

## Consumption Function

The consumption function or propensity to consume refers to income consumption relationship. It is a “functional relationship between two aggregates, i.e., total consumption and gross national income.”

Symbolically, the relationship is represented as  $C = f(Y)$ , where C is consumption, Y is income, and/ is the functional relationship. Thus the consumption function indicates a functional relationship between C and Y, where C is the dependent and Y is the independent variable, i.e., C is determined by Y. This relationship is based on the ceteris paribus (other things being equal) assumption, as such only income consumption relationship is considered and all possible influences on consumption are held constant.

### Consumption Schedule

Income	Consumption
0	20
60	70
120	120
180	170
240	220

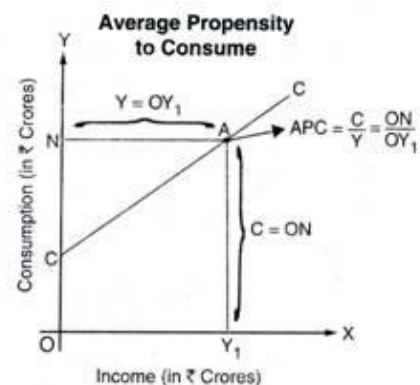
### Properties of Consumption Function

#### Average Propensity to Consume:

The average propensity to consume may be defined as the ratio of consumption expenditure to any particular level of income. It is found by dividing consumption expenditure by income, or  $APC = C/Y$ .

For example, total income = Rs. 100 crore, consumption expenditure = Rs. 80 crore

$$APC = C/Y = 80/100 = 0.8$$



## Marginal Propensity to Consume:

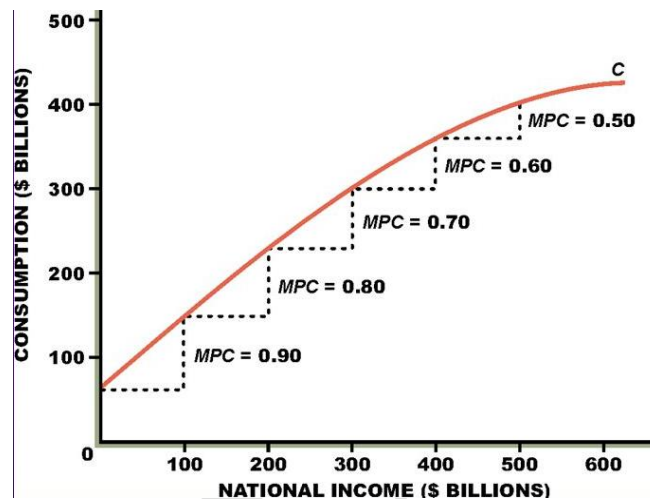
It may be defined as the ratio of change in consumption to the change in income.

Marginal Propensity to Consume = Change in consumption/Change in income =  $\Delta C/\Delta Y$

For example, income increases from Rs. 100 crore to Rs. 200 crore ( $\Delta Y = 100$  crore)

Consumption increases from Rs. 80 crore to Rs. 120 crore ( $\Delta C = 40$  crore)

$$MPC = 40/100 = 0.4$$



## Characteristics of MPC

- It is always positive.
- **MPC is greater than zero and less than one** because with increase in income there is always some increase in consumption. This can be stated as  $0 < MPC < 1$ .
- **MPC of poor class is higher** because their income is low and they spend a large part of their income of consumption expenditure.
- **Constant MPC in the long period** means that change in income followed by change in consumption almost in same ratio.
- **Falling MPC in the short period** means ratio of increase in consumption in short period is less than increase in income.

## Propensity to Consume and Save

Income (₹ in crores)	Consumption (₹ in crores)	Average Propensity to Consume $\left(\frac{C}{Y}\right)$	Marginal Propensity to Consume $\left(\frac{\Delta C}{\Delta Y}\right)$
1000	950	$\frac{950}{1000} = 0.950$	—
1100	1020	$\frac{1020}{1100} = 0.927$	$\frac{70}{100} = .70$
1200	1090	$\frac{1090}{1200} = 0.908$	$\frac{70}{100} = .70$
1300	1160	$\frac{1160}{1300} = 0.892$	$\frac{70}{100} = .70$
1400	1230	$\frac{1230}{1400} = 0.878$	$\frac{70}{100} = .70$
1500	1300	$\frac{1300}{1500} = 0.867$	$\frac{70}{100} = .70$
1600	1370	$\frac{1370}{1600} = 0.856$	$\frac{70}{100} = .70$

**Average Propensity to Save:** The ratio of saving to income at a given level of income.

$$APS = S/Y$$

**Marginal Propensity to Save:** The ratio of change in saving to change in income at a given level of income.

$$MPS = \Delta S / \Delta Y$$

### Relation between MPC and MPS

$$MPC + MPS = 1$$

$$Y = C + S$$

$$\Delta Y = \Delta C + \Delta S$$

Dividing both sides by  $\Delta Y$ ; we get

$$\Delta Y / \Delta Y = \Delta C / \Delta Y + \Delta S / \Delta Y$$

$$MPC + MPS = 1$$

<b>Income (Y) (in crores)</b>	<b>Consumption (in crores)</b>	<b>Savings (in crores)</b>
0	50	-50
50	75	-25
100	100	0
150	125	25
200	150	50
250	175	75
300	200	100

### **Propositions of the Law:**

From above table, we can conclude that:

- When income increases, consumption expenditure also increases but by a smaller amount. Thus, it increases less than proportionately.
- Increased income is divided between consumption and savings.
- Increase in income will decidedly lead to increase in consumption and saving.

### **Determinants of Consumption Function**

**Subjective factors** are those factors which relates to psychological characteristics of human nature & social practices & institutions. These factors relate to the circumstances when business institutions would consume less & save more.

#### **1) Individual Factors**

- Foresightedness (People save in order to fulfill their future needs)
- Economic Independence (Some people save in to order to be independent financially)
- Enlarged income in future
- Occupational motive
- Miserliness (niggardly)
- Precautious nature of people
- Status in the society

#### **2) Business Factors**

- Extension of business
- Liquidity preference

- Financial prudence (meet depreciation and obsolescence)
- Modernization

### **Objective Factors**

- 1) Changes in Money income (when income increases consumption also increases)
- 2) Change in Real income.
- 3) Windfall Gains or losses.
- 4) Change in distribution of income (if equal distribution of income, propensity to consume will be more)
- 5) Changes in the Fiscal Policy.
- 6) Change in Expectations (in war or shortage of goods people increase consumption..)
- 7) Change in Rate of interest (if Rate of interest is more , people save more & consume less & vice versa)
- 8) Financial policies of Corporations.
- 9) Attraction of new products.
- 10) Changes in fashion & tastes.
- 11) Attitude towards Saving
- 12) Social security and life insurance
- 13) Development of the means of transport
- 14) Change in population

### **Measures to raise the Propensity to Consume**

- Redistribution of Income.
- Increased wages.
- Social security measures
- Credit facilities
- Advertisement
- Development of means of transport
- Urbanization
- Increase in population