

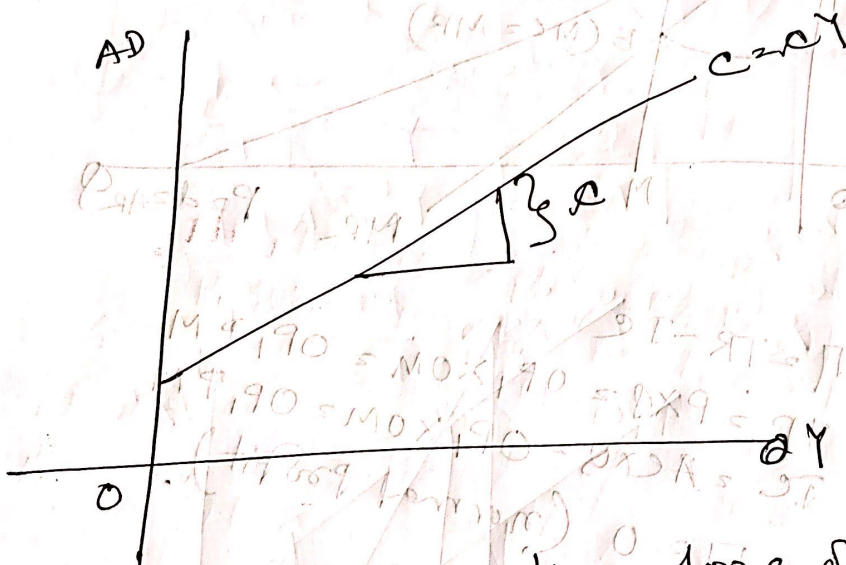
MACRO - Lecture - 3

Consumption, Saving, Investment.

$$C = cY$$

Where c = Marginal Propensity to Consume.

If c is 0.8 and $Y \uparrow$ by 100 HK
the $C = cY = 0.8 \times 100 = 80$ HK

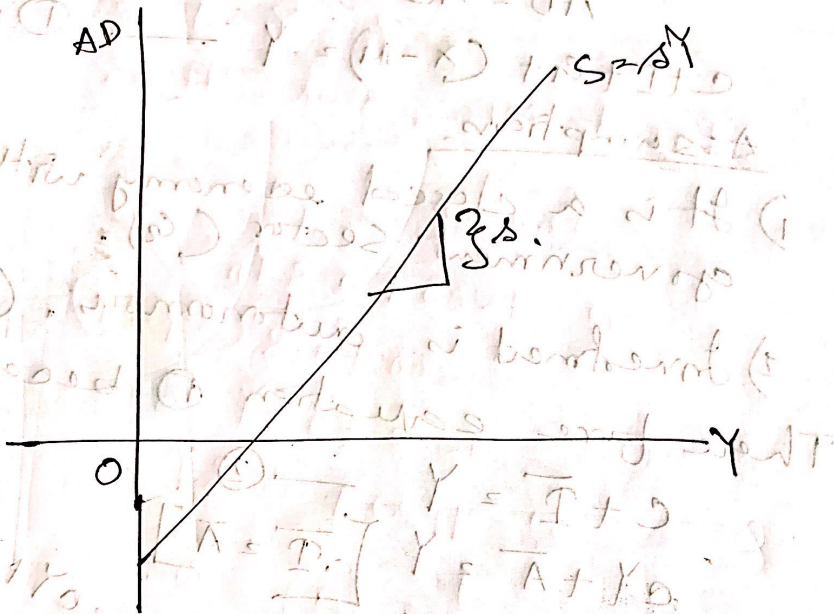


so c is also the slope of consumption function.

$$\text{Now Saving} = S = C - Y = cY - Y = Y(1 - c) = sY$$

s = Marginal Propensity to save = MPS

so if $\alpha > 0.8$ then $S = \alpha Y = (1 - \alpha) Y = (1 - 0.8) \times 100 = 20 + k$.



Again, $\alpha + s = 1 + 1 - \alpha = 1 + s$.

therefore, $0 < \alpha, s < 1$

and if $\alpha = 1$ then $s = 0$ and vice versa.

Planned Investment

$$AD = AS$$

$$C + I + G + (X - M) = Y \quad \text{--- (1)}$$

Assumptions.

1) It is a closed economy with no government sector (G).

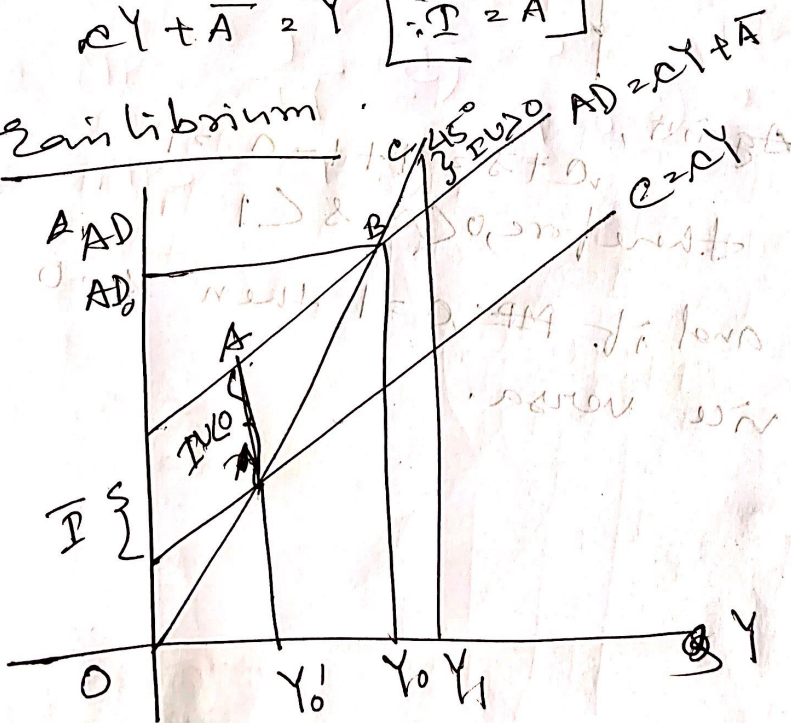
2) Investment is autonomous, (\bar{I})

There fore equation (1) becomes -

$$C + \bar{I} = Y \quad \text{--- (2)}$$

$$cY + \bar{A} = Y \quad [\bar{I} = \bar{A}]$$

Equilibrium



45° = Income-Output line

$Y_0 =$ Efficient level of output

at A, ~~$AD > AS$~~ so Inventory > 0

at C, ~~$AD < AS$~~ so Inventory < 0

at A, $AD > AS$ so Inventory < 0

C, $AD < AS$ so Inventory > 0

At (point B), there is no inventory.

From B →

$$B \quad AD_0 = Y_0$$

$$C \quad Y_0 + \bar{A}_0 = Y_0$$

$$Y_0 - cY_0 = \bar{A}_0$$

$$Y_0 (1 - c) = Y_0$$

$$Y_0 = \frac{1}{(1 - c)} \bar{A}_0$$

Both c and \bar{A}_0 are directly related to Y_0 . The higher the consumption and investment, the higher the income.

Given,

$$C = 1200 + 0.8Y_D \quad \text{where } Y_D = Y - T \text{ and } T = 100$$

Find MPC and MPS.

Answer

$$C = 1200 + 0.8Y_D$$

$$= 1200 + 0.8(Y - T)$$

$$= 1200 + 0.8Y - 80$$

$$C = 1120 + 0.8Y$$

$$MPC = \frac{\Delta C}{\Delta Y} = 0.8$$

$$MPS = (1 - MPC) = (1 - 0.8) = 0.2$$

$$\frac{1}{(1-0.8)} = 5Y$$