

UNIT 02 / 06 · LEARN & TRY

Income determination and the multiplier

Name: _____ Date: _____

Goal: Solve a simple equilibrium model and interpret saving, propensities and multiplier conditions.

Learn

In a simplified two-sector model, planned aggregate expenditure consists of consumption and investment. Consumption can be written $C=a+bY$, where a is autonomous consumption and b is the marginal propensity to consume. Equilibrium requires output equal planned expenditure, not merely that households spend all their income. Saving is income minus consumption, so its function follows from the same equation. Average propensities divide consumption or saving by income; marginal propensities describe changes and need not equal the averages. If the marginal propensity to consume is constant, the simple investment multiplier is one divided by one minus that propensity. An autonomous spending increase becomes income that prompts further spending in successive rounds. This result assumes spare productive capacity, unchanged prices and no additional leakages in the two-sector model. Inventory changes can signal a gap between planned expenditure and output. State these conditions before treating a calculated multiplier as a prediction for a real economy.

Worked example

With $C=100+0.8Y$ and $I=200$, all in ₹crore, equilibrium satisfies $Y=300+0.8Y$. Thus $0.2Y=300$ and $Y=1,500$. Consumption=1,300; saving=200. The multiplier is $1/(1-0.8)=5$ in the stated simple model.