QUESTION #73328

(f) Expansionary Monetary Policy: Suppose the money supply increased to M=P = 1840. Solve for Y,i,C, and I, (repeat parts (a) through (e)) and describe in words the e ects of an expansionary monetary policy. Show the change on the diagram below. Label your diagram. Identify the old and the new equilibrium.
(g) Expansionary Fiscal Policy: Suppose the money supply is at its initial value of 1600 but government increases its spending to G = 400. Solve for Y,i,C, and I, (repeat parts (a) through (e)) and describe in words the e ects of an expansionary scal policy. Show the change on the diagram below. Label your diagram. Identify the old and the new equilibrium.

ANSWERS

f) Lets think that now the economy is in equilibrium and the supply for many is equal to Ms_0. However as you mentioned above the fact is that the Money supply has increased to 1840. This level can be signed by letter Ms_1. We consider that $Ms_1 > Ms_0$.

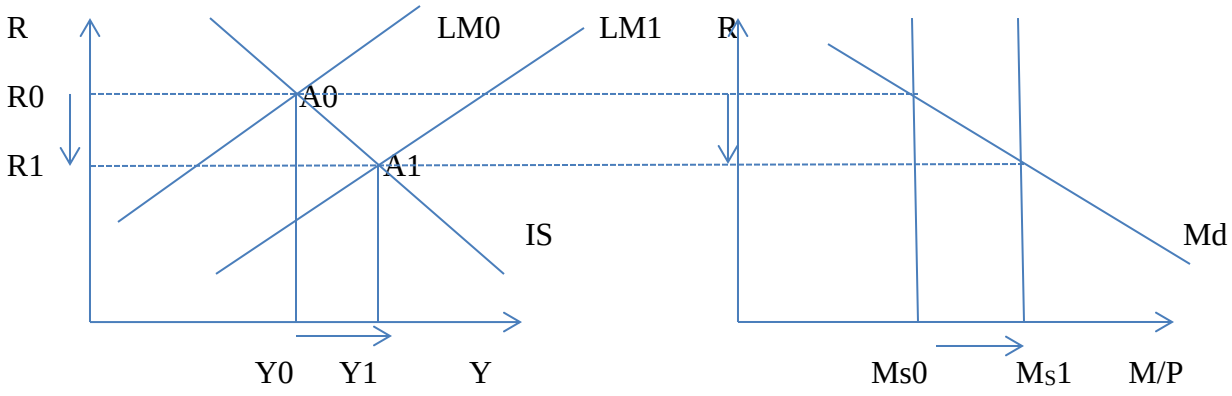
General Effect: The increase of money supply will give an increase of Economic Growth in the short run without an effect of crowding out, but shows different influence on net expert.

To describe what is going on first of all we should represent the chain of changes which will be possibile if money supply increases. The chain is following

$$M_s \uparrow \Rightarrow R \downarrow \Rightarrow I \uparrow \Rightarrow Y \uparrow \Rightarrow Y_d \uparrow \Rightarrow C \uparrow, NX?, as\ NX = g - m' \cdot Y \uparrow - n \cdot R \downarrow$$

Now I will try to explain this chain

After an increase in money supply ($M_s \uparrow$) the economy will face the decline of interest rate ($R \downarrow$)as the resources for giving credits is enlarging and the price of credits is going down. The decline of interest rates will boost investments ($I \uparrow$). In its turn the high level of investments will bring an increase of output ($Y \uparrow$) and incomes ($Y_d \uparrow$). This will bring the rise in consumption ($C \uparrow$). However the changes in net exports is not as clear as we can imagine, as form the net export equation we see that two main factors Y and R behave in the same time in the different directions: on one hand an increase of output ($Y \uparrow$) and decline of interest rates ($R \downarrow$).



The above demonstrated picture shows all effects which we have described above. First of all economy is in the equilibrium A0, than after an increase in money supply the new equilibrium will be in A1

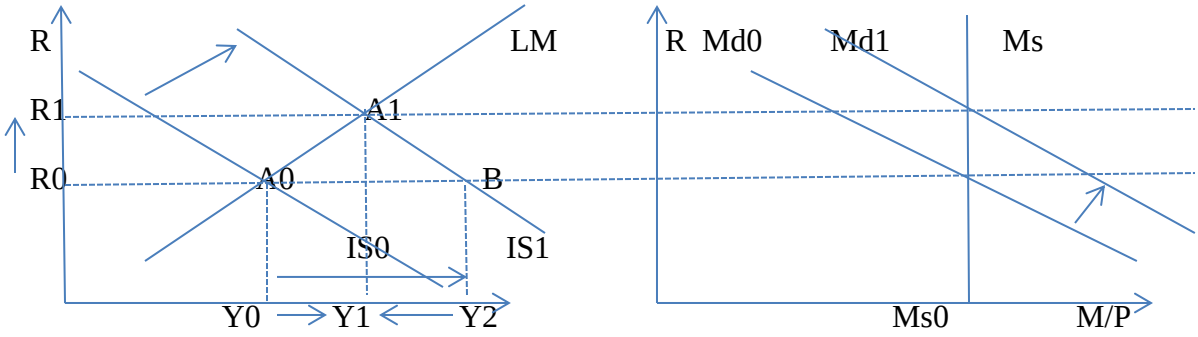
g) Now suppose money supply has not change and is equal to 1600, this is its equilibrium level Ms0, but the government expenses have increased to 400.It means that if in equilibrium level we have G0 expenditures it has increased to G1=400. So what changes will appear in economy?

General effect: The rise of government spending will cause to the effect of crowding out, which will decline the effectiveness of the Expansionary Fiscal Policy.

Chain of changes can be represented in the following way

$$G \uparrow \Rightarrow Y \uparrow \Rightarrow C \uparrow \Rightarrow Y \uparrow \Rightarrow Md \uparrow \Rightarrow R \uparrow \Rightarrow \underbrace{I \downarrow, NX \downarrow}_{Effect\ of\ crowding\ out} \Rightarrow Y \downarrow$$

The description of this chain is the following. When the G increases ($G \uparrow$), than output and income will grow ($Y \uparrow$). This will bring a rise in consumption ($C \uparrow$). Once again the increased consumption will cause an increase in output ($Y \uparrow$). The growth of output will bring to an increase in money demand ($Md \uparrow$). The high level of money demand if the money supply is fixed and for our case it is in the equilibrium level (1600) and has not changed the economy will face the increase of interest rate ($R \uparrow$). This will have dangerous effect on both investments and net experts. They both will go down ($I \downarrow, NX \downarrow$). We call this effect of crowding out. This effect will cause decline of output. All this process we can describe with the following picture.



From the picture we see that the equilibrium is in the point A0, where money supply is equal to 1600 and after the increase of G to 400 we transfer to the other equilibrium level B and our growth of output is Y0Y2. However we will not stay in the same place and unfortunately rise of money demand will cause rise of interest rates and the effect of crowding out will not let us stay in equilibrium point B, so we have to see the cut of output to the level of Y1 which is the level of new equilibrium A1 where we have less output Y0Y1<Y0Y2.