

Answer on Question #66480 – Economics – Macroeconomics

Question

Consider the following behavioral equations:

$$C = c_0 + c_1YD,$$

$$T = t_0 + t_1Y,$$

$$YD = Y - T,$$

$$I = b_0 + b_1Y,$$

G is constant.

Assume that t_1 is between 0 and 1.

a. Solve for equilibrium output.

b. What is the multiplier? Explain what the following symbols in the equation stand for. c_0 , c_1 , t_0 , t_1 , YD , b_0 and b_1 .

c. How will a drop in all C, I and G affect inflation? Illustrate this in DIAGRAM with AD and long-run AS.

Solution

a) $Y = C + I + G = c_0 + c_1(Y - t_0 - t_1Y) + b_0 + b_1Y + G = c_0 + c_1Y - c_1t_0 - c_1t_1Y + b_0 + b_1Y + G$

$$Y - c_1Y + c_1t_1Y - b_1Y = c_0 - c_1t_0 + b_0 + G$$

$$Y = (c_0 - c_1t_0 + b_0 + G) / (1 - c_1 + c_1t_1 - b_1)$$

b) Multiplier is the factor by which increase in total output are greater than the change in spending that caused it.

c_0 – autonomous consumption

c_1 – marginal propensity to consume

t_0 – lump-sum tax

t_1 – rate of income tax

YD – disposable income

b_0 – autonomous investment

b_1 – marginal propensity to invest

c) Drop in all C, I and G negatively affects on aggregate demand : AD_1 shifts to AD_2 . Price falls accordingly from P_1 to P_2 .

