Properties of the Consumption Function

The consumption function has two properties:

(i) the average propensity to consume and

(ii) the marginal propensity to consume.

(1) The Average propensity to Consume: The average propensity to consume (APC), defined as the ratio of consumption expenditure to any particular level of income. It is found by dividing consumption expenditure by income, or $APC = \frac{C}{Y}$. It is expressed as the percentage or proportion of income consumed. The APC at various income levels is shown in column 3 of Table—I. The APC declines as income increases because the proportion of income spent on consumption decreases. But

Table—I

Income (Y) (1)	Consumption (C) (2)	$APC = \frac{C}{Y}$ (3)	$APS = \frac{S}{Y}$ $= 1 - APC$ (4)	$MPC = \frac{\Delta C}{\Delta Y}$ (5)	$MPS = \frac{\Delta S}{\Delta Y}$ $= (1 - MPC)$ (6)
120	120	$\frac{120}{120} = 1$ or 100%	0	—	—
180	170	$\frac{170}{180} = 0{\cdot}92$ or 92%	0·08	$\frac{50}{60} = 0{\cdot}83$	0·17
240	220	$\frac{220}{240} = 0{\cdot}91$ or 91%	0·09	$\frac{50}{60} = 0{\cdot}83$	0·17
300	270	$\frac{270}{300} = 0{\cdot}90$ or 90%	0·10	$\frac{50}{60} = 0{\cdot}83$	0·17
360	320	$\frac{320}{360} = 0{\cdot}88$ or 88%	0·12	$\frac{50}{60} = 0{\cdot}83$	0·17

Reverse is the case with APS (Average propensity Save) which increases with increase in income (column – 4). The APC also tells us about the APS, APS = 1 – APC.

Diagrammatically, the APC is any one point on the C curve. In fig-(1) point R measures the APC of the C curve which is $\frac{OC'}{OY'}$. The flattening of the C curve to the right shows declining APC.

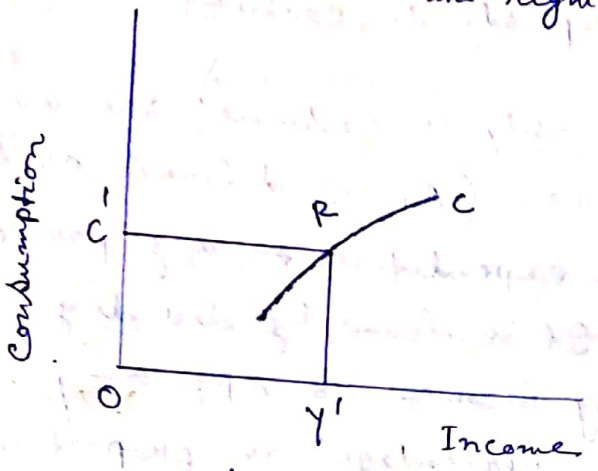

fig – (1)

(2) <u>The Marginal propensity to Consume</u>: The marginal propensity to Consume (MPC) may be defined as the ratio of the change in Consumption to the change in income or as the rate of change in the average propensity to consume as income changes. It can be found by dividing change in Consumption by a change in income or

$MPC = \frac{\Delta C}{\Delta Y}$. The MPC is Constant at all levels of income as shown in column (5) of Table – I. It is 0·83 or 83 percent because the ratio of change in Consumption to change in income is $\frac{\Delta C}{\Delta Y} = \frac{50}{60} = 0{\cdot}83$. The marginal

propensity to save can be derived from MPC by the formula: 1 − MPC. It is 0·17 in Table-I Column (6)

Diagrammatically, the MPC is measured by the gradient or slope of the curve C, in fig −(2). by NQ/RQ where NQ is change in consumption (ΔC) and RQ is change in income (ΔY) or $c'c''/y'y''$.

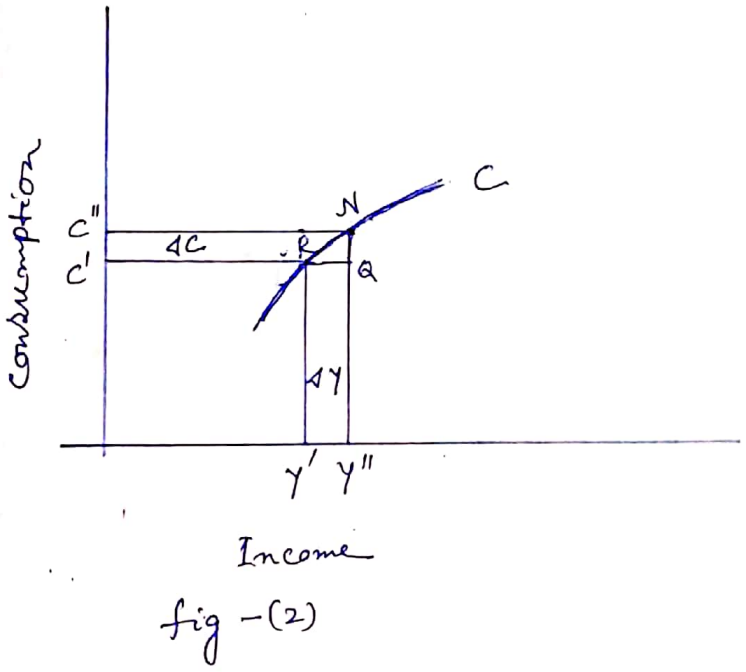

fig −(2)

$0 < MPC < 1$