

Introduction to Macroeconomics

- (*) **Classical Macroeconomics** → Supply side is the "key" determinant of GDP.
 → perfectly flexible mkt structure
 → Long run aspect of the economy
- (*) **Keynesian Macroeconomics** → demand side is the "major" determinant of GDP.
 → Economy is characterized by rigidities
 eg, Price rigidity ($P = \bar{P}$)
 Wage rigidity ($W = \bar{W}$)
 → short run aspect of the economy.

Keynesian Macroeconomics:-

- ↳ SKM [Simple Keynesian Model]
- ↳ IS-LM Model
- ↳ AD-AS Framework [CKM: Complete Keynesian Model]

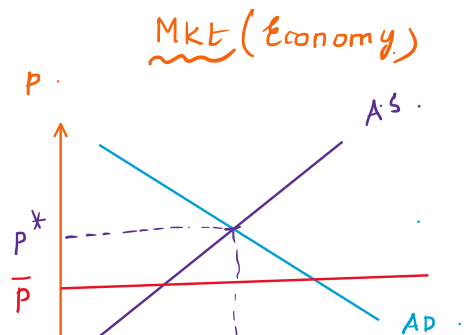
Simple Keynesian Model (SKM):-

Great Depression of 1930's:

Acute recession (GDP is very low & growth is also very low)
 This was a period after World War I. This was a period where people did not have high incomes \Rightarrow purchasing power was low. Firms in the mkt would not dare to raise their prices.

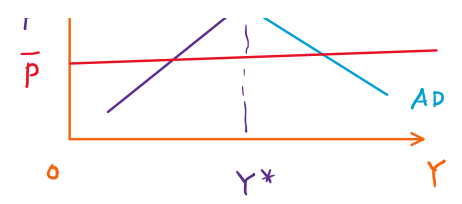
Hence, prices were fixed $P = \bar{P}$. [Price Rigidity]

In scenario of price rigidity, since mkt cannot be cleared by price adjustment, there must be adjustment in output to "clear the market".



market".

clearing



Quantity adjustment happens through change in inventory (ΔINV).

Eg: Suppose firm produces 100 units of output.

Situation 1: Suppose only 80 units are sold.

Remaining 20 units goes into inventory ($\Delta INV > 0$)

Firm will produce less to clear the inventory & thereby achieve the equi: $Q_d = Q_s$.

Situation 2: Suppose there is demand for 120 units.

If there was unsold inventory from previous period then this will be sold out ($\Delta INV < 0$)

Note: If demand is high: $\Delta INV < 0$ [Inventory Decumulation]
If demand is low: $\Delta INV > 0$ [Inventory Accumulation]

\therefore So, adjustment to equilibrium in SKM happens through ΔINV .

SKM Framework:-

(i) Prices are fixed ($P = \bar{P}$), hence adjustment to equilibrium is through output adjustment (ΔINV)

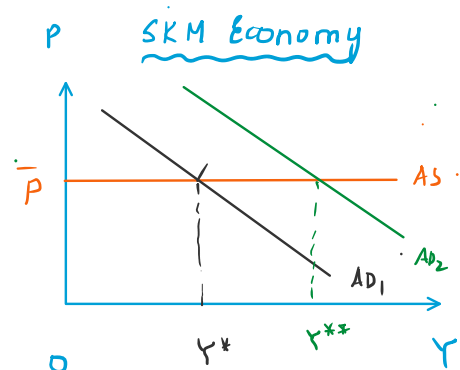
(ii) Hence, $AS = Y$. ---- (i)

(iii) AD has 3 components.

- \hookrightarrow Consumption expenditure (C)
- \hookrightarrow Investment expenditure (I)
- \hookrightarrow Govt expenditure (G).

$\therefore AD = C + I + G$ ---- (ii)

Equilibrium: $AD = AS$.



Equilibrium: $AD = AS$.

$$Y = C + I + G \Rightarrow \text{solve for } Y^*$$

Note: The AD is the major determinant of output level.

Keynesian analysis \Rightarrow "Demand determined economy"

Equilibrium condition: $Y = C + I + G$

$C =$ Consumption $f_C = \bar{C} + c' \cdot Y$, $\bar{C} > 0$, $0 < c' < 1$.

$$\frac{dC}{dY} = c' = \text{MPC} \text{ [Marginal propensity to consume]}$$

As income is partly consumed & partly saved
 $0 < c' < 1$.

$I =$ Investment $f_I = \bar{I}$ [Autonomous Investment]

$G =$ Govt exp $f_G = \bar{G}$ [Autonomous Govt expenditure]