

# Saving Function

**Presented by**

**Shraddhanjali Bhattacharjee**

**Department of Economics**

**Dr. B. K. B. College, Puranigudam**

# What is Saving Function?

- Income that is not spent on consumption is saved
- $S = Y - C$
- Saving function relates the level of saving to the level of income
- Saving is a function of income
- $S = f(Y)$
- $S = \text{Saving}, Y = \text{Income}, \text{Saving is a function of income}$

# Two Aspects of Saving Function

## Average Propensity to Save (APS)

- It is the ratio of total saving to total income

- $APS = \frac{S}{Y}$

- S= Aggregate Saving, Y= Aggregate Income

- If Saving= Rs. 25 Crore and Income= Rs. 100 Crore, then,

$$APS = \frac{S}{Y} = \frac{25}{100} = 0.25$$

## Marginal Propensity to Save (MPS)

- It is the ratio of the change in saving to change in income

- $MPS = \frac{\Delta S}{\Delta Y}$

- $\Delta S$ = Change in saving,  $\Delta Y$ = Change in Income

- If Income rises from Rs. 100 to Rs. 200 crore, Saving rises from Rs. 25 to Rs. 75 crore, then

$$MPS = \frac{\Delta S}{\Delta Y} = \frac{50}{100} = 0.5$$

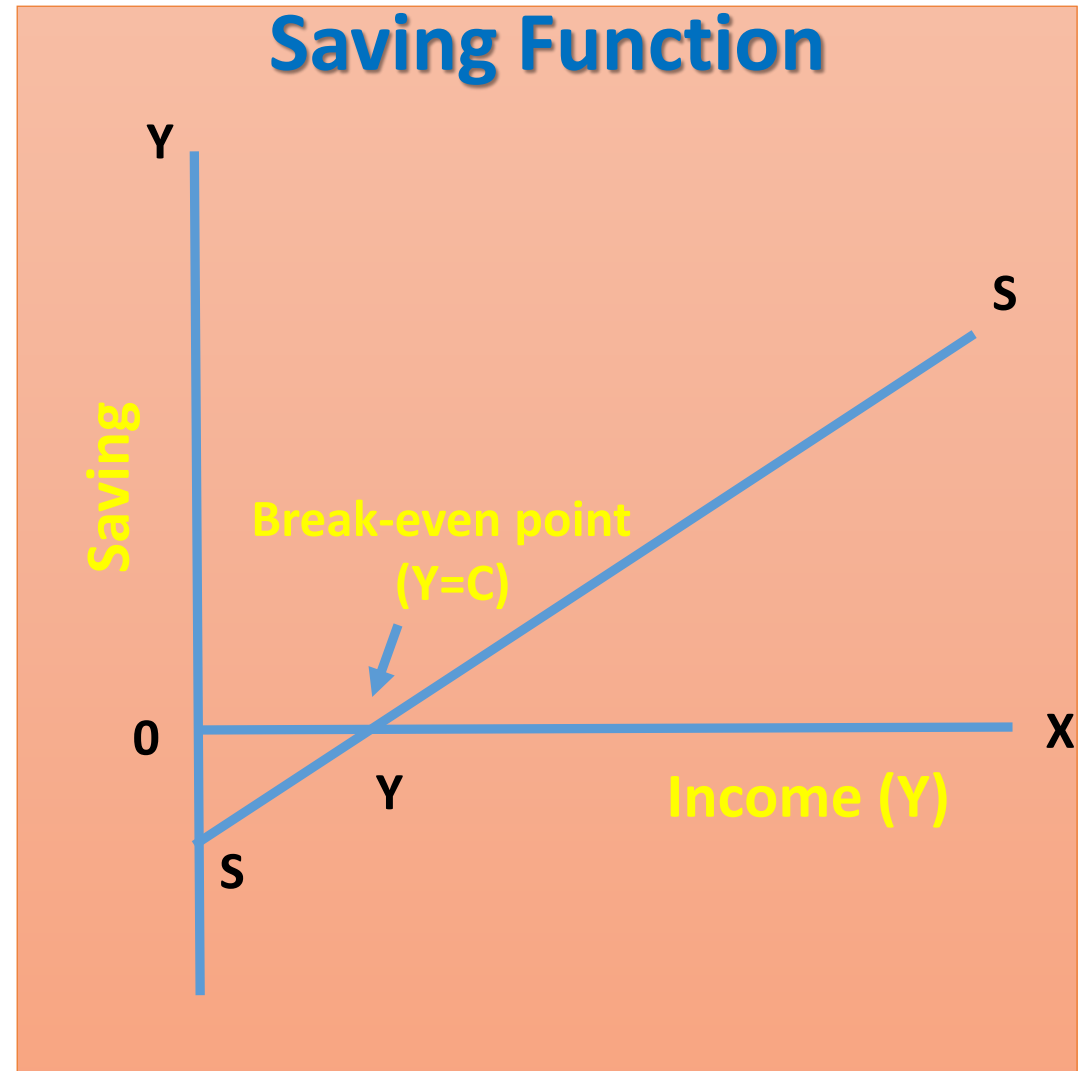
# Saving Schedule

Income (Y) (Rs. Crore)	Consumption (C) (Rs. Crore)	Saving (S) (Rs. Crore)	APS $\frac{S}{\bar{Y}}$	MPS $\frac{\Delta S}{\Delta Y}$
0	100	-100	-----	-----
100	150	-50	-0.5	0.50
200	200	0	0.00	0.50
300	250	50	0.17	0.50
400	300	100	0.25	0.50
500	350	150	0.30	0.50
600	400	200	0.33	0.50

- ✓ Initially total saving is negative, as there is consumption even when income is zero
- ✓ After a point, as income increases, consumption also increases by less than amount than that of income
- ✓ Saving become positive and go on increasing

## Relationship between saving and income

- SS represents saving function
- SS crosses the income axis at point Y---  
- called break-even point
- At zero levels of income, saving is  $-OS$ ,  
APS is negative
- When  $Y=C$ , saving is zero
- After this, as income increases, saving goes on increasing as shown by SS curve



# Salient features of the saving function

- There is a direct relationship between income and saving. As income increases, the level of saving also increases
- At any level of income, below the break-even point, saving is negative and at income levels higher than break-even point, savings are positive
- The slope of saving function is given by MPS

# Relationship between MPC and MPS

□ Because income is either consumed or saved, so  $MPC + MPS = 1$

We know that,  $Y = C + S$

This can be written as,  $\Delta Y = \Delta C + \Delta S$  ----- (1)

Now dividing the equation (1) by  $\Delta Y$ , we get,

$$\frac{\Delta Y}{\Delta Y} = \frac{\Delta C}{\Delta Y} + \frac{\Delta S}{\Delta Y} \text{ ----- (2)}$$

$$MPC + MPS = 1$$

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

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

**Thank You**