# Maharshi Dayanand College of Arts, Science and Commerce, Parel, Mumbai- 12.



**Macro Economics**

# Module I

## Consumption Function

- The consumption function is the assumed direct relationship between the national income level and the planned or desired consumption expenditure. Keynes called it the propensity to consume,

**C = f(Y)** 1)

Here,

C = consumption function, Y = national income and f = functional relationship.

The simplest form of relationship between income and consumption is

**C = cY** 2)



This implies that the consumption (C) is a constant proportion (c) of income (Y)

**Table 1: Consumption Function Schedule**

| Income (Y) | Consumption (C) in Lakh Rs. |
|---|---|
| 100 | 110 |
| 150 | 150 |
| 200 | 180 |
| 250 | 210 |
| 300 | 240 |
| 350 | 270 |

## Consumption Function Contd…

- Consumption is increasing function of income in absolute term, as per consumption schedule.
- Consumption function has two possible shapes

1. Linear consumption function with a constant Marginal Propensity to Consume (MPC)
2. Non – linear consumption function with declining MPC.

**Linear consumption function**

$$C = a + bY \qquad (3)$$

This is **Keynesian** Consumption Function



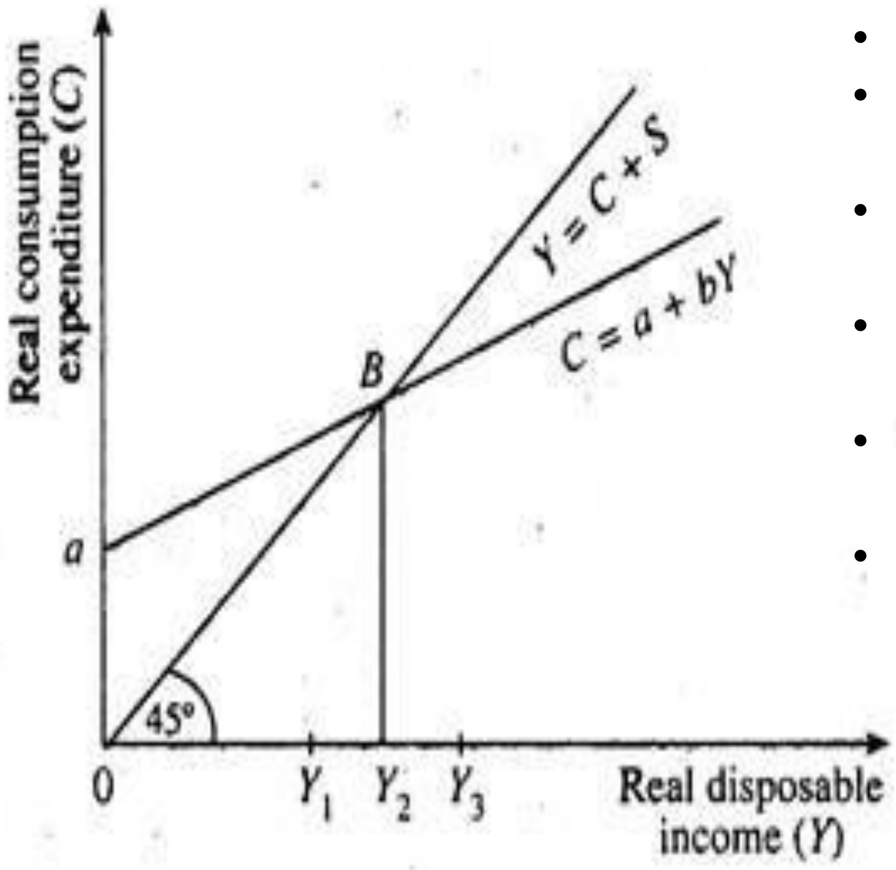
Here,

**C** = Consumption, **a** = Autonomous Consumption (Independent of income level) and **b** = Induced Consumption (Out of Income)

- **a** is witnessed during short run.
- **b** is also known as slope of the consumption function and its determined by MPC

## Consumption Function Contd…

**Diagrammatic Presentation of The Keynesian Consumption Function**




- A 45° guideline indicates at each point of the line Y = C + S.
- This line shows how income is divided between consumption and saving at any level of income.
- The line C = a + bY is the linear short-run consumption function of the Keynesian type.
- At a low level of income such as $Y_1$, consumption exceeds income. So saving is negative. Negative saving is called dissaving.
- When income becomes $Y_2$, consumption is equal to income and saving is zero.
- If income exceeds this level and is, say $Y_3$, consumption is less than income. And saving is positive.

Consumption of low income earner is high out of his/her income compared to high income earners' consumption from their respective income

# Consumption Function Contd…

**Two important components of Keynes Consumption Function**

1. **Average Propensity to Consume (APC)**
2. **Marginal Propensity to Consume (MPC)**

**The APC**

- It is the rate of total consumption to aggregate income in a given period of time
- Symbolically, **APC = C/Y** 4)

**Table 2: APC**

| Income (Y) | Consumption (C) in Lakh Rs. | APC= C/Y |
|---|---|---|
| 100 | 110 | 10 percent more than Income |
| 150 | 150 | 100% (1.00) |
| 200 | 180 | 90% (0.90) |
| 250 | 210 | 84% (0.84) |
| 300 | 240 | 80% (0.80) |
| 350 | 270 | 77% (0.77) |

Table 2 shows as Income is increasing consumption is increasing in absolute term but in relative term it is falling

Table 2 also reflects that as income is rising though consumption is reducing in relative terms saving is increasing.

# Consumption Function Contd…

**The MPC**

- MPC refers to the additional spending on consumer goods out of each small addition to the level of a income.
- Symbolically, **MPC = ΔC/ΔY** 5)

Here,

**ΔC =** small change in the consumption level

**ΔY =** small change in the income level

**Table 3: MPC**



| Income (Y) | Consumption (C) in Lakh Rs. | APC= C/Y | MPC= ΔC/ΔY |
|---|---|---|---|
| 100 | 110 | 10 percent more than Income | - |
| 150 | 150 | 150/150 = 100% (1.00) | 40/50=0.80 |
| 200 | 180 | 180/200 = 90% (0.90) | 30/50=0.60 |
| 250 | 210 | 210/250 = 84% (0.84) | 30/50=0.60 |
| 300 | 240 | 240/300 = 80% (0.80) | 30/50=0.60 |
| 350 | 270 | 270/350 = 77% (0.77) | 30/50=0.60 |

# Consumption Function Contd…

- $0 < MPC < 1$
- MPS = 1 – MPC
- Concept MPC is helpful to understand level of investment in an economy out of every additional rise in the income.
- MPC refers to the slope of the consumption curve.
- As income increases, the MPC level will fall at higher levels of income and there will be more savings.



**Summary Relationship among Consumption Function, APC and MPC**

- When MPC is Constant, Consumption function is Linear.
- APC is constant when consumption function is passing through the origin otherwise not.
- As income increases APC and MPC both decreases but fall in MPC is greater than reduction in the APC.
- As income reduces , an increase in MPC is higher than APC.

Topic 3. Consumption Function Part II Contd…

**Factors Affecting Consumption Function**

1. **Subjective Factors**

- Precautionary Motive
- Motive of foresight
- Motive of higher income in the future
- Motive of independence
- Motive of Pride
- Improvement motive
- Motive of financial prudence

**2. Objective Factors**

- Windfall Gains or Losses
- Fiscal Policy
- Expectation regarding future
- Rate of Interest
- Changes in the net income and accounting practices

## Topic 3. Consumption Function Part II Contd…

### Significance/ Implications of Keynes Consumption Function

- Importance of Investment
- Refutes Say's Law of Market
- This theory explains trade cycle phases

## Reference



Mumbai University Macro Economics Notes

Macroeconomics notes : An Article by S Nyo I

http://www.macroeconomicsnotes.com/consumption-function/linear-and-nonlinear-consumption-functions-macroeconomics/13326

# Question to be Studied

Q. 1. What are the two important components of Keynesian theory of consumption function?
Or
Q. 2 Write a note on Consumption Function

THANKS