

**1. (25%) Fiscal Policy under Floating and Fixed Rates.**

- a) Explain how a temporary increase in the government budget deficit through increased government spending or reduced taxes would affect aggregate demand (i.e., GDP or  $Y$ ), and explain how this would also affect the price of foreign exchange ( $E$ ) and the current account balance using the AA-DD model for an economy operating below full employment. Use the E-R-M graph to show how the increase in GDP would affect the interest rate ( $R$ ).
- b) How would your answer to (a) be different if the increase in the budget deficit was considered by foreign currency traders to be permanent? Show this on your AA-DD diagram in (a).
- c) How would your answer to (a) be different if the central bank accommodated fiscal policy with monetary policy to keep exchange rates fixed? Show this on your AA-DD diagram in (a).
- d) How would your answer to (a) be different if the economy was already operating at full employment? Show this on an AD-AS (Aggregate Demand and Supply) diagram. Would it matter whether exchange rates were fixed or floating?
- e) Use an HH-FF model for the case of two large countries that import goods from each other and have free capital flows across their borders. Contrast the effects of fiscal policy by the home country, under floating (a) and fixed (c) rate systems, on GDP in both countries. In which of the two cases is the foreign country likely to be a free rider, and in which cases is it likely to desire better policy coordination? Give an example in which coordination would change the outcome.

**2. (25%) Monetary Policy under Floating and Fixed Rates.**

- a) Explain how a significant open market purchase of government bonds by the central bank would affect GDP, and explain how this would also affect the price of foreign exchange and the current account balance using the AA-DD model for an economy operating below full employment. Use the E-R-M graph to show how this would affect the interest rate.
- b) How would your answer to (a) be different if the open market purchase of bonds was expected by foreign currency traders to be permanent? Show this on your AA-DD diagram in (a).
- c) How would your answer to (a) be different if the central bank also had to intervene in foreign exchange markets to keep exchange rates fixed? Show this on your AA-DD diagram in (a).
- d) How would your answer to (a) be different if the economy was already operating at full employment? Show this on an AD-AS diagram. Would it matter whether exchange rates were fixed or floating?
- e) Use an HH-FF model to contrast the effects of monetary policy by the home country, under floating (a) and fixed (c) rate systems, on GDP in both countries. In which of the two cases is the foreign country likely to be a free rider, and in which cases is it likely to desire better policy coordination? Give an example in which coordination would change the outcome.

3. (20%) Suppose that a small developing economy has unilaterally pegged its currency against a major trading partner, but is currently in recession and looking for a way to stimulate the economy without worsening its current account balance. One foreign advisor has suggested a sudden, one-time devaluation of the domestic currency, but you are skeptical.

- a) Use the E-R-M graph and the AA-DD model to explain the effects of an unanticipated devaluation on the current account balance, the balance of payments, foreign exchange reserves, the money supply, and output in the economy.
- b) Suppose that in the future markets anticipate another devaluation. Use the E-R-M graph and the AA-DD model to explain the effects of these expectations on the balance of payments, foreign exchange reserves, money supply, and interest rates. If domestic private investment is sensitive to interest rates, what will happen to the economy?
- c) For the second case, assuming that in the expectations are incorrect and a devaluation is not planned, explain the government's alternative policy responses, and explain why the choice made in the first case may affect the ability of the government to respond in the second.
- d) Now consider the alternative scenario of a country where foreign currency traders expect a revaluation of the currency. Explain the effects of this expectation, and the country's policy responses. Is your answer identical to (b) in reverse, or are there significant differences? How could the country prevent a change in its money supply?

4. (30%) **Shorter Essay Questions.** Answer three of the following four questions (10% each)

- A. Consider the case of a small economy with a history of budget deficits financed by a rapid growth of domestic government bonds held by the central bank. Explain why this would undermine the credibility of fixed exchange rates. Then consider the policy options for a new government that wants to break the cycle and create a stable and credible environment attractive to both foreign and domestic investors. Consider the merits of unilateral versus multilateral exchange rate pegs, currency boards, and Dollarization. How does the revenue from seignorage affect the new government's preference?
- B. What are the conditions for an Optimal Currency Area? Does Europe meet these conditions? Why must monetary policy for the Euro area be conducted by a single European Central Bank, rather than allowing the individual central banks in each member country the right to issue Euros in place of their own currency? What are the dilemmas created by fiscal federalism, i.e., allowing each member country the right to maintain an independent fiscal policy? Finally, suppose that the Euro is able to remain a stable currency desirable as a transfer and investment currency, what effects might this have on the United States?
- C. What is the trilemma? Explain carefully, and consider the advantages and disadvantages of each alternative.
- D. How did the Bretton Woods system differ from the gold standard? What unique advantage did it offer the United States? What was the Triffin dilemma? When and why did the system end, and what replaced it?