Keynesian theory of Income determination

Macroeconomics -Intro

- The two major branches of economic theory are the microeconomic theory and macroeconomic theory.
- Macroeconomic theory is concerned with the study of economy wide aggregates, such as analysis of the total output and employment, total consumption, total investment, total saving and national product.

The Classical Theory- Overview

- David Ricardo, James Stuart Mill, Jean Baptiste Say, their classical contemporaries and followers believed that the economy's total output and employment could not fall below the full employment level except very temporarily.
- It was said that the working of free market forces(wages and prices are flexible) would take the total employment and output in the economy to full employment level without much loss of time.

Full Employment - Meaning

Full employment implies 'absence of involuntary unemployment'. Involuntary unemployment is a situation where people are willing to work at the prevailing wage rate but fail to find work. Existence of voluntary unemployment and frictional unemployment is compatible with full employment.

The Classical Theory- Overview (Contd.)

• Full employment is taken for granted in classical theory. Any persistence of unemployment was due to interference with free play of market forces either by the government or by the private monopoly.

The Classical Theory- Overview (Contd.)

- The acceptance of full employment as the normal condition of a free enterprise economy is based on 2 assumptions :
 - There can never be a deficiency of aggregate demand, because production increases not only the supply of goods but, by virtue of factor price payments, it also creates the demand for these goods. Products are paid for with products i.e. supply creates its own demand.
- Even in case of deficiency of aggregate expenditure or demand, wage rates are not sticky in nature and the operation of the free market price and flexible interest automatically removes unemployment which may occur temporarily.

Say's Law (Supply creates its own demand)

- Say's Law or Say's Law of Markets is a principle attributed to French businessman and economist Jean-Baptiste Say
- It states that there can be no demand without supply.
- The activity of production opens a demand for the products produced. Thus the mere creation of one product immediately opens an avenue for other products.

Say's Law - Contd..

- In other words, Say claimed that production is the source of demand. One's ability to demand goods and services from others derives from the income produced by one's own acts of production.
- Wealth is created by production not by consumption. My ability to demand food, clothing, and shelter derives from the productivity of my labor or my non labor assets. The higher or lower that productivity is, the higher or lower is my power to demand other goods and services.

Say's Law- Assumptions

- Whatever income is received by households is immediately spent on goods and services. Thus there is no saving and no hoarding of money.
- All savings are translated to investments due to change in interest rates.
- The government does not perform any economic function and thus there is no govt. expenditure, taxation, subsidies or public borrowing.
- It is a closed economy which implies absence of any trade with other economies.

Say's Law – Introduction of Savings

• Practically, the entire income received by households is not spent on goods and services. Hence

$$Y = C + S \text{ or } S = Y - C$$

In any case, as per the economists, investment will restore to the spending stream what resource owners take out through the saving process.

Savings---->Banks---->Firms (borrowings)

Savings by households= Investment by firms at an equilibrium rate of interest.

The Classical theory- Criticism

So long as the economy operated smoothly, the classical analysis of aggregate economy met no serious opposition. However, Great Depression of 1930's created problems of increasing unemployment, reducing national income, declining prices and failing firms . The classical model miserably failed to explain and provide a workable solution to escape the depression.

The Classical theory- Criticism

- John Maynard Keynes was the main critic of the classical macro economics.
- In his book 'General Theory of Employment, Interest and Money' he out-rightly rejected the Say's Law of Market that supply creates its own demand.
- He severely criticized that cuts in real wages help in promoting employment in the economy.
- He also opposed the idea that saving and investment can be brought about through changes in the rate of interest.
- In addition to this, the assumption of full employment in the economy is not realistic.

Keynesian Theory of Income determination.

According to **Keynes'** own theory of income and employment:

"In the short period, level of national income and so of employment is determined by aggregate demand and aggregate supply in the country. The equilibrium of national income occurs where aggregate demand is equal to aggregate supply. This equilibrium is also called effective demand point".

Effective demand

- Effective demand represents that aggregate demand or total spending (consumption expenditure and investment expenditure) which matches with aggregate supply (national income at factor cost).
- Effective demand is the equilibrium between aggregate demand (C+I) and aggregate supply (C+S).
- This equilibrium position (effective demand) indicates that the entrepreneurs neither have a tendency to increase production nor a tendency to decrease production.

Effective demand

- It implies that the national income and employment which correspond to the effective demand are equilibrium levels of national income and employment.
- Unlike classical theory of income and employment, Keynesian theory of income and employment emphasizes that the equilibrium level of employment would not necessarily be full employment. It can be below or above the level of full employment.

The determinants of effective demand and so of equilibrium level of national income and employment are the aggregate demand and aggregate supply.

(1) Aggregate Demand (C+l):

- ✓ **Aggregate demand** refers to the sum of expenditure households, firms and the government is undertaking on consumption and investment in an economy.
- ✓ The aggregate demand price is the amount of money which the entrepreneurs <u>actually expect to receive</u> as a result of the sale of output produced by the employment of certain number of workers.

- ✓ An increase in the level of employment raises the expected proceeds and a decrease in the level of employment lowers it.
- ✓ The aggregate demand curve AD (C+I) would be positively sloping signifying that as the level of employment increases, the level of output also increases, thereby increasing of aggregate demand (C+I) for goods.
- ✓ The aggregate demand (C+l) depends directly on the level of real national income and indirectly on the level of employment.

(2) Aggregate Supply (C+S):

- The *aggregate supply* refers to the flow of output produced by the employment of workers in an economy during a short period.
- In other words, the aggregate supply is the value of final output valued at factor cost.
- The aggregate supply price is the minimum amount of money which the entrepreneurs <u>must expect to receive</u> to cover the costs of output produced by the employment of certain number of workers.

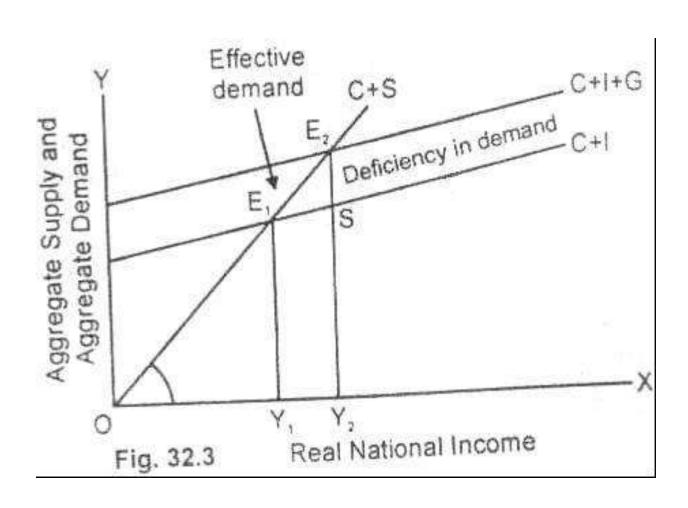
- The aggregate supply is denoted by (OS) because a part of this is consumed (C) and the other part is saved (S) in the form of inventories of unsold output.
- The aggregate supply curve, (C+S) is positively sloped indicating that as the level of employment increases, the level of output also increases, thereby, increasing the aggregate, supply. Thus, the aggregate supply (C+S) depends upon the level of employment through the economy's aggregate production function

Determination of Level of Employment and Income

According to Keynes, the equilibrium levels of national income and employment are determined by the interaction of aggregate demand curve (AD) and aggregate supply curve (AS).

The equilibrium level of income determined by the equality of AD and AS does not necessarily indicate the full employment level. The equilibrium position between aggregate demand and aggregate supply can be below or above the level of full employment as is shown in the curve below.

Effective Demand point:



Explanation

- In the above figure, the aggregate demand curve (C+1), intersects the aggregate supply curve (OS) at point E^1 which is an effective demand point. At point E^1 , the equilibrium of national income is OY^1 .
- Let us assume that in the generation of OY¹ level of income, some of the workers willing to work have not been absorbed. It means that E¹ (effective demand point) is an under employment equilibrium and OY¹ is under employment level of income.
- The unemployed workers can be absorbed if the level of output can be increased from OY¹ to OY² which we assume is the full employment level.

Explanation

- We further assume that due to spending by the government, the aggregate demand curve (C+I+G) rises. As a result of this, the economy moves from lower equilibrium point E¹ to higher equilibrium point E². The OY is now the new equilibrium level of income along with full employment. Thus E² denotes full employment equilibrium position of the economy.
- Thus government spending can help to achieve full employment. In case the equilibrium level of national income is above the level of full employment, this means that the output has increased in money terms only. The value of the output is just the same to the national income at full employment level.

Importance of Effective Demand

- The importance of the principle of effective demand in macro economics, in brief, is as under:
- (i) Determinant of employment. Effective demand determines the level of employment in the country. As effective demand increases employment also increases. When effective demand falls, the level of employment also decreases.
- (ii) Say's Law falsified. It is with the help of the principle of effective demand that Says Law of Market has been falsified. According to the concept of effective demand whatever is produced in the economy is not automatically consumed. It is partly saved. As a result, the existence of full employment is not possible.

Importance of Effective Demand

- (iii) Role of investment. The principle of effective demand explains that for achieving full employment level, real investment must equal to the gap between income and consumption. In other words, employment cannot expand, unless investment expands. Therein lies the importance of the concept of effective demand.
- (iv) Capitalistic economy. The principle of effective demand makes clear that in a rich community, the gap between income and expenditure is large. If required investment is not made to fill this gap, it will lead to deficiency of effective demand resulting in unemployment.

Criticism on Keynesian Theory

- From mid 1970 onward, the Keynesian theory of employment came under sharp criticism from the monetarists.
- The monetarists believed that J. M. Keynes laid more emphasis on the determinants of aggregate demand and to a greater extent ignored the determinants of aggregate supply.
- The 'General Theory of Keynes is applicable to the developed economies. The Keynesians concepts are not very useful for policy purposes in less developed countries.