Equilibrium Level of National Income

The equilibrium level of national Income can be determined by using the simple Keynesian consumption. The national is said to be in equilibrium when planned output is equal to the planned expenditure. Planned output may be called aggregate Supply and planned expenditure may be called aggregate Demand. The equilibrium level of income is determined by equality of aggregate supply and aggregate demand. In this analysis only commodity market of the economy is considered. This analysis is done based on following assumption.

(i)The economy is advanced capitalistic economy, having sufficient amount of unemployment and unutilised capacity in different firms.

(ii)We assume that money wages, prices, interest rate are constant and do not change with the change in the level of output.

(iii) Aggregate consumption expenditure can be determined through Keynesian consumption function which is C= f (Y), here C is Consumption, Y is Income, f is function. Here marginal propensity to consume (MPS) is gretar than zero but less than one.

(iv) Aggregate investment is autonomous and independent of rate of interest and level of income i.e. I= Io (read it I zero).

(v) The economy is closed economy having no foreign transaction.

(vi)There are no economic activities of the Government.

(vii) We assume that entire saving is undertaken by households and entire investment is undertaken by firms.

The equilibrium level of national income is determined when aggregate demand is equal to the aggregate supply. Aggregate

demand during a period of time is sum total of consumption expenditure and investment expenditure (D=C+I). Total demand for commodities will come from either from consumers who will consume the commodities or from firms who will engage them in the production process. We assume that there is only one commodity which is consumed and employed in production process i.e. same commodity is as consumer goods and also capital goods. Aggregate supply is equal to the total output that has been produced in the economy.

The aggregate supply is denoted by Y which is real national income (output). The aggregate demand is C+I. In the equilibrium level aggregate supply is equal to the aggregate demand hence

$$Y = C+I$$

Or $Y = a+ bY+ Io$ [as we know it from consumption function $C= a+$ by and from investment function $I = Io$]

or $Y-bY = a+ Io$

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

$$Y = a+ Io/ (1- b)$$

Here Y= National Income, C= Consumption, I = Investment, a= autonomous consumption, b= MPC (Marginal Propensity to Consume).

The numerator (a+ Io) on the right hand side is the sum total of autonomous component (i.e. not depend on national income) of aggregate demand. Two conclusions we can get:

(i)Other thing remain the same greater the autonomous component of aggregate demand (a+Io) greater will be the equilibrium national Income.

(ii) In the given autonomous component of aggregate demand, higher the marginal propensity to consume(b) higher will be the equilibrium national income.

Graphical representation:

In the given graph we measure national income in horizontal axis and consumption and investment in vertical axis. We draw a 45 degree straight line as aggregate supply line. Since investment is autonomously given so it represented by horizontal straight line. Consumption function [C=f(Y)] is upward rising straight line which intersect 45 degree line from above. We get C+I curve by adding vertically the consumption function and Investment line. It is parallel to the consumption curve. The point of intersection of C+I curve and 45 degree curve is equilibrium point. In the given graph P is the equilibrium point. Equilibrium national income is equal to the OM. At equilibrium point aggregate demand is equal to the aggregate supply i.e. Y= C+I. It is noted that this equilibrium level is a stable equilibrium. This means that if level of income is different from OM then there will be tendency for the level of income to move towards OM. For example, suppose in any period of time the level of income is OM1 there will be excess supply so producers will reduce production that trends to reduce national income to the level OM. On the other hand if national income become OM2 then there will be excess demand and producers will increase production that leads to increase national income to the level OM.

This are noted that the equilibrium national income will be stable if Marginal propensity to consume(MPC) is less than one.

The equilibrium national income can be determined only when Savings and Investment are equal.

This note are prepared by SG sir with the help of book of Macroeconomics of Jaydev Sarkhel . Photo of Graph is given in the whatsapp group download it and draw it in copy then read the note. If not understand please call SG sir in this no: 8013350655.