

## Consumption function

Consumption function shows the Relation b/w income and consumption. It is the functional relation of total consumption and aggregate National income. It is denoted mathematically as below-

$$C = f(Y)$$

Where.  $C$  = Consumption,

$Y$  = Level of income

$f$  = functional Relation.

□ Propensity to consume  $\Rightarrow$  The relation change in the consumption due to change in income is called propensity to consume. It may be measure two types

1) Average propensity to consume - APC

2) Marginal propensity to consume - MPC

1) APC (Average propensity to consume) - It is the ratio of income and consumption. That is

$$APC = \frac{C}{Y}$$

Where,  $C$  = expenditure by consumption  
 $Y$  = level of income.

The above formula clearly shows that when income is increased then APC is decreased due to the fact that the consumption is low with respect to income increased.

2) MPC (Marginal propensity to consume)  $\Rightarrow$  It is the result of change in consumption due to change in income.  
 Thus,

$$MPC = \frac{\Delta C}{\Delta Y}$$

Where,  $\Delta C$  = Change in consumption  
 $\Delta Y$  = Change in income.

□ Characteristics of marginal propensity of consumption  $\Rightarrow$

1) MPC is ~~not~~ always positive.

ii) It is always less than one. It means

$$0 < MPC < 1$$

It indicates that ~~total~~ consumption is never zero.

iii) Marginal propensity to consume is high to the poor with respect to MPC to rich,

□ Relation between Marginal propensity to consume and Average propensity to consume.

i) Marginal propensity to consume is change in average propensity to consume.

ii) if Change in income then change both APC and MPC.

iii) if the income is increased then MPC and APC are decreased but MPC is speedly decreased as compare to APC.

iv) if the income decreased then MPC and APC are increased but MPC is speedly increased as compare to APC.

v)  $APC > MPC$  in Short run.

vi)  $APC = MPC$  in long run.

## propensity to save

The relation between Income & Save is called propensity to save. It may be indicated by the

1) Average propensity to save (APS)

2) Marginal propensity to save (mps)

1) APS (Average propensity to save)  $\Rightarrow$  It indicates the ratio of income and save. like -

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

Where,  $APS = \text{Average propensity to consume}$ ,

$S = \text{Save (Aggregate)}$

$Y = \text{Aggregate income}$ .

2) MPS (Marginal propensity to save) :- It is the ratio of change in income and change in save like —

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

$\Delta S$  (Delta S) = Change in save

$\Delta Y$  (Delta Y) = Change in income

- The Relation between Average propensity to consume (APC) and Average propensity to save (APS)

The Summation of APS and APC is equal to one. In the mathematical form

$$APS + APC = 1$$

- Marginal propensity to consume (MPC) and marginal propensity to save are related each other as like —

$$\boxed{MPS + MPC = 1}$$

thus,  $MPS + MPC = 1$

The summation of MPC & MPS is equal to one.

- Theory of the consumption function—
  - i) The absolute income hypothesis.
  - ii) The relative income hypothesis.
  - iii) The permanent income hypothesis.
  - iv) The life-cycle hypothesis.