

Quadrant II - Notes

Paper Code: ECC 104

Module Name: Concept of IS curve and derivation of IS functions

Module No: 1

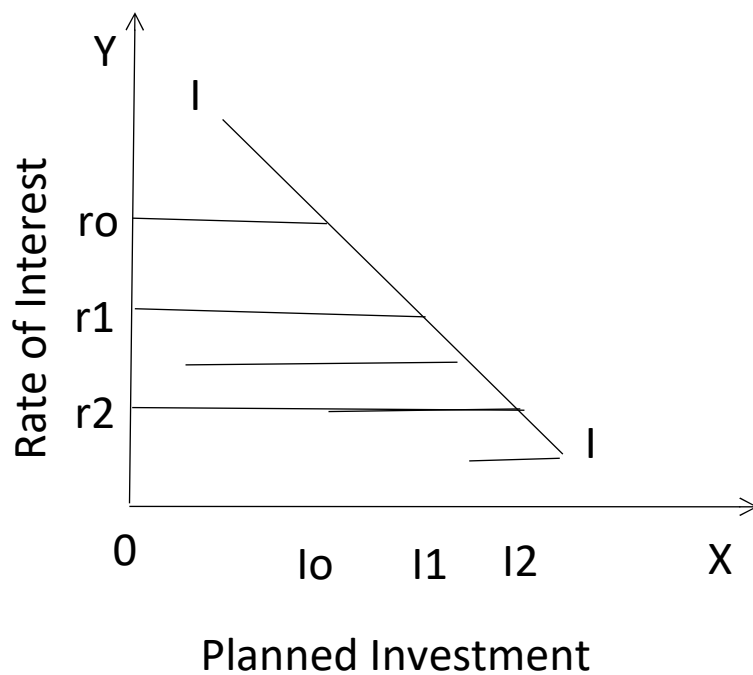
CONCEPT OF IS CURVE:

- The term IS stands for investment – saving.
- It represents the product or the goods market equilibrium.
- It shows the combinations of interest rates and income levels where saving –investment equality takes place so that the product market of the economy is in equilibrium.
- It is also known as ‘real equilibrium’.
- **The IS curve is the locus of those combinations of rate of interest and the level of national income at which goods market is in equilibrium**

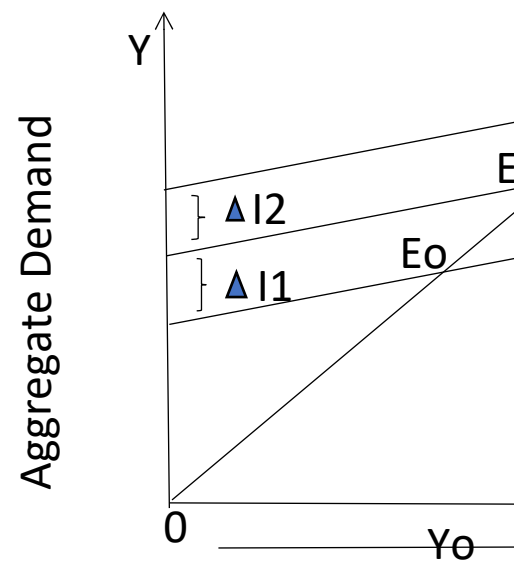
DERIVATION OF THE IS CURVE:

- The goods market is in equilibrium when aggregate demand is equal to income.
- $AD = C + I$.
- When the rate of interest falls the level of investment increases and vice versa.
- Thus, changes in the interest rates affect aggregate demand by causing changes in the investment.
- When the interest rate falls, it lowers the cost of investment projects and increases the profitability of investment.

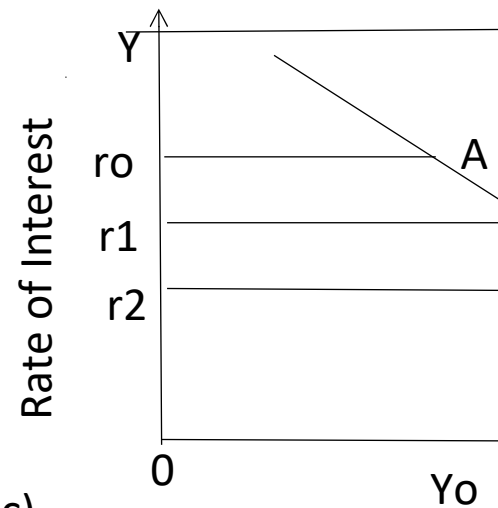
- The businessmen will therefore undertake greater investment at a lower rate of interest.
- The increase in investment demand will bring about an increase in aggregate demand which will raise the equilibrium level of income.
- Thus the IS curve relates different equilibrium levels of national income with various rates of interest.
- With a fall in the rate of interest, the planned investment will increase which causes an upward shift in aggregate demand function($C + I$) resulting in goods market equilibrium at a higher level of national income.



Panel (a)



Panel (c)



- In Panel (a) the relationship between rate of interest and planned investment is depicted by the investment demand curve I
- When the rate of interest is r_0 the planned investment is equal to I_0 .
- With I_0 as the amount of planned investment, the aggregate demand curve is $C + I_0$ which equals aggregate output at Y_0 level of national income as shown in Panel(b)
- Therefore in panel (c) against the rate of interest r_0 , level of income equal to Y_0 has been plotted.
- Now, if the rate of interest falls to r_1 , the planned investment by businessmen increases from I_0 to I_1 and the aggregate demand curve shifts upward to $C + I_1$ and the goods market is in equilibrium at Y_1 level of national income.
- Thus in panel (c) the level of national income Y_1 is plotted against the rate of interest r_1 .
- With the further lowering of interest rate to r_2 , the planned investment increases to I_2 and the aggregate demand curve shifts further upwards to $C + I_2$ corresponding to which goods market is in equilibrium at Y_2 level of income.
- Therefore, in panel (c) the equilibrium income Y_2 is shown against the interest rate r_2 .
- By joining points A, B, D representing various interest – income combinations at which goods market is in equilibrium we obtain the IS curve.
- The IS curve is downward sloping which implies that when rate of interest declines, the equilibrium level of national income increases.