

DETERMINATION OF NATIONAL INCOME

Unit - 2

Formula List

- ① $AD = C + \bar{I}$
- ② $C = a + b(Y_d)$
- ③ $b = mpc = \frac{\Delta C}{\Delta Y}$ or $(1 - mps)$
- ④ $Y_d = Y - Tax$
- ⑤ $apc = \frac{C}{Y}$
- ⑥ $mps = \frac{\Delta S}{\Delta Y}$ or $(1 - mpc)$
- ⑦ $S = Y - C$
- ⑧ $S = -a + mps(Y)$
- ⑨ $aps = \frac{S}{Y}$
- ⑩ $AS = C + S$
- ⑪ At equilibrium $AD = AS$
 $C + \bar{I} = C + S$

⑫ In Equilibrium

$$AS = AD$$

$$\hookrightarrow Y = C + I$$

$$Y = a + bY + I$$

$$Y - bY = a + I$$

$$Y(1-b) = a + I$$

$$Y = \frac{a + I}{1-b}$$

⑬ Inflationary Gap $\Rightarrow AD > AS$

⑭ Deflationary Gap $\Rightarrow AD < AS$

⑮ Investment multiplier

$$k = \frac{\Delta Y}{\Delta I} \quad \text{or} \quad k = \frac{1}{1-b} \quad \text{or} \quad k = \frac{1}{mps}$$

⑯ Three Sector model

$$AD = C + \bar{I} + \bar{G}$$

$$AS = C + S + T$$

@ Eq $\Rightarrow$

$$AS = AD$$

$$C + S + T = C + \bar{I} + \bar{G}$$

$$S + T = \bar{I} + \bar{G}$$

(17) with Lumpsum Tax

$$Y = \frac{1}{1-b} (a - bT + \bar{I} + \bar{G})$$

(18) with Transfer Payment

$$Y = \frac{1}{1-b} (a + bTR + \bar{I} + \bar{G})$$

(19) with Transfer Payment and Lumpsum Tax

$$Y = \frac{1}{1-b} (a - bT + bTR + \bar{I} + \bar{G})$$

(20) with Tax as function & Transfer payment

$$Y = \frac{1}{1-b(1-t)} (a - bT + bTR + \bar{I} + \bar{G})$$

(21) Four Sector Model

$$AD = C + \bar{I} + \bar{G} + \bar{X} - \dot{M}$$

$$AS = C + S + T$$

@ Eq. $AD = AS.$

DATE

(22) With Lumpsum Tax and Import function

$$Y = \frac{1}{1-b+m} (a-bT + \bar{I} + \bar{G} + \bar{X} - M)$$

(23)

$$0 < b < 1$$

(24)

$$0 < mps < 1$$

(25)

$$MPC + MPS = 1$$

(26)

$$APC + APS = 1$$

$$(\bar{C} + \bar{I} + \bar{G} + \bar{X} - M)$$

known

$$M, \bar{I} + \bar{G} + \bar{X} - M$$

$$T - bT + M$$

$$2T = 4T$$