Chapter 8: Income Determination and Multiplier

Question 1

Calculate multiplier if MPC is : (i) 0.75 (ii) 0.90

Solution:

(i) Multiplier (k) = $\frac{1}{1-MPC} = \frac{1}{1-0.75} = \frac{1}{0.25} = 4$

(ii) Multiplier (k) = $\frac{1}{1-MPC} = \frac{1}{1-0.90} = \frac{1}{0.10} = 10$

Question 2

Calculate the value of multiplier if the MPS is: (a) 0.40 (b) Equal to MPC

Solution:

(a) Multiplier (k) = $\frac{1}{MPS} = \frac{1}{0.40} = 2.5$

(b) If MPS = MPC, then MPS = 0.5

Multiplier (k) = $\frac{1}{MPS} = \frac{1}{0.5} = 2$

Question 3

In an economy, income generated is four times the increase in investment expenditure. Calculate the values of MPC and MPS

Solution:

Multiplier 4

(a) Multiplier (k) = 1/1−MPC

4 = 1/1−MPC

1- MPC = 1/4

MPC= 0.75

MPS =1 – MPC

= 1 – 0.75

MPS= 0.25

Question 4

In a two-sector economy, the saving function is given as S = – 10 + 0.2Y and investment function is expressed as 1: – 3 + 0.1Y. Calculate the equlibrium level of income?

Solution: Equilibrium level of income (Y) is attained when S= I. It means:

-10 + 0.2Y = – 3 + 0.1Y

0.2Y – 0.1Y = – 3 +10

0.1Y = 7

Y=70

Equilibrium level of income = 70

Question 5

What are the two approaches for determining the equilibrium?

Solution: The two approaches for determining the equilibrium are :

1. AD (or C+I) and AS approach: Equilibrium is achieved when planned expenditure of the economy (AD) is equal to the planned availability of goods and services (AS), i.e., when AD = AS
2. Saving and Investment Approach: Equilibrium level of income is determined at the level where planned saving is equal to planned investment. I.e., when S=1

Question 6

What are the approached for determining the equilibrium level of income?

Solution: The two approaches to determining the equilibrium level of income are.

- AD (or C+1) and AS approach
- Saving and investment approach