Answer on Question #51593, Economics - Macroeconomics

Assignment

Given that:
C = 0.5Y + 50
I = -10r + 650
Ms = 3000
L1 = 0.4Y
L2 = -15r + 2750
Md = L1 + L2

Where:
L1 = Transaction and Precautionary demand for money
L2 = Speculative demand for money

Determine the equilibrium values of national income (Y) and interest rate (r) on the assumption that the commodity and money markets are in equilibrium. Show the equilibrium values of Y and r on a graph

Solution

We can calculate this as follows:
Ms = Md
3000 = L1 + L2
0.4Y -15r + 2750 = 3000
0.4Y -15r = 250

Y = C + I
Y = 0.5Y + 50 -10r + 650
0.5Y + 10r = 700
Y = 1400 -20r

0.4 (1400 -20r) -15r = 250
560 – 8r – 15r = 250
23r = 310
r = 13.5

Y = 1400 – 20r = 1130