

ECO 305: Intermediate Macroeconomics

Homework: Dynamic General Equilibrium Model with Money

Due In Class on Tuesday, November 29, 2011

Directions: *When prompted*, use the dynamic, general equilibrium model of consumption, investment, employment, production, *and money demand and supply* to answer the questions. Assume in your modeling that labor supply is very inelastic with respect to changes in real wages and real interest rates (therefore, if there are shifts in labor supply and labor demand, assume labor demand shifts by a greater amount). For each of the following scenarios, describe and illustrate the present day impact on:

- Consumption
- Investment
- Employment
- Production
- Real wage
- Real interest rate
- Aggregate price level

1. Suppose the Federal Reserve decreases the money supply. What is the impact on the aggregate price level? You do not need to determine the full effects on the general equilibrium for this question.
2. Suppose an improvement in online banking technology makes it less costly to conduct financial transactions, making it less necessary to have cash in advance to buy final goods and services. Notice, this is only an improvement in technology for financial services, not for production of final goods and services. Illustrate the effect on the market for money. What is the impact on the aggregate price level? You do not need to determine the full effects on the general equilibrium for this question.
3. The government passes a bill that leads to a cut in government services in the future. Describe and illustrate the general equilibrium effects on the economy. Be sure to describe and illustrate the impact on the market for money.
4. Suppose a natural disaster destroys buildings and infrastructure that were used in the production of goods and services. Describe and illustrate the general equilibrium effects on the economy. Be sure to describe and illustrate the impact on the market for money.
5. Suppose there is a change in preferences such that the marginal utility of consumption increases relative to the marginal utility of leisure. Describe and illustrate the general equilibrium effects on the economy. Be sure to describe and illustrate the impact on the market for money.