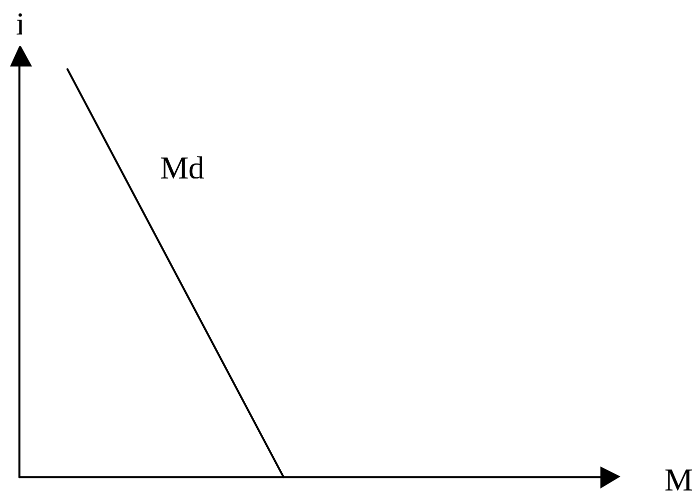
Solution to Quiz #3-B

1.c or e (depending on accelerator effect)
2.d
3.b

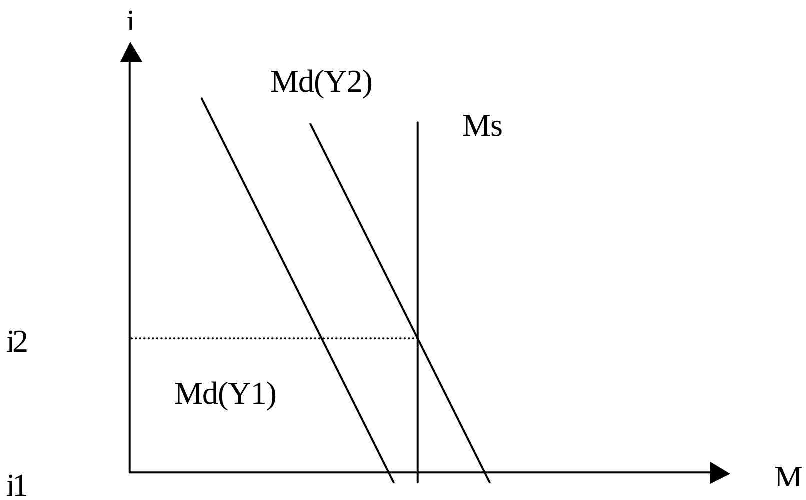
4.If the interest is negative holding money is preferred to holding bonds. Holding bonds would reduce the wealth on the bondholder. Note that there cannot be an equilibrium with the interest rate being negative. While bond supply is infinite and bond demand is zero, bond supply and bond demand cannot be equal.

5.

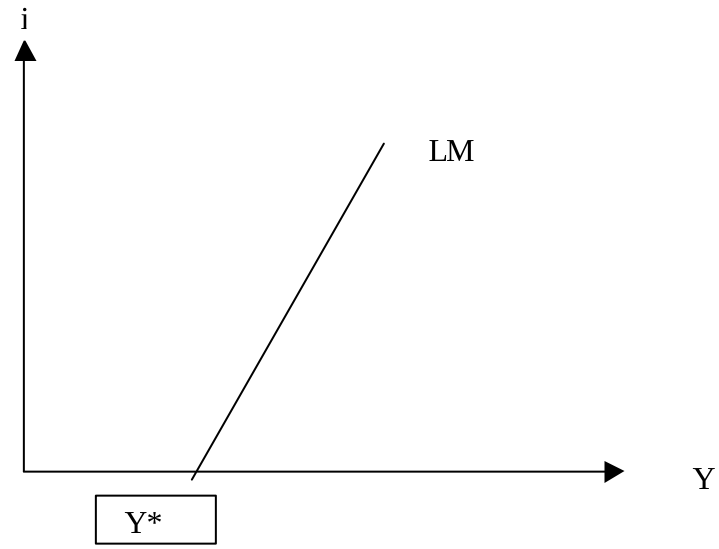


Note that the money demand Md coincides with the horizontal line once the interest rate is zero. At zero interest rate people are willing to hold any amount of money.

6.

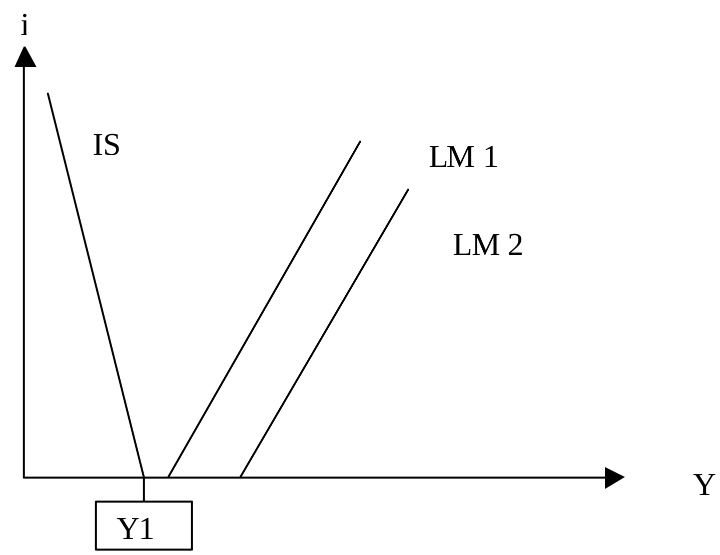


7.



The LM curve is flat to the left of all income levels smaller than Y*. Note Y* is the largest income level at which the money market clears for a zero interest rate.

8.



In the original situation (LM 1) the interest rate is zero and output is given by Y1. Expansionary monetary policy shifts the LM curve to the right. However, since the IS remains unchanged the intersection of the new LM curve (LM 2) and the IS curve is still given by Y1.

9. As we have seen in 8, expansionary monetary policy does not affect output and the interest rates. What is the economics behind this? Since interest rates are already at zero,

monetary policy cannot lower them any more. Hence, the expansion in money supply does not have any effect on investment demand. When interest rates are zero the link from money supply to aggregate demand is cut off.

10. Expansionary fiscal policy or a tax cut stimulate output if the interest rate is close to zero since they induce a shift in the IS curve.