

CBA(10)  
ECO-00

If India's exports increase, aggregate demand rises. A fall in foreign income will have an exactly opposite effect. When foreign income falls, foreign spending falls, including foreign spending on Indian goods. The end result is a fall in India's net export and a consequent fall in aggregate demand.

What, then, is the relation between the international trade effect and the slope of the aggregate demand curve? When domestic prices rise, domestic goods become more expensive in relation to foreign goods. This reduces India's exports. So with a rise in the domestic price level, India's net exports fall. The same logic applies to changes in the level of foreign prices.

As have been explained by Boyes and Melvin, "If foreign prices rise in relation to domestic prices, domestic goods become less expensive relative to foreign goods and domestic net exports increase. So domestic aggregate demand rises as the level of foreign prices rises. When the level of foreign prices falls, domestic goods become more expensive relative to foreign goods, causing domestic net exports and aggregate demand to fall."

#### **Government Policy:**

Government policy also exerts considerable influence on the economy and causes the AD curve to shift. If the government increases the money supply and, as a result, the price level begins to rise, people will try to protect their living standard by spending more and saving less.

As a result the AD curve will shift to the right, which again means that equilibrium aggregate expenditure increases at every price level. If, on the other hand, the government imposes additional taxes on individuals and companies, both consumption spending and investment expenditure will fall. This will lead to a leftward shift of the AD curve. A government subsidy will have an opposite effect.

1. The AD curve shows the equilibrium level of desired expenditure at alternative price levels.
2. The wealth effect, the interest rate effect and the international trade effect are to be combined to explain why the aggregate expenditure curve shifts with changes in the general price level.
3. The AD curve shifts due to changes in non-price determinants viz., expectations of consumers and investors, foreign income and price levels, government policy.

#### **Aggregate Supply:**

The aggregate supply curve shows the various quantities of national output (GNP) produced or income (GNI) generated at different price levels. Like the ordinary supply curve for an individual commodity the aggregate supply curve also slopes upward from left to right. Different factors explain the upward slope of the AS curve.

In micro-economics, we noted that when the price of a single good rises (the prices of other goods remaining the same) producers will be willing to offer a larger quantity of the commodity for sale.

Thus the upward slope of the supply curve of an ordinary commodity is explained by a change in relative price. But while analysing aggregate supply, we look at the general price level (or the overall price index which is a weighted average of all prices).

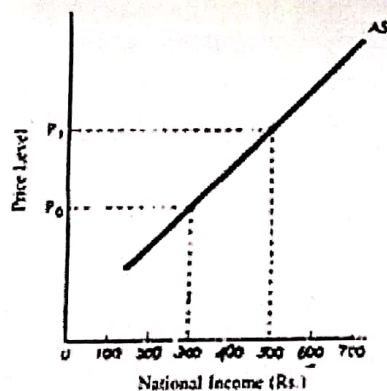
This means that we have now to analyse how the amount of all goods and services produced changes with changes in the level of prices. The direct relationship between prices and national output has to be explained by the effect of changing prices on profits. In this context changes in relative price have no role to play.

### ***Aggregate Production and the Price Level:***

Along the aggregate supply curve, we hold everything except the price level and output constant. Here the price level is the price of aggregate output (GNP). We also assume that costs of production do not change in the short run even when there are price changes.

If the price level increases but the cost of production remains unchanged business profits will go up. As profits rise, business firms will be able to produce more output. This means as prices rise, supply will increase (because producers will be willing to offer a larger quantity for sale).

The result is the positively sloped aggregate supply curve as shown in Fig. 37.5. As the price level rises from  $P_0$  to  $P_1$  the volume of output increases from Rs. 300 to Rs. 500. The higher the price, the larger the profits, *ceteris paribus*, and the larger the volume of production in the macro-economy. The converse is also true. Falling prices and profits give producers the signal to produce less.



**Fig 37.5 Aggregate Supply**

The above supply curve is a short-run supply curve. It is drawn on the basis of the assumption that costs of production remain unchanged for the period under consideration. However, costs change in the long run, in which case the upward sloping short-run supply curve of the type shown in Fig. 37.5 will no longer be relevant.

### ***Shifts in Aggregate Supply:***

The aggregate supply curve may shift to the right or to the left as shown in Fig. 37.6. Such shifts occur due to changes in non-price determinants of aggregate supply, viz., factor prices (such as wage rates, costs of raw materials, etc.), technology and expectations of producers.



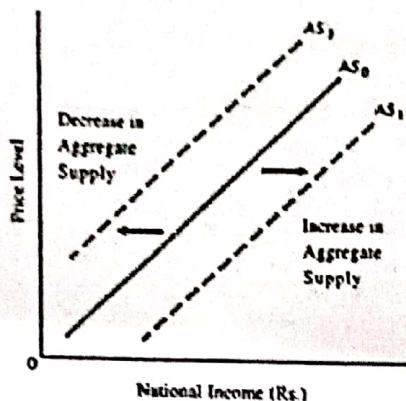


Fig 37.6 Shift of the AS curve

### Factor Prices:

When commodity prices rise, factor prices do not rise immediately. As a result, cost of production remain unchanged for some time. A rise in commodity prices initially stimulates production. However, when all firms attempt to produce more at the same time, factor prices rise.

This is reflected in the cost of production of each firm. When costs rise in response to the rise in prices the AS curve shifts to the left from  $AS_0$  to  $AS_2$  in Fig. 37.6, (which is comparable to decrease in supply studied in microeconomics). Here, at any given price level, firms produce less output.

The converse is also true. When factor prices (such as wage rates, interest rates and costs of raw materials) fall the AS curve shifts to the right from  $AS_0$  to  $AS_1$  in Fig. 37.6. This means that at any given level of price, firms will produce more output.

A related point may also be noted here. Since here we measure the general price level (which is the weighted average of all prices) only those change in resource prices (such as changes in oil prices) will have an impact on the AS curve.

### Technology:

Technological progress has the effect of raising the productivity of existing resources. It thus reduces costs of production and shifts the AS curve to the right, from  $AS_0$  to  $AS_1$  in Fig. 37.6. As new technology is adopted, the amount of output that can be produced by each unit of input increases, moving the aggregate supply curve to the right.

### Expectations:

If, for some reason, such as increased consumer demand, or a policy of tax cut, or growing urbanisation (in the wake of economic development), business people expect profits to rise in future they will step up production. This means that they will be offering larger quantities for sale at the same price levels and the AS curve will now shift to the right.

### The Actual Shape of the AS Curve:

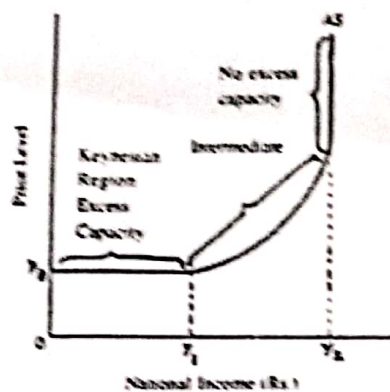


Fig 37.7 Actual Shape of Short-run AS Curve

The AS curve does not really look like the lines shown in Figures 37.5 and 37.6. Rather Fig. 37.7 is a correct picturisation of the AS curve. And this curve has three distinct regions.

At relatively low levels of the national income (below  $Y_1$ ) the AS curve is horizontal at the fixed price level  $P_0$ . This is known as the Keynesian region. It is that portion of the AS curve at which prices are fixed because of unemployment and excess capacity at these levels.

This Shape of the short-run AS curve are normally observed during depression and unemployment which means output (GNP) can be expanded with rise in the general price level. As output crosses the critical minimum level ( $Y_1$ ), in the intermediate range the AS curve begins to slope upward, which means that along with output, prices also rise.

This rise in the price level is essential to induce further increases in output. Finally, at the potential (full employment) output level  $Y_2$  the economy is producing its maximum capacity output. In such a situation increased prices have no output effect. Here the AS curve is a vertical straight line, as shown in Fig. 37.7.

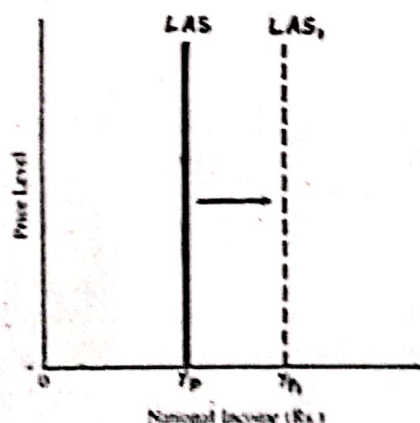


Fig 37.8 The L-R Aggregate Supply Curve

### ***The Long-Run Aggregate Supply Curve:***

The long-run AS curve is a vertical straight line at the potential level of national income ( $Y_p$ ) like the one shown in Fig. 37.8. Such a supply curve indicates that there is no relationship between the changes in the price level and the quantity of the output produced. This does not, however, mean that the economy is forever fixed at the current level of potential national income or GNP.

Over an extended period of time, as new technologies develop and the quantity and quality of factors of production increase, potential output also increases, shifting the long-run AS curve to the right, as shown in Fig. 37.8, from  $LAS_0$  to  $LAS_1$ . Such a rightward shift implies an increase in potential national income from  $Y_{p0}$  to  $Y_{p1}$ .

Even in the long run, price level has no effect on the level of output. But changes in the determinants of the supply of real output in the economy—such as an increase in the supply of resources, expansion of production capacity, or technological progress can increase potential national income in the long-run.



# National Income: Definitions, Circular Flow and Concepts (With Diagram)

National income is the aggregate money value of all incomes earned by individuals and enterprises.

National income may also be defined as the money measure of the net aggregates of all commodities and services accruing to the inhabitants of an economy during a year.

Thus, the concept national income has different meanings. It may be described as the 'national product' or 'national income' or 'national dividend'.

## II. National Income Accounts:

Economic growth of any country is measured by its growth of national and per capita incomes. In other words, national income is the yardstick of measuring the growth performance of any economy. Increase in national income is tantamount to economic growth. In view of this, every country prepares statistics on national income as well as its various facets.

The method through which national income statistics is prepared and compiled is called national income accounting. Thus, national income accounts can be defined as a set of systematic statements which reflect the aggregate money value of all goods and services produced in different sectors of an economy (primary, secondary and tertiary sectors) together with the records of distribution of factor incomes among different groups and final expenditures (either gross or net) of the economy.

In national income accounts, all types of transactions conducted, say, in a year, are recorded. These are systematically classified and entered into national income accounts by the statisticians. Thus, national income accounts reflect how millions of transactions that are conducted are interrelated. Above all, by reading these accounts one gains clear knowledge about the working of the economy.

Economists, planners, government, businessmen, international agencies (IMF, World Bank, etc.) use national income data and analyse them for variety of purposes. Firstly, while formulating national economic plans and policies, national income statistics are taken into account. Secondly, national income data help in measuring changes in the standard of living over time. Level of development is also measured by using national income figures. Such figures are also of importance for making international comparisons. There are other uses too. Above all, national income figures enable us to compare standards of living of different countries.

## III. Circular Flow of Income:

The national income and national product accounts of a country describe the economic performance or production performance of a country. Various measures of the nation's income and product exist the most frequently cited summary measures of an economy's performance is the gross national product (GNP) or gross domestic product (GDP). However,