Economics 14.02
Problem Set 6
Due Date: 4/30/04
Please STAPLE all sheets together.

Answer each as True, False or Uncertain. Give a two or three sentence explanation for your answer.

1. Under a fixed exchange rate regime, the medium-run adjustment to the natural rate of output from a lower output level does not involve a change in the investment level since the interest rate is constant.
2. Consumers are indifferent to whether net exports increase due an increase in foreign income or due to a depreciation of the exchange rate.
3. The adoption of a common currency in Europe (the Euro) is a good idea.
4. Assuming the world interest rate remains constant, a reduction in the European labor market rigidities will increase the United States output level.
5. Under a fixed exchange rate regime, the money supply does not adjust to output shocks if the world interest rate and domestic price level remain constant.

Longer Problem 1 (Fixed Exchange Rates):

Consider a country operating under a FIXED exchange rate regime. Describe the short-run and medium-run effects of an increase in government spending using the graphs on the following page. Give 2-3 sentence answers to questions below.

- In the top-left graph, a clear accounting of the shifting AS and/or AD curves. Use the middle-left graph to show how the underlying IS and LM curves are moving. Finally, use the bottom-left graph to show movements in the interest parity condition. To the right, illustrate the time paths with T_0 is the time of the policy change, and T_2 when the new medium-run equilibrium is reached. When necessary, assume the Marshall-Lerner condition holds.
- In each graph, the drawn curves represent the initial equilibrium. Label short-run movements from these equilibriums with a "1", and medium-run movements with a "2". Include the following axis or curve labels:
  - Initial Equilibrium: AS_0, AD_0, IS_0, LM_0, P_0, P^e_0, Y_0, i_0, E_0
  - Short-Run Equilibrium: AS_1, AD_1, IS_1, LM_1, P_1, P^e_1, Y_1, i_1, E_1
  - Long-Run Equilibrium: AS_2, AD_2, IS_2, LM_2, P_2, P^e_2, Y_2, i_2, E_1

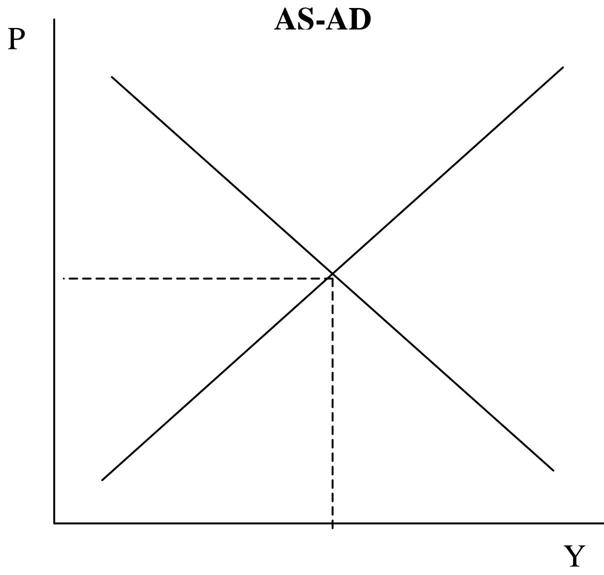
a. Describe the short-run and medium-run effect on output, the real exchange rate, and the interest rate.

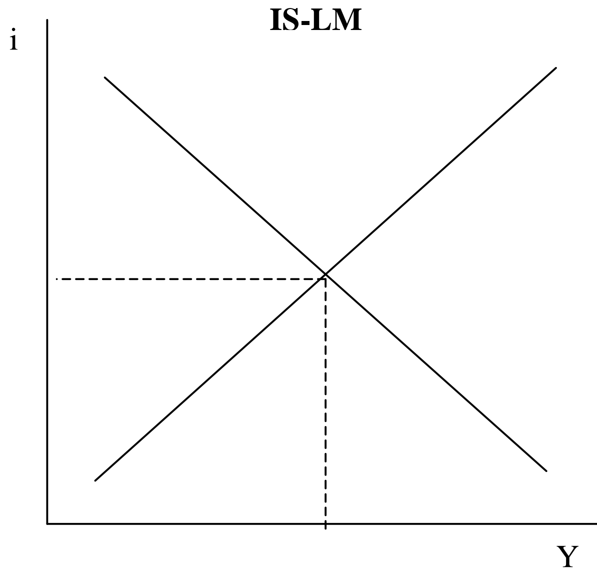
b. Describe the short-run and medium-run effect on the components of spending - consumption, investment and net exports. What ultimately "pays" for the increased spending?

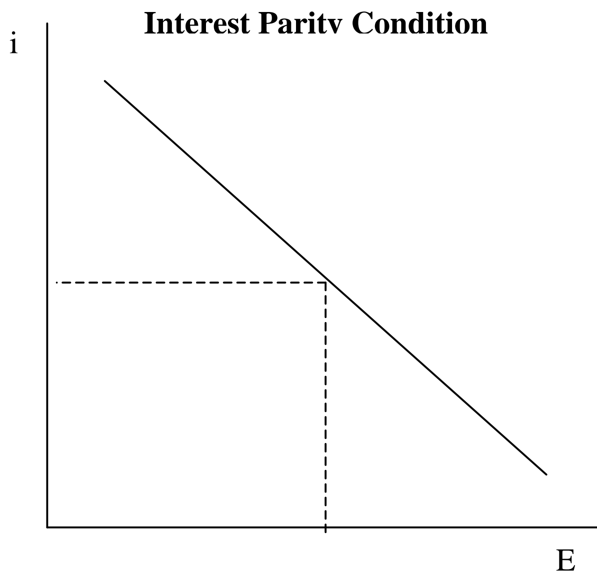
c. What is happening to the money supply?

d. Comment on the proposition: "Budget deficits lead to trade deficits".

Longer Problem 1 (Fixed Exchange Rates):







Time-Path

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Longer Problem 2 (Flexible Exchange Rates – this case is substantially harder):

Consider a country operating under a FLEXIBLE exchange rate regime. Describe the short-run and medium-run effects of an increase in government spending using the graphs on the following page. Assume the central bank does not change the money supply. Give 2-3 sentence answers to questions below.

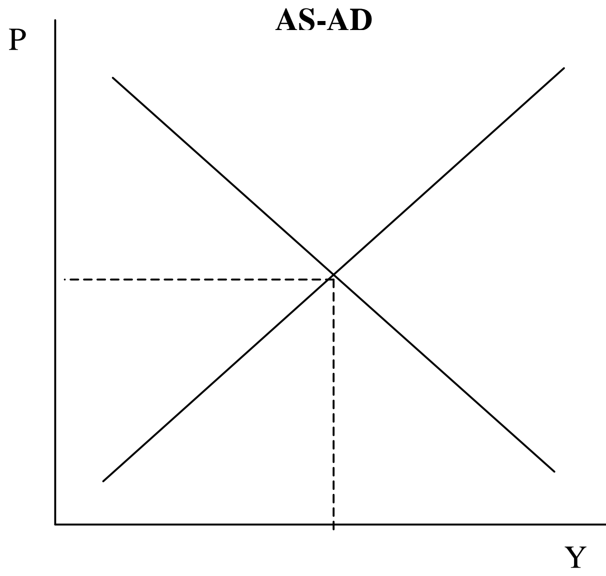
- In the top-left graph, a clear accounting of the shifting AS and/or AD curves. Use the middle-left graph to show how the underlying IS and LM curves are moving. Finally, use the bottom-left graph to show movements in the interest parity condition. To the right, illustrate the time paths with T_0 is the time of the policy change, and T_2 when the new medium-run equilibrium is reached. When necessary, assume the Marshall-Lerner condition holds.
- In each graph, the drawn curves represent the initial equilibrium. Label short-run movements from these equilibriums with a "1", and medium-run movements with a "2". Include the following axis or curve labels:
  - Initial Equilibrium: AS_0, AD_0, IS_0, LM_0, P_0, P^e_0, Y_0, i_0, E_0
  - Short-Run Equilibrium: AS_1, AD_1, IS_1, LM_1, P_1, P^e_1, Y_1, i_1, E_1
  - Long-Run Equilibrium: AS_2, AD_2, IS_2, LM_2, P_2, P^e_2, Y_2, i_2, E_1

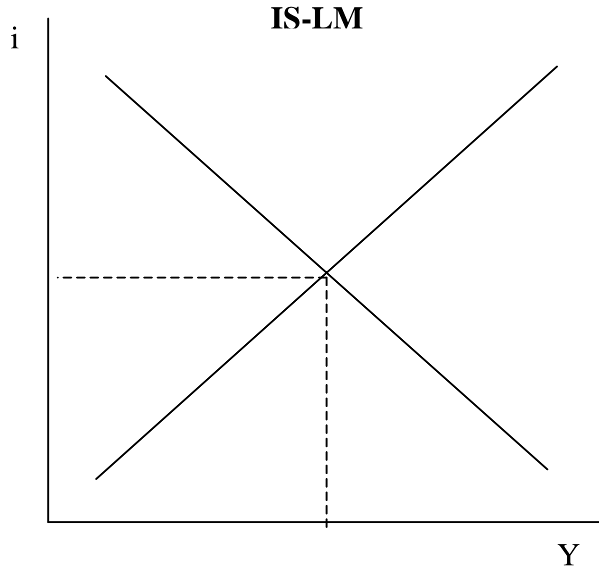
a. Describe the short-run and medium-run effect on output, the real exchange rate, and the interest rate.

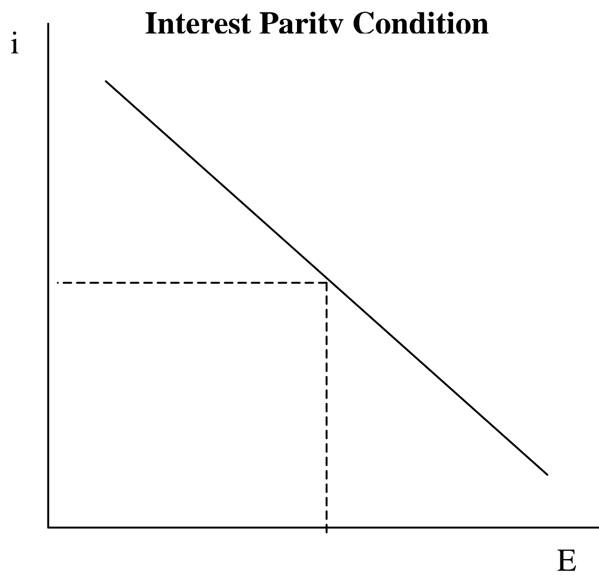
b. Describe the short-run and medium-run effect on the components of spending - consumption, investment and net exports. What ultimately "pays" for the increased spending?

c. Comment again on the proposition: "Budget deficits lead to trade deficits".

Longer Problem 2 (Flexible Exchange Rates):







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