective to work on the go and communicate with your coworkers.

5. The government passes a bill to cut taxes today and likely finance it with increases to taxes in the future.

6. The government passes a bill to cut taxes today and finance it with cuts to government expenditures in the future. How does your answer compare to the previous question? What explains the difference?

7. Suppose it is expected that energy prices will increase in the future. If true, this will have a negative effect on businesses' productivity.