

Answer on Question #60990-Economics-Macroeconomics

Given a hypothetical consumption function of the form:

$$Y = C + I_0 + G_0, C = \alpha + \beta Y_d \text{ Where: } Y_d = Y - T, Y = \text{Income}, T = \text{Taxes}$$

Government spending and investment are exogenously determined at G and I respectively. Assuming this model represent a three sectors economy, determine Investment multiplier, Government spending multiplier and Tax multiplier. If there is an increase in marginal propensity to consumer, how will this affect the national income?

Answer:

$$\text{Investment multiplier} = \frac{\Delta Y}{\Delta I} = \frac{1}{1-\beta};$$

$$\text{Government spending multiplier} = \frac{\Delta Y}{\Delta G} = \frac{1}{1-\beta};$$

$$\text{Tax multiplier} = \frac{\Delta Y}{\Delta T} = \frac{-\beta}{1-\beta}.$$

If marginal propensity to consume increase national income will increase on $\Delta\beta(Y - T)$.