

effective demand in these words, "The adjective effective is used to designate the point on the aggregate demand curve where it is intersected by the aggregate supply curve".

### 3. THE AGGREGATE DEMAND

There are two determinants of effective demand—the aggregate demand and the aggregate supply. In this section, we study the aggregate demand or the aggregate demand function.

The aggregate demand refers to sale proceeds expected by entrepreneurs at varying levels of employment. The amount of money expected by the entrepreneurs through the sale of goods produced at a specific level of employment is termed as the *aggregate demand price*. Suppose the entrepreneurs expect from sales an amount of Rs. 80 crore when 20,000 workers are employed, the expected sale proceed

of Rs. 80 crore signifies the aggregate demand price.

In the words of Stonier and Hague, "The aggregate demand price at any level of employment is the amount of money which all the entrepreneurs in the country, taken together, really do expect that they will receive, if they sell the output produced by this given number of men."

The aggregate demand or aggregate demand function or aggregate demand schedule represents amounts of expected sale proceeds or aggregate demand prices corresponding to different levels of employment.

In the words of Harvey and Johnson, "The receipts, which entrepreneurs as a whole, expect to obtain can be termed aggregate demand."

According to Keynes, "The aggregate demand function relates any given level of employment to the expected proceeds from that volume of employment."

Dillard writes, "The aggregate demand curve or aggregate demand function is a schedule of the proceeds expected from the sale of output resulting from varying amounts of employment."

The aggregate demand function or aggregate demand schedule expresses the functional relationship between the employment and expected proceeds. It can be stated as  $D = f(N)$ .

As employment rises, the expected sale proceeds or aggregate demand price also rises and vice-versa. So there is a direct functional relation between the aggregate demand (D) and the level of employment (N).

The aggregate demand function or aggregate demand schedule can be explained through Table 1

Table 1—Aggregate Demand Schedule

| Level of Employment<br>(In Lakh Workers) | Expected Proceeds<br>(In Crore Rs.) |
|--|-------------------------------------|
| 0  | 0                                   |
| 2  | 200                                 |
| 4  | 380                                 |
| 6  | 540                                 |
| 8  | 680                                 |
| 10                                       | 800                                 |

Table 1 shows that the expected proceeds or aggregate demand price goes on increasing as the volume of employment expands. Initially at zero employment, since output is zero, the expected proceeds are also zero. As 2 lakh workers are employed, more quantity is produced and the expected sale proceeds are Rs. 200 crore. When employment is raised to 4 lakh workers, the expected receipts of entrepreneurs are Rs. 380 crore. Finally, at the employment of 10 lakh workers, the aggregate demand price rises to Rs. 800 crore. The expected proceeds, no doubt, rise with a rise in employment but they increase at a diminishing rate.

Given the Table 1, it is possible to draw the aggregate demand function (ADF) or the aggregate demand curve.

In Fig. 1 employment is measured along horizontal scale and expected proceeds along the vertical scale. Given the different levels of employment and corresponding levels of expected proceeds, the aggregate demand function (ADF) has been determined. It starts from the origin and slopes upwards from left to right.

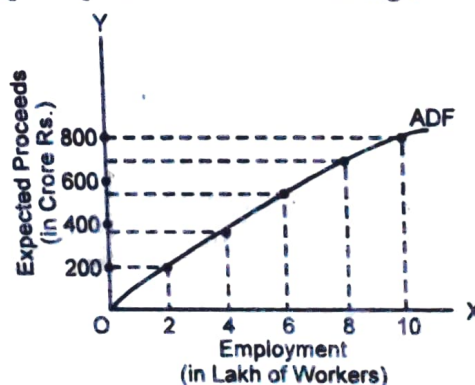


Fig. 1

#### 4. SHIFTS IN AGGREGATE DEMAND

During the period of boom or expansion, the entrepreneurs expect to receive larger amounts by the sale of output at the same level of employment. It means the aggregate demand function shifts upwards ( $ADF_1$ ), when larger sale proceeds are expected at the given levels of employment. On the opposite, when there is contraction or depression, all entrepreneurs have pessimistic expectations. They expect lower sale proceeds at the same level of employment. In such a situation, the aggregate demand function shifts downwards (as  $ADF_2$  in Fig. 2) compared with the original aggregate demand function. Fig. 2 shows that shifts can take place in the aggregate demand function in the *short run* on account of shifts in entrepreneurial expectations.

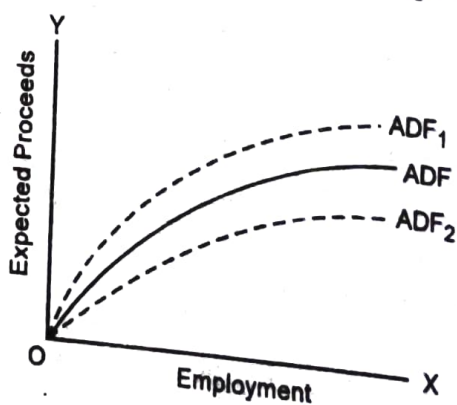


Fig. 2

The optimistic or pessimistic expectations of entrepreneurs or shifts therein are influenced by the following factors :

- (i) changes in consumer outlays.
- (ii) changes in private investment outlays.
- (iii) changes in government expenditure on goods, services and transfers.
- (iv) changes in taxes.
- (v) variations in money supply.
- (vi) changes in price level.

#### 5. THE AGGREGATE SUPPLY

An entrepreneur must receive some minimum amount from the sale of product at a given level of employment, if that level of employment or output is to be worthwhile. The minimum amount which is necessary to be received is the cost of production. If the producers are not able to recover even that minimum amount, they will not maintain the supply. This amount of sale proceeds which the entrepreneurs must expect to receive so as to make the given level of supply or employment worth while, can be regarded as the aggregate supply price.

In the words of **Stonier and Hague**, "At any given level of employment of labour, aggregate supply price is the total amount of money which all the entrepreneurs in the economy, taken together, must expect to receive from the sale of output produced by that given number of men, if it is to be just worth employing them."

According to **Dillard**, "The minimum price or proceeds, which will just induce employment on a given scale is called the aggregate supply price of that amount of employment."

**Keynes** writes, "The aggregate supply price of the output of a given amount of employment is the expectation of proceeds which will just make it worth the while of the entrepreneurs to give that employment."

The aggregate supply function relates different amounts of minimum expected proceeds or aggregate supply prices to different levels of employment. The aggregate supply or aggregate supply function expresses the functional relationship between aggregate supply price ( $Z$ ) or cost to the level of employment ( $N$ ). This functional relationship can be stated as  $Z = f(N)$ .

The aggregate supply function or the aggregate supply schedule can be shown through Table 2.

Table 2—Aggregate Supply Schedule

| Level of Employment<br>(In Lakh Workers) | Minimum Expected<br>Proceeds of Aggregate<br>Supply price<br>(In Crore Rs.) |
|--|---|
| 0  | 0   |
| 2  | 180   |
| 4  | 360   |
| 6  | 540   |
| 8  | 720   |
| 8  | 900   |

Table 2 shows that there is direct relation between level of employment and the aggregate supply price. Initially at zero level of employment, the aggregate supply price is also supposed to be zero. As employment rises to 2, 4, 6 and 8 lakhs of workers, the aggregate supply prices or minimum expected proceeds which the employers must get are Rs. 180 crore, Rs. 360 crore, Rs. 540 crore and Rs. 720 crore respectively. After 8 lakh workers are employed, the level of employment remains unchanged signifying a state of *full employment*. Now at the same level of employment, the minimum expected proceeds or costs continue to increase. This happens because inflation starts after full employment and there is escalation of costs or aggregate supply prices even though there is no change in employment.

The aggregate supply curve or the aggregate supply function (ASF) is shown in Fig. 3.

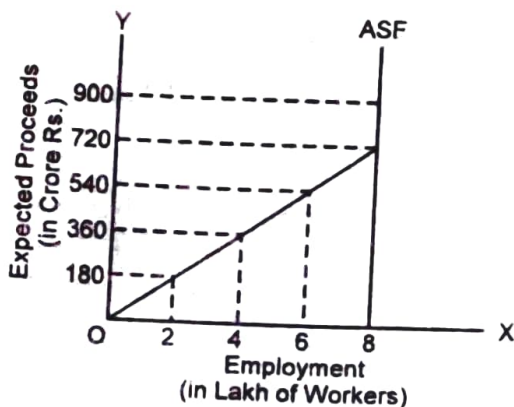


Fig. 3

In Fig. 3, employment is measured along horizontal scale and expected proceeds along the vertical scale. Given the levels of employment and corresponding minimum expected proceeds in Table 2, the aggregate supply function ASF has been drawn. It initially slopes upwards from left to right and at the level of full employment (8 lakh workers), it becomes parallel to vertical scale because the aggregate supply price alone now rises, while the level of employment remains fixed. In other words, the ASF is relatively more elastic before full employment and becomes perfectly inelastic after full employment.

Keynes regards aggregate supply function as fixed in the short period because supply is affected by such factors as machinery, equipment, organisation and techniques of production which can undergo changes only in the long run.

## 6. DETERMINATION OF EFFECTIVE DEMAND

The effective demand signifies the short run equilibrium between aggregate demand and aggregate supply. The point of effective demand is determined by the *intersection between the aggregate demand and the aggregate supply functions*. So long as the aggregate demand price is more than the aggregate supply price, the employers will tend to expand employment as they expect profits over costs. On the opposite, when the aggregate supply price is more than the aggregate demand price, the costs being in excess of expected sale proceeds, the volume of employment is likely to be reduced. When the aggregate demand price becomes exactly equal to the aggregate supply price, there