4 Aggregate Demand and Aggregate Supply

1. INTRODUCTION

In Keynes' *General Theory*, the level of employment has been related to the effective demand. A higher level of effecitve demand implies a higher level of employment and vice-versa. The concept of effective demand, however, was not originally developed by J.M. Keynes. T.R. Mathus, first of all, explained the over-production and unemployment in a capitalistic economy through the deficiency of effective demand. The credit, however, goes to Keynes who modified it and made it a tool of the most logical and scientific analysis of variations in income, output and employment in a capitalistic economic system.

2. MEANING OF EFFECTIVE DEMAND

In Economics, demand for goods and services does not merely mean the desire or willingness to buy them. The consumers must also have the capacity to buy. The demand, in fact, denotes the effective desires involving both the willingness and capacity to buy. The latter is expressed through the amount actually spent on the purchase of goods and services. The term demand has been often employed to indicate the quantities of goods and services bought by a consumer or a group of consumers in one market at their different prices. The term 'effective demand' refers to the aggregate amount spent on goods and services by the whole community in a specified period. Thus effective demand signifies the total spending of community.

Dillard, therefore, rightly defined effective demand in these words, "*Effective demand menifests itself in the spending of income.*"

According to **Kurihara,** "*Total demand is effective when consumption plus investment assumes a value equal to income.*"

This definition recognises that effective demand is equal to total expenditure which remains equal to total income. It elaborates upon the composition of total expenditure which is the sum of consumption expenditure and investment expenditure.

The above definitions suggest that effective demand is determined by total expenditure.

Effective Demand = Total Expenditure... (*i*)

If total expenditure increases, there is an increase, in effective demand and vice-versa. In any economic system, one man's expenditure is another man's income so that aggregate expenditure remains equal to aggregate income.

Total Expenditure = Total Income ... (*ii*)

The aggregate income in a country remains equal to the value of total output. As output rises, there is also is rise in income and vice-versa.

Total Income = Total Output ... (*iii*)

The level of output in a country is determined by the volume of employment. At a higher level

of employment, the output too is larger and vice-versa.

Total Output = Total Employment ... (iv)

From (i), (ii), (iii) and (iv) it follows that :

Effective Demand (E.D.) = Total Expenditure (E)

= Total Income (Y)

= Total Output (O)

= Total Employment (N)

E.D. = E = Y = O = N

Thus the inference follows that the level of effective demand is the determinant of employment.

In a closed two-sector (households and business) economy, the total expenditure (E) is comprised of consumption expenditure, (C) and investment expenditure (I)

E. D. = C + I

In a three-sector system including household, business and government sectors, another component of aggregate spending is the government expenditure on goods and services (G). Therefore effective demand in such a system is the sum of consumption, investment and government expenditure.

E. D. = C + I + G

In a complete four-sector system including household, business, government and foreign sectors, the aggregate expenditure is the sum of consumption, investment, government expenditure and net foreign balance (X – M). X stands for the total receipts of the country from the foreign countries on account of the exports of goods, services and capital. M, on the other hand, stands for total payment made by the home country to the foreign countries. The net foreign balance is the excess of total receipts from abroad and total payment to abroad.

The net foreign balance (X – M) can be positive or negative. In a four-sector complete system, the effective demand can be expressed as

E. D. = C + I + G + (X – M)

Some writers including Keynes himself have defined the concept of effective demand from the point of view of its *determination*. According to them, the effective demand is determined by an equality between aggregate demand and aggregate supply.

In the words to **J.M. Keynes** "*The volume of D (Aggregate Demand) at the point of aggregate demand function, where it is intersected by aggregate supply function, will be called the Effective Demand.*"

According to **Stonier and Hague**, "*The short run equilibrium level of aggregate demand and aggregate supply, which determines short run employment, can be called effective demand.*"

From this viewpoint, **Dillard** defines 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."*

Accordng 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 (In Lakh Workers)	Expected Proceeds (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 of 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.
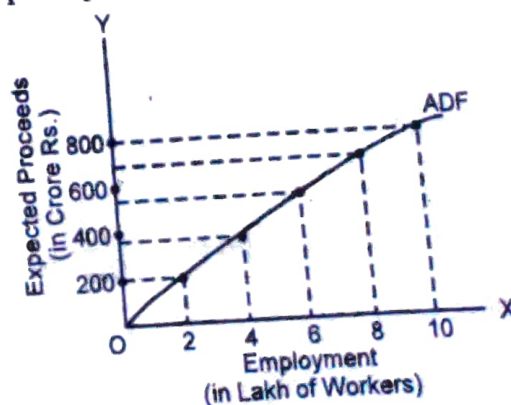

Fig. 1