

Written Assignment Unit 6

Due to the post pandemic changing scenario there is an economic slowdown, and the only solution is to boost the economy by infusion. The federal government decided to infuse \$ 400000 into the economy for a period of time and see the rolling effect. Calculate the multiplier effect and find out the real GDP change if the multiple propensities to consume is 0.6?

Solution

Given:

Expenditure = \$ 400000

MPC = 0.6 or 60%

Multiplier effect (k) = change in real GDP (y)/ change in injections

Applying the formula for the calculation of multiplier

Multiplier (k) = $1/\text{MPS}$ where MPS is marginal propensity to save

Multiplier (k) = $1/1-\text{MPC}$ where MPC is marginal propensity to consume

When $\text{MPS} = 1-\text{MPC}$

The premise behind this formula is: one person spending is equal to another person saving until the saving is equal to the induced money in the market.

Substituting the values

$$\begin{aligned}\text{Multiplier (k)} &= 1/(1-\text{MPC}) \\ &= 1/(1-0.60) \\ &= 1/0.40\end{aligned}$$

The Value of multiplier effect = 2.5

$$\begin{aligned}\text{Change in the GDP} &= \text{Investment} * \text{Multiplier effect} \\ &= \$ 400,000 * 2.5 \\ &= \$ 1,000,000\end{aligned}$$

The induced money will help the real GDP to change by \$ 1,000,000 with the multiplier effect calculated at 2.5. The consumption percentage is at 60%.