4th Sem (M)

Investment

In ordinary parlance, investment means to buy shares, stocks, bonds and securities which are already existing in stock market. This is called financial investment. In Keynesian terminology, investment refers to real investment which adds to capital equipment. It leads to increase in level of income and production by increasing the production and purchase of capital goods. Investment thus includes new plant and equipment, construction of public works like dams, roads, buildings etc. net foreign investment, inventories and stocks and shares of new companies. Investment is a flow concept.

Capital on the other hand, refers to the real assets like factories, plants, equipments, and inventories of finished and semi-finished goods. It is any previously produced input that can be used in the production process to produce other goods. The amount of capital available in an economy is the stock of capital. Thus capital is a stock concept.

To be more precise, investment is the production or acquisition real capital assets during any period of time. Symbolically, let I be investment and K be capital in the year t, then $I_t = K_t - K_{t-1}$

Capital and investment are related to each other through net investment. Gross investment is the total amount spent on new capital assets in a year. But some capital stock wears out every year and is used up for depreciation and obsolescence. Net investment is gross investment minus depreciation and obsolescence charges (or replacement investment). This is the net addition to the existing capital stock of the economy. If gross investment equals depreciation, net investment is zero and there is no addition to the economy's capital stock. If gross investment is less than depreciation, there is disinvestment in the economy and the capital stock decreases. Thus for an increase in the real capital stock of the economy, gross investment must exceed depreciation i.e there should be net investment.

Types of Investment:

Induced Vs Autonomous

Investment may be either induced or autonomous.

(1) **Induced Investment**: Induced investment is real investment. Induced investment is profit or income motivated. That type of investment which is induced by changes in the level of income or changes in the rate of interest is known as induced investment. On the other hand, autonomous investment is that type of investment which is not influenced by changes in the level of income or by changes in the rate of interest.

In the simple keynesian model of income determination investment is assumed to be autonomous.

Induced investment takes place either due to change in the level of income or due to change in the rate of interest. Demand also influences it. Induced investment is a function of income i.e., $I = f(Y)$. It is income elastic. It increases or decreases with the rise or fall in income as shown in fig (1)

$I_1 I_1$ is the investment curve which shows induced investment at various level of income. Induced investment is zero at OY_1 income. when income reises to OY_3, induced

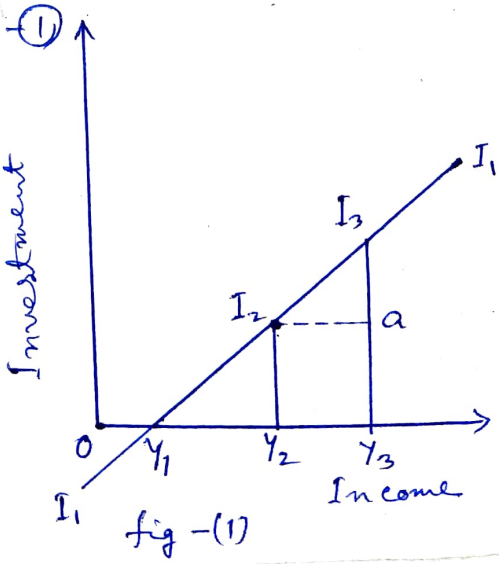

fig -(1)

investment is $I_3 Y_3$. A fall in income to OY_2 also reduces induced investment to $I_2 Y_2$. Induced investment may be further divided into

(i) the average propensity to invest and

(ii) the marginal propensity to invest.

(i) The Average propensity to Invest:- The average propensity to invest is the ratio of investment to income i.e $API = \frac{I}{Y}$. If the income is Rs. 40 crores and investment is Rs. 4 crores, $API = \frac{I}{Y} = \frac{4}{40} = 0.1$. In terms of fig-(1) the API at OY_3 income level is $I_3 Y_3 / OY_3$.

(ii) The Marginal propensity to Invest (MPI):- The marginal propensity to invest is the ratio of change in investment to the change in income i.e $MPI = \frac{\Delta I}{\Delta Y}$. If the change in investment ΔI = Rs. 2 crores and the change in income, ΔY = Rs. 10 crores then $MPI = \frac{\Delta I}{\Delta Y} = \frac{2}{10} = 0.2$

in fig-(1) $\frac{\Delta I}{\Delta Y} = \frac{I_2 a}{Y_2 Y_3}$.

(2) Autonomous Investment :- Autonomous investment is independent of the level of income and is thus income inelastic. It is influenced by exogenous factors like innovations, inventions, growth of population and labour force, researches, social and legal institutions, weather changes, war, revolution etc. But it is not influenced by changes in demand. Rather, it influences the demand. Investment in economic and social overheads whether made by the govt. or the private enterprise is autonomous. Such investment includes expenditure on building dams, roads, canals, schools, hospitals etc. Since investment on these projects is generally associated with public policy, autonomous investment is regarded as public investment. In the long-run private investment of all types may be autonomous because it is influenced by exogenous factors.

In fig (2) autonomous investment is shown as a curve parallel to the horizontal axis as $I_1 I_1$ curve. It indicates that at all the levels of income the amount of investment OI_1 remains constant. The upward shift of the curve to $I_2 I_2$ indicates an increased steady flow of investment at a constant rate OI_2 at all levels of income.

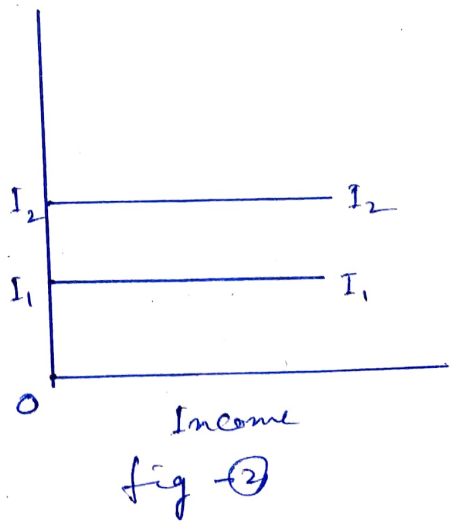

fig (2)