

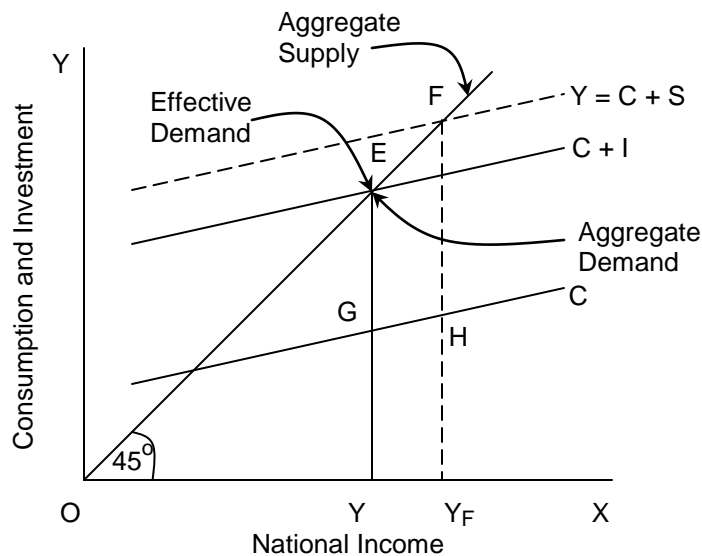
Determination of National Income

1. In the short run, the level of national income is determined by aggregate demand and aggregate supply. The supply of goods and services in a country depends on the production capacity of the community. But during the short period the productive capacity does not change.
2. If AD increases, output will also increase and the level of national output (i.e., national income) will rise. On the other hand, if AD decreases, the national output or national income will also decrease. It follows that the equilibrium level of NI is determined by AD since the aggregate capacity remains more or less the same during the short run.
3. Thus, there are two components of effective demand:

- (a) Consumption demand, and
- (b) Investment demand.

4. **Aggregate Demand = Consumption + Investment**
i.e., **AD = C + I**

5. The consumption demand depends on propensity to consume and income. At a given propensity to consume, as income increases, the consumption demand will also increase.



6. In the above diagram the 45° line represents aggregate supply line and it is also called 'income line'. This income line shows two things:

- (a) Total output or aggregate supply (C + I), and
- (b) National income.

7. In the above diagram, the curve C rises upward to the right which means that as income increases consumption also increases. The distance between income line and consumption line represents saving. Thus, $NI = C + S$ or $Y = C + S$.
8. One noteworthy thing about propensity to consume is that it remains stable or constant during the short period. Because the propensity to consume depends on the tastes and needs of the people and these do not change in the short run.
9. Since consumption is more or less stable and cannot be varied, therefore, variation in NI depends on variation in investment.
10. Investment is the second component of AD. Investment depends on two things:
 - (a) Marginal efficiency of capital, and
 - (b) The rate of interest
11. The rate of interest is more or less stable, hence, change in investment depends on the marginal efficiency of capital (MEC).
12. The MEC means expectations of profit from investment. In other words, the expected rate of profit is called MEC.
13. The MEC depends on two factors:
 - (a) Replacement cost of capital goods, and
 - (b) Profit expectations of investors.
14. If we join the investment demand with the curve C of propensity to consume, we get AD curve $C + I$ in which C represents consumption and I investment. The distance between propensity to consume curve C and AD curve $C + I$ is equal to investment.
15. The level of NI will be determined at point at which the AD and AS curves intersect each other. At this point AD and AS are in equilibrium.
16. In the above diagram, the equilibrium level of income is OY. At this point the AD curve and AS curve intersect each other.
17. If the income is more than OY, then total output or AS is greater than AD ($C + I$), and the entire output cannot be sold out.
18. If the income is less than OY, then total output or AS is less than AD ($C + I$), and the entire output will be sold out. In such a situation there is a shortage of supply, but the output will be increased in order to cover the shortage and the NI will also increase.

19. OY is the equilibrium level of income which is less than full employment level, i.e., OY_F . Whereas, the HF corresponds the saving.
20. The economy will be in full employment level only when investment demand increases so as to cover this saving. But there is no guarantee that investment demand will exactly be equal to savings.

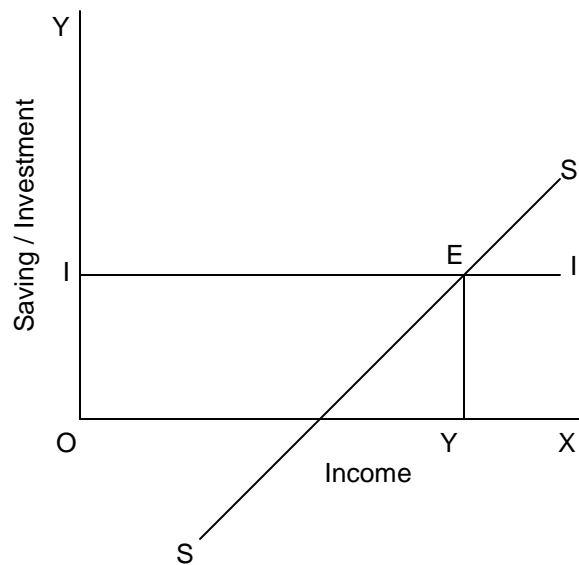
Equality of Saving and Investment:

1. There is another way of determining the equilibrium level of NI, i.e., through equality of savings and investment.
2. Take the same diagram of AD and AS. At point E, the savings and investment are equal to GE. At above the point the saving is more than investment, and for income less than this point, the investment is more than saving. Saving and investment are only equal at the equilibrium level of income, and when they are not equal, the NI is not in equilibrium.
3. When at a certain level of NI intended investment by the entrepreneurs is more than intended savings by the people, this would mean that AD is greater than total output or AS, i.e.,

$$I > S \text{ or } AD > AS$$

This would induce the firms to increase production raising the level of income and employment.

4. Hence, when at any level of NI, investment is greater than savings, there will be a tendency for the NI to increase.
5. On contrary, when at any level of NI, the investment demand is less than saving, it means that AD is less than AS. As a result of a decline in national output, the national income will also reduce.
6. Saving is withdrawal of some money from the income stream. On the other hand, investment is the injection of money into the income stream. If the intended investment is more than intended saving, it means that more money has been injected in the economy. This would increase the national income.
7. But when investment is just equal to saving, it would mean that as much money has been put into income stream as has been taken out of it. The result would be that the NI will neither increase nor decrease, i.e., it would be in equilibrium. The determination of NI by investment and saving is illustrated in the following diagram:

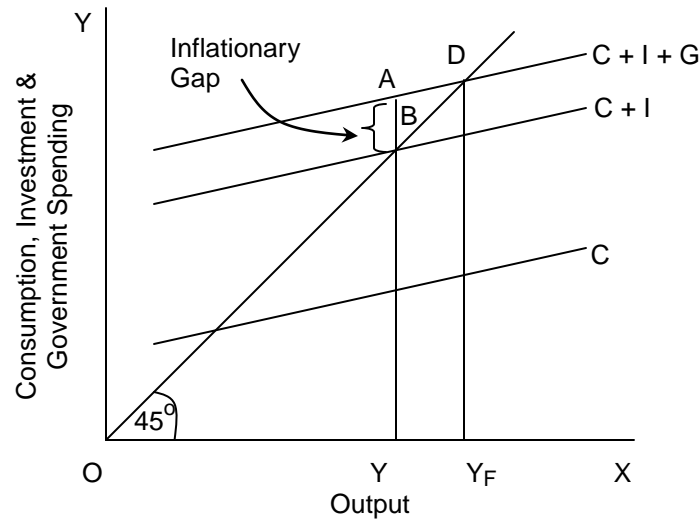


8. In the above diagram, the investment line (II curve) has been drawn parallel to the X-axis. This is done on the assumption that in any year, the entrepreneurs intend to invest a certain amount of money. That is, we assume that investment does not change with income.
9. The saving line (SS curve) shows intended saving at different levels of income.
10. The saving line and investment line intersect each other at the equilibrium point E, where the intended saving and the intended investment are equal at OY level of income. Hence OY is the equilibrium level of NI.
11. In the above diagram, there is no tendency for income to increase or decrease.
12. If the income level is greater than OY, the amount of intended investment is less than saving, as a result, the income will finally decrease.
13. If the income level is less than OY, the amount of intended investment is greater than intended saving, as a result, the income will continue to increase to the equilibrium level.

Inflationary Gap:

Inflationary gap arises when consumption and investment spending together are greater than the full employment GNP level. This means that people are demanding more goods and services than can be produced. In other words, the implication of inflationary gap is that national income, output and employment cannot rise further. The only consequence of increased demand is that the price level will increase. Or we may say that there will be an inflationary gap if scheduled investment tends to be greater than full employment saving. In a situation like this, more goods will be demanded than the economic system can produce. The result will be that price will begin to rise and an inflationary situation

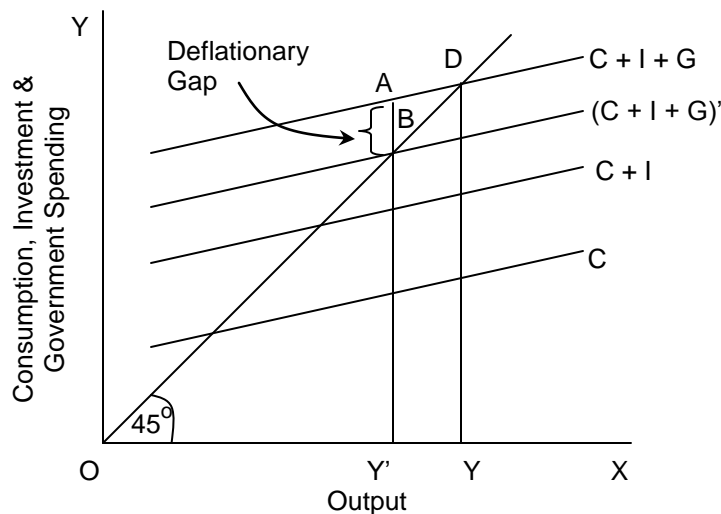
will emerge. Thus, if full employment saving falls short of scheduled investment at full employment (which means that peoples' propensity to spend is higher than the propensity to save), there will be an inflationary gap.



In the above diagram, $C + I + G$ (consumption, investment and government spending) line shows the total expenditure on demand in the economy. At this level, Y is the real output, as shown by the intersection, point D , with the 45° line. Y_F represents a full employment level on real output. Real income of the economy, obviously cannot reach Y . At Y_F , total demand ($C + I + G$) exceeds total output, leaving a gap AB , which is the inflationary gap in the Keynesian sense.

Deflationary Gap:

The deflationary or recessionary gap is the amount by which the aggregate expenditure falls short of the full employment level of national income. It causes a multiple decline in real NI.



In the above diagram, Y is the total output at full employment level. Let us assume that the total demand is $(C + I + G)'$ which cuts the 45° line at B , with real output Y' , AB then is the deflationary gap.