

### Question #63477- Economics - Macroeconomics

Given a hypothetical consumption function of the form  $Y = C + I_0 + G_0$ ,  $C = \alpha + \beta Y_d$  Where:  $Y_d = Y - T$ ,  $Y =$  Income,  $T =$  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:**

$$m_i = \frac{\Delta Y}{\Delta I} = \frac{1}{1 - MPC}$$

$$m_g = \frac{\Delta Y}{\Delta G} = \frac{1}{1 - MPC}$$

$$m_t = \frac{\Delta Y}{\Delta T} = \frac{-MPC}{1 - MPC}$$

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