

NCERT Macroeconomics Solutions Class 12 Chapter 4

1. What is marginal propensity to consume? How is it related to marginal propensity to save?

MPC or Marginal Propensity to consume is a vital component of the Keynesian theory of macroeconomics and it is defined as the increase in consumer spending due to increase in income. It is expressed as $\Delta C/\Delta Y$ which shows change in consumption with change in income.

Where ΔC = Change in consumption

ΔY = Change in Income

MPC and MPS (Marginal propensity to save) are related as follows

$$MPC + MPS = 1$$

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

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

For example, If a person gets Rs. 1000 extra as bonus, and if he spends around Rs. 700 and saves 300, then his MPC will be 0.7 and MPS will be 300 or $(1 - 0.7) = 0.3$.

2. What is the difference between ex ante investment and ex post investment?

Ex-ante Investment	Ex-post Investment
The investment planned by the firms in the economy during a particular period of time is called ex-ante investment.	The actual investment that is made by all the entrepreneurs in the economy during a period is called ex-post investment.
The planning is done based on future expectations.	It is the result of actual investment

3. What do you understand by 'parametric shift of a line'? How does a line shift when its (i) slope decreases, and (ii) its intercept increases?

Consider the equation of straight line of the form $b = ma + \epsilon$, where $m > 0$ is called the slope of the straight line (a) and $\epsilon > 0$ is the intercept on the vertical (b) axis. Any increase in a will result in increasing the value of b by a unit of m. Here m and ϵ are known as parameters of the graph and their role is to regulate the graph's position.

Parametric shift refers to the changes in the curve due to change in value of the entities m and ϵ in the graph.

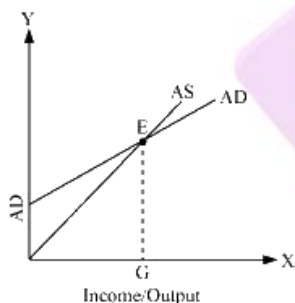
According to the conditions in question

- i. If slope decreases then the consumption curve will shift downwards
- ii. When intercept increases, the consumption curve will move parallelly with the intercept.

4. What is 'effective demand'? How will you derive the autonomous expenditure multiplier when price of final goods and the rate of interest are given?

Effective demand is the demand for product or a service when purchasers become constrained in a market. It also refers to their ability and willingness to purchase goods at different levels. According to the macroeconomic theory by Keynes, effective demand is referred to as the point of equilibrium where aggregate demand equals aggregate supply.

Graphically it can be represented as :



In this graph the x-axis is representing income and the y-axis is representing level of aggregate demand. The two curves AD and AS meet at equilibrium point E. Effective demand is shown by EG. AD represents the output level. Autonomous expenditure multiplier can be derived as follows

$$Y = AD \text{ (at equilibrium)}$$

$$AD = A + cY$$

Therefore

$$Y = A + cY$$

$$\text{or } A = Y - cY$$

$$A = Y (1 - c)$$

$$Y = A / (1 - c)$$

Where

A = Autonomous expenditure

c = MPC or Marginal Propensity to Consume

Y = Level of income

$1 / 1 - c$ = autonomous expenditure multiplier

Therefore we can say that autonomous expenditure multiplier is dependent on the MPC and Income level.

5. Measure the level of ex-ante aggregate demand when autonomous investment and consumption expenditure (A) is Rs 50 crores, and MPS is 0.2 and level of income (Y) is Rs 4000 crores. State whether the economy is in equilibrium or not (cite reasons).

According to question

Consumption expenditure (A) = Rs 50 Crores

MPS = 0.2

We know

MPC = 1 - MPS

MPC = 1 - 0.2

= 0.8

Now,

$$Y = 4000 \text{ Crores}$$

We know that $AD = A + cY$ (eq.1)

Putting the values in equation (eq. 1)

$$AD = 50 + 0.8 \times 4000$$

$$= 50 + 3200$$

$$= \text{Rs } 3250 \text{ Crores}$$

$$\text{But, Rs } 3250 < \text{Rs } 4000$$

This show that $AD < Y$

Therefore, as Output level is not equal to the level of income and hence the economy is not in equilibrium.

6. Explain 'Paradox of Thrift'.

Paradox of thrift is said to be a situation where people tend to save more money and this form of increased saving leads to reduced consumption and as a result there is a decrease in aggregate consumption. Such a system of savings will lead to decrease in levels of employment and reduce the total savings of the economy and slows down growth of economy. This is one of the central component of Keynesian economics.