NCERT Solutions for Class 12 Macro Economics

Chapter 4 – Determination of Income and Employment

1.

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

Ans: The Marginal Propensity to Consume (MPC) is a crucial element of Keynesian macroeconomic theory, defined as the increment in consumer expenditure resulting from an increase in income. It's written as ΔC/ΔY, which shows how spending changes when income changes.

Where ΔC = Change in consumption
ΔY = Change in Income
MPC and MPS (Marginal propensity to save) are related as follows:
MPC + MPS = 1
or MPS = 1- MPC
or MPC = 1- MPS

For instance, if an individual receives an additional Rs. 1000 as a bonus, and subsequently expends approximately Rs. 700 while saving Rs. 300, their Marginal Propensity to Consume (MPC) will be 0.7, and their Marginal Propensity to Save (MPS) will be 0.3, calculated as (1 – 0.7).

2.

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

Ans:

Sl.No	Ex-ante Investment	Ex-Post Investment
1.	It pertains to the projected or anticipated investment within a specific timeframe.	It denotes the specific amount of investment made during a designated timeframe.

Sl.No	Ex-ante Investment	Ex-Post Investment
2.	It is hypothetical, wherein a firm independently determines its investment amount.	It is real or original that denotes the existing investment of a specific period.
3.	It is formulated based on future expectations.	It is the definitive outcome of variables.

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?

Ans: The equation of the straight line is b = ma + ε, where m > 0 is the slope of the line (a) and ε > 0 is the point where the line crosses the vertical (b) axis. The amount of b will go up by a unit of m for every increase in a. You can think of m and ε as graph factors. Their job is to control where the graph is placed.

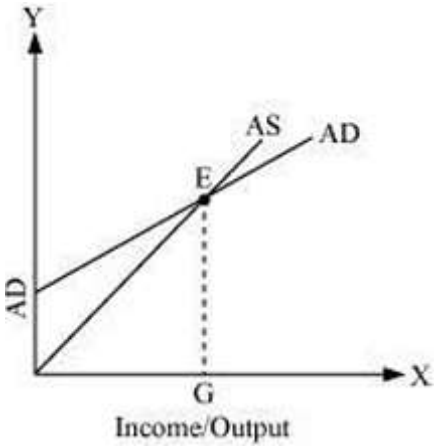
If you change the values of m and ε in a graph, the slope will change too. This is called parametric shift.
Based on the factors in question

i. The usage curve will move down if the slope goes down.
ii. The demand curve will move in a straight line with the intercept as it rises.

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?

Ans: When the level of aggregate demand alone determines equilibrium production, this is referred to as effective demand. Because the supply is assumed to be infinitely elastic, the equilibrium output will only be impacted by AD if there is any inequality between the aggregate supply (AS) and the aggregate demand (AD).



The y-axis in this graph shows the amount of aggregate demand, while the x-axis shows income. At equilibrium point E, the AD and AS curves converge. EG shows effective demand. AD stands for output level. This is how you can figure out the autonomous expenditure multiplier:

$Y = AD$ (at equilibrium)
$AD = A + cY$
Therefore
$Y = A + cY$
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

The autonomous expenditure multiplier is contingent upon the marginal propensity to consume (MPC) and the level of income.

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).

Ans:

Consumption expenditure (A) = Rs 50 Crores
MPS = 0.2
So, MPC = 1 - MPS
= 1 - 0.2
= 0.8
Y = 4000 Crores
We know that AD = A + cY (1)
Putting the values in equation (1)
AD = 50 + 0.8 x 4000
= 50 + 3200
= Rs 3250 Crores
But, Rs 3250 < Rs 4000
Implies that AD < Y
Hence, the economy is not in equilibrium.

6.

Explain 'Paradox of Thrift'.

Ans: The paradox of thrift happens when people save more money, which makes the economy as a whole save less. In other words, when individuals augment their saving-income ratio, or marginal propensity to save (MPS), the aggregate demand will decline as consumption diminishes. This will subsequently result in a decline in employment and income levels, ultimately diminishing the overall savings for the economy. This concept, proposed by Keynes, posits that increased individual saving will ultimately result in a deceleration of the economy concerning the circular flow of income.