Classical and Keynesian Theory of Income and Employment

The theory is ascribed to early Classical economists like Adam Smith, Ricardo, and Malthus and neo-classical like Marshall, Pigou and Robbins.

An economy, as a whole, always functions at the level of full employment i.e., full employment of labor and other resources .Full employment level of output of goods and services is the largest output that the economy is capable of producing when all its resources are fully employed. Full employment is regarded as a normal situation, yet there could be a temporary unemployment.

If at all there is unemployment, it must be a temporary one and it will be cured automatically through free play of economic forces. Classical behave that aggregate supply would always be at full employment level which is based on two assumptions, namely Say's Law of Market and Wage-price flexibility as explained below.

Supply creates its own demand:

Classical theory of employment is based on 'Say's Law of market' which states that 'supply creates its own demand'. This implies that supply creates a matching demand for it with the result that the whole of output is sold out. So, there is no deficiency in aggregate demand and hence no possibility of over-production and unemployment. Thus, equilibrium level of income and employment is established only at the level of full employment.

Flexible system of prices, interest rates and wages:

(a) Price mechanism automatically brings equilibrium between demand and supply in the market,

(b) Flexibility of interest rates brings about equality between savings and investment,

(c) Flexibility of wage rates brings about full employment equilibrium. As a result, the aggregate supply is always at full employment level of output.

Keynesian vs. Classical Theory

- According to classical economists, money is demanded for transaction motive alone. On the contrary, Keynes maintained that money is demanded for transaction motive as well as speculative motive.
- According to classical economists, supply of laborers depends on real wages (W/P). On the contrary, Keynes believes that it depends on money wage.
- In classical theory saving is a function of rate of interest and Keynes is of view the saving is a function of an income.

Salient features of Keynesian Theory are:

i. An economy can be in equilibrium even at less than full employment level:

Economic system does not ensure automatic equality between ‘aggregate demand’ and ‘aggregate supply at full employment’ as believed by Classical. He proved that an economy could be in equilibrium even at less than full employment level. This is the basic difference between Classical Theory and Keynesian Theory.

ii. Demand creates its own supply:

Aggregate demand for goods and services directly determines the level of output, income and employment. If AD increases, level of output will go up by increasing employment of resources to meet increased demand and as a result income will also go up. Thus, demand creates its own supply.

iii. Equilibrium level of income and employment is determined by aggregate demand and aggregate supply:

But this does not mean level of full employment. The equilibrium level of income maybe at below or above the level of full employment .In reality, an economy operates very often at less than full employment equilibrium. Since in the short run, aggregate supply does not change, it, therefore, changes in aggregate demand which brings about changes in income and employment.

This is the gist of Keynesian approach. The core issue of macroeconomics is the determination of level of income, employment and output. According to this theory, in an economy income and employment are in equilibrium at that level at which Aggregate Demand = Aggregate Supply.

Mind, Keynesian theory is supposed to apply under short run and perfect competition. Thus, in Keynesian framework, this determination depends mainly on the level of aggregate demand because during short run aggregate supply is constant with respect to given price. Let us, therefore, first of all clearly understand the concepts of aggregate demand and aggregate supply.

Assumptions of Keynesian theory of employment

1) **Short period:** In short period aggregate supply remains constant, as such level of employment can be increased & unemployment removed by increasing aggregate demand.

2) **Perfect competition:** Keynesian theory of employment is based on perfect competition.

3) **Closed economy:** where level of income & employment remains unaffected by the foreign trade.

4) **Ignores the role of government as a spender or a Taxer:** Keynes has ignored the effect of government sector on aggregate demand.

5) **Diminishing marginal utility:** as more & more units of labor are employed, their marginal productivity goes on diminishing.

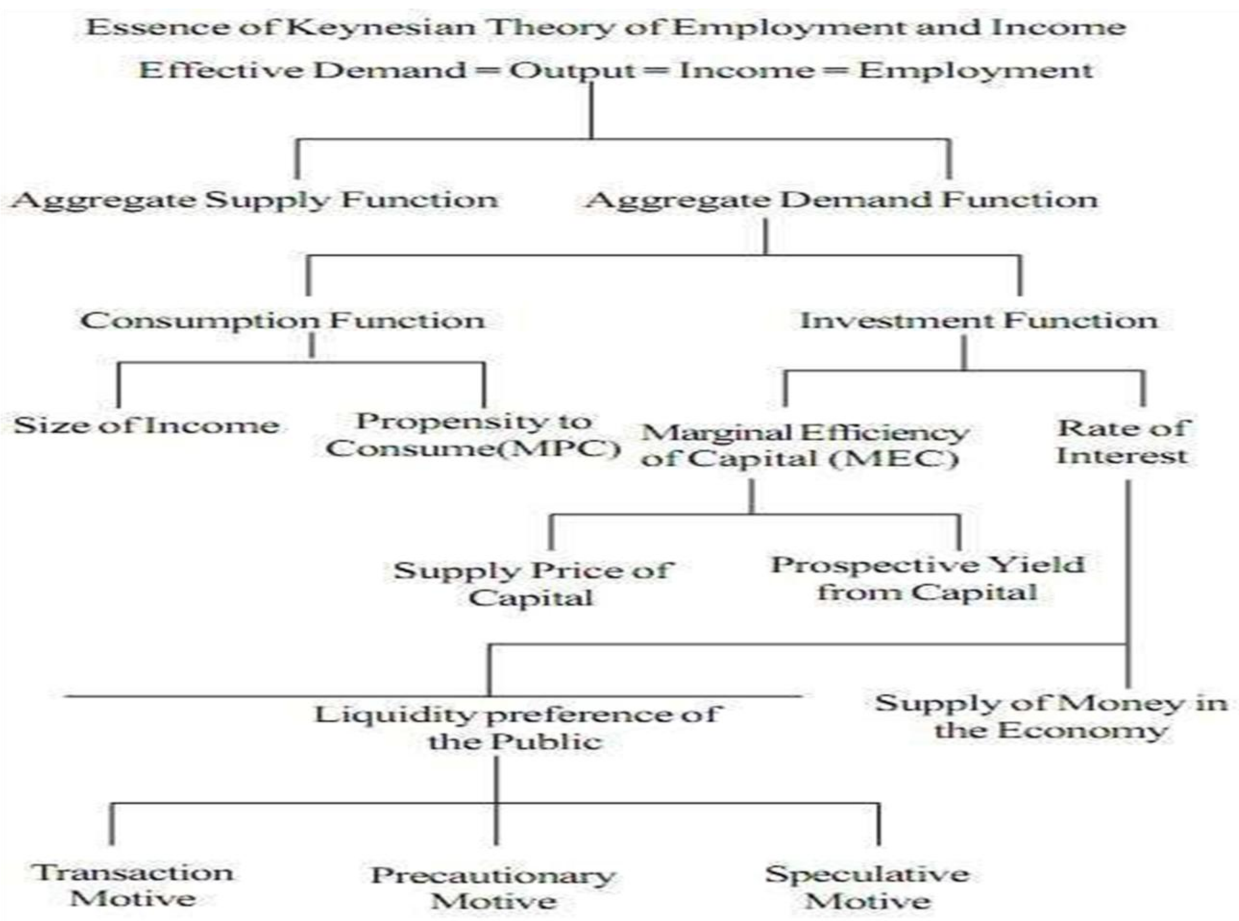
6) **Labor is only variable factor of production:** means that with increase in the number of labors there is increase in output.

7) **Labor has money illusion:** Laborers have an illusion that value of money remains constant.

8) **Under- employment equilibrium**

9) **Saving & investment function:** Keynes theory is based on assumption that saving is a function of income i.e. $S = f(Y)$ & investment of a function of rate of interest i.e. $I = f(r)$.

10) **Interest is a monetary phenomenon:** It is determined by the demand for and supply of money.



Aggregate supply price refers to the total amount that all the producers must receive by selling the output produced at a given level of employment. Aggregate supply price is equal to total cost of production. AS schedule refers to a schedule showing aggregate supply price received at different levels of employment.

Aggregate demand price refers to that total amount which all producers expect to receive by selling the output produced at a given level of employment. AD schedule refers to a schedule showing aggregate demand price received at different levels of employment. **AD= C +I**

Explanation of theory of Income and Employment:

- The basic concept of Keynesian theory is that level of employment in a country is determined by the aggregate demand and aggregate supply. Effective demand refers to that level of aggregate demand at which it is equal to aggregate supply.

- According to Keynesian theory of Income & employment , in short period, total output or national income depends on level of employment because in short period other factors of production like capital, technique etc. remain constant. Level of employment depends on effective demand.

- National income or output (Y) is a function (F) OF level of employment (N). **Y = f (N)**

- Level of employment (N) is a function of effective demand(ED). **N = f (ED)**

- Effective demand(ED) expresses equality between aggregate demand and aggregate supply.

- **ED = (AD = AS)**

Consumption Expenditure: Consumption expenditure is an important constituent of aggregate demand. Increase in consumption expenditure leads to increase in total income. Consumption expenditure depends mainly on 2 factors:

- **Propensity to consume:** Propensity to consume is the ratio of consumption expenditure to different value of income.

- **National income:** Keynes assumes that consumption is a function of income. Increase in income causes increase in consumption.

Investment: It refers to that expenditure which leads to addition in the total stock of capital assets. It is an important constituent of aggregate demand. According to keynes, investment mainly depends upon 2 factors:

- rate of interest
- marginal efficiency of capital

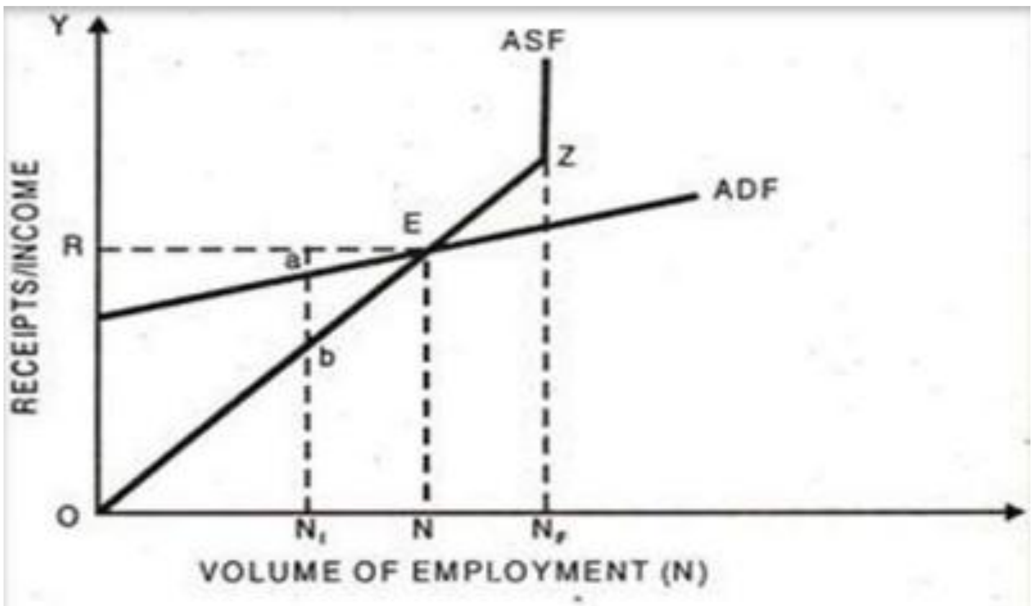
- Marginal efficiency of capital refers to rate of profit. It is governed by two factors: 1) supply price of capital asset and 2) prospective yield.
- An entrepreneur compares rate of interest with marginal efficiency of capital before making investment.

- Where MEC > Rate of interest, investment is made otherwise not if MEC < Rate of interest on investment is made. In short period investment can be made by lowering the rate of interest.
- So, To increase the aggregate demand there should be an increase in consumption and investment. In short period consumption cannot be increased but investment can be increased so employment will increase.

Determination of Employment

Employment (N) (in lakh)	**Aggregate Supply (in crores)**	**Aggregate Demand (in crores)**	**Trends in Employment**
0	0	60	Rise
10	60	100	Rise
20	90	120	Rise
30	120	140	Rise
40	150	160	Rise
50	**180**	**180**	**Equilibrium**
60	210	190	Fall
70	240	200	fall

Effective Demand Curve



Determination of Income and Output

$Y = C + I$

$C = C_0 + bY$

$Y = C_0 + bY + I$

Here, Y = Income

C = Consumption Expenditure

C_0 = Autonomous Consumption

b = Marginal Propensity to Consume

Y = Income in initial stage

I = Autonomous Investment

Keynesian Model

- Y = f (N); output (Y) is the direct function of employment (N), output depends on employment. Total output increases with increase in output.
- NS=f (W); Supply of labor (NS) is the direct function of money wage (W). It means supply of labor increases with increase in money wages.
- ND = f (W/P); Demand for labor (ND) is the inverse function of real wage (W/P). It means demand for labor increases as his real wage falls and decreases as his real wage rises. Hence, according to Keynes, increase in employment will lead to fall in real wages.
- Labor market will be in equilibrium when demand for labor is equal to its supply i.e. **NS = ND**
- According to Keynes, money market will be in equilibrium when demand for money is equal to supply of money i.e. **MS = MD**
- I = S; Keynes also assumed that in equilibrium, investment and saving will be equal.
- I= f (r); investment is an inverse function of rate of interest (r).
- S = f (Y); saving is a direct function of income. Savings increases with increase in income.

These equations tell that to increase employment in the short run, rate of interest should be lowered and to increase demand for labor, real wages should also be lowered. For this purpose, price- level should be raised and money wages not to be changed.