t the equilibrium or the point of effective nand is not necessarily determined at the level full employment. It can get determined in all situations less than full employment , full ployment and over full employment. This may explained through Fig. 5.

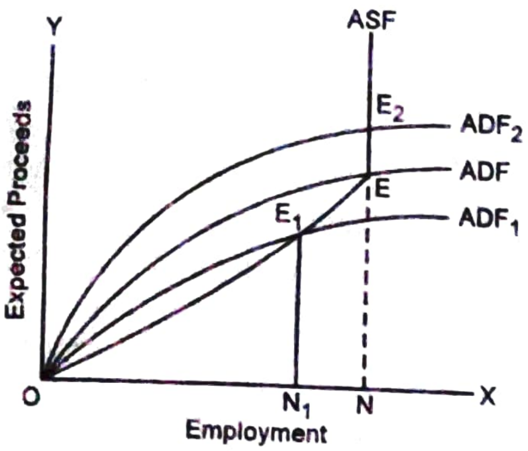

Fig. 5

In Fig. 5, given the aggregate demand tion ADF and the aggregate supply function , their intersection takes place at E which e point of effective demand. This intersection s place precisely at the point where ASF mes perfectly inelastic. So the equilibrium represents *full employment equilibrium* he level of employment is ON.

n case the aggregate demand function shifts DF$_1$, given the ASF, the intersection between wo takes place at E$_1$. At this point or tive demand, ON$_1$ workers are employed. ans in the equilibrium position E$_1$, NN$_1$ ers are still unemployed. So E$_1$ represents ss than full employment or *under-oyment equilibrium.*

n case the aggregate demand function shifts DF$_2$, the intersection between ASF and takes place at E$_2$ which is again the point ective demand. At this point of equilibrium, vel of employment corresponds to full yment level ON. E$_2$ represents over-full yment equilibrium because the economy ached full employment equilibrium at E. Thus E$_2$ is a situation that occurs after full employment.

From the above analysis, it is clear that the point of effective demand or equilibrium is not necessarily determined at full employment. It can take place at full employment or in the under-full employment or over-full employment situation.

8. SHIFTS IN AGGREGATE SUPPLY OR SUPPLY SHOCKS

The short-run aggregate supply is often supposed to remain fixed on account of such factors as labour productivity, wages, costs of materials, constancy of techniques of production, price level and difficulty in wage cost-price adjustment and failure of monetary fiscal and other policy to bring in quick adjustments in wages, costs and prices with employment.

However, the world economies can not rule out the supply shocks that have impact upon output and employment. The supply shocks, may be adverse and favourable.

The *adverse* supply shock is one that shifts up the aggregate supply curve. The macroeconomic story of the 1970's was a story largely of the negative or adverse supply shocks. The steep increase in oil price by OPEC between 1971 and 1974 and then in 1979 and 1980 led to high inflation along with recession.

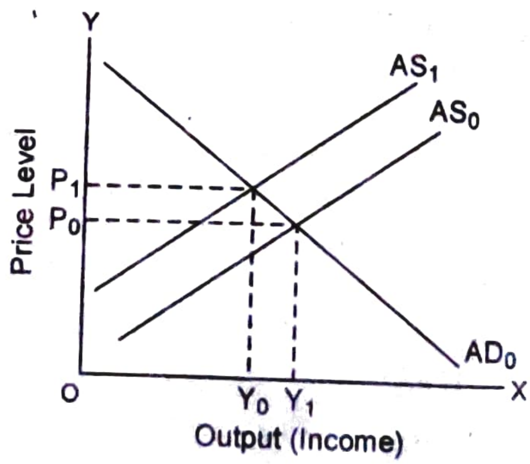

Fig. 6

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depressed and intersection betwee ADF and ASF takes place at the relatively more elastic part of the latter. Given that point of effective demand, some work-force is still unemployed. Thus the economic system left to itself is likely, in general, to have an under-employment equilibrium.

(*v*) ***Vital importance of investment*** : In the capitalist economies, the under-employment equilibrium is a reality. The basic cause of it is under-consumption or over-saving. It is not possible to raise consumption in the short period for raising the level of effective demand or employment. So only alternative left to raise the level of effective demand is to raise investment. In this way, investment has the most vital and strategic significance for the stabilization of the capitalistic economy at a higher level of income, output and employment.

(*vi*) Paradox of poverty : The gravest contradiction in the advanced capitalistic countries is that there is *poverty in the midst of plenty*. Higher the level of income, greater is the danger of unemployment and economic collapse. This paradox is caused by the deficiency of aggregate demand on account of (*a*) under-consumption and (*b*) over-saving. Since consumption expenditure remains stable in the short period and investment opportunities are limited, the widening saving gap can not be wiped out. That causes the deficiency of aggregate demand and fall in the level of effective demand and employment. Keynes considered the paradox of poverty as a serious defect in the modern capitalistic system. In his words, "The richer the community .... the more obvious and outrageous are the defects in the modern capitalistic system." In this context Joan Robinson remarked, "The popular description of unemployment is poverty amidst plenty." The increasing over-saving gap or deficiency of aggregate demand is the basic cause of poverty and contraction in an economically rich country.

10. INVESTMENT MULTIPLIER ANALYSIS WITH AGGREGATE DEMAND

Keynes' concept of investment multiplier explains that a small increment in autonomous investment can lead to a multiple expansion of income. It is interesting to know how the investment multiplier (K) works or operates and brings about a multiple income propagation. In this section, the investment multiplier will be considered in a *static* sense. In case of static investment multiplier, it is assumed that there is no time period or lag between the initial change in investment and the final multiple change in income. In additon it is assumed that there is a change in investment only once. Subsequently, no change in investment take place.

Suppose there is an initial rise in autonomous investment in a country by Rs. 100 crore. This amount is spent on the purchase of machinery or raw materials or labour services. In any case, some group in the community receives an income of Rs. 100 crore. If every group in the country has the marginal propensity to consume (MPC) = 0.50, the given group will spend Rs. 50 crore on consumption. The remaining amount of Rs. 50 crore will be saved by it. The spending by this group will raise the income of another group by Rs. 50 crore. It will spend half of it (Rs. 25 crore) on consumption. The rest of the amount will be saved by it. Thus still another group receives an income of Rs. 25 crore. It will in turn spend half of it (Rs. 12.5 crore) on consumption and Rs. 12.5 crore will be saved. Thus the transmission of income takes place from one group to another until aggregate expenditure income rises by Rs. 200 crore on account of initial increase in investment (ΔI) by Rs. 100 crore because the investment multiplier (K) = 2, when the MPC is 0.50.

$$\Delta Y = K \times \Delta I = 2 \times 100 = \text{Rs. } 200 \text{ crore}$$

The multiple income expansion due to initial increase in investment of Rs. 100 crore when MPC = 0.50, is shown through Fig. 7.

An increase in investment brings about an increase in total expenditure or aggregate demand. It shifts the aggregate demand function in the upward direction and the level of income rises the investment multiplier times the initial increase in investment.

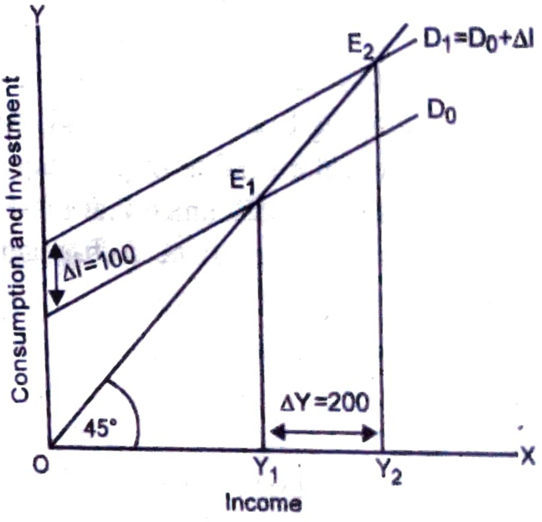

Fig. 7

In Fig. 7, income is measured along the horizontal scale and consumption and investment are measured along vertical scale. The 45° line or income-consumption line (Y = C) or aggregate supply function is drawn from the origin. By aggregating consumption and investment, we get the aggregate expenditure or aggregate demand function D_0. It cuts the 45° line at E_1 and the initial equilibrium income is OY_1. If autonomous investment is raised by ΔI = Rs. 100 crore, the aggregate expenditure or aggregate demand curve shifts to $D_1 = D_0 + \Delta I$. It cuts the 45° line and E_2 and the equilibrium income is finally OY_2, Y_1Y_2 is the increase in income (ΔY) = Rs. 200 crore due to increase in investment (ΔI) = Rs. 100 crore measured by the vertical distance between D_0 and $D_1 = D_0 + \Delta I$ curves. Thus there is an increase in income multiplier times the increase in initial investment.

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