Review for Midterm 2

Practice questions

It is critical that you are able to manipulate the IS and LM curves to determine how changes in exogenous variables affect the equilibrium output and interest rate levels.

For the following questions involving the IS/LM model, use these equations and assumptions

LM: \[ \frac{M}{P} = m + l(r + \pi) + dY, \quad l < 0, \quad d > 0 \]

IS: \[ Y = A + cY + br + G, \quad c > 0, \quad b < 0 \]

\( A, \ G, \ M, \ P, \) and \( \pi \) are exogenous. Note: there are no taxes.

1. Suppose that \( A \) increases and \( G \) decreases. Which of the following best describes the equilibrium effects of the two changes?

   a. \( Y \) will increase and \( r \) will increase.
   b. \( Y \) will not change and \( r \) will not change.
   c. \( Y \) will increase and \( r \) will not change.
   d. One cannot determine the direction of the equilibrium effects on \( r \) and \( Y \) without knowing the magnitudes of the changes in \( A \) and \( G \).

2. Suppose that \( P \) decreases and \( G \) increases. Which of the following best describes the equilibrium effects of the two changes?

   a. \( Y \) will increase and \( r \) will increase.
   b. \( Y \) will decrease and \( r \) will decrease.
c. $Y$ will increase, but one cannot tell whether $r$ will increase, decrease, or remain the same without additional information on the magnitudes of the changes in $P$ and $G$ and the parameters of the IS/LM model.

d. One cannot determine for either $r$ or $Y$ whether the variable will increase, decrease, or remain the same without additional information on the magnitudes of the changes in $P$ and $G$ and the parameters of the IS/LM model.

3. If investment depends negatively on the rate of interest but does not depend on the level of output, which of the following statements will best describe the equilibrium effect on investment of a simultaneous increase in $G$ and increase in $M$?

   a. $I$ will increase
   b. $I$ will decrease
   c. $I$ will not change
   d. The equilibrium change in $I$ cannot be determined without additional information on the magnitudes of the changes in $G$ and $M$ and the parameters of the IS/LM model.

**Concepts**

The following are among the concepts you will want to understand for the midterm:

Federal Reserve System
Federal Open Market Committee
Open Market Operation
Commodity money
Fiat Money
M1
M2
The Federal Reserve as an independent agency
Present discounted value calculations over 2 and 3 period horizons