

Answer on Question #44677 – Economics – Macroeconomics

Suppose the product and money market model are given as;

$$S = -20 + 0.5Y \quad M_t = 0.5Y$$

$$I = 200 - 2000i \quad M_{sp} = 100 - 1500i$$

$$M_s = 150$$

Do you think the economy is in equilibrium? Show the necessary calculations.

Solution

Since at equilibrium $M_s = M_d = M_t + M_{sp}$ and $I = S$:

$$0.5Y + 100 - 1500i = 150$$

$$-20 + 0.5Y = 200 - 2000i$$

$$0.5Y - 1500i = 50$$

$$0.5Y + 2000i = 220$$

After we subtract first equation from the second, we get:

$$3500i = 170$$

$$i = 170/3500 = 0.0486$$

$$Y = (220 - 2000 \cdot 0.0486)/0.5 = 245.71$$