MACROECONOMICS
LA321/LAL200

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Classical Theory

Assumptions

- Full employment without inflation
- Laissez-faire capitalist economy
- Perfect competition in labour, money and product markets
- Quantity of money and technology is given and fixed
- Labour is homogenous
- Wages and prices are flexible
- Money wages and real wages are directly related
- Closed economy

Classical Theory

Say's Law of Market : Supply Creates its own Demand.

Money market equilibrium

The validity depends on **Quantity Theory of Money** which states that general price level (P) changes proportionally to the change in money supply (M) (given that velocity of money (V) and volume of transactions (T) is held constant).

$$MV = PT$$

Capital market equilibrium

$$C + I = C + S$$

$$S = I$$

Interest rate is the important determinant responsible for the Saving Investment equality.

Classical Theory

Say’s Law of Market : Supply Creates its own Demand

Labour market equilibrium

Automatic full employment happens if there is perfect competition in the labour market. For any cut in the money wages, real wages will also reduce proportionally. Rise in real wages leads to an increase in supply of labour and fall in demand for labour and vice-versa.

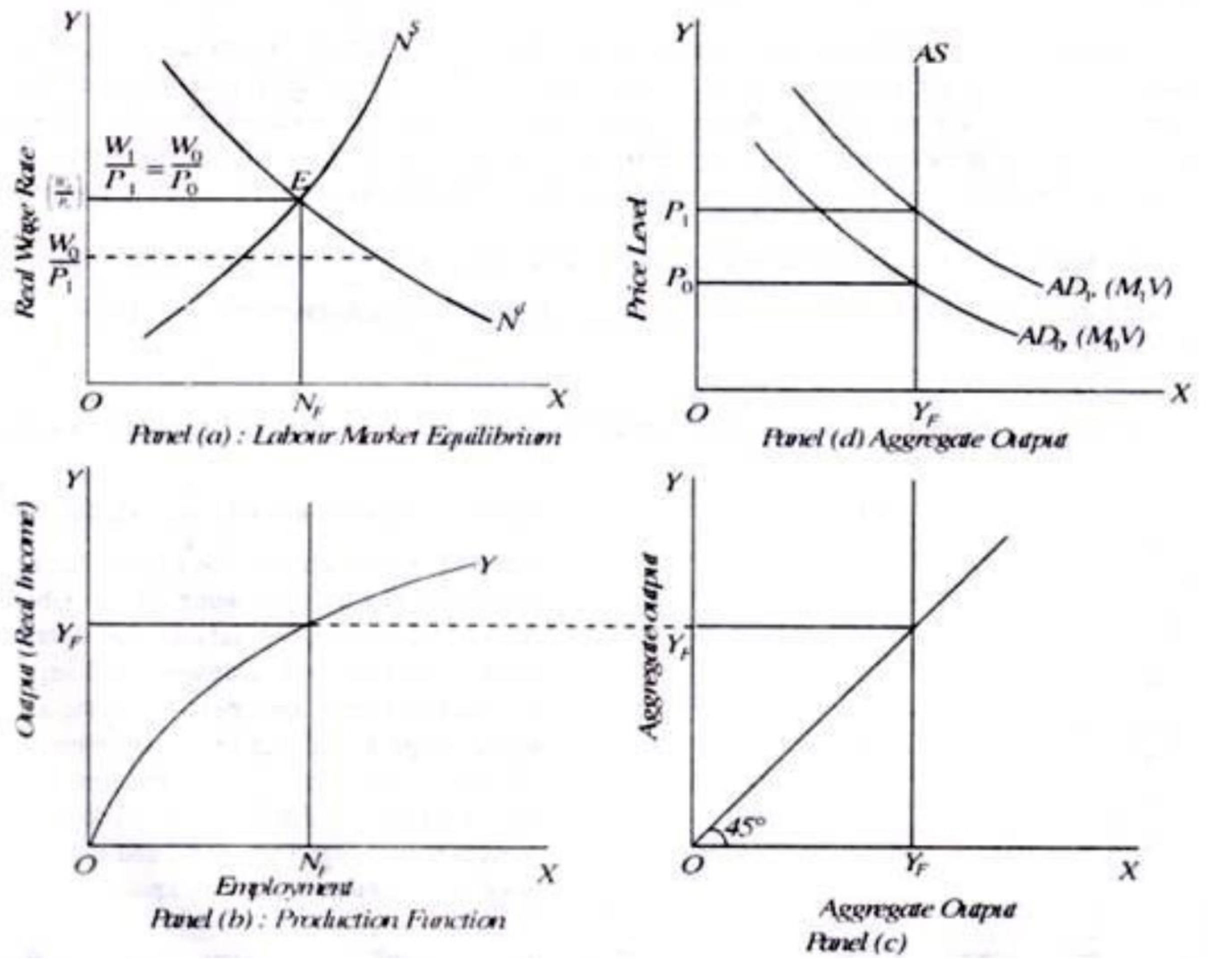
Product market equilibrium

$$Q = f(K, L, T)$$

Total output (Q) is a function of capital (K), labour (L) and technology (T). T is held constant in this model. If employment (L) increases, total output also increases to reach the full employment level.

Classical Theory

All markets are at equilibrium simultaneously as shown below:



Criticisms

Keynes criticized the Classical model stating:

- Refutation/rejection of Say’s Law
- Self-adjustment not possible; some govt. intervention will be required
- Full employment equilibrium is not possible
- Savings-Investment equality not via interest rate but via income
- Money is not neutral
- Long run is unrealistic

Keynesian Effective Demand

AD = AS

Effective demand depends on Consumption and Investment

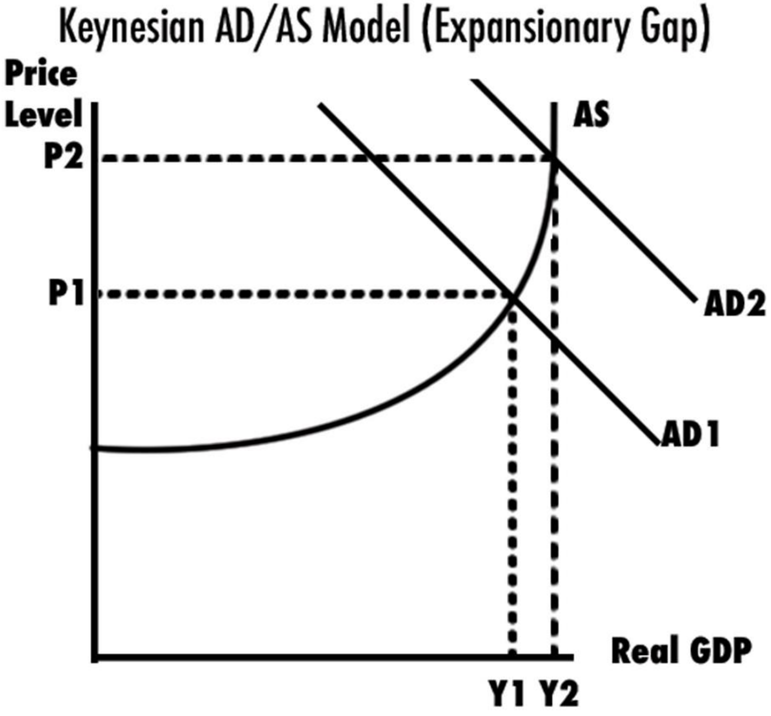
- **Consumption (C)** depends on Income and Marginal Propensity to Consume
- **Investment (I)** depends on Interest rate and Marginal Efficiency of Capital

Interest rate depends on money supply in the economy and liquidity preference of the people.

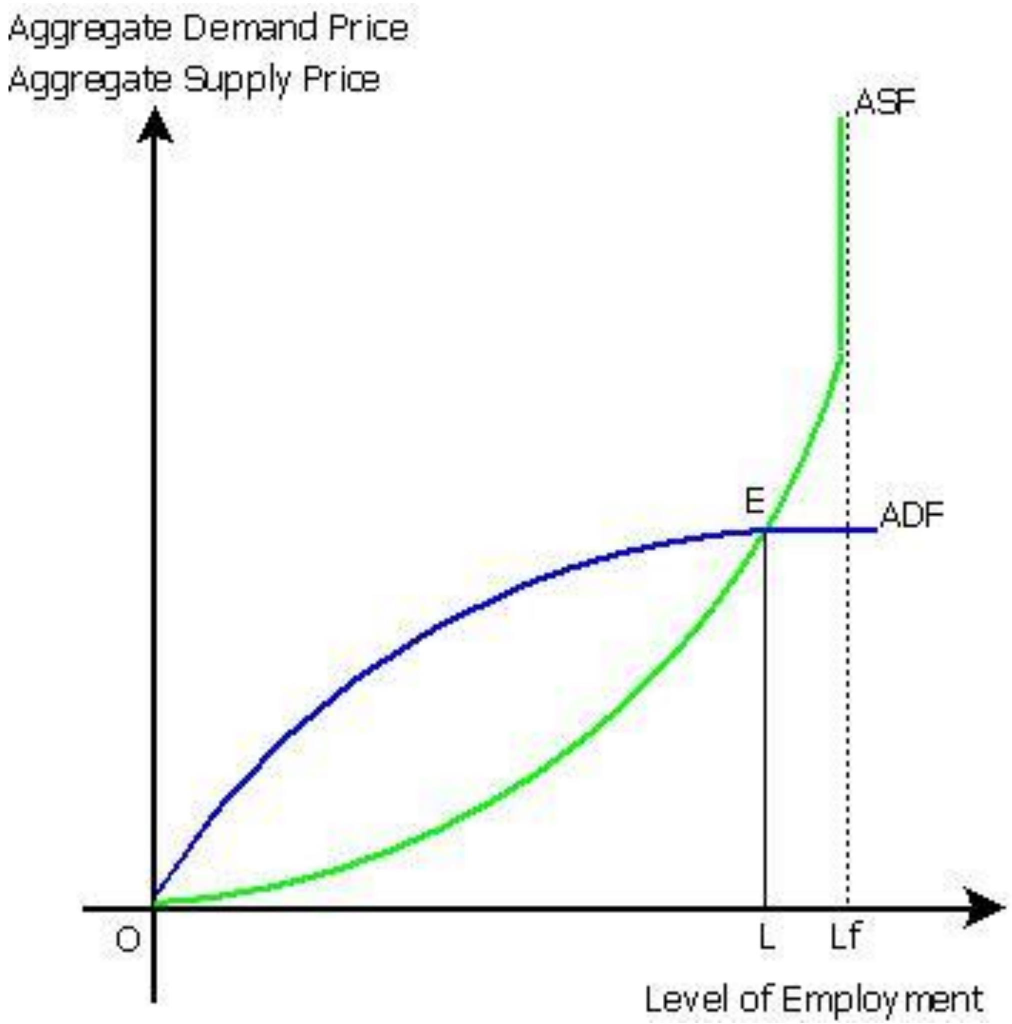
$$APC = \frac{C}{Y} \qquad MPC = \frac{\Delta C}{\Delta Y}$$

Keynesian Effective Demand AD

Keynisian equilibrium happens where AD1 intersects the AS curve; where equilibrium level of output or income is Y1. This happens before the full employment level of income Y2.



Keynesian Under-employment Equilibrium at point E



Some Important Concepts

Classical Dichotomy or Money Neutrality

- Two independent sectors – real and nominal
- Money is neutral; just a medium of exchange
- Nominal variables do not affect real variables

Wage Rigidity (Keynesian)

- Reasons for downward rigidity of wages are **Money Illusion**, minimum wage laws, efficiency wages and work contracts.
- Due to money illusion, labour supply depends on money wages according to the Keynesian model.

Consumption Theories

Keynes' Psychological Law of Consumption

- When income increase our consumption increases; but this increase will not be proportional to the rise in income. $C = c + bY$

b or mpc is the slope of the consumption function and $0 < mpc < 1$.

- **Relative Income Hypothesis**

Your consumption pattern will depend on your income relative to other agents in the society. Even if your income falls, your consumption will have a tendency to remain at your previous peak level (Ratchet effect).

Consumption Theories

- **Permanent Income Hypothesis**

The income will have both the permanent and transitory component. Permanent or normal consumption depends only the permanent income and not on the transitory income

$$Y = Y^P + Y^T$$

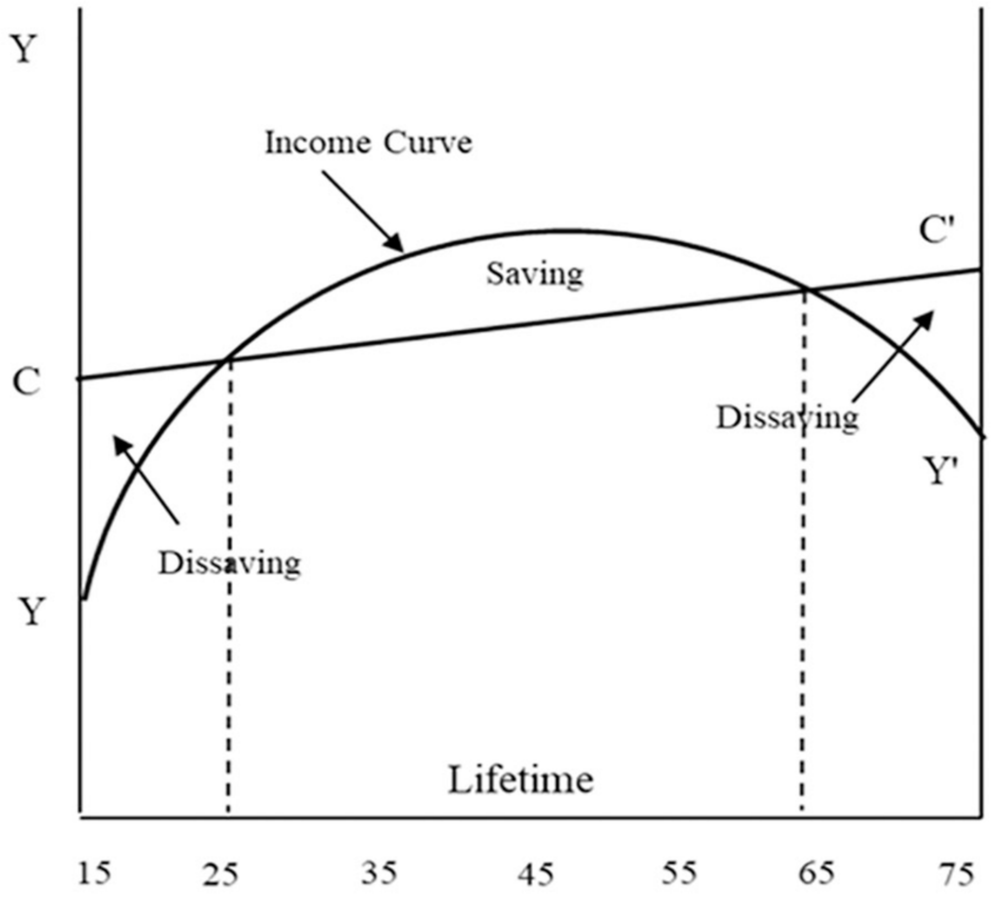
$$C = \alpha Y^P$$

- **Life Cycle Hypothesis**

The consumption will be dependent on your wealth (W) and income (Y).

Consumption Theories

$$C = \alpha W + \beta Y$$



IS – LM Model

IS Curve – Product/Goods Market Equilibrium

IS curve shows the inverse relationship between interest rate (r) and income (Y). Every point on the IS curve satisfies S = I or AD = AS. The IS schedule is given as:

$$Y = C(Y - T) + I(Y, i) + G$$

$$\boldsymbol{Y = \bar{I} - ai}$$

Slope of IS (a) depends on:

- Interest elasticity of investment demand (Higher interest elasticity, flatter the IS and vice-versa)

- Multiplier (Larger the multiplier ($\frac{1}{(1-MPC)}$), flatter the IS curve)

IS – LM Model

LM Curve – Money Market Equilibrium

At all points on an LM curve, Money Demand = Money supply. The LM curve equation is given as:

$$i = kY - hi$$

Slope of the LM curve depends on:

- Income elasticity of demand for money (larger this elasticity, steeper the LM curve)
- Interest elasticity of demand for money (lower this elasticity, steeper the LM curve)

IS – LM Equilibrium

Equilibrium happens where the IS curve intersects the LM curve such that both the goods market and money market is in equilibrium. This equilibrium leads to the equilibrium level of income (Y) and interest rate (i).

THANK YOU