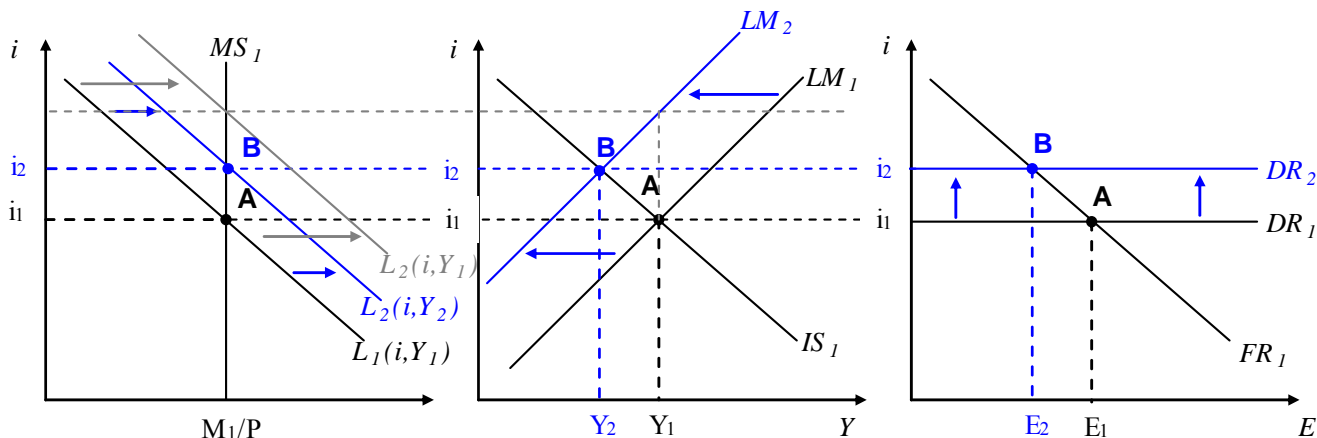


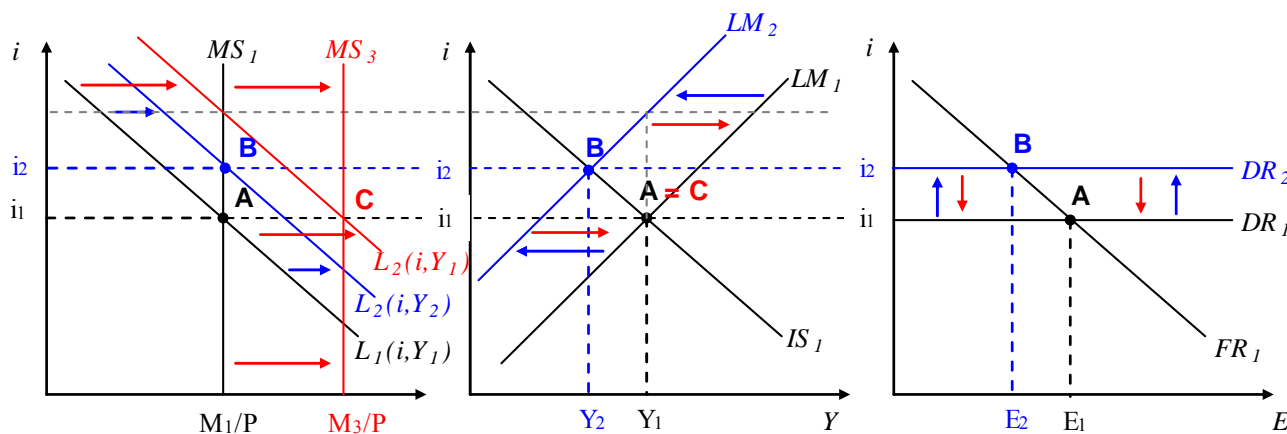
Econ 160B: International Macroeconomics  
Solution key to homework #4

Question 1:

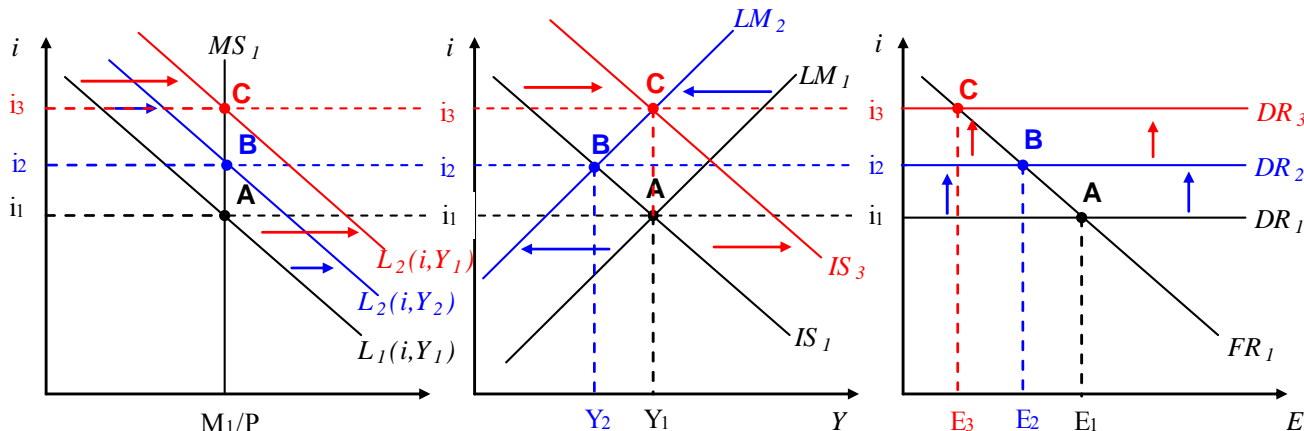
To begin, the effect of an increase in money demand (with no policy response) is shown below. This diagram may serve as a useful reference for seeing the policy responses below. With no policy response:  $Y \downarrow$ ,  $i \uparrow$ ,  $E \downarrow$ ,  $C \downarrow$ ,  $I \downarrow$ ,  $CA \downarrow$  (if  $MPC_F = 0$ , otherwise,  $CA$  ambiguous). We will assume in the subsequent sections that  $MPC_F = 0$ .



a) Monetary policy response under a floating exchange rate regime. The money supply rises and makes the LM curve shift immediately right, back to its original position. So all variables remain unchanged.



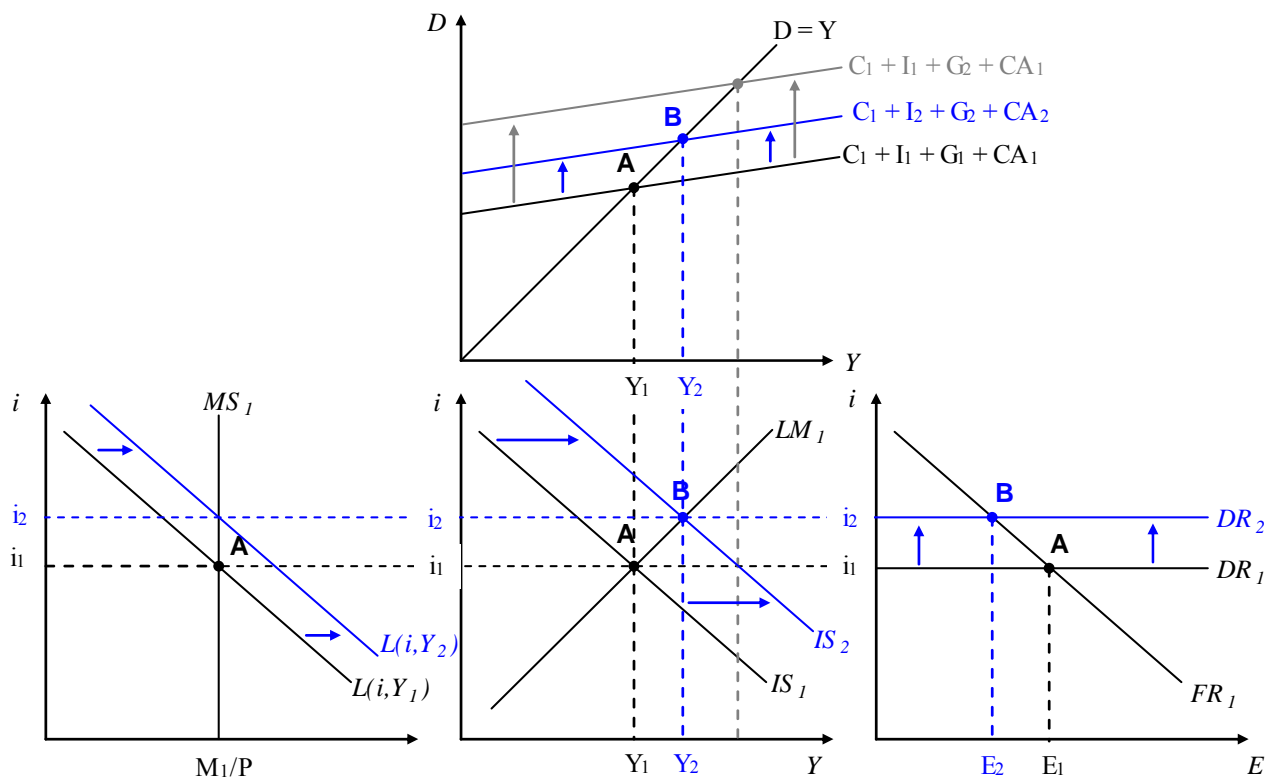
b) Fiscal policy response under a floating exchange rate regime. The tax cut works by inducing more consumption expenditure to raise demand and shift the IS curve to the right.  $Y$  unchanged,  $i$  rises,  $E$  falls (currency appreciation),  $C$  rises,  $I$  falls,  $CA$  falls. Note,  $C$  rises because the tax cut raises disposable income ( $Y-T$ ). Investment falls because of the rise in the interest rate.



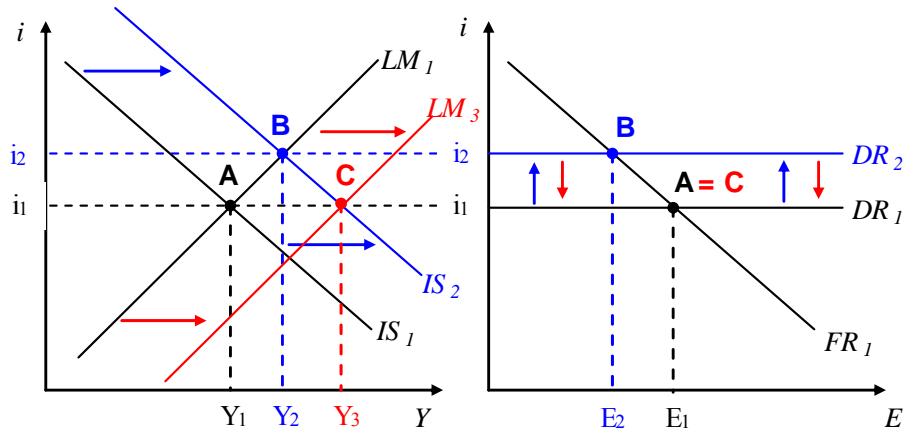
Since fiscal policy implies a worsening current account while a monetary policy response does not, Mexico might prefer to use the monetary policy response.

Question 2:

- a) Government spending increases under a flexible exchange rate.  $Y \uparrow, i \uparrow, E \downarrow$   
 (We also know that consumption rises since it is a function of income, which rises. Investment would fall because the interest rate rises and makes loans more expensive.) The graph shows not only the IS-LM plot and Forex market, but for more insight also shows the money market and Keynesian cross. (The gray shift is the exogenous shift caused by government spending. The equilibrium point shows where the economy ends up after the endogenous effects are taken into account.) The IS curve shifts right because there is a rise in demand (by the government and consumers) at a given interest rate.



- b) Government spending increases under a fixed exchange rate: Now the LM curve shifts to the right also, because the fixed exchange rate commitment requires money supply rise. This keeps the interest rate at the level consistent with the fixed exchange rate in the foreign exchange market. The end effect is that output rises even more than in part (a) above.  $Y \uparrow, i$  unchanged,  $E$  unchanged



Question 3.

The only possibility among the three choices is a shock lowering foreign demand.

A rise in money demand would shift the LM curve left and raise the interest rate, but we are told it is falling.

A shock lowering domestic investment demand would shift the IS curve left, lowering the interest rate and depreciating the currency. But the fall in the value of the currency should raise the trade balance, but we are told it is falling.