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):

**AS-AD**

**IS-LM**

**Interest Parity Condition**

**Time-Path**
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):

AS-AD

IS-LM

Interest Parity Condition

Time-Path

$Y$

$P$

$M/P$

$i$

$E$

$\varepsilon$

$C$

$I$

$NX$

$T_0$

$T_2$

Time