

Macroeconomics: Assignment 6  
(Deadline: for your reference only)

Cheng Sun

1. Suppose that higher income implies higher imports and thus lower net exports. That is, the net-exports function is

$$NX = NX(e, Y)$$

Examine the effects in a small open economy of a fiscal expansion on income and the trade balance under the following exchange-rate regimes.

- a) A floating exchange rate.
- b) A fixed exchange rate.

How does your answer compare to the results in Table 13-1?

2. Suppose that money demand depends on disposable income, so that the equation for the money market becomes

$$M/P = L(r, Y - T)$$

Analyze the short-run impact of a tax cut in a small open economy on the exchange rate and income under both floating and fixed exchange rates.

3. Suppose that the price level relevant for money demand includes the price of imported goods and that the price of imported goods depends on the exchange rate. That is, the money market is described by

$$M/P = L(r, Y)$$

where

$$P = \lambda P_d + (1 - \lambda) P_f / e$$

Here,  $P_d$  is the price of domestic goods,  $P_f$  is the price of foreign goods measured in the foreign currency, and  $e$  is the exchange rate. Thus,  $P_f/e$  is the price of foreign goods measured in the domestic currency. The parameter  $\lambda$  is the share of domestic goods in the price index  $P$ . Assume that the price of domestic goods  $P_d$  and the price of foreign goods measured in foreign currency  $P_f$  are sticky in the short run.

- a) Suppose that we graph the  $LM^*$  curve for given values of  $P_d$  and  $P_f$  (instead of the usual  $P$ ). Is this  $LM^*$  curve still vertical? Explain.

- b) What is the effect of expansionary fiscal policy under floating exchange rates in this model? Explain. Contrast with the standard Mundell–Fleming model.
- c) Suppose that political instability increases the country risk premium and, thereby, the interest rate. What is the effect on the exchange rate, the price level, and aggregate income in this model? Contrast with the standard Mundell–Fleming model.