CHAPTER – 4

INCOME DETERMINATION

Exercises

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

Answer:

Marginal propensity to consume – It is the proportion of additional income going to consumption expenditure. It is the ratio between change in consumption and change in income.

Marginal propensity to save – It is the proportion of additional income that goes to saving. It is the ratio between change in savings and change in income.

Propensity to consume means desire to consume so marginal propensity to consume is the ratio of increase in consumption due to increase in income. In the same way propensity to save means desire to save, so marginal propensity to save means the ratio of increase in saving due to increase in income.

Relation between Marginal Propensity to Consume (MPC) and Marginal Propensity to Save (MPS)
MPC = $\Delta C/\Delta Y$

MPS = $\Delta S/\Delta Y$

Where

ΔC = Change in Consumption

ΔY = Change in Income

ΔS = Change in Saving

MPC + MPS = 1

Y = C + S

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

Dividing both sides by ΔY

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

1 = MPC + MPS

Ø MPC = 1 – MPS, OR

Ø MPS = 1 – MPC

Example - Suppose the income increases from 200 crores to 250 crores and consumption increases from 20 crores to 40 crores.

ΔY = 50 crores

ΔC = 20 crores

MPC = 20/50 = 40%

MPS = 1 – 40% = 60%

This means that if 40% of change in income is going into consumption then the remaining 60% will go to saving.

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

Answer:

Ex ante investment is the planned investment and ex post investment is the actual investment.

Planned investment is investment which is desired to be made by firms and planners in economy during the year whereas actual or realised investment is the investment made during that period.

According to Keynes investment in inventory of unsold goods is unplanned investment so actual investment is the sum of planned and unplanned investment.

Unplanned investment is that investment which was not included in planned investment.

Question 3: What do you understand by 'parametric shift of a line'? How does a line shift when it's?

(i) slope decreases, and (ii) its intercept increases?

Answer:

Change in consumption curve due to the change in its slope is known as parametric shift in the curve.

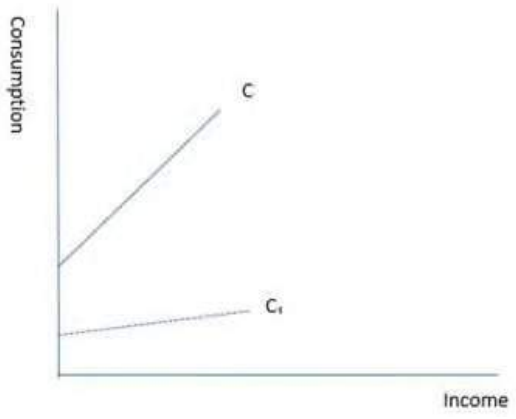
Let C = C + by be the consumption function

Where,

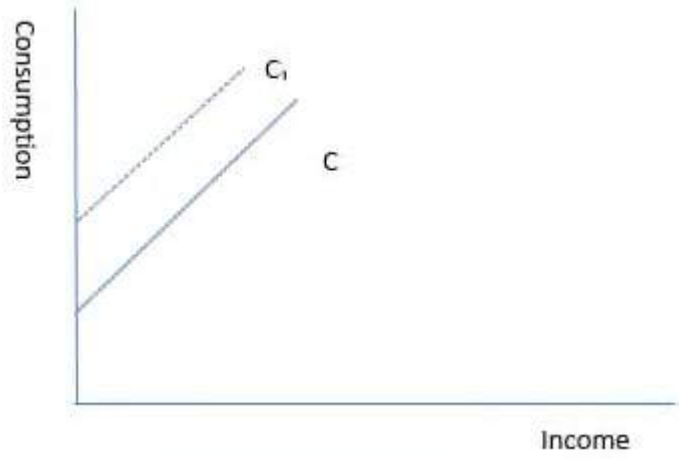
b – MPC

y – Income

(i) When slope decreases – The consumption curve will swing downwards. This is known as parametric shift in the curve.



(ii) When its intercept increases – Intercept is the autonomous part of consumption function, so when intercept increases there will be a parallel shift in the consumption curve.

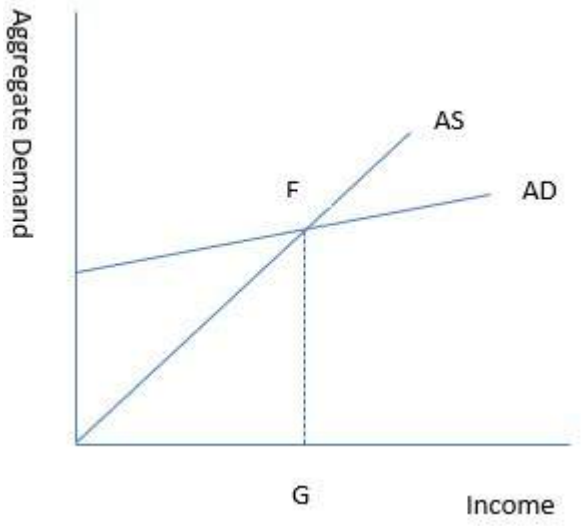


Question 4: What is 'effective demand'? How will you derive the autonomous expenditure multiplier when price of final goods and the rate of interest are given?

Answer:

When aggregate demand is at the point of equilibrium it is called effective demand because at this point it becomes effective in determining the national income. Effective demand is that level of demand which is fully made by corresponding supply and there is no tendency of expansion and contraction.

According to Keynesian theory, in short run the equilibrium level of income and employment is determined by the level of effective demand because aggregate supply or national income is assumed to be given and constant at that level.



E is the equilibrium point where the aggregate supply (AS) curve and aggregate demand (AD) curve meet, EG is the effective demand and output level is determined by AD

Autonomous expenditure multiplier

$Y = AD$ (at equilibrium)

$AD = A + cY$

$Y = A + cY$

$Y - cY = A$

$Y (1 - c) = A$

$Y = A / (1 – c)$

Where,

A = Autonomous expenditure

c = MPC

Y = level of income

$A / (1 – c)$ = autonomous expenditure multiplier

So, the autonomous expenditure multiplier is dependent on the income and MPC.

Question 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).

Answer:

MPC = 1 – MPS

= 1 – 0.2

= 0.8

Y = 4000 crores

$AD = C + I = C_0 + CY + I = C_0 + I + CY$

AD = A + CY

Where,

$A = C_0 + I$

= 50 + 0.8 (4000)

= 3250cr

AS (Y) = 4000cr

Here aggregate demand is less than aggregate supply so the economy is not in equilibrium this means that the buyers are planning to buy less than what the sellers are planning to produce and sell, due to this the inventories will accumulate. So the producers will reduce the production level and workers will be laid off.

Question 6: Explain 'Paradox of Thrift'.

Answer:

The growth of a country is dependent upon its level of investment and level of investment depends upon the level of savings that is thrift or savings lead to increased income in the economy.

According to Prof. Keynes, the increase in savings in the economy may not benefit the economy as a whole because if all people will increase the proportion of income they save, the total value of savings will not increase. It will either decline or remain unchanged.

The paradox of thrift states that as people become thriftier, they end up saving less or same as before.

With help of following chart we can understand it easily

