

Answer on Question #50380, Economics, Macroeconomics

**Task:**

Suppose, the saving function of a society is as follows:

$S = -100 + 0.25Y$ , where  $S$  = Total saving and  $Y$  = Disposable income.

Answer the following questions:

- What is the amount of dissaving?
- What is the total saving when disposable income is 4000?
- What is induced consumption when disposable income is 2000?
- Find MPS

**Answer:**

a) Dissaving – the aggregate excess of expenditure over income by all families, who spent in excess of their current earnings.

The equation for the saving function can be re-written as:

$$S = -100 + 0.25Y$$

Total savings    autonomous dissaving    induced saving

So, the amount of dissaving is -100.

b)  $Y = 4000$

$$S = -100 + 0.25 \cdot 4000 = 900$$

c)  $C + S = Y$

This means, that the consumption function is opposite to savings function.

$$C = 100 + 0.75Y$$

Total consumption    autonomous consumption    induced consumption

So, when disposable income is 2000, the induced consumption is:

$$Y = 2000$$

$$0.75 \cdot 2000 = 1500$$

d) MPS – marginal propensity to save

$$MPS = \frac{\Delta \text{savings}}{\Delta \text{income}}$$

According to the task :

$$\Delta \text{income} = 4000 - 2000 = 2000$$

Total savings for  $Y = 2000$  are :

$$S = -100 + 0.25 \cdot 2000 = 400$$

$$\Delta \text{savings} = 900 - 400 = 500$$

$$MPS = \frac{500}{2000} = 0.25$$